UNIVERSITY OF ZULULAND
Masters of Commerce in Industrial Psychology

TITLE : Attitude, knowledge and perception towards HIV/Aids, condom use and Voluntary Counselling and Testing (VCT) amongst University of Zululand students during the HIV/Aids pandemic.

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YEAR : 2009

ACKNOWLEDGEMENTS

I would like to express my sincere thanks to:

My supervisor, Dr K.A. Nel, for her time, invaluable guidance, inspiration, sharing her keen sense of humour and depth knowledge.

My co-supervisor Miss Vezi for all the guidance, support and encouragement to this study.

My dearest mother, Thandekile Nqojane, my late father Isaac, Selemo Nqojane and my sisters, Ntokozo and Thandiswa for their support, enthusiasm, continuous encouragement, patience, tolerance and unconditional love throughout the entire journey.

All University of Zululand students (post-graduates and undergraduates) who gave of their time to complete the questionnaires and be part of the focus group.

Dr Z.M. Mkhize, the HIV/Aids Manager at the University of Zululand for all the support, counselling every step of the way and encouragement she gave me to be able to complete this project.

Special thanks to Tsholofelo Molapisi, S`yanamukela Madela, Nobuhle Jiyane, M.B.J. Malusi, Mbali Thwala, Themba Mkhize, Caroll Hermann, Nonhlanhla Mnisi, Hlengiwe Ndlela, Nomzamo Nxumalo and Lumka Mabo. Thank you for the friendship and contributions to my personal and educational growth. I appreciate being in such a supportive and special group.

ABSTRACT

The investigation explores tertiary education students` attitudes and perceptions towards condom use during the HIV/Aids pandemic. This study focuses on risk behaviour, stigmatization, social perceptions, voluntary counselling and HIV testing (VCT). It provides insight into student behaviour, attitudes and perceptions. It is hoped that findings can be used in the formulation of improved strategies for HIV/Aids programmes and education in the tertiary sector. A sample of four hundred University of Zululand undergraduates completed a questionnaire. Data was analyzed and interpreted in terms of hypotheses formulated from relevant literature. A mixed methods approach using quantitative and qualitative methods was used. Statistica was used to calculate descriptive statistics while the chi-square was applied to examine the relationship between the variables. Overall the findings seem to indicate that students have knowledge but this does not always translate into actual behaviours. This is likely to result in cognitive dissonance where there is a discrepancy between what respondents believe and how they act. Cognitive dissonance also has an influence on the othering of HIV and Aids and high levels of fear. It is also likely that as the institution is the workplace of students such results can be found amongst individuals who are below the age of thirty five in the business workplace. The results point towards the continuance and further spread of the pandemic as an important proportion of the sample respondents indulge in high risk behaviours and have negative attitudes towards VCT.

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CHAPTER ONE: INTRODUCTION

1.1 Introduction

Southern Africa is the region which is most affected by Acquired Immune Deficiency Syndrome (Aids). According to Nel (2003) Aids is spreading at an exponential rate on the sub-continent, recent statistics show that there could be as many as eight million people in South Africa infected with the retrovirus. The World Health Organization (WHO, 2007) states that South Africa has more Human immunodeficiency virus (HIV) infected people than any other country in the world, although India is fast catching up. It is thus vital that all aspects of knowledge, attitudes and perceptions of young South Africans towards the pandemic are investigated. This will assist government in devising relevant policies and campaigns to help curb the spread of the pandemic.

Condoms are an effective means of preventing Sexual Transmitted Infections (STI`s) when used correctly and consistently as they are impermeable to viruses and sperm. Mashego (2004) states that, unsafe sexual behaviour stems from a lack of knowledge about the transmission of HIV. This suggests that people who know about the consequences of unsafe sexual behaviour would not engage in such behaviour(s). Essentially, if people are aware that condoms prevent infection they would not engage in sex without protection. Many campaigns have stressed this factor, however it appears human behavior cannot easily be changed (Nel, 2003).

According to Mashego (2004) students know that risky behaviour can result in HIV infection. However, although students may know that the main mode of transmission of HIV is through unprotected sexual contact, and they are aware of the protection a condom offers, this knowledge is often not translated into appropriate sexual behaviour(s). Schools and tertiary institutions are an important source of information about HIV and Aids for students (Weston, 2006). According to Page, Ebersohn, and Rogan (2006*)* communication about HIV/Aids is inadequate in most schools and tertiary institutions because teachers and lectures are not trained to discuss sexuality, therefore further training in this area is necessary if young people are to be properly advised about HIV/Aids..

Campbell (2003) notes that the issues of gender inequality and power relations in traditional, patriarchal or tribal society are all-pervasive and manifested in a number of different ways. This includes the shared expectations and norms within society about appropriate behaviours and roles ascribed to males and females. In turn these expectations and roles guide a female's access to resources and to decision-making. Women's sexuality and their ability to take control in sexual relationships are thus hindered by male patriarchal norms which dictate that a man controls sexual encounters.

According to Nel (2003) women are biologically more vulnerable to HIV/Aids. This is because during intercourse the genital surface area that is exposed to infection is greater in women than in men. This facilitates infection by the virus. The same study

noted that, women who are in abusive relationships are less likely to disclose their HIV status to their husband or partner for fear of being assaulted. Behaviour change is noted as the only viable means of limiting HIV infection. Campbell (2003) states that knowledge of health risks is a pre-condition for behaviour change although, only part of the solution to combating the HIV pandemic.

Weston (2006) states, in a study underpinned by the Health Belief Model (HBM) and Protection Motivation Theory (PMT), that most investigations indicate that university students do not perceive themselves to be at risk of contacting HIV. They view themselves as being separated from the retrovirus and not easily infected. It is thus essential that students know the facts about sexually transmitted diseases and ways in which they can protect themselves. The lack of knowledge, especially about the different modes of transmission of HIV, may influence not only their personal sexual behaviour, but also their attitude towards HIV infected persons.

According to Shell (2000) students are more vulnerable to HIV/Aids because they are in a high risk age group that is; eighteen to thirty nine years of age (18-39). However, the University of Zululand (Unizulu) was one of the first universities to initiate a response to the HIV/Aids epidemic in the form of a policy document. The development, implementation and approval of this policy was the first step in the management of HIV/Aids on the campus (Elliott, 2002). A new, more far reaching policy has recently been passed through Senate at Unizulu. Tertiary institutions' are places where leaders

learn before they enter the workplace they are thus seen as environments where vital information about the pandemic is communicated (Nel, 2003).

1.2 Resume

This chapter describes how literature underpins how relevant the issue of young people's attitudes, knowledge and perceptions towards HIV/Aids is in South Africa. The next chapter discusses relevant literature in more detail.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

According to Nel (2003) literature has shown that the death rate in South Africa has increased exponentially because of the Human Immune Deficiency Virus (HIV) which, if untreated, leads to Acquired Immune Deficiency Syndrome (AIDS). The pandemic has played a significant role in the mortality of South Africans particularly, amongst young people (Mashego, 2004). As it is mostly a sexually transmitted disease, it should be containable, understanding and knowing about measures that combat its spread is important to everyone, especially the young, who are considered to be more sexually active than older people.

Reid and Walker (2005) state that in the past safe sex meant contraception or prevention of unwanted pregnancies, but in recent times safe sex is about the prevention of sexually transmitted infection (STI`s), especially HIV/Aids. The fast rate of HIV infection is a challenge to the planners of preventative programmes and effective intervention(s). It is therefore of great importance that the attitudes of young South Africans toward condom use be investigated so that official bodies can introduce relevant policies to curb the pandemic (Barnes, 2000 & France-Presse, 2004). An overview of HIV/Aids literature is presented, focusing first on the global picture and then on the regional (Sub-Saharan African) and local (South Africa) situation.

2.2 The Epidemiology and treatment of HIV/Aids

The HIV retrovirus is adaptive, once inside your body, it hijacks the cells that manage the immune system which protects the body against infections. It slowly builds up a reservoir of inactive viral cells that lie in wait for the T-cell count in the body to drop. HIV is transmitted through direct contact with a mucous membrane or into the bloodstream with a bodily fluid containing HIV, such as blood, semen, vaginal fluid, and/or breast milk. HIV is able to modify, replicate and change itself at a very fast pace making it difficult to find a cure or a vaccine for the infection (Kalichman, 2000).

The most common form of the virus found in South Africa is HIV1. HIV2 is rare and is mainly found in West Africa (Nel, 2003 & Mashego, 2004). HIV infects cells in the immune system and the central nervous system. The main type of cell that HIV infects is the helper-T lymphocyte. These cells play a crucial role in the immune system, by coordinating the actions of other immune system cells. A large reduction in the number of helper-T cells seriously weakens the immune system. HIV infects the helper-T cells because it has the protein CD4 on its surface, which HIV uses to attach itself to the cell before gaining entry. This is why the helper - T cell is often referred to as a CD4+ lymphocyte.

Once it has found its way into a cell, HIV produces new copies of itself, which can then go on to infect other cells. Over time, HIV infection leads to a severe reduction in the

number of T-helper cells available to fight disease. The virus then starts attacking the immune system, causing moderate immune deficiency. An individual will then be prone to illness such as tuberculosis, which can be treated (Weston, 2006). The name of this condition is called Acquired Immunedeficiency Syndrome (Aids). An individual can be HIV positive and feel completely well for many years. However, all people infected with HIV will eventually get Aids. It should be noted that when individuals first become infected with HIV, they usually do not suffer any signs of disease. In some individuals the body may show an immune reaction against the infection and some acute symptoms which are given below.

- Mononucleosis like illness - the primary symptom is swollen lymph glands. In the case of HIV infection. All the lymph glands in the body become infected and symptoms such as sore throats and fevers can occur.

- Candida Albicans – a fungus, which can be detected on the skin and mucous membranes for instance, the mouth or vagina of most healthy individuals. In HIV infected individuals Candida becomes resistant to treatment and it infects the mouth where it forms a furry white plaque (commonly called a thrush infection).

- Hairy Leukoplakia - this condition is seen only in HIV/Aids infected persons. The papillae cells on the tongue grow very quickly and cause a thickening of the tongue.

- Brain infection (Encephalopathy) - swelling and inflammation of the brain can occur even at an early stage of HIV infection. An individual may suffer impaired brain function and have problems with attention, memory and or problem solving.
- Dementia - damage to the brain causes impaired mental function. Essentially, as the disease takes hold, the individual may have problems with memory, motor functions and the ability to perform the tasks needed for daily living (Nel, 2003).

Aids is not an epidemic but a pandemic that exists in all countries of the world it develops during the last stages of HIV infection (Ross & Deverell, 2004 & The World Health Organization (WHO), 2004). It is a disorder in which the immune system loses its ability to fight infections in itself it is not fatal, but without a functioning immune system, the body cannot protect itself from organisms that invade it and cause it damage. An individual with a failing immune system is susceptible to a variety of infections that are very unlikely to occur in people with healthy immune systems. These are called opportunistic infections, because they take advantage of the body's weakened immune system. It must be noted that Aids can affect every body system (Taylor, 2006). At this point in an infection cycle an individual will usually start to use anti-retroviral and other medications to combat full blown Aids. There are several infections that are usually found in individuals with badly compromised immune systems, they are described below.

- Pneumocystitis (PCP) – the pneumocystis carini fungus causes inflammation of the lungs. It is a common fungus and illness that only originates in individuals who have compromised immune systems. It is a major cause of death among people who have developed full blown Aids.
- Systemic mycosis – there are three different types of common fungus found in soil which can cause generalized infection in HIV/Aids patients. People who have health immune systems can catch infections from these fungi but they are usually not generalized. If an individual with HIV is infected with this type of fungi extensive systemic infection is caused.

- Tuberculosis (Tb) – one of the most serious chronic infections associated with HIV infection is tuberculosis. It has become compounded by the increase of multi-drug resistant tuberculosis strains which are difficult to treat (Nel, 2003).

Other infections can occur and only the most common acute and chronic ones have been listed. HIV infection causes the immune system to progressively weaken which ends in a condition called full blown Aids (when opportunistic illnesses have taken hold).

According to Nel (2003) the treatment of HIV/Aids uses particular medications, known as anti-retroviral, such as Zidovudine (AZT which stops the HIV retrovirus replicating. There are also different types of drugs such as a three in one drug which can help delay the onset of full blown Aids but does not cure the disease. Another widely used drug is Nevaripine which is given to HIV positive pregnant mothers and it cuts the mother to child infection rate from between twenty to fifty percent. This helps stop the progression

of the pandemic as many HIV positive mothers give birth to HIV negative babies. There is a roll out of anti-retrovirals in state clinics and hospitals in South Africa which has started to prove effective in prolonging people's lives.

Treatment is not just medical and HIV infected individuals are also given eating plans and helped to plan healthy lifestyles. However, changes in lifestyle are often not available to HIV infected persons as those that are the worst affected by the pandemic are often the poorest of the poor. Symposiums and workshops on behaviour change are another HIV prevention strategy which takes place at clinics and venues throughout South Africa the impact of these is uncertain as infection rates are still high implying that behaviour change has not occurred (Nel, 2003).

It is apparent that both acute and chronic infections, which need varying amounts of expertise and time to treat, as well as research needed to develop vaccines and drugs, can cause a strain on the health, social and economic systems of countries with a high prevalence. The humanitarian and monetary implications of the pandemic are immense (WHO, 2004).

2.3 A brief overview of global HIV infection trends

The prevalence of HIV infection in individuals aged fifteen to forty nine years old at the end of 2005 was as high as nineteen percent globally (UNAIDS, 2007 & WHO, 2007). In 2007, an estimated thirty three million people lived with the disease worldwide and it killed an estimated two million people. The total number of Aids deaths since the

beginning of the epidemic until the end of 2004 was estimated at twenty two million people.

The majority of people who are affected by the HIV retrovirus live in the developing world and seventy five percent of these are from Sub-Saharan Africa (Kumarnayake & Watts, 2001). According to Kalichman (2000) the pandemic continues to exact a devastating toll on individuals and families. He notes that, millions of woman and children around the world are infected with HIV each year because of sexual violence, poverty and civil unrest and adherence to patriarchal and traditional norms which give women few rights.

2.3.1 The United States of America (USA)

According to Barnett and Whiteside (2002) since the beginning of the HIV and Aids pandemic more than half a million people have died of Aids in the USA problematically about a fifth of infected people are unaware of their infection, posing a high risk of onward transmission. The USA's response to the Aids epidemic has produced mixed results. HIV prevention efforts have not always been successful and every year approximately fifty six thousand (56,000) Americans are infected with HIV. There is much stigma and discrimination towards HIV positive persons and people struggle to access antiretroviral therapy. In 2007, there were seven thousand, seven hundred and thirty four (7,734) new diagnoses of HIV, contributing to a cumulative total of ninety seven thousand, four hundred and twenty three (97,423) reported infections by the end

of June 2008. At least eighteen thousand, three hundred and twenty four (18,324) people diagnosed with HIV have died followed an Aids diagnosis (UNAIDS, 2007).

2.3.2 The United Kingdom (UK)

An estimated seventy seven thousand and four hundred (77,400) people were living with HIV in the UK at the end of 2007, of whom more than a quarter (twenty eight percent) were unaware of their infection. When the tests for HIV antibodies became widely available in the mid 1980s several risk groups for instance, substance abusers who use needles, were identified. According to Kalichman (2000) between 1999 and 2003 there was a steep increase in the number of HIV diagnoses. The major component of the rapid increase in recent years has been in heterosexually acquired infections. At the end of June 2008, forty three thousand and eighty two (43,820) men who have sex with men were diagnosed with HIV in the UK. It has been estimated that, at the end of 2006, about forty one percent (41%) of all people living with HIV in the UK were men who had sex with men. However, the number of heterosexually acquired HIV infections diagnosed in the UK has risen rapidly over the last fifteen years. The peak infection was in 2004 when four thousand, seven hundred and forty three (4,743) heterosexual persons were diagnosed as HIV positive. A total of forty one thousand, seven hundred and seventy nine (41,779) cases of HIV infection were reported by the end of June 2008 (UNAIDS, 2007). These are known infections it is likely that the actual infection rate is higher.

2.3.3 China

UNAIDS (2007) reports that at least seven hundred thousand people are living with HIV in China in 2007 this figure is lower than the previously published estimate in 2003. AIDS is now the leading cause of death among infectious diseases on the mainland, as official figures indicate that 7000 people had died in the first nine months of 2008 and 45 000 were infected with HIV.A Ministry of Public Health study predicts, in a medium scenario of HIV transmission, there will be 80,000-100,000 people with HIV and 10,000-25,000 people with AIDS in China by 2003. There will be significant medical costs and loss of productivity as a result of these high levels of infection, disease, and eventual mortality (Sun, Nan & Guo, 2000).

2.3.4 India

UNAIDS (2007) estimated that there are around two million people living with HIV in India. This puts India behind South Africa and Nigeria in numbers living with HIV. The actual number of people living with HIV is not known as many rural populations in India have not been researched with reference to HIV infection. India is so densely populated that an only 0.1% increase in HIV prevalence would increase the estimated number of people living with HIV by over half a million. The national HIV prevalence rose dramatically in the early years of the epidemic, but a study released at the beginning of 2006 suggests that the HIV infection rate has fallen in southern India, the region that has been hit hardest by Aids. This may be, in part, due to intensive HIV/Aids prevention programmes and workshops the state provided in that region. However, it is likely that

the true infection rates in India are higher than thought. Four southern states (Andhra Pradesh, Maharashtra, Tamil Nadu and Karnataka) account for around 63% of all people living with HIV in India. In the southern states, HIV is primarily spread through heterosexual contact, whereas infections are mainly found amongst injecting drug users and sex workers in the north-east.

2.3.5 Russia

In 2008 the HIV epidemic in Russia continued to grow, but at a slower pace than in the late 1990s. According to a report by WHO (2006), at the end of December 2007, the number of registered HIV cases in Russia was 416,113. The actual number of people living with HIV in Russia is estimated to be about ninety thousand. In 2007, eighty three percent of HIV infections in Russia was registered amongst injecting drug users, six percent (6 %) amongst sex-workers, and five percent (5 %) amongst prisoners. In 2007, ninety three percent (93%) of adults and children with advanced HIV infection were receiving antiretroviral therapy (Kalichman, 2000). Russia is witnessing an exponential growth in the rate of HIV infection, with the number of registered cases in May of 2000 equal to the previous ten year period (Petroisan, 2000). The number of cases has continued to escalate. The health system in Russia has struggled to cope with the pandemic and government has not implemented effective programmes it is only in the first decade of the 21st century mobilizing its resources to fight an overwhelming HIV infection rate.

2.4 A brief overview of sub-Saharan Africa HIV infection trends

Sub-Saharan Africa, especially Southern Africa, is the hardest hit region in the world. Sub-Saharan Africa has been devastated by the HIV/Aids pandemic, statistics show that at least one adult in five is infected with the HIV retrovirus (Weston 2006). The leading cause of death amongst people aged fifteen to thirty five (15- 35 years) is Aids. On average, the HIV prevalence rate in Sub-Saharan Africa is seven percent (7 %) of the entire population (UNAIDS, 2007). Deaths in Sub-Sahara Africa from 2003 to 2006 are estimated at twelve million people of the region. The prevalence of HIV/Aids in the region is high and HIV infected persons account for eleven percent (11%) of the population. According to Muheua (2007) the number of women infected is significantly higher than men in all countries in the Southern African region. In Botswana, the percentage of young women living with Aids is forty five percent of the total population, this compared to the figure for young men which is nineteen percent of the total population.

According to Nel (2003) the HIV prevalence rate in women attending antenatal care clinics in urban setting in South Africa is thirty six percent and its two neighboring countries, Botswana (fifty six percent) and Namibia (thirty one percent). Ross and Deverell (2004) describe the major facilitators of the heterosexual HIV pandemic in Sub-Saharan Africa as, poor education, poverty, poor health care, cultural traditions and tribal norms which are underpinned by the predominance of patriarchal societies where women do not have a voice in matters pertaining to sex. This makes them vulnerable to HIV/Aids as they cannot demand condom use.

2.4.1 Zimbabwe

With around one in seven adults living with HIV and an estimated five hundred (500) adults and children becoming infected every day (one person every three minutes), Zimbabwe is experiencing one of the harshest Aids epidemic in the world. The country has a tense political and social climate where there is no government response to the pandemic. Between 2002 and 2006, the Zimbabwe`s population is estimated to have decreased by four million people. Average life expectancy for women, who are particularly affected by Zimbabwe's Aids epidemic, is thirty four - the lowest anywhere in the world. The adult prevalence for HIV was twenty percent 2005, and fell to sixteen percent in 2000. The present prevalence rate is unknown (WHO, 2007).

2.4.2 Botswana

Botswana has been hard hit by Aids. In 2007 there were an estimated 300,000 people living with HIV. Considering Botswana’s population is below two million the infection rate is very high. The country has an estimated adult HIV prevalence of twenty four percent the second highest in the world (UNAIDS, 2007). An estimated 95,000 children have lost at least one parent to the epidemic. It is vital that children have access to education (particularly Aids prevention programmes). However, this is problematic in Botswana as many children are providing care for ill relatives or supporting siblings and not attending school (WHO, 2007).

2.4.3 Zambia

More than one in every seven adults in Zambia now lives with HIV and life expectancy at birth has fallen to just forty two (42) years. This has compounded Zambia's existing economic problems. In four decades of independence, Zambia is peaceful but not prosperous. Today it is one of the poorest and least developed countries in the world (WHO, 2007). Unlike some countries, HIV in Zambia is not primarily a disease of the most underprivileged. Infection rates are very high amongst wealthy people and the better educated. It is uncertain why this is the case as research to the underlying cause of middle class infection has not been carried out. HIV is prevalent in the two urban centres of Lusaka and the Copperbelt, rather than in poorer rural populations. However, it is the poorest that are least able to protect themselves from HIV or to cope with the impact of Aids. Although the HIV epidemic has spread throughout Zambia and to all parts of its society, some groups are especially vulnerable, most notably young women and girls. At the end of 2007, UNAIDS estimated that seventeen percent of people aged fifteen to forty-nine years were living with HIV or Aids. Of this number, fifty seven percent were women (UNAIDS, 2007).

2.4.4 South Africa

South Africa is a large country. It has had a difficult history and during Apartheid there were designated homelands. Black males usually left these homelands and migrated to work in cities. Here, they often had other families or girlfriends so had multiple sexual partners (Nel, 2003). This enhanced the spread of HIV infection which is relevant to the

explosive spread of HIV in the country. In July 2005, the South African National Health Department stated that the number of HIV-positive South Africans is six million. This is almost two million more than Statistics South Africa figures (Weston 2006). South Africa is one of the Sub-Saharan countries hardest hit by the epidemic. In mid-2007, following a government antenatal survey, the Department of Health, in collaboration with UNAIDS, WHO and other groups, published an updated estimate of seventeen percent HIV prevalence in people fifteen to forty-nine of age. This is equal to around six million people living with HIV, including several thousand children. It is predicted that the number of People Living with HIV/Aids (PLWHA) will exceed six million by 2015. In this era it is predicted that seven million (or more) South Africans will have died of Aids (UNAIDS, 2007 & WHO, 2006). It is clear that the impact of HIV/Aids on the country in social and economic terms will be devastating.

2.5 The Debate on Knowledge, Practice, Attitude and Behaviour Change (KPAB)

The majority of research on HIV/Aids can be captured under the heading of KAPB which stands for knowledge, attitudes, practice and behaviour (Weston, 2006). Behaviour change shows that change occurs in steps and that knowledge is not a good indicator of behaviour change. Behaviour change, it seems, is the only way to reduce HIV infection (Kelly, 2001, Levine & Ross, 2002). The continuing increase of infection rates suggests that efforts to curb negative sexual behavior(s) have been limited and perhaps not effective on a broad scale. Fundamentally, behaviour change (if it has occurred at all) does not seem to have achieved a significant public health impact.

According to Sarafino (2002) many studies indicate that there has been an impact on knowledge and attitudes, but not on actual behaviour-change. In fact, evidence increasingly suggests that knowledge alone cannot make behaviour change possible. It appears that knowledge of Aids and methods of protection remain inadequate as a modifier of health-risk behaviours. Knowledge needs to be linked to individual risk assessment. Focus should be shifted to recognition of risk, commitment to change, acquisition of sexual communication and negotiation skills, empowerment within relationships and the development of group norms to encourage information sharing on risk reduction. These behavioural interventions need to challenge people on their personal roles in the fight against HIV/Aids. However, prevention should still the primary focus of prevention and health promotion campaigns. Greater success may be seen when groups considered to be at high risk are targeted, for instance sex workers (Enfield, 2003). Knowledge, a sound understanding of sexual behaviours and tracking behaviour over time is an important element in the effective monitoring and evaluation of HIV prevention and care programmes.

According to Taylor (2006) campaigns should focus on the alleviation of guilt, the moderation of fear and addressing those mechanisms that halt behavioural changes even where knowledge is sufficient. Factors that influence knowledge or attitudes also indirectly influence sexual practices. Variables may intrude which may mediate between knowledge acquisition, attitude formation and sexual behaviours. Fear for instance, can lead to two different behaviours. It can be a motivator of positive action but it can also be a de-motivator that can lead to denial and can trigger negative behaviours relating to

HIV/Aids. An attitude contains beliefs, evaluations and action intentions that may affect behaviour(s). How individual`s feel about using condoms, what the individual believes about purchasing and using condoms and a persons' intentions to use condoms are all important components of individual attitudes and knowledge towards using HIV prevention techniques such as condoms (Mashego, 2004, Chwee, Eke-Huber, Eaddy & Collins, 2005). It must also be stated that self-confidence regarding the ability to purchase and use condoms is a behavioural necessity. Commitment to using condoms, positive communication with sexual partners and the availability of condoms also seem to be important reasons in the intended use of condoms.

2.6 Cognition Models

According to Green and Sobo (2000), cognition models are derived from subjective expected utility theory which suggests that behaviour is the outcome of a rational consideration towards the costs and benefits of behaviour(s). The Health Belief Model (HBM) and the Protection Motivation Theory (PMT) are both considered to be cognition models. They examine the predictors and precursors to health behaviour. These models do not focus on the social context of cognitions. They emphasize individual cognitions, and perceived behaviour (s) as a result of rational information processing they are thus relevant to research on attitudes, knowledge and perceptions toward HIV/Aids (Weston, 2006).

The HBM and PMT are linked as they are both psychological models which can be used to understand, explain and predict behaviour or behavioural intentions. The HBM is a

flexible model and has the advantage of being able to predict various health behaviours for instance risky sexual behaviour. Health behaviours are viewed by both models as being connected to attitudes and intentions (Dickenson, 2004). These models pay attention to the severity, susceptibility and self-esteem of individuals which relate to risk-taking behaviours, stigmatization and if and when individuals use Voluntary Counselling and Testing (VCT). These models are used in the study to investigate for instance, sexual risk-taking behaviour, substance abuse and risk behaviour, stigma in relation to social perceptions and VCT and disclosure.

2.7 The Health Belief Model

The Health Belief Model (HBM) is a psychological model that attempts to explain and predict health behaviors. This is carried out by focusing on the attitudes and beliefs of individuals. The HBM was first developed in the 1950s by the social psychologists Hochbaum, Rosenstock and Kegels working in the United State Public Health Services. The model was developed in response to the failure of a free tuberculosis (TB) health screening programme (Campbell, 2003).

The HBM has been adapted to explore a variety of long-and short-term health behaviours, including sexual risk behaviours and the transmission of HIV/Aids. It emphasizes the significance of a person's attitude in the prevention of disease, the seriousness of the disease, benefits of health actions and barriers to health actions. It was noted that these attitudes are modified by demographic and psycho-sociological factors (Harrison, Smith & Myer, 2000). The HBM is based on the understanding that a

person will take health-related actions (for instance, condoms use) if that person feels that a negative condition (such as HIV) can be avoided. According to Hunt, Jaques, Niles and Wierzalis (2003) there is a positive expectation that by taking a recommended action, individuals will avoid a negative health condition (for instance, using condoms will be effective in preventing HIV). There is also the belief that individuals can successfully take a recommended health action (for instance, individuals can use condoms comfortably and with confidence). According to Petzer (2003) the HBM is a rational-cognitive model and it assumes rational decision-making. A criticism of the model is that most adolescents and many adults do not seem to approach the Aids issue from a logical perspective and seem capable of discounting risks optimistically perceiving themselves as invulnerable to harm.

2.7.1 Key Concepts of the Health Belief Model

Originally, the model was designed to predict behavioural response to treatment received by acute or chronically ill patients. However, in recent years the model has been used to predict more general health behaviours. For instance, patients decide which route to take, in specific health behaviours and how much notice they take of individual benefits, disadvantages and barriers. These may differ markedly from person-to-person and can be due to social or environmental factors (Baumeister, Catanese & Vohn, 2001). The model recognizes the fact that sometimes wanting to change health behaviour(s) is not enough to actually make an individual change. It incorporates different elements into its estimations about what it actually takes to get an individual to

change his or her behaviour. These elements help individuals to conceptualize their own perceived risk.

According to Weston (2006) and Barbour (2008) the HBM has several constructs representing perceived threats and net benefits. They are perceived susceptibility, perceived severity, perceived benefits, and perceived barriers. These concepts are proposed as accounting for people's readiness to act. The concepts self-efficacy and cues to action were added by Rosenstock in 1988 to help the HBM better fit the challenges of changing habitual unhealthy behaviours, such as being sedentary, smoking, or obesity. The cues to action, concept activates readiness to change and stimulates actual overt-behavior. The concept of self-efficacy or self esteem is needed for individuals to successfully perform an action. It relates to an individual`s self-confidence.

- Perceived susceptibility - Elliott (2002) defines this concept as an individual's assessment of the chances of becoming infecting or catching a specific condition. For any given condition an individual will have a perception as to how susceptible he or she is to it developing. For instance, some people are convinced that because a parent or sibling has a disease they will get it. A stereotypical view, often quoted, is that of the smoker who refuses to give up because he knows someone who smoked all of their life without a single problem. Essentially, they do not develop lung-cancer (Beck, 2002). Awareness of conditions is an important factor in this respect. However, this does not mean

that individuals who are unaware of conditions do not feel susceptible to illness. Individuals may be worried that something is wrong somewhere or because they feel tired which means they must be sick. This level of concern can be the same as in individuals who worry about a specific condition. It must be noted that people will not change their health behaviours unless they believe that they are at risk. According to Cameron (2001), for instance, people who do not think that they are at risk of acquiring HIV from unprotected intercourse are unlikely to use a condom.

- Perceived severity refers to an individual's belief in the seriousness of a condition and its potential consequences (Weston, 2006 & Timmons & Lynch, 2004). This includes evaluating potential medical, psychological and social consequences. An example of perceived severity, in terms of condom use, would be extent that students believe the consequences of contracting sexually transmitted infections (STI's) are significant. Individuals differ in terms of how serious they think different conditions are. This interacts with the perception of susceptibility. An individual may be at low risk of developing bowel cancer, but since he or she perceives it as a very serious condition, he or she may feel motivated to see their General Practitioner about persisting bowel problems. This risk perception may influence an individual's risk reduction strategy and affect motivation to avoid perceived threats (Dannreuhter & Lekhi, 2000). The probability that an individual will change his or her health behaviours to avoid a consequence depends on how serious he or she considers the consequence to be.

- Perceived barriers – this refers to an individual's belief of the influences that facilitate or discourage the adoption of a promoted behaviour (Weston, 2006). An example would be the perception that condoms limit feeling or sexual gratification in the male. One of the main reasons people don't change their health behaviours is that they think that doing so is going to be difficulty. Sometimes it is not just a matter of physical difficult but social and/or psychological difficulty. Changing health behaviours can take effort, money and time. For instance, stopping smoking and using nicotine gum to help stem the craving for nicotine. This gum is expensive and it takes time to wean the body of nicotine dependence. Promoting new behaviours which may include practical problems like getting to the clinic (paying for a taxi) or issues such as stigmatization also impact on an individuals will to change (Stephenson, 2004).

- Perceived benefits – the concept refers to an individual's belief in the positive consequences of an adopted behaviour. A variant of the model includes the perceived costs of staying on or adhering to prescribed interventions. Benefits may include the early treatment for HIV or preventing the infection of others.

- Self-efficacy according to Alexander and Fisher (2003) is self confidence and describes how a person views their own ability to carry out a particular action (or it is their own confidence in their ability to take action). This includes the individual's perception of how likely he or she is to change particular behaviours. If the individual has low self-esteem it may be a barrier to taking action. Individuals must be self confident and believe that they have the ability to

change. In recent years, self esteem, for instance has been found to be one of the most important factors in an individual's ability to successfully negotiate condom use.

- Cues to action are external events that prompt a desire to make a health change. Cues to action may include information provided or sought, reminders by powerful others, persuasive communications and personal experiences (Abrahams, 2001). It is difficult to convince people to change behaviour if they do not perceive that there isn't something in it for them.

2.7.2 Conceptual models

According to Weston (2006) diagram 1 (page, 27) depicts a conceptual model of one aspect of the HBM. It includes an example of an individual perception to perceived susceptibility to illness and the factors which influence this perception. In the example other modifying factors which affect how a respondent might behave include the perceived threat of disease and cues to action. In addition it looks at the factors which effect how an individual predicts the likelihood that a specific behaviour will occur. The diagram indicates that likelihood of action might be influenced by perceived benefits to changing individual's behaviour while considering barriers to behaviour change.

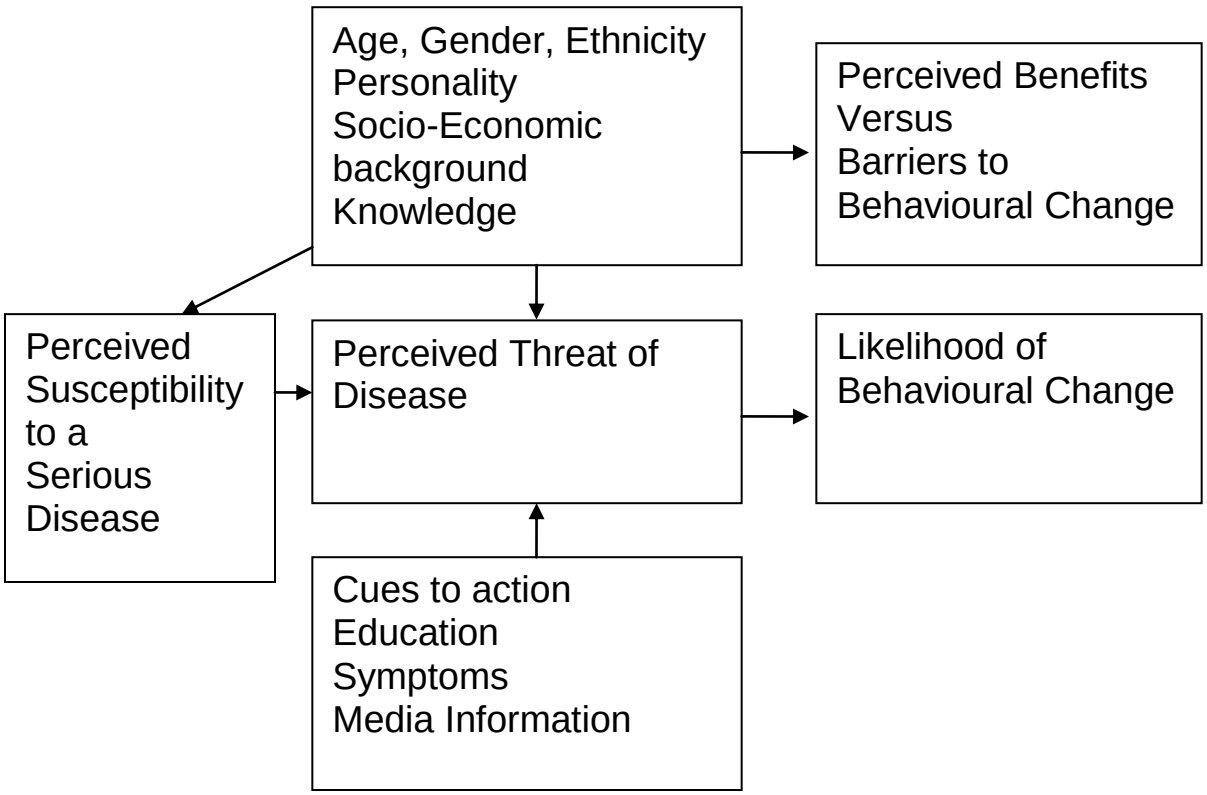

Figure 1:
Diagram showing how actions might be influenced by perceived benefits

2.7.3 Rationale for the Health Belief Model in understanding HIV/Aids behaviour(s)

The model describes how an individual's perception of his or her vulnerability to Aids is determined by understanding the HIV retrovirus and it transmission in relation to HIV/Aids infection (Weston, 2006). Developed in the 1950s the HBM has functioned effectively to promote medical compliance and health screening. In addition, it has been used successfully as a framework for the development of health education strategies. The HBM as a framework for motivating people to take positive health actions uses an individuals desire to avoid negative health consequences as a prime motivator

(Alexander & Fisher, 2003). For example, HIV is a negative health consequence and the desire to avoid HIV can be used to motivate sexually active people into practicing safe sex behaviour(s).

2.7.4 Limitations of the Health Belief Model

The HBM however, has limitations. Its has been criticized for emphasizing the individual (rather than including the social and economic environment) and for the absence of a role for emotions such as fear and denial (Weston, 2006). A major weakness of the HBM is the fact that all determinants of health behaviour are not included, for instance positive behaviours are often ignored. The HBM has been criticized for focusing on the conscious processing of information. For example, it would suggest that the use of condoms is determined by weighing up the positive and negatives of use which rarely happens when people are about to engage in sexual activity.

The inter-relationship between different core components of the HBM has also been questioned. Issues such as how core components should be measured and how they relate to each other have become concerns (Taylor, 2006 & Sarafino, 2002). In addition, breast self-examination behaviour has been the subject of many studies which report that barriers and perceived susceptibility are the greatest predictors of health conduct. This information is relevant to the present study, particularly as it attempts to explain and predict health behaviour by focusing on an individual's knowledge, attitudes and beliefs.

2.8 The Protection Motivation Theory

According to Weston, (2006) the Protection Motivation Theory (PMT) was originally proposed to provide conceptual clarity to the understanding of fear. A later revision of the PMT extended the theory to a more general theory of communication that seeks to persuade individuals with an emphasis on the cognitive processes behind behavioural change. PMT is partially based on the work of Lazarus (1966) and Leventhal (1970) and describes adaptive and maladaptive coping with a health threat as a result of two appraisal processes (Weston, 2006). Numerous health behaviour theories such as PMT and the Health Belief Model (HBM) specify factors (for instance, response esteem and vulnerability) which produce a transition between the stages (Protection Motivation Theory, 2004). For instance the degree of risk severity, vulnerability, self-efficacy and response efficacy are critical motivators as people move through the stages of pre-contemplation, contemplation, the preparation stage and action.

- Pre-contemplation - The earliest stage of change is known as pre-contemplation. During the pre-contemplation stage people are not considering change. People in this stage are often described as in denial due to their claims that their behaviour is not a problem (Sebastian, 2003). An individual in this stage may feel resigned to their current state or believe that they have no control over behaviour(s). In some cases, people in this stage do not understand that their behavior or actions are damaging to self.

- Contemplation – according to Weston (2006) during this stage, people become more and more aware of the potential benefits of making changes,

but the costs tend to be highlighted. This conflict creates a strong sense of ambivalence about change. The results of the contemplation stage of change can last months or even years. In fact, many people never make it past the contemplation phase. During this stage, individuals may view change as a process of giving something up rather than a means of gaining emotional, mental, or physical benefits with regard to behaviour change.

- Preparation stage - during this stage, individuals might begin making small changes to prepare for a larger lifestyle change. For example, if losing weight is an individual`s goal, he or she may change to lower-fat foods. If an individual`s goal is to stop smoking, he or she might change brands or smoke less each day. The individual might also take some sort of direct action such as consulting a therapist, joining a health club, or reading self-help books (Sebastian, 2003). If an individual is in the preparation stage, there are some steps he or she may take to improve his or her chances of successfully making a lasting life change. Individuals must gather as much information as he or she can about ways to change behaviour. This can be done by preparing a list of motivating statements and writing down achievable goals. Individuals can also find outside resources such as support groups, counsellors, or friends who can offer them advice and encouragement.

- Action - during the fourth stage of change, people begin taking direct action in order to accomplish goals. Sometimes resolutions fail because the previous

> steps have not been given enough thought or time. For example, many people make a New Year's Resolution to lose weight and immediately start a new exercise regime, begin eating a healthier diet. These steps are vital to success, but these efforts are often abandoned in a matter of weeks because the individual has no support and does not plan properly. If an individual is currently taking action towards achieving a goal, he or she must congratulate and reward self for any positive steps taken. Reinforcement and support are extremely important in helping maintain positive steps toward change. Individuals must take the time to periodically review motivations, resources, and progress in order to refresh commitment and belief in his or her own abilities (Stephenson, 2004).

PMT is organized as two sub-processes that people use in evaluating threats (threat-appraisal process) and in selecting coping mechanisms (coping appraisal). They include behaviours that lead to negative consequences (for instance, smoking) and the absence of behaviours, which eventually may lead to negative consequences (for instance, not participating in breast cancer screening and thus missing the opportunity of early detection of cancer) (Petros, Airhihenbuwa, Simbayi, Ramlagan & Brown, 2006). PMT states that stakeholders' motivations or intentions to protect themselves from harm are enhanced by four critical perceptions: severity of the risks, personal vulnerability to the risks, self-efficacy or confidence in one's ability to perform the risk-reducing behaviour, and the response efficacy of the risk-reduction behavior. It also states that people's intention to protect themselves is weakened by the perceived costs of the risk-reducing

behaviours. Protection motivation effectively arouses, sustains, and directs positive behavioural activities starting with the identification of the hazard in question (Weston, 2006).

2.8.1 Support for the Protective Motivation Theory

According to Weston (2006) women are given information about breast cancer and how to examine their breasts. The effects of this information was aligned and evaluated with the components of the PMT and women's intentions to carry out breast self-examination. The results indicated that the best predictor of intentions is to practise breast self-examination (BSE). This is response effectiveness (believing that BSE will detect the early signs of cancer), response severity (believing that breast cancer is dangerous and difficult to treat in its advanced stages) and response self-esteem (belief in individual`s ability to carry out BSE effectively).

A similar study was conducted on the influence of appeals to increase exercise and intentions to exercise. These were observed using the components of PMT, the findings indicated that perceived susceptibility to illness and individual self-esteem predicted exercise intentions. In a comparative study the effects of persuasive appeals for increasing exercise on intentions to exercise were evaluated using the components of the PMT. The results indicate that vulnerability (ill health would result from lack of exercise) and self-esteem (believing in individuals ability to exercise effectively) predicted exercise intentions but that none of the variables were related to self-reports

of actual behaviour (Weston, 2006). Elliot (2002) manipulated dental students' beliefs about tooth decay using persuasive communication. Results of the study indicated that the information he disseminated increased the students fear about tooth decay. However, students noted that there was, in fact, something they could do which had positive behavioural intentions, for instance, flossing and brushing regularly especially after eating.

2.8.2 Limitations of the Protective Motivation Theory

The PMT has been less widely criticized than the HBM. However, many of the criticisms of the HBM also relate to the PMT. According to Weston (2006) for example, the PMT assumes that individuals are rational information processors (although it does include an element of irrationality in its fear component), it does not account for habitual behaviours such as brushing teeth, nor does it include a role for social (what others do) and environmental factors (for instance, opportunities to exercise or eat properly at work). This type of limitation is generic to investigations that use the PMT as a framework. Essentially, though in spite of these limitations the PMT provides a effective theoretical framework for investigation into health related behaviours.

2.9 Theoretical Perspectives

There is no doubt that HIV/Aids is a devastating disease, with severe global implications, especially in Southern Africa. Control of the HIV epidemic differs from that

of other infectious diseases because of the complex and personal nature of the risk behaviours that drive its spread (Baumeister et. al, 2001). A significant amount of research on risk-taking behaviour has been carried out among universities students and high school learners in South Africa. They concur that risky sexual practice is ranked as the highest of the risk-taking behaviours.

Studies relating to risk and HIV/Aids are predominantly around sexual behaviour and attitudes, as well as drug and alcohol use. In general, studies reflect that students do not see themselves as being at risk of contracting HIV (Nel, 2003). Threat appraisal and coping appraisal are two concepts that commonly appear in studies on perceptions of risk. It is important to discuss these perspectives as they give insight into risk behaviour and attitudes such as fear amongst students.

The rapid spread of the HIV/Aids pandemic called for the need to get baseline information to measure the outcome of interventions. Understanding why people behave in a way that puts themselves at risk, will help in identifying barriers to behaviour change and could identify areas that need reinforcement in HIV/Aids intervention programmes (Magwaza, 2003). Boer and Eamons (2004) conducted a study in Northern Thailand using concepts from the HBM. They found that response efficacy and self efficacy were critical in gaining better coping mechanisms. These concepts are connected to the HBM and PMT.

2.10 Sexual Risk-Taking Behaviour

For the purpose of this study sexual risk taking behaviour can be defined as having penetrative sex with another individual without taking any preventative precautions against HIV infection, pregnancy and STI infection (Nel, 2003).

2.10.1 Global trends and Knowledge in Sexual Risk-Taking Behaviour

Global trends indicate a similar pattern to those found in research in South Africa. There are approximately forty eight million people worldwide living with the infection, progress towards developing effective international responses to curb the spread of the disease has been slow (WHO, 2006). The spread of HIV/Aids is most acute in Africa and Asia where one in four of all new infections occurs (Stephenson, 2004 & WHO, 2006).

In the USA less than twenty percent of college students consistently use condoms during sexual intercourse. A study conducted in various USA colleges tested various concepts from the HBM in terms of there ability to explain and predict college students` intentions regarding condom use. The second aim was to investigate the relationship between safe sex behaviour and student's knowledge, concerns or attitudes about HIV/Aids. The results indicate that having the knowledge is not enough to reduce sexual risk-taking behaviour(s) (Weston, 2006).

One of the most important sexual risk behaviours associated with HIV/Aids is not using a condom. Ever since the discovery of the HIV retrovirus research has developed ways to predict and promote safer sex. Findings on self-reported attitudes and behaviour

indicate that men are more likely to engage in risky sexual behaviour such as not using a condom (Baumeister et al., 2001).

It is important to consider that males may be more honest in reporting risky sexual behaviour(s) when responding to research questions. Alexander and Fisher (2003) conducted a study that revealed that woman may be more sensitive to social expectations and may not tell the truth about sexual experience and behaviour(s). Women perceive that they should not be promiscuous and should be relationship oriented. It is likely that as a result of stigmatization (or perceived stigmatization) they may not answer questions about sexual behaviour honestly.

2.10.2 Sub-Saharan African trends and Knowledge in Sexual Risk-Taking Behaviour

Weston (2006), states that the HBM concept of perceived susceptibility can be useful in terms of analyzing sexual risk-taking behaviour(s). Chwee, Eke-Huber, Eaddy and Collins (2005) conducted a study examining undergraduate Nigerian college students` HIV knowledge and perceived susceptibility. This was a quantitative study which indicated that females had a greater knowledge about the pandemic compared to males. Females scored higher in knowledge about the risks of HIV transmission through oral sex which, although low, exists. The study also indicated that male respondents perceived lower risk severity pertaining to HIV infection.

In Africa, there is much quantitative research using demographic comparisons on attitudes, knowledge and perceptions toward HIV. There are a few cases of qualitative research looking at the experience and feelings of HIV positive people and people living with Aids (Weston, 2006).

2.10.3 South African trends in Knowledge and Risk-Taking Behaviour

Sexual risk-taking, as noted previously, involves any sexual activity that places individuals at risk for unintended pregnancy and, or STI`s. Examples include unprotected sex, inconsistent use of contraception, use of contraception without appropriate protection against STIs, or multiple sexual partners. HIV and STI`s infection rates in South Africa are among the highest in the world. The majority of those infected with HIV are women in their twenties, sex workers, miners and other migrant workers. Studies reveal that gender imbalances, high levels of tolerance for gender-based violence and patriarchal sexual norms account for high levels of sexual risk behaviour. Levels of knowledge about HIV are extremely high amongst most groups, but the translation of this knowledge into safe sex is seldom put into practice (Uys, 2002).

Uys (2002) at Rand Afrikaans University (RAU) used both qualitative and quantitative components in an investigation related to HIV/Aids. The purpose of the study was to determine the levels of awareness and knowledge about HIV/Aids. As knowledge and awareness are seen as affecting student's vulnerability to contracting HIV, the study aim was to find out whether this awareness was reflected in the students sexual activities. For example, did students use condoms when engaging in safe sex and did they limit

their sexual partners. The results indicated that students know that risky behaviour could result in the contraction of HIV and they could pin-point high-risk behaviour, yet they still engaged in unsafe sex. In addition, it was found that students had generally negative attitudes toward condom use.

Research at Rhodes University in Grahamstown indicated that males and females differ in their attitude towards condom use, females being more positive about condom use than males. The results indicated that only twenty eight percent of respondents regularly used condoms during sex (Weston, 2006). At the University of Zululand seventy eight percent of students state that they do not always use a condom during sex (Nel, 2003). This study looked at the impact that the HIV/Aids pandemic is having on higher education and the crucial role that tertiary education institution should play in dealing with this impact. As well as stressing the academic effects of the disease, the study also emphasized its effect on society.

Madlala (2001) explored South African school pupil's views on sexual violence and risk of HIV infection. The study suggests that research on youth in South Africa has shown that misconceptions are high about the risk of HIV/Aids infection. It also found that the response to learning about behaviour transformation is not as positive as anticipated. This research is relevant to the current study in terms of general misconceptions about HIV/Aids. One third of the participants indicated that they thought they may be HIV-positive.

Levine and Ross (2002) conducted a study about the perceptions and attitudes of young adults at the University of Cape Town towards HIV/Aids. The authors state that student's knowledge and social constructs of HIV/Aids are important. Their research results indicated that participants tend to imagine that they have immunity to the virus and consequently they continue to practice unsafe sex.

2.11 Substance Abuse and Risky Behaviour

It is well documented that substance abuse in all forms increases the risk of negative sexual behaviours (that is, behaviours that may have poor health outcomes). Global and South African trends are noted in this regard.

2.11.1 Global Substance Abuse and Risky Behaviour

According to Enfield (2003) the level of alcohol use on American college campuses is very high. It is reported that fifty percent of college student drinkers engage in heavy episodic drinking and that this leads to negative physical and psychological consequences. For instance, Green and Sobo (2000) report that depressive symptoms, that have an etiology in substance abuse, placed young women but not young men at a greater risk of having penetrative sex by the age of sixteen. Low self- esteem, which is also associated with substance abuse in young women, also increases the risk of having unprotected sex. Young people begin smoking cannabis, drinking alcohol and taking other recreational drugs in the years preceding, or around the same time, as they begin exploring their sexuality.

It was noted that abuse of substances in the United Kingdom is related to sexual risk taking behaviour. The research concentrated on the role that alcohol-related experiences play in acting as a barrier to preventive (that is, prevention of sexually transmitted diseases) behaviours (Nel, Tebele & Mpungose, 2007).

2.11.2 South African trends in Substance Abuse and Risky Behaviour

In addition to having one of the highest rates of HIV infection in the world, there are also high levels of alcohol use and misuse in South Africa. Many of South Africa's social and health problems are attributable to the misuse of alcohol, with sexual risk behaviours considered to be one such problem (Ross & Deverell, 2004). However, there has been a limited amount of research on the mechanisms through which alcohol misuse increases the occurrence of sexual risk behaviour within South African communities. Such research is noted as important in informing the development of interventions to help communities recognize their increased vulnerability with respect to their engagement in and, or exposure to, sexual risk behaviours in contexts where alcohol is misused.

Alcohol use is wide spread in South Africa. Uys (2002) acknowledges that there is a relationship between alcohol abuse, casual relationships and unsafe sex. By implication, HIV/Aids is a component of this cycle. The author indicates that in most studies concerning tertiary-level student attitudes, it seems that students do not perceive themselves as being at risk of HIV/Aids infection. On the other hand, a study by Levine and Ross (2002 mentioned that students do feel threatened in relation to the

retrovirus and alcohol consumption because they are aware they are more likely to commit risky sexual behaviours.

Research at tertiary institutions indicates that alcohol use is widespread in South Africa. Although traditionally men have been perceived as the biggest consumers of alcohol women (both Black and White), are fast catching up (Nel, Tebele & Mpungose, 2007). Cameron's (2001) research indicates that White females are still more likely to drink alcohol than Black females but consumption of alcohol amongst black females is rapidly becoming higher. However, males of all population groups have roughly the same rates of alcohol consumption. People in urban areas are more likely to drink than their rural counterparts, although people based in rural areas seem to more inclines to drink at risky (very high levels of alcohol consumption) levels when they do drink. Barnes (2000) also recognizes that alcohol plays a role in creating an environment that perpetuates risky behaviour. Notably, the relationship between alcohol, drugs and non – use of condoms.

The study by Ross and Deverell (2004) investigated the link between alcohol use and HIV status. Its main findings indicated that, alcohol use and HIV-related sexual risk behaviours are growing problems that affect most sectors of the community in South Africa. It also noted that adolescents and youth are particularly affected by both alcohol problems and related HIV infection. The research concluded that HIV-related knowledge is wide spread, but people seldom protect themselves from infection. It also noted that the role of alcohol consumption pertaining to HIV infection is not well

understood by communities. Numerous socio-economic factors perpetuate the production, availability and consumption of alcohol in South Africa for instance, working conditions on wine farms and mines which are notoriously difficult and poorly paid. In addition, alcohol production and distribution provides many job opportunities in a society with high rates of unemployment (Shell, 2000).

Lindell and Perry (2004) evaluated the HBM and emphasized the links between demographics and susceptibility variables to alcohol intake. For instance, it is important to consider the influence of alcohol on risk behaviours as small-town universities are known for having cultures of high alcohol consumption on campus and related risky sexual behaviours (Rhodes Counselling Centre, 2000).

2.12 Stigmatization and Social Perceptions

Stigmatization affects various attitudes and perceptions related to HIV/Aids issues such as inaccurate beliefs and knowledge, threats, risk and risk stereotypes and disclosure. Petros, Airhihenbuwa, Simbayi, Ramlagan and Brown (2006) discuss how cultural and racial attitudes affect perceptions of those seen as responsible, and in turn vulnerable to, HIV/Aids infection. According to Abraham (2006) the othering of blame needs to be considered in understanding why people see the other, as responsible, and vulnerable to, HIV/Aids infection (the othering of blame is essentially transferring responsibility or blame to protect self, a way of deferring responsibility for one's own actions). These are core issues relating to HIV/Aids. The HBM can contribute to explanations of distancing processes through it concepts of perceived susceptibility and perceived severity. Stigma

can be defined as the identification and recognition of a bad or negative characteristics in a person or group of persons and treating them with less respect, or worth, than they deserves due to this characteristic.

There are many different types of stigma, some of which are defined as (a) discreditable stigma, one that is not known about by the world at large (b) discrediting stigma, one that cannot be hidden from people because it is obvious and visible (c) enacted stigma, the real experience of prejudice and (d) discriminatory and felt stigma, the fear that discrimination might occur (Ross & Deverell, 2004). HIV/Aids is a discreditable stigma, and disclosure is often avoided as a result of both felt and enacted stigmas. Experiencing any kind of stigma is likely to lead to low self-esteem, reduced willingness to seek medical and social help and increased difficulty in sharing problems with friends, family and others. In most cases, women are the first in the family to be diagnosed with HIV, and they are often accused of being the source of it in the family. They thus become stigmatized.

2.12.1 Global trends Stigmatization and Social Perceptions

HIV/Aids is as much about social phenomena as it is about biological and medical concerns. From the moment scientists identified Aids, social responses such as fear, denial, stigma and discrimination have accompanied the epidemic. Discrimination spread rapidly, fuelling anxiety and prejudice against the groups most affected, as well as amongst those living with HIV or Aids (Boer & Emons, 2004). A study in Northern Thailand reveals an assessment of the correlation between groups with accurate and

inaccurate beliefs about HIV transmission and stigmatization and emotional reaction to PLWHA and Aids risk groups. Participants with inaccurate beliefs showed more fear and stigmatizing attitudes towards PLWHA`s. The sample in the research perceived a higher risk for HIV infection in casual contact and was unwilling to mix with people they new to be homosexuals or sex workers.

Across the world the global epidemic of HIV/Aids has shown itself capable of triggering responses of compassion, solidarity and support, bringing out the best in people, their families and communities. However, the downside according to Weston (2006) is that the pandemic is associated with stigma, repression and discrimination, as individuals affected (or believed to be affected) by HIV are rejected by their families, their loved ones and communities. Stangor and Crandall (2000) suggest that stigmatization behaviour may have a purpose in protecting the self from a threat. It has been documented that in locations where there is a high HIV/Aids risk, fear about contagion and stigmatizing attitudes have a high incidence.

Abrahams (2006) conducted research on HIV/Aids-related stigma amongst Muslims in a Cape Town community. Participants were aware of having to protect themselves from HIV/Aids and thought that this could be a barrier to people reaching out to those who are infected with HIV/Aids. According to Kahn (2004) the HIV pandemic is closely linked to stigmatizing behaviours. Research findings suggest that stigmatization perpetuates risk of infection. Another finding indicated that it is possible to reduce stigmatization and/or the impact of stigmatization on people. However, this involves a culture of

forgiveness, tolerance and adherence to religious values. It was noted that stigma can be viewed as a powerful tool for social control. It can be used to marginalize, exclude and exercise power over individuals who show certain characteristics. While the societal rejection of certain social groups such as homosexuals, injecting drug users and sex workers may pre-date HIV/Aids, the disease has, in many cases, reinforced this stigma.

2.12.2 Sub-Saharan African trend, stigmatization and social perceptions

Kumarnayake and Watts (2001) suggest that in underdeveloped countries HIV/Aids is perceived differently to developed countries, where it is viewed as a treatable disease which has the potential to be contained. Alternately HIV/Aids is viewed in Africa as being incurable and still spreading. Stereotypes such as traditional customs and sexual promiscuity are often blamed for the spread of HIV in Africa.

Reid and Walker (2005) have contributed to studies on stigmatization in Southern Africa through investigating attitudes to homosexuality and its association with HIV/Aids related deaths. They studied cultural norms and their relation to secrecy, as well as stereotypes. Despite a high level of awareness HIV and Aids remain highly stigmatized in most sub- Saharan countries for instance, Zimbabwe. People living with HIV are often perceived as having done something wrong and discrimination is frequently directed at both the affected person as well as their families. Because of this many people are afraid to get tested for HIV for fear of being socially alienated, losing their partner or losing their job. Those who do know their status rarely make it publicly known, which often means that they do not have access to sufficient care and support. There is some

evidence that in Zimbabwe the stigma surrounding HIV is gradually diminishing, although it still remains a significant problem.

2.12.3 South African trends in Stigmatization and Social Perceptions

Stigmatization behaviour(s) can be connected to the use of stereotypes in the South African context. Social stigma associated with HIV/Aids was perpetuated, in the Mbeki era, by the Government's reluctance to bring the crisis into the open and face it head on. This prevented many from speaking out about the cause of illness and subsequent deaths of family members leading to medical doctors recording (so-called) uncontroversial diagnoses on death certificates. According to Campbell (2003) the South African Government needs to stop being defensive about the pandemic and show backbone and courage if it is to face the challenges of associated with the HIV/Aids crisis.

HIV/Aids is often seen to bring shame upon PLWHA their family and/or the wider community. In the minds of the community it is often associated with behaviours such as homosexuality, drug addiction or promiscuity and can be seen as the result of personal irresponsibility (Kalichman & Simbayi, 2003). Unfortunately negative responses to HIV/Aids exist and feed upon and reinforce dominant ideas of good and bad with respect to sex, morality and illness underpinned by judgments about what are considered proper and improper sexual behaviours. Stangor and Crandall (2000) suggest that such stigmatization behaviour(s) may have purpose in protecting the self from a threat. They view this as particularly relevant in the South African context where

multiple race and class structures could be seen to perpetuate stigmatization. They suggest that through social stigmatization, the individual can distance himself or herself from the disease or behaviour associated with the stigmatized group. Related to the topic of stigmatization and social perceptions is the issue of social context. Many HIV-positive people have engaged in prevention initiatives by declaring their HIV-status openly. Campbell, Foulis, Maimane and Sibiya (2005) conducted a study looking at how the individual's social environment shapes or influences HIV-prevention programmes. Three aspects of context are seen to undermine the effectiveness of such intervention: stigmatization, the pathologisation of youth sexuality and negative images of youth. This study explored how different understandings of the causes and ways to manage HIV/Aids serve to stop the failure of HIV-prevention initiatives.

Abraham, (2006) explored identity change, the experience of living with HIV/Aids and how an individual can manage the social risks of HIV. The author also explored many of the issues around stigmatization, which cause people to avoid disclosing their HIV positive status. Findings indicate that mainstream cultural models lay the foundation for perceived risk of self-disclosure. There are various reasons for why it might be difficult to disclose HIV status. For instance double stigma is evident when HIV is associated with high-risk groups and behaviour which is disdained in a cultural sense (for instance, homosexuality in a rural African context).

According to Sarafino (2002) there are certain factors which contribute to HIV/Aids-related stigma. Fundamentally, because HIV/Aids is a life-threatening disease

associated with sex, people are scared of contracting HIV because they will die and also because they will be perceived to be doing something sexually wrong (shameful). The disease is thus associated with what are perceived as wrongful sexual behaviour(s) (such as sex between men and/or promiscuous sex). These behaviours are stigmatized in many societies, particularly patriarchal conservative contexts such as those found on the African continent. More factors that contribute are for instance, PLWHA are often thought of as being responsible for becoming infected with the retrovirus because they are at moral fault. Essentially, they have erred against moral norms by committing acts that deserve to be punished.

Together with the widespread belief that HIV/Aids is shameful, these images represent ready-made but inaccurate explanations that provide a powerful basis for both stigma and discrimination. These stereotypes enable some people to deny that they are likely to be infected or affected. It is interesting to note that HIV-positive women are treated very differently from men in many developing countries. Madlala (2001) states that, men are likely to be excused for the behaviour that resulted in their infection, whereas women are not (this is usually promiscuous sexual behaviour or having penetrative sex without a condom).

In October 1998, the Deputy President of South Africa Thabo Mbeki made the Declaration of Partnership against Aids, in which he called for an end to discrimination against people living with HIV. Less than two months later, Gugu Dlamini, an Aids

activist in Durban, was beaten to death by her neighbours after declaring that she was HIV-positive on World Aids Day (Department of Health, 2006). In 2000, Justice Edwin Cameron of the South African court announced in a speech that he was HIV-positive. The public response to this declaration was, on the face of it, largely supportive. However, it must be stated that revealing HIV-positive status can have a negative effect on employment and housing opportunities, as well as social relationships (Kahn, 2004).

A study by Lindell and Perry (2004) revealed that only one third of respondents who had revealed their HIV-positive status were met with a fair or good response in their communities. One in ten said that they had been met with outright hostility and rejection. When his son died of Aids in 2005, Nelson Mandela publicised the cause of his death in an effort to challenge the stigma that surrounds HIV infection. He stated that he wanted to give publicity to HIV/Aids and not hide it. He noted that this was the only way to make it appear acceptable as an every-day illness. The concept of otherness is also integral to the understanding of stigmatization, as people construct roles for themselves in relation to another. This can be part of a process of reaction that can be related to stigmatization or condemnation. Essentially, anyone who has the virus is different thus other people who are different have unsafe sex (not me). This difference is perceived in a negative way which leads to stigmatization and discrimination of those who are known to be HIV positive or who have Aids (Nel, 2003).

2.13 Women and stigma

The impact of HIV/Aids on women is particularly acute. South Africa demonstrates significant differences between the experiences of men and women. Cultural attitudes towards women tend to demonstrate inequality. The poorest and most disadvantaged people in South Africa remain black women who are disadvantaged in terms of their earning power, their access to education and their employment status. In some societies, women are economically, culturally and socially disadvantaged and may lack equal access to treatment, financial support and education (Mashego, 2004). Women are often mistakenly perceived to be the main transmitters of sexually transmitted disease. This together with traditional beliefs about sex, blood and the transmission of other diseases provide a basis for the further stigmatization of women within the context of HIV/Aids. Women's lack of empowerment is at the heart of their inability to prevent exposure to HIV (Reid & Walker, 2005).

In South Africa patriarchy ensures that women experience different forms of male domination and oppression according to their class, status, religion, race and even ethnic and cultural backgrounds. For example, white, middle class women will experience patriarchy differently to rural African women. It is because of the understanding of the links between class, race and gender in South Africa that the notion of triple oppression emerged to describe the character of the oppression of black women. For the majority of women in South Africa, oppression emerges in terms of patriarchal control, their relationship to the means of production (they are mostly poor workers or unemployed) and the fact that they are black. However, that is not to say that

if black women become richer they will be liberated in a sexual sense (Tillotso & Maharaj, 2001).

2.14 Stigmatization links to risk and disclosure

Kahn (2004) suggested the high perception of stigma is associated with reduced disclosure to others, leading to poor social support and higher distress in social contexts. Green and Sobo (2000) explore stigmatization attached to HIV within the context of risk. The investigation explored identity change, the experience of living with HIV/Aids and how an individual can manage the social risks of HIV. The authors researched many of the issues around stigmatization, which cause people to avoid disclosing their HIV positive status. The results indicated that mainstream cultural models fundamentally laid the foundation for perceived risks to self-disclosure. These models dictate what is moral in terms of behaviour and those behaviour(s) which are seen as amoral or different are stigmatized.

2.15 Perceptions toward Voluntary Counselling and Testing (VCT)

Voluntary counselling and testing is defined as the process by which an individual undergoes counselling enabling him or her to make an informed choice about being tested for HIV. This decision must be entirely the choice of the individual and he or she must be assured that the process will be confidential (Kalichman & Simbayi, 2003). It is widely recognized that voluntary counselling and testing has a fundamental and essential counselling process which serves to assist clients in deciding whether or not

to have an HIV test and then to provide support and facilitate decision making following testing. De Paoli, Manongi and Klepp (2004) discussed the four stage model of VCT namely, pretest counselling, post-test counselling, follow-up counselling and support as required. Pre-test counselling is a legal requirement before a test for HIV is conducted, and post-test counselling is provided a week after the test has been taken.

VCT services are important and effective in HIV/Aids prevention. It is a significant entry point to care and support. The VCT counselling enables uninfected people to remain so and enables those infected with HIV to plan for the future and prevent HIV transmission to others. People's attitudes towards having VCT can be affected by their demographic make-up. Black women showed a higher chance of agreeing to VCT than white women (Weston, 2006). The main objective of pretest counselling is to prepare a client for taking an HIV test. The counsellor explains what an HIV test is and also corrects any myths or misinformation about HIV. The counsellor then discusses the implications of knowing one's sero-status and ways to cope with either a positive or negative diagnosis. The result of the HIV test is usually delivered by a counsellor at the post-test session. It is essential that follow up counselling services be made available to all clients following the post-test counselling session. Many clients may return with additional questions, fears and concerns. This applies to both HIV positive individuals and HIV negative individuals and those who are involved in caring for or living with HIV-infected people (Ross and Deverell, 2004).

Those who are infected will benefit from available counselling and support. VCT is acknowledged within the international arena as an effective and pivotal strategy for both HIV/Aids prevention and care. Research conducted in Kenya, Tanzania and Trinidad by the Family Health International in collaboration with UNAIDS and WHO has provided strong evidence to support the theory that VCT is both effective and cost effective as a strategy for facilitating behavior change (UNAIDS & WHO, 2006). The study also found that VCT is an important entry for care and support in terms of the HIV/Aids pandemic. These findings have boosted interest and support for VCT as a valuable component of a comprehensive HIV/Aids prevention programme amongst international organizations.

2.15.1 Global trends in Perceptions toward Voluntary Counselling and Testing (VCT)

Many studies in developing and developed countries describe barriers to access to VCT as distance, cost for the services, fears of knowing HIV status, self-esteem and stigmatization (Alexander & Fisher, 2003). However, motivating people to use VCT can be difficult as studies report factors that deter people going to counselling as feeling sick on the day of counselling, unexpected family events, a new partner, fear of having been exposed to HIV by the actions of a spouse or partner and job circumstances. Other studies on assessing quality care of VCT concluded that quality of care could be improved by increasing accessibility, having better facilities, maintaining confidentiality and reducing stigma. Overall VCT providers are important counselling in helping stem HIV transmission and prevention. However, it must be noted that counselling about

condom use to prevent sexually transmitted infections and unwanted pregnancy is less common and free condom distribution is low worldwide (Campbell, 2003).

2.15.2 Sub-Saharan African trends in Perceptions toward Voluntary Counselling and Testing (VCT)

A significant amount of research has been conducted in Africa on attitudes towards voluntary counselling and testing (VCT). De Paoli, et.al (2004) conducted a study of factors associated with pregnant women's willingness to accept VCT in Tanzania. Constructs derived from the HBM were used in the study to explain the perceptions of women. The results indicated that forty two percent of women were willing to accept VCT and did not have negative perceptions toward it. Willingness to accept VCT was affected by perceived high personal susceptibility to HIV/Aids. The study focused on the psychological consequences of HIV testing. One of the conclusions was that women's fear of blame and rejection becomes an important factor when sharing a positive HIV/Aids diagnosis. HIV/Aids counseling and testing has become a necessity for all health professional in Sub Saharan Africa where HIV/Aids as it is estimated that more than seventy percent of HIV/Aids cases in the world are in sub Saharan Africa (which has only ten percent of the world population).

McKee, Bertrand and Backer-Benton (2004) discussed the fact that Tanzania experienced a generalized HIV epidemic which is still growing. The availability of testing and counselling services is very uneven and only a small proportion of people believed there were benefits to knowing their sero status. This is changing due to

improved access to VCT and antiretroviral drugs. The situation in the country has highlighted the fact that there is a great demand for HIV counseling and testing in Africa. The United Nations Aids Report (UNAIDS) stated that new studies in Africa showed dramatic increases in demand for VCT when services are made accessible, affordable and secure for those people who want to know their HIV status.

There are few studies conducted in Africa on the counsellor's role and experiences in VCT. However, one reported that counsellors find the work rewarding but stressful. In addition to their obligations in the counselling relationship (providing information, protecting confidentiality and being non judgmental). Counsellors perceived pressure to provide information and be role good models in their community (Kelly, 2001). However, qualitative studies on public interest towards VCT in Malawi and Uganda reported that community members valued VCT. The results indicated that counsellors gave them enough time to ask questions and are competent and retain confidentially. In Uganda it is preferred that counsellors do not come from the same community as the individual's who are counseled feel confidentiality may be breeched (WHO, 2006).

Between 2004 and 2005 the total number of VCT sites in for instance, Zimbabwe increased from two hundred to more than four hundred, with every health district containing at least one site that provides the service. Despite these advances, there is still a strong reluctance to access testing amongst much of the population. PLWHA face a particularly high level of discrimination in Zimbabwe, and many people fear that if they

are found to be HIV-positive they will be victimized. Another issue in not getting tested and receiving VCT is that individuals who live in places where there is little, or no access to Anti-retroviral medication (ARVs), see counselling and testing as pointless.

2.15.3 South African trends in perceptions toward Voluntary Counselling and Testing (VCT)

Kalichman and Simbayi (2003) conducted a study which focused principally on VCT. They claim that only one in five South Africans who are knowledgeable about VCT have in fact undergone testing. The aim of the study was to examine the relationship between HIV testing history, attitudes towards testing and HIV/Aids stigmatisation. The research is particularly relevant to the present study which looks at attitudes towards VCT and social perceptions and stigmatization. There were two hundred and twenty four men and two hundred and seventy six women in their study. Ninety eight percent of the respondents were Black and seventy four percent were of age thirty five or below. The findings indicated that forty seven percent of participants had undergone VCT, and that both those who had and had not been tested experienced high risks for exposure to HIV. Participants who had not been tested or had not received their results back tended to be far more positive about the testing procedure. In order to promote VCT in South Africa people will have to be educated about the benefits of testing and of reducing stigmatisation. It was suggested that if HIV/Aids stigmatisation is reduced, resistance to seeking VCT will be reduced.

VCT should be an important part of any country's response to Aids. The number of VCT sites in South Africa has increased significantly in recent years, with four thousand, one hundred and seventy two (4,172) operational by November 2006. Despite this progress, there are concerns about the quality of VCT services in some areas. Another problem is that women seem to be accessing testing more readily than men in South Africa. Researchers believe that this is due to fears amongst men that their HIV-positive status will be disclosed through testing, and that stigmatisation will follow. In South Africa, there is some correlation between extreme poverty and high HIV prevalence, although HIV is prevalent across all classes (Shell, 2000).

According to Kelly (2001) South African university students are a population group who are likely to engage in promiscuous behaviour and sexual partners tend to change fairly frequently (Kelly, 2001). Because of this stigmatization, risk behaviour and VCT are all issues which are of relevance and are directly or indirectly related to sexual behaviour(s).

2.16 Religion and HIV/Aids

Taylor (2006) discussed the fact that, the Roman Catholic Church (Christian faith) condemns any artificial birth control or sexual acts aside from sexual intercourse, between married heterosexual partners. However, the use of condoms to prevent sexually transmitted infections and diseases is not specifically addressed by Catholic

doctrine. It is currently a topic of debate among theologians and high-ranking Catholic authorities globally. Cardinal and Danneels (2008), believe the Catholic Church should actively support condoms use to prevent disease, especially serious diseases such as Aids. However, to date statements from the Vatican have argued that condom-promotion programmes encourage promiscuity, thereby actually increasing disease transmission. The church has long opposed the use of condoms or the pill as contraceptives, as they break the link between sex and procreation, although it does allow natural methods of contraception, such as monitoring the woman's ovulation cycles. The church also believes that any form of contraception encourages promiscuity (Beck, 2002).

Other Christian churches do not have this dogmatic view and support contraception, condom use and in some cases do not stand in the way of the woman's right to choose an abortion (Nel, 2003). Globally, many liberal religions do not condemn condom use, though many do not support abortion. Methods of contraception are left very much to individual users and many religious and spiritual leaders, aware of the enormity of the pandemic, condone the use of condoms in stopping the spread of HIV/Aids.

However, for many devout Muslims, Hindus and Christians, condoms use is considered sacrilegious, things that should not be used that are contrary to natural laws and sex is certainly not something to discuss. According to Petros, et al. (2006) many Black South

African Christians believe that Aids is a punishment from God and that one must ask forgiveness either to be healed or to save one's soul from going to hell if infected with the retrovirus.

2.17 HIV/Aids as a Gender Issue

To some extent HIV/Aids has become a gender issue, especially in the sub-Saharan region of Africa where the majority of infected persons are females (Ross & Deverell, 2004). As females in this region and other poorly developed regions usually have limited say in regard to their bodies, which are often used for sexual purposes by men without their consent, it is perceived by some to be a gendered disease.

2.17.1 Global trends in HIV/Aids as a Gender Issue

HIV, especially within the South African context can be conceptualized as a gender issue. The majority of preventative campaigns have been narrowly focused on the use of condoms and partner reduction (Ross & Deverell, 2004). The power dynamics that exist within relationships are not recognized as critical. Most heterosexual encounters are male dominated and this domination provides a context wherein the responsibility lies with the women to negotiate safe sex. Many women do not feel sufficiently empowered to assert their rights, needs or desires and, in fact many women are not permitted this freedom of expression by their partners. The imbalance of power between men and women within relationships is intensified by economic forces. The economic security and survival of many women is dependent on the support of their partners. Despite the fact that women are at greater risk than men of contracting HIV,

the messages contained in prevention campaigns remain biased towards male concerns and power dynamics. HIV testing then has become a gender issue, which has attached to it the discourses of patriarchy and heterosexuality.

Baumeister, et al. (2001) argues that, gender refers to the societal beliefs, customs and practices that define masculine and feminine attributes and behaviour. In most societies, the rules governing sexual relationships differ for women and men, with men holding most of the power. This means that for many women, including married women, their male partner's sexual behaviour is the most important HIV-risk factor. The epidemic also has a disproportionate impact on women. Their socially defined roles as carers, wives, mothers and grandmothers means they bear the greatest part of the Aids-care burden. When death and illness lead to household or community impoverishment, women and girls are even more affected due to their low social status and lack of equal economic opportunities. The testing procedure itself is open to power dynamics that could serve to reinforce what some pundits liken to gender oppression, and it needs to be examined in this light. Physiologically women are more susceptible to the virus, particularly during heterosexual sex thanks to the exposure of vaginal fluid to infected semen (Levine & Ross, 2002 & Nel, 2003). In many parts of the world women have to use sex in exchange for money, accommodation or food. This is called transactional sex and is common in Asia and sub-Saharan Africa. This sexual intercourse is usually with older men and almost always without a condom sometimes for very small amounts of money.

2.17.2 Sub-Saharan Africa trends in HIV/Aids as a Gender Issue

In many parts of the world, both developed and developing, being married doesn't protect a woman from HIV. According to Mashego (2004) many women don't feel they have the right to ask their partner to wear a condom. The result could be forced sex or other forms of domestic violence. For many young girls in developing and war torn countries, violence is often their first taste of sex. In Sub-Saharan Africa civil war has led to women being raped as part of the spoils of war.

It is also true that babies are raped because some men believe that having sex with a child can either cure or rid them of the HIV virus. Young girls from poverty stricken homes are being forced onto the streets and sold into slavery (Kumarnayake & Watts, 2001). They have sex against their will, usually with older men who have had unprotected sex with many partners. Many HIV infected women in developing countries have difficulty accessing good quality health care and often they are looking after relatives with HIV as well. They have very little chance of gaining a good education or of financial independence through employment thus are forced into sex work. For instance, in Tanzania women spend fifty percent less time doing farm work while their husbands are ill with HIV. In Vietnam seventy five percent of all carers of people with HIV are women.

In developing countries such as those within sub-Saharan Africa, there's a major stigma attached to women undergoing HIV tests (WHO, 2007).These women can face

violence and death if the test proves positive and they disclose their status. Concrete action is needed to prevent violence against women and ensure access to basic education and employment rights for women and girls. Women's increased HIV infection risk mirrors gender inequalities in the developing world. There are large social and economic gaps between women and men in for instance, Zimbabwe, and these inequalities have played a central role in the spread of HIV. Conservative attitudes towards female sexuality contrast with lenient ones towards the sexual activity of men, resulting in a situation where men often have multiple sexual partners and women have little authority to instigate condom use. Sexual abuse, rape and coercive sex are all common. As economies in developing countries deteriorate more women are turning to sex work as a means of survival.

According to Mngomezulu (2005) prevention campaigns that emphasize safe sex and abstinence often fail to take into account these realities, and are more applicable to the lives of men than those of women. Women are likely to be poorer and less educated than men, predisposing them to HIV infection and making it harder for them to access treatment, care and information.

2.17.3 South African trends in HIV/Aids as a Gender Issue

In South Africa almost every family has been touched by Aids, infected females out number males by as much as two to one in some age groups. Besides being the majority of those infected, women and girls are now bearing the brunt of the epidemic in other ways as well. It is women and girls who usually take care of sick people, and it

is they who are the most likely to lose jobs, income and stop going to school because of family commitments (Boxford, 2000).

In South Africa Black female university students use transactional sex in exchange for money with which they buy thing, sometimes they pay for their studies in this way. This phenomenon is called the Sugar Daddy phenomenon. At present in South Africa it is largely a Black female phenomenon – although white females have been known to use Sugar Daddies (an older man that pays for a females needs). At present, little research has been carried out on the phenomena and it is an interesting area for future research (Private Communication with Dr Kathryn Nel, 20.5.09).

2.18 Barriers to HIV/Aids prevention

Culture has been identified as one of the primary barriers to preventing the spread of HIV/Aids. Promoting health and accomplishing behaviour modification in any multicultural society poses a challenge of great proportions. Cultural considerations may ultimately affect whether members of a population choose to participate in a specific prevention campaign or not. It may also dictate whether individuals choose to believe, internalize and accept the message propagated by such campaigns (Ross & Deverell, 2004).

Most of the literature describes culture as a barrier to effective HIV prevention. Although it is likely that culture is perceived as obstructionist, this is neither an inherent nor an inescapable phenomenon (Sarafino, 2002). Culture can be perceived as a positive

influence as opposed to a barrier to effective HIV prevention. Socio-cultural beliefs do influence people's perceptions regarding HIV infection but if health promotion campaigns are culturally and environmentally appropriate culture can be an asset not a problem. In South Africa the scrutinize campaign promoting HIV awareness, has been accepted by local ethnic groups because it is culturally sensitive.

2.19 Culture Beliefs and Condoms Usage

Culture plays a significant role in the perceptions of condom use amongst traditional African societies. Culture dictates that condom use is unnatural and as a result the message that condom use prevents HIV infection has been met with some resistance. The availability of condoms, knowledge and awareness of HIV/Aids do not to correlate with condom usage and modified sexual behaviour among traditional African societies (Reid & Walker, 2005). Another African study in Rwanda revealed that there is a belief that the use of condoms blocks the exchange of fluids between two partners during sexual intercourse. This exchange is regarded as very important in a relationship, in that it is believed that these fluids prevent illnesses and promote fertility (Muula & Mfutso-Bengo, 2004 & Muheua, 2007).

There are misconceptions about the use of condoms amongst traditional African women. For example, condoms might remain in the vagina and suffocate the woman as they move through the body to the throat. This happens because of a lack of anatomical

knowledge. The majority of people in Africa also believe that semen contains important vitamins which play a role in the development of the foetus in the womb (Mashego, 2004). Kelly (2001) maintains that for many sub-Saharan Africa communities, negative attitudes towards condom use, is based on cultural factors. These include the desire for more children and female sexual compliance. Children and compliant females enhance the males' economic status in society and increases social security for their old age (by having many children to care for them when they are old).

2.20 Condom Effectiveness

The effectiveness of condoms, as of most forms of contraception, can be assessed in two ways. Perfect use or method effectiveness includes people who use condoms properly and consistently. Actual use or typical use effectiveness are all condom users, including those who use condoms improperly, inconsistently, or both (Campbell, Foulis, Maimane & Sibiya, 2003). Condoms may be combined with other forms of contraception (such as spermicide) for greater protection. They are widely recommended for the prevention of STI`s and have been shown to be effective in reducing infection rates in both males and females. While not a hundred percent effective, condoms are effective in reducing the transmission of HIV, genital herpes, genital warts, syphilis, chlamydia, gonorrhea, and other diseases. Beck (2002) noted that condom use is the best available strategy to prevent HIV infection. However, since many people choose not to use condoms where the risk of HIV exists, alternatives to condom use for HIV prevention are needed. Using condoms should be shared by both partners. This

presupposes that females must be empowered to step out of traditional roles and take the initiative in sexual encounters (Barnett & Whiteside, 2002).

According to Campbell (2003) the following needs to be done in order to encourage the use of condoms. Firstly, countries (particularly those with high HIV infection rates) need to review existing policies and laws governing the manufacture, importation, exportation, sale, distribution, advertising and use of condoms. Countries facing foreign exchange and balance-of-payment problems impose a high import duty on condoms. This effectively prevents widespread condom use because of high costs. Condom use in these countries is thus low and inconsistent. Currently, it must be noted that getting hold of condoms is easier than in the past as in most countries with high HIV infection rates they are available free of charge in many places such as public toilets, clinics and even municipal libraries.

In earlier international studies, women have had more positive attitudes towards using condoms than men have, while men have had fewer difficulties in buying and carrying a condom. Women are embarrassed to buy condoms and were afraid that their partners might think they are promiscuous. Mashego (2004) reported that, negative attitudes towards condom use, stemmed primarily from beliefs about having natural sex (that is, sex without using any form of contraception). The desirability of using condoms appears to be influenced by factors such as trust in your partner and the nature of the relationship. Lack of knowledge or skill in the use of condoms may also influence beliefs about their effectiveness and the resulting choice of contraceptive methods

Mashego (2004) and France-Press (2004) state that in African society there is much ignorance and misinformation about proper condom use and related topics. They further note that individuals need to understand the role of condoms for preventing Aids transmission. It is stated that the image (or profile) of condom use needs to be improved. For instance, perceptions of condom breakage can be addressed by educating individuals about the storage and handling of condoms in ways that minimize product deterioration (Mashego, 2004 & France-Presse, 2004). They must be promoted and branded as a preventive measure against disease, not against pregnancy, in Africa. Condom use is also associated with sex workers and disease. Condom use must be promoted as a way of escaping negative health consequences.

Taylor (2006) reported that using condoms or insisting that a partner use a condom may be seen as implying that the partner has an STI or is unfaithful or that the person insisting on the condom use is unfaithful. One way of encouraging discussions on safe sex issues and negotiating condom use is by normalizing the use of condoms among sexually active individuals. It must be noted that nearly half of all pregnancies are unplanned, suggesting that condom use should be a higher priority for women.

According to Boer and Emons (2004) research indicates that young unmarried men are more reluctant than women to suggest the use of condoms. For men, the reluctance has to do with the idea of reduced sexual pleasure but also the tendency to view condoms primarily as contraception rather than a means of infection control. Despite the advantages of using condoms, there are a number of factors that prevent individuals

using them. For example, negative attitudes towards condom use, not taking into account personal risk, using alcohol or drugs, low self-confidence and reliance on other contraceptive methods, have been the most common reasons put forward for not using condoms (Kalichman, 2000). Despite wanting sex research has indicated that many men are shy about putting condoms on in front of a sexual partner. It is likely that this is because of communication barriers in society about issues relating to sex and HIV infection. Another reason given for non condom use is that as it has been much publicized that condoms do not provide absolute protection high-risk groups for HIV infection explain their non-compliance in condom use by stating I will get sick anyway (Nel, 2003).

2.21 Condom use amongst students in South Africa

An investigation into understanding the risk behaviours of high school learners in relation to the HIV pandemic in KwaZulu Natal (South Africa) indicated that one third of male respondents, from a randomly selected sample of rural learners, reported to always using condoms (Kalichman,2000). Smoking and drinking amongst learners is reported to have increased the likelihood of negative sexual behaviours which increase the risk of HIV transmission. The majority of sexually active respondents do not use condoms consistently. It was found that there are some learners who have never used condoms before and many students do not like to carry condoms because of the associated stigma. Students also reported to feeling embarrassed about thinking about, discussing or using condoms.

Condoms are used less often with cohabiting or regular partner. In these relationships, on the African continent, females are generally unable to negotiate condom use. Other common reasons given for non-condom use are reduced sensitivity, an association with unfaithfulness, unavailability of condoms, a general dislike of condom use, objections by male partners and stigma attached to condom usage. The findings of various research studies have highlighted and given researchers and policy makers insight into factors that affect the initial and consistent use of condoms, and what some of the perceived and experienced barriers to condom use are.

In the South African context tertiary students are likely to be at risk of contracting sexually transmitted diseases because of their patterns of sexual behaviour. These include sex with multiple partners and inconsistent use of condoms. An increased awareness of condom use among peers is associated with higher levels of condom use (Mashego, 2004). A review of studies at the University of Zululand campus undertaken by Nel, Tebele and Mpungose (2008) noted the following, which because of homogeneity of respondents age and education, can likely be extrapolated to tertiary students generally in South Africa. The study had certain hypotheses which the results supported. It was asserted that women students would be more conservative in sexual behaviour than male students and that female would be more accepting and empathetic towards People living with HIV/AIDS (PLWHA). The study also predicted that there would be a segment of the student population who would reveal a dissonance between attitudes, knowledge and behaviours and also that a proportion of students of both sexes would reveal significant gaps in their knowledge about how HIV/AIDS is

transmitted. It was also postulated that condom use would be inconsistent this hypothesis was supported nearly seventy percent of the respondents reported multiple sexual partners and inconsistent condom use.

2. 22 HIV/Aids Interventions

Since the early 1980s, most countries have attempted to prevent the spread of HIV, but some have been much more successful than others. Apart from sexual abstinence or a stable mutually faithful relationship with an uninfected partner, condom use is considered the best way to protect individuals from sexually transmitted diseases, including HIV/Aids (Mashego, 2004 & Baumeister, Catanese & Vohn, 2001). Early in the course of the Aids epidemic, condoms were recognized, and are still regarded as the most effective means of preventing or reducing HIV infection, if they remain intact, and are consistently and properly used (Kahn, 2004). It must be also stated that the degree to which condom use can assist in reducing the probability of transmission also depends on the quality of the condom as well as correct usage. However, increasing condom use seems to be difficult in thee South African context as the following discussion illustrates.

As the focus of the pandemic has swung from people dying from Aids to people living with HIV infection, a primary focus of therapeutic interventions has been to enhance quality of life. Probably the most immediate challenge of working with individuals who have HIV or Aids is the preservation and enhancement of their physical health through a

multidisciplinary team approach. Counselling interventions include helping clients prior to diagnosis to assess their risk status and behaviours through a lifestyle review. This helps individuals in clarifying what HIV testing is about, its advantages and limitations, and to assist individuals in dealing with an HIV positive diagnosis. This counselling also helps individuals to comprehend the challenges of the life-threatening disease giving them the opportunity to ventilate feelings of fear, denial, guilt and despair (Ross & Deverell, 2004; Lindell & Perry, 2004).

Counsellors may also have to intervene with family, partners and significant others in order to mediate conflict and provide information and emotional support with regard to such aspects as anticipatory mourning and other emotional issues. It may also be necessary to implement culturally sensitive community education programmes. Kalichman and Simbayi (2003) state that the issue of HIV/Aids prevention in South Africa has attracted less controversy and debate than other aspects of the country's response to Aids. There have been some notable national efforts, such as, The Soul City Project, which was started in 1994 and educated people about Aids through radio, print, and television, using dramas and soap operas to promote the message. Another campaign, Beyond Awareness, which ran between 1998 and 2000 concentrated on informing young people about Aids through the media. A later programme known as the Khomanani (caring together) run by the Aids Communication Team (ACT), a group set up by the government in 2001, has also had much success. The Love Life campaign is the most prominent HIV prevention campaign to be carried out in South Africa, which

specifically targets young people and attempts to integrate HIV prevention messages into their culture. It was launched in 1999, with the aim of reducing rates of teenage pregnancy, HIV and sexually transmitted infections amongst young South Africans.

Efforts to prevent the spread of HIV in Zimbabwe have been spearheaded by the Non Governmental Organizations (NGO`s) and religious and academic organizations. Although HIV prevalence has fallen in some areas, indicating a change in sexual behaviour, it is difficult to say how significant the role of prevention programmes has been in achieving this trend. Prevention schemes have been significantly expanded since the turn of the millennium, but remain critically under-funded. There has also been conflict between the messages promoted by different programmes; for instance, some religious or traditional campaigns discourage the use of condoms and place emphasis on abstinence, contrasting with the strategies of some other organizations. This has led to confusion about how it is best to prevent HIV infection, particularly amongst young people (UNAIDS, 2006).

Children in Zimbabwe are currently taught about HIV and Aids in schools from the age of eight. To ensure knowledge transfer the Government has recently suggested that students take an exam on the subject as part of the school curricula. Outside of school, efforts to educate and inform people about HIV and Aids (which are often organized by NGO`s) have used a number of different means to convey prevention messages,

including television and radio, drama, and community groups. A greater understanding and awareness of HIV and Aids is thought to lead to changes in sexual behaviour, which has been shown to reduce the number of new HIV infections. A study carried out in 2006 suggested that the adoption of safer sexual behaviours was one of the reasons why HIV prevalence in Zimbabwe has declined.Although these campaigns have probably saved many lives, the actual difference they have made in reducing the number of new HIV infections is very difficult to measure. The prevailing high rates of HIV found across South Africa suggest that either the message isn't getting through to many people, or that people are receiving information but not acting upon it (UNAIDS, 2006).

There are a number of different types of HIV prevention programme currently taking place in Botswana. These include, public education and awareness which is based on imparting factual knowledge about Aids and has the following slogan: Abstain, Be faithful and, if you have sex, Condomize. Botswana has safe-sex billboards and posters everywhere, but it is unclear whether anyone pays attention. Education for young people is crucial so that HIV education and prevention messages help stem the increasing prevalence rates. School-based learning plays one of the most important parts in educating young people about HIV and Aids. Botswana has produced specific HIV and Aids materials which have been developed for all ages of learners in conjunction with the Botswana Ministry of Education (WHO, 2007).

2.23 Increased access to treatment may reduce stigma

In a special Cabinet meeting, the South African government announced its intent to support the provision of antiretroviral medication to the South African public health sector as early as 2006. The Cabinet declared antiretroviral drugs to be effective in improving the quality of life of those at a certain stage of the development of Aids (Taylor, 2006). Civil society welcomed the announcement of both the government's long awaited recognition of the science of HIV/Aids and its resolution to address the pandemic actively. WHO (2004) stated that the role of government supporting such medical initiatives, both financially and ideologically, is fundamental to South Africa's perceptions and grasp of the disease. The provision of antiretroviral medication is complicated and much work in the fields of service delivery, adherence and compliance need to be conducted.

In order for the medication to be effective, an optimal level of the drug needs to be maintained in the body at all times. Should this level fall as a result of failure to take the dose at the same time every day, the virus becomes resistant to the medication, resulting in new strains of HIV being formed. People taking the medication must look after their health, often they need to change their lifestyles. It is hoped that positive behaviour change, in terms of health promotion, will lead to communities adopting positive health behaviours. The knock-on effect it is postulated will also help overcome the stigmatization of HIV/Aids. If people are seen to be fit and follow a healthy lifestyle stigma may be reduced as these people are seen to be productive, vital members of their communities (WHO, 2006).

2. 24 HIV/Aids in the workplace

Bloom (2006) states that HIV/Aids pose a threat to the sustainability of companies, primarily because of its impact on the workforce. It is thus an issue of concern to both management and unions. Corporate sustainability – sometimes known as triple bottom line reporting - takes into account social and environmental factors, as well as profits – is receiving increasing attention as the HIV pandemic continues to grow.

South African business has for the most part responded conscientiously to the HIV and Aids pandemic. Hundreds of companies have implemented work-based awareness programmes and HIV counselling in the workplace, while a number has even offered antiretroviral (ARV) drugs to infected employees. However, companies continually report on the poor attendance at these work-based programmes and want to find out why this is happening. It is also seen as very important to find new ways of engaging adult South Africans in terms of discussing HIV/Aids related issues. The latest estimates are that around five million South Africans are infected with HIV. Business leaders have warned that companies may have to train three people for every job because of the expected increased death toll in the country (De Beers, 2004). A higher percentage of infection per capita is found in KwaZulu-Natal, due the province being the home of at least ten percent (10%) of the population. Bigger companies are paying more attention to this serious issue than small to medium size businesses. Only five percent (5%) of businesses employing less than fifty (50) people have a formal HIV/Aids policy, as opposed to eighty percent (80%) of companies employing over a thousand employees. Only half of companies, in South Africa, employing over two

hundred and fifty one (251) and fewer than a thousand people feel they have dealt with issues related to HIV/Aids and related social stigma (Nel, 2003).

The Economic Review (1, 2005) in an editorial notes that a quarter of organizations in the country have commissioned an HIV/Aids impact analysis (this quantifies the current and future costs - both direct and indirect - associated with the organization's risk analysis). In sixty five percent (65%) of South African organizations, the Human Resource Manager or department is responsible for directing HIV/Aids strategy. Forty one percent (41%) organizations implemented their policies between 1995 and 1999; thirty one percent (31%) only began in 2000; and twenty percent (20%) only implemented HIV/Aids workplace based programmes as late as 2001. There is no doubt that HIV/Aids has a devastating effect on the South African economy. To meet this challenge South African companies have incorporated the effects of the pandemic into those factors perceived as a direct threat to business, essentially trying to write off losses before they occur.

Cogwell and Kaczmarek (2004) state that a major result of this acknowledgement are more up-dated and relevant educational and awareness programmes in the organizational arena. These programmes incorporate consultation with various affected parties and tend to focus on the establishment of an infrastructure which deals with the effects of the disease in the workplace. These programmes aim to inform employees of what the pandemic means in real terms and what the benefits are of keeping to healthy

living plan. The most important result of any corporate initiative is total commitment to the programme which helps counter issues such as stigmatization and prejudice about HIV in the workplace.

The most popular resource for conducting HIV/Aids training are health based programmes which are incorporated into organizational wellness and employee assistance programmes. In terms of HIV/Aids awareness or education companies make use of tools such as posters and pamphlets (69%), free condom provision (69%) condom promotion and education (53%), newsletters which impart knowledge about the pandemic (49%), and detailed brochures with the names of counsellors and clinics which deal with HIV infected clients (42%). Nel (2003) states that workplace investigations into HIV/Aids, that are both quantitative and qualitative, need to be ongoing in South Africa. She notes that a tertiary institution is a workplace for administrative and academic staff and further notes that it is also the workplace of students. She further states that ongoing investigations into the pandemic are critical at all tertiary institutions in South Africa as part of organizational studies into the disease.

2.25 Employee health in South Africa

According to Nel (2003) Human Resource (HR) departments can be regarded as an organisations most valuable asset because they keep the fit between employee and management a comfortable one. HR activities are effectively designed to co-ordinate

the human resources within an organisational setting. The functions of an HR department encompass providing support for organisations in the following areas:

- increased/decreased quality of work life;
- increased/decreased productivity;
- satisfaction of the workforce;
- development of the workforce and increased/decreased readiness for organisational change.

It is usual for health management programmes in organisations to fall under the HR department. It must be noted however that occupational health and safety, traditionally the responsibility of HR, is increasingly a function of departments such as Technical Services. These departments are responsible for ensuring organisations comply with legal standards relating to employee health and safety. They are not responsible for the implementation of wellness programmes, which is still considered an HR function. If such services are split within a company then role-players need to liaise closely to ensure appropriate wellness programmes are offered. According to Nel (2003) wellness programmes, health promotion and other counselling services should not be aimed just at preventing or managing stress, for instance, but should also act as mediums which promote HIV intervention programmes and have holistic HIV/Aids intervention centres. As fit, healthy and well-informed individuals will be productive this translates into having fully equipped clinics on tertiary education campuses (the workplace of students). These settings should be fully involved with HIV prevention and promotion programmes as well as being VCT centres.

2.26 Resume

The literature shows a clear correlation between attitudes and knowledge. However, the literature also indicates that knowledge does not necessarily result in safe sexual behaviours. Research in South African Universities is ongoing and essential as they are part of the workplace for both staff and students. It is likely that health promoting behaviours, such as condom use, are not followed for a variety of reasons for instance, the prevailing paradigm of patriarchy in the country and cultural misperceptions. The following chapter sets out the methodology used in the study design, data collection and data analysis that will be used in the study.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

An important method in scientific investigations is survey research which is used in this study through a self-administered questionnaire. This investigation used a mixed methods approach by using qualitative and quantitative research methods which were used to gain a broad understanding of the research problem.

The questionnaire was based on one used by Nel (2003) but up-dated with pertinent questions about counselling and condom use. The survey explored specific questions to measure dependent variables in order to gain quantitative data. Quantitative research produces findings that reveal factors that play a significant role in the extent of risk behaviour(s).

Qualitative questions were added to the questionnaire. This added an holistic element to the study which is consistent with triangulation of data. Tillotso and Maharaj (2001) emphasize that in terms of studies in risk behaviour, qualitative research results help in allowing an understanding of how characteristics of different contexts can have an impact on beliefs, attitudes and practices. It is suggested that qualitative research can be used effectively to investigate sensitive topics such as HIV infection and sexual behaviour(s).

3. 2 Research design

The research is quasi-experimental in design as it uses multiple waves or different types of measurement. Both qualitative and quantitative research tools were used to analyze the data. Quantitative methodology was used to examine differences among cases and to analyze the data with numerical comparisons. Qualitative methodology was used to look at orientations which are concerned with attitudes and beliefs of the participant. The qualitative analysis of themes in the focus group gave an added focus to the development of the questionnaire based on the Health Belief Model (HBM) and Protection Motivation Theory(PMT). This gave the original questionnaire constructed by Nel, (2003) more depth and added the topic of voluntary counselling and testing (VCT) which is a more contemporary issue.

3.3 Research hypotheses

The study has the following assumptions:

- Female students are more likely to feel they are at risk of contracting HIV and Aids;
- Condoms are not used consistently, by either gender, when having penetrative sex;
- VCT counselling is perceived in a negative manner by both genders.

3.4 Data collection for question construction of additional questions for the survey (Focus Group)

Data was collected from a focus group by constructing a semi-structured interview schedule based on data gained in the literature review underpinned by the HBM and PMT. A focus group is a form of qualitative research in which a group of people is asked about their attitude towards a product, service, concept, idea, or packaging. Questions are asked in an interactive group setting where participants are free to talk with other group members (Weston, 2006). The results of the focus group interview were analyzed and interpreted. They were then used to develop additional questions for the questionnaire which added more depth to the original instrument developed and used by Nel (2003). The focus group was seen as a useful addition to the study in that it generated themes and ideas for additional questions used in the survey. Students completed informed consent forms indicating their willingness to be part of the focus group (see Appendix A).

3.5 Research participants for the Focus Group (Sample)

A judgmental sample Barbour (2008) was used to generate the focus group. A judgmental sample is a common non-probability method of sampling. The researcher selects the sample based on his or her judgment. This is usually an extension of convenience sampling. Specific honours students, who were judged appropriate for the task by the researcher, were asked to participate in the focus group. This non-probability method is often used for research as it is a practical, cheap and convenient method of acquiring a sample. It was assumed that honours students would have a

suitable frame of reference, in terms of HIV/Aids knowledge and student life, to be able to add value in helping generate relevant qualitative questions for the survey. Both male and female post-graduate students formed the focus group. Their aged varied between twenty three and thirty one years of age.

3.6 Interview schedule for Focus Group

The Health Belief Model (HBM) and Protection Motivation Theory (PMT) were used as a foundation for the focus group interview schedule. The components of the HBM and PMT that were used as a guide are listed below, beginning with the six components of the Health Belief Model.

Knowledge – This pertains to knowledge of health risks and what can be considered high-risk behaviour. It also refers to where the individual can gain information about preventative methods, which can be used to prevent HIV/AIDS infection.

Perceived susceptibility – This refers to the individual's subjective perception of contracting a particular illness.

Perceived barriers – This is the opposite of the above. It is what an individual perceives as a negative outcome when faced with the adoption a health promoting behaviour. For instance, men may not want to wear a condom because of cultural issues

Perceived severity – Relates to the subjective evaluation of medical, social and/or financial problems associated with becoming infected with HIV/AIDS. If an individual has

witnessed a relative or friend being repeatedly hospitalised because of an illness he or she will perceive the financial implications inherent to disease.

Perceived benefits – Pertains to the positive outcomes linked to adopting specific behaviours – people will only adopt these behaviours if they feel they will benefit. Men may be persuaded to use a condom if they believe that it is an effective way of preventing HIV/Aids infection.

Cues to action – These can be likened to mechanisms, which trigger a specific response. If, for instance, more than one individual in a family has died of HIV/AIDS an adolescent can be cued to act in a positive health-promoting manner. This could be sexual abstinence or the use of condoms (Nel, 2003):

The four components of the Protection Motivation Theory which underpinned the generation of questions in the interview schedule for the focus group

1. Pre – contemplation – people enter a stage when change is not really considered in a serious manner.
2. Contemplation – people become aware of the benefits of change.
3. Preparation – individuals begin to make changes towards a better lifestyle.
4. Action – direct action is taken in terms of what is perceived as a positive change (Weston, 2006).

An interview schedule was generated about the areas of risk and risk-taking behaviour, VCT, and stigmatisation (see Appendix B). Participants were provided with a comfortable venue with refreshments this created an environment conducive to discussion. A note-taker recorded the process for a period of one hour and ten minutes. He was introduced to the

group with the assurance that although he would not be taking part, he too understood that what was shared during the focus group was confidential. According to Terre Blanche and Durrheim (2002) the note taker assists the focus group discussion to flow freely while the researcher is focusing on facilitating the group.

3.6.1 Analysis of Interview schedule for Focus Group (Qualitative)

Thematic Content analysis was used to analyse the material produced by the focus group; this involved sifting through the data which led to the reporting of a number of distinct themes. The steps used to analyse the data are summarised below (Terre Blanche & Durrheim, 2002):

- familiarisation and immersion – this is undertaken by working with the text and reading it through many times so that meaning and interpretations can be made;
- inducing themes which should arise naturally out of the data;
- coding – putting the data into analytically appropriate themes;
- Elaboration-keep coding until no new insight is obtained;
- Interpretation and checking – an account (or interpretation) is given of the thematic categories found in the data;

3.7 Survey Questionnaire

The themes that were generated from the focus group were used to formulate additional survey questions. They included the following: stigmatization, HIV/Aids awareness,

VCT, HIV status, risk behavior and social issues (see Appendix E for an explanation of how the survey questions were formulated from the themes and statements made by the focus group).

3.8 Development of questions

The themes, underpinned by the HBM, and PMT produced from the focus group were used to develop questions which were added to an original questionnaire developed by Nel (2003). The quantitative part of the project was used to verify data from the focus group. The focus group generated the following themes: stigmatization, HIV/Aids awareness, VCT, HIV status, risk behavior and social issues (see Appendix C).

Many of these themes were incorporated into the survey questionnaire in combination with the sub-goals of the study (see Appendix D). For instance, the following questions relating to risk behaviour were generated: I think that people who are having unsafe sex have a high risk of being infected with HIV (very unlikely (0).....very likely (6))". The themes of risky sexual behaviour, stigma, social perceptions and HIV/Aids awareness on campus were connected to the following statement: "I would avoid having sex with a person I don`t know well-(very unlikely (0)….very likely (6))".

Various questions were generated through the theme of testing which emerged during the focus group discussion. For instance, students were asked to respond to the

following statements in the survey by choosing " Strongly Agree", " Agree", "Neutral", "Disagree:", or "Strongly Disagree".

- People who sleep around are more likely to go for HIV/Aids testing
- Near the beginning of a relationship I am able to suggest to my partner that we go for an Aids test
- I found the counselling process impersonal
- The counselling part of the testing process should be voluntary

Concerning the themes of stigmatization and social perceptions, the following survey questions were generated by the focus group:

- How do you view the disease/virus?(1) A guarantee of death,(2) Curable, (3) A treatment chronic condition for which I will take medication for the rest of my life, or (4) None of the above
- I feel as though I will contract HIV/Aids anyway, so I feel what`s the point of wearing a condom ("Strongly Agree", "Agree", "Neutral:, "Disagree" or "Strongly Disagree")?

3.9 Survey research participants

One thousand survey questionnaires were handed out to under-graduate students from different faculties at Unizulu. As the University has approximately 10,000 students enrolled for its undergraduate courses it was deemed appropriate to give out questionnaires to one percent of the entire undergraduate population, with attrition (non-return) of survey questionnaires as high as 40-50% (Nel, 2003) it was hoped that at least three to five hundred would be returned as this could be considered an appropriate sample. Student populations can be considered homogeneous in terms of two key variables, age and level of education. Thus it is likely the sample results can be considered representative and generalized to the student population as a whole.

3.10 Data collection methods (Survey)

Questionnaires were drawn up with a cover letter emphasizing the fact that involvement in the survey was voluntary and anonymity and confidentiality were ensured (see Appendix D). An initial pilot questionnaire was used to assess the validity of the questionnaire. This questionnaire did not change after being piloted (see Appendix D). A pilot study is a small experiment designed to test logistics and gather information prior to a larger study, in order to improve the latter's quality and efficiency (Ruxton & Colegrave, 2006). After the questionnaire was piloted permission was asked from the relevant course-coordinators for questionnaires to be to undergraduates in different faculties distributed and answered during lecture periods. In total five hundred

questionnaires were returned. The final sample was four hundred as one hundred were either not completed or improperly completed thus they were discarded.

3.11 Data Analysis from the Survey (Quantitative)

The integrity of the data set was established, the statistica programme was used to calculate descriptive statistics to summarize and present data. This included frequency tables and histograms. Cross-tabulations were also used. The Chi-square Test was used to investigate appropriate variables relating to themes concerning perceptions of VCT, risk and risk-taking behaviour and stigmatization. It should be noted that using the Chi-square Test with such a large sample is can be considered problematic as statistical significance is more likely to be found. However, Terre Blanche and Durrheim (2002) state that the chi-square test can be used as an inferential statistic to deduce the probability that any association is likely to be as a result of chance factors.

3.12 Resume

The study is essentially, survey research with a quasi experimental design with qualitative components which explored the knowledge, attitudes, practice and behaviour of students to HIV/Aids. The study design was deemed appropriate in terms of the study question further appropriate tools were used to analyze the data to give a broad overview of participants responses.

CHAPTER FOUR: RESULTS AND ANALYSIS

4.1 Introduction

This chapter focuses on the results and analysis produced by the study. The research aimed to explore the knowledge, perceptions' and attitudes of University of Zululand students towards HIV/Aids issues. It focuses on students` knowledge and attitudes towards voluntary counselling and HIV testing (VCT), students` perception of risk and perception of risk-taking behaviour and social perceptions with an emphasis on stigmatization.

One thousand questionnaires were handed out and five hundred were returned out of these one hundred were improperly filled in (or not filled in). These were discarded, thus the final sample was four hundred. The focus group results are presented first. The thoughts and themes that emerged during the focus group discussion are summarized. An explanation of the themes generated by the focus group is linked to the questions in the survey (see Appendix E). Colour coding was used to group ideas according to themes. For instance, ideas related to stigmatization were highlighted in purple and ideas related to VCT were highlighted in blue. Statements relating to the theme of risk behaviour were highlighted in red (see Appendix C).

Following this the survey results are presented according to themes. Firstly, however demographics are given in order to provide background information about the participants. Questions were sorted into themes which are introduced throughout the

section under the following headings which arose out of the original questionnaire underpinned by the HBM and PMT plus the focus group and discussed in relation to the study assumptions.

- Risk taking behaviour
- Stigmatization and social perceptions
- Stigmatization and VCT.

4.2 Qualitative Results from the Focus group

Themes that were generated from the focus group were treatment of HIV and Aids, HIV/Aids awareness; stigmatization, VCT, HIV status, social issues and risk behaviour (see Appendix C). These themes assisted in informing the development of the survey questionnaires. Participants thought that some poor Black groups of society felt that no matter what their behaviour was, they would be infected with HIV/Aids. The focus group discussion established various patterns of thought. Most participants had come into contact with People Living with HIV/Aids (PLHWHA's). In issues pertaining to stigmatization, participants felt comfortable to be part of the focus group discussing issues about HIV/Aids. One participant mentioned that people do not discuss HIV/Aids while they are in good health. However, when they become infected with different illnesses and their immune system becomes weak they become stigmatized as people assume they have Aids, it is only then that people want to start discussing the illness. One of the comments from the group was, "We still, get shock when we see thin people no matter how educated we are." Another person commented, "I am angry because we

tend not to listen to HIV/Aids education and look for excuses, it is always someone else's fault." This indicates an attitude of blame. Another participant felt that, "People need to be educated and it seems like some need more information about the virus." This shows that there is still a big task in educating people about HIV/Aids. One participant remarked, "I would not like it being thin if I found out that I am HIV positive. I would not feel happy to bring stress to my family". It implies that people still feel that HIV/Aids is not treatable. It appears that there is still a lack of knowledge about anti-retroviral treatment.

Focus group participants indicated that they perceived sexual risk behaviour to be high at Unizulu. Participants mentioned that high risk behaviours can be observed by the high rate of pregnancy at Unizulu. It was felt that people are engaged in sexual behaviour as result of for instance, substance abuse such as alcohol or drugs. The focus group generally felt that the consumption of alcohol is likely to have an affect on infection rate at Unizulu. This is because people "lose control," after drinking.

The focus group participants showed a general concern in terms of VCT. Participants felt that, the way the counsellors' talk to students makes individuals feel as if they already know that they are HIV positive. Some participants felt that that counsellors seem to take any anger a client shows personally thus they feel uncomfortable about discussing issues related to HIV/Aids with them. It was also noted that the peer group generally felt that they would rather not share intimate sexual details with VCT counsellors as they are unsure of confidentiality. The group felt that going for VCT

counselling should be voluntary; nobody should be forced to go for VCT. One participant said that “it is worst going for VCT because your partner knows it is better just to get the results. Participants felt that pre and post counselling was boring for both the counsellors and the client and it should be stopped, for they could not see any benefits.

4.3 Demographic/ Results

Gender, age faculty, sexual orientation, where students live, social year and academic year, are demographics indicators that were used in the study. Respondents ranged between seventeen and thirty five years of age.

4.3.1 Gender of respondents

Table 1:
Frequency table for gender

Gender	% Total Percentage of respondents
Male	34%
Female	66%
Total %	100%

Table 1(above) indicates that thirty four percent (34%) of respondent were male while sixty six percent (66%) respondents were female. This is a common trend for instance, in a 2004 HIV/Aids study conducted by Mashego, thirty two percent (32%) of the respondent were male and sixty eight percent (68%) of the respondents were female. This seems to indicate that females are more likely to participate in HIV/Aids surveys. It may also indicate that they are more likely to take pro-active behaviours with regard to HIV/Aids knowledge attainment and/or prevention.

4.3.2 Social year of respondents

Table 2:
Frequency table for social year

Social Year	% Total Percentage of respondents
First	43%
Second	23%
Third	29%
Fourth	5%
Total %	100%

Table 2 indicates that in terms of social year, forty three percent (43%) of student are in their first year, twenty three percent (23%) of students are in second year, twenty nine percent (29%) of students are in third year and five percent (5%) of students are in fourth year.

4.3.3 Academic year of respondents

Table 3:
Frequency table for academic year

Academic year	%Total Percentage of respondents
First	42%
Second	22%
Third	33%
Fourth	3%
Total %	100%

Table 3 (above) shows that forty two percent (42%) of respondents were in first year (academic), twenty two percent (22%) of respondents were in second year, thirty three percent (33%) of respondents were in third year and three percent of respondents were in fourth year. The majority of students who were willing to fill in the survey were in their

first year. Tables 4.3.2 and 4.3.3 also indicate that around one percent of both first and second year respondents are repeating students.

4.3.4 Ethnicity

Table 4:
Frequency table for ethnicity

Ethnicity	**% Total Percentage of respondents**
Black	95%
White	1%
Indian	3%
Coloured	1%
Total %	100%

Table 4 indicates that ninety five percent (95%) of respondents were Black, one percent (1 %) of respondents were White, and three percent (3%) of respondents were Indian/Asian and one percent (1%) of respondents' Coloured. Ethnicity was considered as an important demographic to include in the study as other research has found people of different races have different attitudes towards HIV/Aids issues (Weston, 2006). The demographics are a representative spread of ethnicity at the University of Zululand which has a 98% intake and student base.

4.3.5 Faculty to which respondents belong

Table 5:
Frequency table for Faculty

Faculty	**% Total Percentage of respondents**
Commerce, Law & Administration	47%
Art	36%
Education	9%
Science & Agriculture	8%
Total %	100%

Table 5 indicates that forty seven percent (47%) of respondent belong to the Faculty of Commerce, Administration and Law, thirty six percent (36%) of respondents belong to the Faculty of Arts, nine percent (9%) of respondents belonged to the Faculty of Education and eight percent (8%) of respondents belong to the Faculty of Science and Agriculture. This indicates the majority of participants who returned the questionnaires originated from the Faculty of Commerce, Administration and Law and the Humanities.

4.3.6 Sexual orientation of respondents

Table 6:
Frequency table for sexual orientation

Sexual orientation	**% Total Percentage of respondents**
Heterosexual	87%
Bisexual	1%
Homosexual	12%
Total %	100%

Table 6 indicates that eighty seven percent (87%) of participants are heterosexual, one percent (1%) of participants are bisexual and twelve percent (12%) of participants are homosexual. The issue of sexual orientation becomes increasingly significant in HIV/Aids related issues where correlations have been found in terms of sexual orientation and varying attitudes towards HIV/Aids. The above demographics indicate that although the majority of respondents are heterosexual (87%), twelve percent (12%) report to being homosexual – this is over forty individuals which is a high percentage of homosexuality in a sample of four hundred. However, it may be that as this was a convenience sample homosexual students chose to fill in the questionnaire as it is likely that they suffer stigmatisation because of their sexual orientation. Essentially, responding to the questionnaire gave them a voice and enabled them to indicate their views particularly about issues such as stigmatization.

4.3.7 Living situation of respondents

Table 7:
Frequency table for living situation

Living situation	**% Total Percentage of respondents**
In residence	60%
Digs	1%
Home	13%
Off campus	26%
Total %	100%

Table 7 (above) looks at where the respondents live. Sixty percent (60%) of respondents live in residences at Unizulu. This corresponds with the statistics that the majority of participants are first and second years, who usually live in residence at the

University of Zululand. One percent (1%) of respondents' lives in digs, thirteen percent (13%) live at home while twenty six percent (26%) of respondents live off campus possibly with family. It is important to know the demographics concerning where students live, as research indicates that students who live in residence are perceived as being more likely to catch and spread the HIV/Aids virus (Weston, 2006).

4.4 Risk-taking behaviour

4.4.1 Perceived risk-group

Table 8:
Cross tabulation for gender compared to perceived risk group

Gender	Risk group high	Risk group medium	Risk group low	% Total Percentage of Respondents (Male and female)
Male	55%	25%	25%	100%
Female	65%	20%	15%	100%

Participants were asked the following question. The responses are presented in Table 8. In terms of catching HIV/Aids, do you perceive yourself to be part of?

1) A high risk group?
2) A medium risk group?
3) A low risk group?

The results indicate that the majority of respondents felt themselves to be at high risk. This indicates a turnaround since the early 2000's as Uys (2002) states that, at that time, most studies show that university students do not perceive themselves to be at risk of catching HIV or in a high risk group. The chi-square test was used on this

categorical data in order to test if the two variables are independent or dependent. A chi-square was conducted comparing gender to perceived risk group. The assumption was met for the hypothesis as follows:

H_o: Perceived risk group is independent of gender

H_1: Perceived risk group is dependent on gender

The chi-square test shows if there is no significant relationship between the two categorical variables. Here the probability value (p) is more than 0.05, which indicates that there is no statistically significant relationship between gender and perceived risk group. A chi-square analysis revealed that: x^2 (N= 400) = 6.84, p = 0.449 df = 2. (Marked effects significant if p = <0.0500)

The results however, do appear to indicate that the different gender groups have different perceptions concerning their vulnerability or risk of HIV infection (see Table 8). This is particularly evident amongst the male and female students. Of the male students, fifty five percent (55%) perceived themselves to be part of the high-risk group, twenty five percent (25%) perceived themselves to be part of the medium risk group and twenty percent (25%) perceived themselves to be part of the low risk group. Of the female students, sixty five percent (65%) perceived themselves to be part of the high-risk group, twenty percent (20%) perceived themselves to be part of the medium risk group and fifteen percent (15%) perceived themselves to be part of the low risk group.

This indicates that a larger majority of female respondents felt that they were more at risk of contracting HIV/Aids than the male group.

4.4.2 Gender and risky behaviour

Students were asked to state which risk group they thought that they belonged to in terms of being infected with HIV/Aids. Male and female responses were then compared.

Table 9:
Frequency table for gender versus perceived risk group

Gender	**Risk group: high**	**Risk group: medium**	**Risk group: low**
Male	34%	38%	31%
Female	66%	62%	69%
Total percentage respondents%	100%	100%	100%

The chi-square test was conducted comparing gender and risk behaviour in order to test if the two variables are independent or dependent. The assumption was met for this procedure.

$H_{o:}$ Perceived risk group is independent of gender

H_1: Perceived risk group is dependent of gender

A chi-square analysis revealed, x^2 (N=400) = 1.60, p = 0.433, df = 2 the probability value (p) is greater than 0.05, which means that there is no statistically significant relationship between gender and perceived risk group (Marked effects significant if p = <0.0500).

Fundamentally, however the results indicate that there are some differences in perception toward risk group between men and women. Thirty four percent (34%) of men perceived themselves to be part of the high risk group, while sixty six percent (66%) of women perceived themselves to be part of the high risk group. Thirty eight percent (38%) of men perceived themselves to be part of the medium risk group, while sixty two percent (62%) of women perceived themselves to be part of the medium risk group. Thirty one percent (31%) of men perceived themselves to be part of the low risk group, while sixty nine percent (69%) of women perceived themselves to be part of the low risk group. There is a noticeable difference in perception depending on the individual`s gender. It appears that female undergraduates perceive themselves as being more vulnerable to HIV/Aids as compared to males. This result underpins the result in table 8.

4.4.3 Ranking risk behaviour

Students were asked to rank various behaviours in terms of risk. The following hypothetical question was asked:

> Rate the following behaviour in terms of how much risk you think they will put you at in being infected with HIV/Aids (0 means no risk and 6 means extreme risk)
>
> Having unprotected sex: (0) (1) (2) (3) (4) (5) (6)

Table 10:
Frequency table ranking risk behaviours: unprotected sex

Category	% Total Percentage of respondents
0-no risk	6%
1	1%
2	1%
3	2%
4	2%
5	2%
6-extremly risky	86%
Total %	100%

As illustrated by Table 10, eighty six percent (86%) of students chose category 6 which means that most students felt that unprotected sex is extremely risky in terms of contracting HIV/Aids. However, fourteen percent (14%) felt that there was no risk at all and six percent felt that unprotected sex was not a risk at all. These are worrying statistics as respondents should be aware that unprotected sex is the riskiest sexual; behaviour of all when it comes to contracting HIV and Aids.

Table 11:
Frequency table ranking risk behaviors: intention to use a condom

Intention to use a condom	% Total Percentage of respondents
0-very unlikely	7%
1	2%
2	2%
3	7%
4	5%
5	7%
6- very likely	70%
Total %	100%

Table 11 explores students` intention to use a condom through the following statement:

If I am sexually active, I intend to use a condom-(very unlikely (0)…..very likely (6))

(0) (1) (2) (3) (4) (5) (6)

The results indicate that the majority of students chose categories four, five and six, eighty two percent in total (82%). Five percent (5%) chose category four, seven percent (7%) chose category five and seventy percent (70%) chose category six. This result indicates that the majority of students intend to use condoms. Students admit intention to use condoms yet perceived risk behaviours are still high (see Table 8 and 11). However, eleven percent (11%) of participants have little or no intention of using a condom. This translates into more than forty respondents and is a cause for concern as if they are sexually active the risk of HIV and other STI transmission is high (as well as the possibility of unwanted pregnancies).

Table 12:
Frequency table ranking behaviours: fear and HIV status

Fear	**% Total Percentage of respondents**
0-not at all	12%
1	6%
2	9%
3	19%
4	12%
5	7%
6- paralyzing fear	45%
Total %	100%

Table 12 explores the degree of fear in relation to an individual`s HIV status. The participants responded to the following statement:

If you find out you were HIV positive, how scared you would feel if 0 was not at all, and 6 was paralyzing fear. Please tick the appropriate answer.

(0)(1)(2)(3)(4)(5)(6)

Table 12 suggests that the majority of students were extremely fearful about how they would feel if they contracted HIV/Aids. Twelve percent (12%) chose category four, seven percent (7%) chose category five and thirty five percent (35%) chose category six. This amounted to fifty four percent (54%) of participants who chose higher order categories signifying a fearful response. It is noteworthy that a high number indicated a fearful response as it suggests that respondents have knowledge that being infected with HIV/Aids would be a life-changing experience.

4.4.4 Gender and risk behaviour

Table 13:
Cross-tabulation of gender and intention to use condoms

	0 - little intention	**1**	**2**	**3**	**4**	**5**	**6 – very high intention**	**Total % respondents (male and female)**
Male	7%	2%	2%	10%	4%	7%	68%	100%
Female	6%	2%	2%	5%	5%	8%	72%	100%

Table 13 indicates that more females than males have the intention of using condoms if they are sexually active. It is important to note that intention to use condom is different from the actual behaviour of using or wearing a condom as often behaviour and intention do not correlate (Weston, 2006). Essentially, the intention to use the condom is

there but due to a variety of reasons condoms don't get used (for instance, the consumption of alcohol or not having a condom or money to buy one). The male respondents indicated that seventy nine percent (79%) of them intend to use condoms when sexually active as they chose the three categories with the *highest intention to use condoms.* In total eighty four percent (84%) of females chose the three highest categories in terms of intending to use condoms. When comparing the two findings seventy nine percent (79%) of male respondents and eighty four percent (84%) of female respondents have similar aims in terms of their intention to use condoms. However, sixteen percent of (16% females) and twenty one percent (21%) of males have no or little intention to wear condoms. The reason for this needs further investigation.

4.4.5 Choice of partner

The participants were asked to respond to the following statement:

I would avoid having sex with a person I do not know well- (very unlikely (0)…..very likely (6))

(0) (1) (2) (3) (4) (5) (6)

Table 14 presents data showing what percentage of students is likely to avoid having sex with a stranger.

Table 14:
Frequency table showing likelihood of avoiding having sex with a stranger

Likelihood of avoiding having sex with a stranger	**% Percentage of respondents**
0 - very unlikely	14%
1	3%
2	5%
3	5%
4	2%
5	7%
6 – very likely	64%
Total %	100%

Table 14 indicates that the majority of students chose the highest categories of four, five and six. Two percent (2%) of students chose category four, seven percent (7%) of students chose category five and sixty four percent (64%) of students chose category six. This adds up to seventy three (73%) of respondents who gave an affirmative response to the question. This indicates that the majority of respondents perceive sexual intercourse with a stranger to be a risky activity. However, twenty three percent (23%) of students are not likely to avoid having sex with a stranger. Fourteen percent (14%) of those are very unlikely to avoid having sex with a stranger. This means that around forty eight (48) individuals would be very unlikely to avoid having sex with a stranger. This type of behaviour is very likely to add to the continuation of the HIV/Aids pandemic.

4.4.6 Gender and choice of partner

Table 15 indicates the different genders` responses to the following statement:

I would avoid having sex with a person I do not know well- (very unlikely

(0)…..very likely (6))

(0) (1) (2) (3) (4) (5) (6)

Table 15:
Cross -tabulation of gender and likelihood of avoiding having sex with a stranger

I would avoiding having sex with a stranger	**0 - very unlikely**	**1**	**2**	**3**	**4**	**5**	**6 - highly likely**	**Total % respondents (male and female)**
Male	19%	7%	2%	9%	3%	10%	50%	100%
Female	10%	1%	1%	3%	3%	4%	78%	100%

Table 15 indicates that of the male respondents for this study, three percent (3%) chose category four, ten percent (10%) chose category five and fifty percent (50%) chose category six. This amounts to sixty three percent (63%) of male respondents who chose the highest three categories indicating that they would avoid having sex with a stranger. Of the female respondents, three percent (3%) chose category four, four percent (4%) chose category five and seventy eight percent (78%) chose category six. In total, eighty five percent (85%) of respondents chose the higher categories indicating that they were more likely to avoid having sex with a stranger than men.

Table 15 also indicates that males are far more likely (than females) to have sex with a person they do not know well. Thirty seven percent (37%) of male students chose the lower order categories of nought, one two and three. In contrast, fifteen percent (15%) of female chose the lower order categories. These findings indicate that females have a

higher likelihood of avoiding sex with a stranger than males. This appears to indicate that females have a higher perception of the severity of HIV/Aids.

4.4.7 Protective behaviour

If students are able to suggest going for HIV/Aids testing to their partner (s), they are effectively engaging in protective behaviour. This could prevent them from being infected with HIV/Aids. Table 16 presents data which explores respondents` ability to suggest HIV/Aids testing to a partner. Being unable to suggest going for HIV testing could be considered a barrier to HIV/Aids prevention efforts. Participants were asked to respond to the following statement:

Near the beginning of a relationship I am able to suggest to my partner that we go for an Aids test

1) Yes
2) No
3) Does not apply

Table 16:
Frequency table of ability to suggest HIV/Aids testing to a partner

Ability to suggest testing to a partner	**% Total Percentage of respondents**
Yes	59%
No	22%
Does not apply	19%
Total %	100%

Table 16 indicates that fifty nine percent (59%) of students agreed with the statement that they would be able to suggest to their partners that they go for an HIV/Aids test at the beginning of a relationship. Twenty two percent (22%) of students disagreed with the statement. This means that more than half of the respondents agreed with the statement by indicating that they would be able to suggest to their partners that they go for HIV testing. Nineteen percent (19%) selected the does not apply option. It is unclear why they selected the does not apply option, perhaps they are not in a relationship at the moment or find the question difficult to answer. In real terms over eighty (80), that is twenty two percent (22%), of participants would not be able to ask their partners to go for an Aids test at the beginning of a relationship. This indicates that talking about matters relating to sexual behaviour(s) is still problematic for some respondents.

4.4.8 Perceived risk

The following tables address the issue of perceived risk. This concept deals with students` subjective assessments of whether they are at risk of being infected with HIV/Aids. It also explores whether students feel they have been exposed to the retrovirus. Participants responded to the following statement:

If I have sex, using a condom can prevent me from HIV infection ((very unlikely (0)…..very likely (6)))

(0) (1)(2)(3)(4)(5)(6)

Table 17:
Perception of whether a condom can prevent HIV/Aids

Using a condom can prevent HIV/Aids	**% Total Percentage of respondents**
0-very unlikely	9%
1	5%
2	4%
3	8%
4	9%
5	13%
6 – very likely	52%
Total %	100%

The majority of students chose categories four, five and six. Nine percent (9%) chose category four and thirteen percent (13%) chose category five. Fifty two percent (52%) chose category six. This indicates that the majority of respondents know that it is likely that condoms prevent HIV infection. Table 17 has varied responses and this suggests that there is still a lack of knowledge about a condom`s ability to protect the individual from HIV infection. The fact that twenty six percent (26%) of students answered in categories 0, 1, 2 and 3 indicates this. This table points toward lack of knowledge of some of the respondents which can be considered another barrier to HIV/Aids prevention. As there has been much media coverage and educational information given to communities about the ability of condoms to prevent HIV infection this is a worrying statistic which needs further investigation.

4.4.9 Risk and preventative ability of condoms

Participants were asked to rate whether they saw themselves as belonging to a high, medium or low risk group concerning the likelihood that they would contract HIV/Aids.

This was cross-tabulated with their rating of whether using a condom can prevent HIV infection.

Table 18:
Cross tabulation of risk group and perception of condoms` preventative ability

Condoms' preventative ability according to perceived high, medium or low risk infection groups		**0 - very unlikely**	**1**	**2**	**3**	**4**	**5**	**6 – highly likely**	**Total % of respondents according to perceived high, medium or low risk group**
High	19%		5%	3%	8%	9%	8%	57%	100%
Medium	27%		4%	6%	6%	9%	16%	50%	100%
Low	54%		4%	3%	9%	8%	15%	51%	100%

It seems that the majority of students who view themselves as belonging to a high risk group, do in fact believe that using a condom can prevent HIV infection. Of these participants who perceived themselves as belonging to the medium risk group, seventy four percent (74%) chose category four, five and six indicating that they believe that a condom can prevent HIV infection.

Of these participants, nine percent (9%) chose category four, sixteen percent (16%) chose category five and fifty one percent (51%) chose category six. Seventy five percent (75%) of participants perceived themselves as falling into the low risk group (categories four, five and six). Of these participants, eight percent (8%) chose category four, fifteen percent (15%) chose category five and fifty one percent (51%) chose category six. The findings indicate however, that those participants, who perceived

themselves as belonging to the high risk group, were more likely to view condoms as being able to prevent HIV/Aids infection than the medium and low risk groups.

Table 18 also suggests that respondents (whether they perceive themselves as belonging to the high or the low risk group) appear to believe in the preventive ability of condoms. A chi-square was performed on categorical data in order to test if perceived risk group and perception of whether a condom can prevent HIV/Aids were independent or dependent of each other.

The assumption was met for the present chi-square test.

Ho: Perceived risk group is independent of response efficacy

H1: Perceived risk group is dependent of response efficacy

The chi-square analysis revealed that there was no significant difference, $x2\ (12, N=100) = 6.35$, $p = 0.897$ (marked effects significant if $p > 0.0500$), $df = 12$, here the probability value (p) is larger than 0.05, which means that there is no statistically significant relationship between the perception of whether a condom can prevent HIV infection and the perceived risk group. Whether students perceived themselves as being part of a low, medium or high risk group was not dependent on their perception of whether a condom prevent them from HIV infection.

4.4.10 Attitudes towards condom use

Respondents were asked to answer the following statement which was designed to assess their attitude toward condom use: I feel as though I will contract HIV/Aids anyway, so what's the point of wearing a condom?

1. Strongly agree, 2. Agree, 3. Neutral, 4. Disagree, 5. Strongly disagree

Table 19:
Attitudes towards condom use

What is the point of wearing a condom?	**Percentage of respondents**
Strongly Agree	13%
Agree	13%
Neutral	10%
Disagree	23%
Strongly disagree	41%
Total %	100%

Table 19 indicates that most students see condoms as being important in preventing infection with HIV/Aids. Twenty three percent (23%) of students disagreed and forty one percent (41%) strongly disagreed, whereas only twenty six percent (26%) of respondents showed an affirmative response (by choosing strongly agree and agree). It is evident that Table 18 and Table 21 indicate that the majority of students do regard wearing condoms in a positive manner. However, 26% of respondents felt they were likely to contract HIV infection anyway. This is, in real terms, is over eighty (80) respondents and is likely to point toward inconsistent or no condom use which is a high risk behaviour.

4.4.11 Ability to insist on condom use

In Table 20, students` confidence in their ability to insist on condom-use is explored. Students who cannot insist on the use of a condom are more likely to engage in risky

sexual behaviour. Participants responded to the following statement: When I want to, I know that I can insist on using a condom (very unlikely (0)…..very likely (6))

(0) (1)(2)(3)(4)(5)(6)

Table 20:
Insistence on use of condom

Insistence on use of condom	**% Percentage of respondents**
0-very unlikely	8%
1	4%
2	3%
3	7%
4	8%
5	8%
6 – very likely	62%
Total %	100%

Table 20 indicates that sixty two percent (62%) of students chose category six as a response to this question. This means that sixty two percent (62%) of respondents felt it very likely that when they wanted to, they could insist on using a condom. In total seventy eight percent (78%) of respondents chose category four, five and six (the highest categories). It is interesting to note that overall around seventy eight percent (78%) of respondents generally think they can insist on condom use, yet forty six percent (46%) of them feel they belong to high or medium risk groups for HIV infection (see Table 18). This indicates that perhaps they know what they are supposed to do (knowledge) but it does not translate into asking a partner to comply with the desired behaviour (wearing a condom).

4.4.12 Participants` confidence that they can insist on condom use

This study investigates participants` confidence that they would be able to insist that a condom be used. Participants responded to the following statement:

When I want to, I know that I can insist on using a condom (very unlikely (0).....very likely (6))

(0) (1) (2) (3) (4) (5) (6)

Table 21:
Cross tabulation of gender and participants` confidence that they can insist on condom use

I can insist on using a condom	0-very unlikely	1	2	3	4	5	6 – highly likely	Total % respondents (male and female)
Male	10%	7%	3%	7%	10%	7%	56%	100%
Female	7%	1%	2%	6%	6%	9%	69%	100%

Table 21 reflects that men and women had very similar feelings about this statement: “When I want to, I know that I can insist on using a condom (very unlikely (0).....very likely (6))”. Whereas fifty six percent (56%) of men chose category six (reflecting that they were certain they could insist on condom use), sixty nine percent (69%) of women chose category six. In total seventy three percent (73%) of men chose category four, five and six and eighty four percent (84%) of women chose the same categories. In this study, men and women indicated a similar perception of their confidence in insisting on condom use. This means that the majority of both female and male participants should be able to discuss issues such as sex and condom use with their sexual partners. If this

is the case over time this may have a positive impact on HIV prevention efforts. However, as the incidence of HIV/Aids has actually increased in 2007 – 2008 (Personal communication Dr K. A. Nel, July, 2009) it may be that respondents write down what they think to be the correct response but do not follow through with the actual behaviour (of wearing condoms). However, ten percent of the female participants and twenty percent of the male participants, which is one hundred and twenty respondents (in total), did not feel as if they would be able to insist on condom use. This indicates that some participants still have problems discussing sexual issues. This underpins the results in table 16.

4.4.13 Motivation to protect from HIV infection

The following statement is used to measure motivation to protect from HIV infection:

If I am sexually active, I intend to use a condom-(very unlikely (0).….very likely (6))

(0) (1) (2) (3) (4) (5) (6)

Table 22:
Motivation to protect from HIV infection through condom use

I intend to use a condom	**% Percentage of respondents**
0-very unlikely	7%
1	2%
2	2%
3	7%
4	5%
5	7%
6 – very likely	70%
Total %	100%

Table 22 indicates that the majority of students are likely to use a condom if sexually active. Eighty two percent (82%) of respondents chose categories four, five and six and twelve percent (12%) of respondents chose category four and five. Respondents seem to have the intention and are motivated to protect themselves from HIV/Aids infection and yet they may still be engaging in risky behaviour(s).

4.5 Stigma and social perceptions

4.5.1 Fear levels and perceptions of risk

The following table explores fear levels and their relation to misconceptions about risk. Participants were asked to respond to the following statements which were cross tabulated:

Rate the following behaviours in terms of how much risk you think they will put you at of being infected with HIV/Aids (0 means no risk and 6 means extreme risk)

Kissing some-one who is HIV-positive

(0) (1) (2) (3) (4) (5) (6)

Table 23:
Risk of kissing an HIV-positive person

Risk of kissing an HIV-positive person	**Percentage of respondents**
0 – No risk	33%
1	21%
2	14%
3	17%
4 -	4%
5	4%
6 – Extreme risk	7%
Total %	100%

Table 23 indicates that thirty three percent (33%) of participants chose category 0 indicating that the act of kissing someone with HIV held no risk of catching HIV/Aids. Twenty one percent of respondents chose category one, fourteen percent (14%) chose category two, seventeen percent (17%) of respondents chose category three, four percent (4%) of respondents chose category four, four percent (4%) of respondents chose category five and seven percent (7%) of respondents chose category six.

These responses indicate that the majority of respondents felt that kissing holds little risk behaviour. Sixty eight percent (68%) of participants chose 0, one and two in total, and this suggests that majority of participants do not perceive that kissing is a risky behaviour in terms of being infected with HIV/Aids. However, 15% (fifteen percent) of the sample felt that kissing was extremely to moderately risky. Although the majority of students indicate that they are well-informed regarding the unlikely transmission of HIV/Aids infection through kissing sixty students are not. It may be that fear of HIV makes kissing appear risky to students when, in fact, it has an extremely low risk.

If you found out that you were HIV positive, how scared would you feel if 0 was not at all, and 6 was paralyzing fear. Please tick the appropriate answer:

(0)(1)(2)(3)(4)(5)(6)

Table 24:
Fear levels upon discovery of HIV positive status

Fear level	Percentage of respondents
0-not at all	12%
1	6%
2	9%
3	19%
4	12%
5	7%
6- paralyzing fear	35%
Total %	100%

Table 24 indicates that the majority of students chose category six, thirty five percent (35%) of respondents indicating that they would feel paralyzing fear if they were to discover that they were HIV positive. It is interesting that a notable amount of participants chose category three, four and five. Nineteen percent (19%) chose category three, twelve percent (12%) chose category four and seven percent (7%) chose category five. This indicates that over fifty percent of the respondents would feel paralyzing to moderate fear if they found out that they were HIV positive. Fear is likely to have a role in stigmatization of the disease and it is also a possible barrier to prevention as individuals tend to try and hide from or ignore things they are afraid of (Nel, 2003).

4.5.2 Perception of immunity

The following table investigates students` perception of how immune they are to HIV/Aids. Participants responded to the following statement:

I think that people who are having unsafe sex have a high risk of being infected with HIV (very unlikely (0)…..very likely (6))

(0) (1)(2)(3)(4)(5)(6)

Table 25:
Risk of HIV infection through unsafe sex

Unsafe sex and risk of HIV	**Percentage of respondents**
0-very unlikely	5%
1	3%
2	2%
3	2%
4	3%
5	4%
6 – highly likely	81%
Total %	100%

Table 25 again measures participants` perceptions of immunity to the retrovirus. This concept relates to othering of the retrovirus. The above frequency table shows that eighty one percent (81%) of respondents chose category six reflecting a high perceived vulnerability. Three percent of participants chose category four, four percent (4%) chose category five and eighty one percent (81%) chose category six. In total eighty eight percent (88%) of respondents chose category four, five and six indicating a very high percentage of respondents who perceive that it is likely that people who are having unsafe sex have a high risk of being infected with HIV/Aids. Five percent (5%) of participants chose category 0, reflecting that they think it is very unlikely that people who are having unsafe sex have a high risk of being infected with HIV. Three percent chose category one and two percent of students chose category two. This amounts to ten percent (10%) of respondents who showed a negative response by choosing category nought, one and two. In real terms forty respondents indicated that HIV infection is likely to happen because of unsafe sex. This may point towards lack of

knowledge, poor understanding of HIV, or disregard of information that is commonly available.

4.6 Stigmatization and voluntary counselling and HIV testing (VCT)

This section provides information on the number of respondents in the sample who have received VCT and compares the responses of both females and males. It explores stigmatizing attitudes and cross-tabulates students` openness to testing and attitudes towards People Living with HIV and Aids. This section also examines the relationship between the number of participants who have received VCT and participants` perceptions of their own risk. Students` perceptions of the counselling process (part of the VCT process) are explored in greater details in order to ascertain whether students perceive this process to be an effective preventative procedure.

4.6.1 Quantity of participants who have received VCT

Respondents answered the following question:

I have undergone Voluntary Counselling and Testing (VCT) for HIV/Aids.

1) Yes
2) No

Table 26:
Frequency table showing students who have received VCT

I have received VCT	Number of respondents	Percentage of respondents
Yes	234	58%
No	166	42%
Total %	400	100%

Table 26 indicates that fifty eight percent (58%) of students in the sample admitted to having had HIV/Aids testing. Forty two percent (42%) had not received VCT. Although the majority of student had received VCT more than a third had not. This statistic seems to point toward resistance toward going for VCT and underpins the qualitative results from the focus group which indicate resistance to this type of counselling.

4.6.2 Gender and VCT

Participants were asked if they had received VCT and this data is presented below in terms of the different genders` responses**.**

Table 27**:**
Cross tabulation of gender and people receiving VCT

Gender	VCT-Yes	VCT-No	Total %
Male	55%	45%	100%
Female	60%	40%	100%

Table 27 suggested that fifty five percent (55%) of the male respondents had received VCT, whereas sixty percent (60%) of female respondents have received VCT. This indicates that more female respondents than male respondents had VCT. This may indicate that female engage in more responsible behaviour by being tested or that

females are more anxious about their HIV/Aids status than males and therefore receive VCT.

4.6.3 Stigmatizing attitudes

Participants responded to the following statement:

If I found out that the chef at my favourite restaurant was HIV–positive I would

1. Avoid the restaurant completely
2. Simply lessen my frequency of dining there
3. Still go there just as often as before

Table 28:
Cross tabulation indicating students` openness to testing and attitudes towards people with HIV/Aids

I found out my chef was HIV positive	**I would avoid the restaurant Completely**	**I would go to the restaurant less frequently**	**I would go as often to the restaurant**	**Total % respondents**
Yes	2%	10%	72%	84%
No	2%	4%	10%	16%
Total %	4%	14%	82%	100%

Table 28 indicates that the majority of the respondents, eighty four percent (84%) would go as often to the restaurant if they were aware that the chef was HIV positive. Only sixteen percent would avoid, go less frequently or not go as often to the restaurant. This may indicate that attitudes and behaviour are less stigmatizing than in the past. However, sixteen (16%) percent of the respondents which relates to more than sixty

persons in the sample who would be likely to show stigmatizing attitudes towards PLWHA.

4.6.4 Perceived risk and Voluntary Counselling and Testing

In this study the respondent`s assessment of their risk of becoming infected with HIV/Aids was examined. This study also looks at the extent that respondents believe themselves to have been exposed to HIV.

In terms of catching HIV/Aids, do you perceive yourself to be part of

1) A high risk group?
2) A medium risk group?
3) A low risk group?

Table 29:
Cross tabulation of perceived risk group and number of students who have received VCT

I have received VCT Perceived risk group	**Yes**	**No**	**Total % according to perceived high, medium or low risk group**
High	58%	42%	100%
Medium	50%	50%	100%
Low	63%	37%	100%

Table 29 shows that of the participants who perceived that they belonged to the high risk group, fifty eight percent (58%) had received VCT and forty two percent (42%) had not. Of the participants who perceived themselves as belonging to the medium risk group, fifty percent (50%) had received VCT and fifty percent (50%) had not. Of those

who perceived themselves as belonging to the low risk group, sixty three percent (63%) had received VCT and thirty seven percent (37%) had not. Participants who perceived themselves as belonging to the low risk group were least likely to have received VCT. This finding suggest that students tend to receive VCT only when they believe that they may be infected or if they view themselves as belonging to the high risk group. This emphasizes the need for awareness campaigns to encourage VCT and testing before engaging in sexual activity with a partner.

A chi-square test was used on the following categorical data in order to test if the two variables are independent or dependent. Participants were asked whether they had or had not received VCT and this data was compared with their perception of their risk group.

H_0: Individuals` perception of risk group (in terms of being infected with HIV/Aids) is independent of whether they have not undergone VCT.

H_1: Individuals` perception of risk group (in terms of being infected with HIV/Aids) is dependent of whether they have not undergone VCT.

The chi-square statistic indicated that there was no significant difference, x2 (12, N100) = 6.35, p = 0.897, df = 12, here the probability value (p) is larger than 0.05, which means that there is no statistically significant relationship (chi square significant at < 0.05).

4.6.5. The counselling process

The VCT process includes both counselling and testing. Both pre-test counselling and post-test counselling are provided for participants receiving VCT at Unizulu. It is important to consider how students react to the counselling process in order to determine whether they perceive it as a worthwhile intervention or not.

Participants responded to the following statement:

I am put off going for HIV testing because of what I have heard about the counselling process.

1. Strongly agree, 2. Agree, 3. Neutral, 4. Disagree and 5. Strongly disagree

Table 30:
Being put off by the counselling process

I am put off HIV testing because of the counselling process	**Percentage of respondents**
Strongly Agree	9%
Agree	19%
Neutral	24%
Disagree	34%
Strongly disagree	14%
Total %	100%

The majority of students disagreed with the statement above. Thirty four percent (34%) of students disagree with the statement that they are put off going for HIV testing because of what they have heard about the counselling process. A further 14 percent strongly disagreed and twenty four percent (24%) remained neutral.

This means that in total forty eight percent (48%) of participants were not put off by what they had heard about the counselling process. This is less than fifty percent (50%) of the sample. Twenty eight percent (28%) of the sample agreed and strongly agreed that they were put off the counselling process by what they had heard and twenty four percent (24%) noted to being neutral about the question. These responses appear to underpin the qualitative results (page 91), in that the counselling process or VCT does not appear to be a popular option. It would be expected that more than half the sample would disagree or strongly disagree with the statement that: I am put off HIV testing because of counselling process (by what they heard) if they saw the counselling process in a positive manner.

I found the counselling process to be impersonal

1. Strongly agree, 2.Agree, 3.Neutra, 4.Disagree, 5.Strongly disagree

Table 31:
The counselling process- the extent to which it was found to be impersonal

The counselling process is impersonal	**Percentage of respondents**
Strongly Agree	9%
Agree	44%
Neutral	26%
Disagree	14%
Strongly Agree	7%
Total	100%

The results indicate that fifty two percent (52%) of the respondents felt that the counselling process was impersonal. A further twenty six percent (26%) of participants

indicated that they were neutral to the question. Twenty one percent (21%) of the sample disagreed with the statement indicating that they felt the counselling process was not impersonal. This statistic underpins the result that participants generally find many negatives in the VCT process (see qualitative results).

4.7 Resume

This chapter reported and discussed the main results obtained from responses to the survey questionnaire. The qualitative results are underpinned by the quantitative results in that VCT counselling is generally seen in a negative manner by respondents. Although respondents' knowledge generally seems to be good there are still many participants who display an alarming lack of knowledge about for instance, condom use and how HIV is spread. It is also noted that although the majority of the sample indicate that it is unlikely they would display stigmatizing behaviour toward others there are still some who would. This perpetuates stigmatization and the othering of pandemics such as HIV/Aids. The statistics also indicate that respondents are still fearful of the pandemic which may point toward resistance to listening to interventions and facing the challenges posed by HIV and Aids responsibly

CHAPTER FIVE: DISCUSSION OF FINDINGS AND CONCLUSION

5.1 Introduction

The discussions of the results of this study are underpinned by the relevant literature as presented in the literature review. It focuses on students' attitudes towards voluntary counselling and HIV testing (VCT), students' perception of risk and perception of risk-taking behaviour and social perceptions with an emphasis on the stigmatization of HIV/Aids. The discussion is also presented in terms of the study assumptions namely:

- Female students are more likely to feel they are at risk of contracting HIV and Aids
- Condoms are not used consistently, by either gender, when having penetrative sex
- VCT counselling is perceived in a negative manner by both genders

5.2 Discussion of Quantitative Results of the study

5.2.1 Risk-taking behaviour (Gender)

Gender and risk taking behaviour was considered to be an important cross-tabulation as literature shows that research that people of different gender have different attitudes towards HIV/Aids issues (Abraham, 2006 & Nel, 2003). The results indicate that the different gender groups do have different perceptions concerning their vulnerability or risk of HIV infection (see Table 8). It must be noted that these are not statistically significant. A larger majority of female respondents felt that they were more at risk of

contracting HIV/Aids than the male group. This underpins the assumption that female students are more likely to feel they are at risk of contracting HIV and Aids

5.2.2 Rating risk behaviour

Student's rated unprotected sex in terms of how much risk the individual would have being infected with HIV/Aids. Table 10 indicates that eighty six percent (86%) of respondents chose category six. Most respondents therefore indicated that they felt that unprotected sex was extremely risky two percent (2%) of respondents chose category five. This indicates that the majority of students did not have misconceptions about the danger if contracting HIV/Aids through unprotected sex. However, fourteen percent (14%) felt that there was no risk at all of contracting HIV and Aids if not using a condom and six percent felt that unprotected sex was not a risk at all. This still indicates that there is either a gap in knowledge, which would appear unlikely, or that students have stopped listening to HIV prevention campaigns. This needs further investigation. However, the statistic does underpin the assumption that condoms are not used consistently by either gender when having penetrative sex. This underpins the assumption that condoms are not used consistently, by either gender, when having penetrative sex

5.2.3 Fear

Weston (2006) uses the HBM and PMT to clarify the concept of fear. According to this model, when a health threat exists, people either control their fear about the danger or they control the danger. The variables which contribute to this choice are perceived threat and efficacy. The findings indicate that both knowledge and risk behaviour may be high. In

order to explain this, it is necessary to explore the concept of fear levels towards HIV/Aids. Boer and Emons (2004) suggest that participants in their study who experienced high levels of fear would direct their attention toward controlling their anxiety rather than altering their behaviour. It seems that moderate levels of fear appear to initiate the most responsible behaviour. Table 12 of the present study indicates that thirty five percent (35%) of the present sample chose category six (paralyzing fear) when rating the extent of the reaction they would feel if they found that they were HIV positive. Seven percent (7%) chose category five (the next highest category indicating fear). This indicates that students of both genders are extremely fearful with regard to HIV/Aids infection and that students have knowledge of the retrovirus.

5.2.4 Gender and intention

The study results indicate that more females than males have the intention of using condoms. However, as both Nel (2003) and Weston (2006) note intention does not necessarily translate into behaviour. Seventy nine percent (79%) of male respondents and eighty four percent (84%) of female participants chose the three highest categories in terms of intending to use condoms. It must be noted with concern that sixteen percent of females and twenty one percent of males have little or no intention to wear condoms. The reason for this needs further investigation as such behaviours perpetuate the pandemic. This also underpins the hypothesis that condoms are not used consistently, by either gender, when having penetrative sex

5.2.5 Choice of partner

According to Sarafino (2002) perceived severity of being infected with HIV/Aids is a significant predictor of the adoption of HIV-preventative behaviour(s). His study showed that severity was a significant predictor of the participants' decisions to be more careful about the selection of intimate partners, reducing the number of sexual partners and generally positive changes towards safer sexual behaviour(s). The present study indicates that students perceive high severity through being infected with HIV/Aids. This is indicated by Table 14. The majority of respondents in the present study perceive sexual intercourse with a stranger to be a risky activity. However, more men and twenty three percent (23%) of all respondents are not likely to avoid having sex with a stranger. Fourteen percent (14%) of those are very unlikely to avoid having sex with a stranger. This means that around forty eight (48) individuals would be very unlikely to avoid having sex with a stranger which in turn will enable the spread of HIV/Aids. Weston (2006) states that in Sub-Saharan Africa, unequal gender relations need to be changed in order to alleviate the impact of HIV/Aids. This suggests that patriarchy still exists which could affect men's perceived severity. It is also possible that men are ignoring the information given to them because they have reached information saturation point. This statistic underpins the study assumptions that: Female students are more likely to feel they are at risk of contracting HIV and Aids. It is also likely that if an individual has sex with a stranger he or she is not likely to be prepared in terms of condom use. The assumption that: Condoms are not used consistently, by either gender, when having penetrative sex, is thus also underpinned by this statistic.

5 .2.6 Protective behaviour

Research shows that respondents who said that they could suggest to their partner that they go for an HIV/Aids test at the beginning of their relationship are more likely to perceive less physical or psychological costs from taking this particular health action. This indicates that they would be more likely to engage in protective behaviour. Table 16 indicates that fifty nine percent (59%) of students agreed to the statement that they would be able to suggest that their partner should go for an HIV/Aids test at the beginning of a relationship twenty two percent (22%) of students disagreed with the same statement. These students do not feel comfortable communicating safe sex practices to their partner ninety percent (19%) of respondents chose the option "does not apply".

Kelly (2001) states that in small university communities, sexual partners tend to change fairly frequently. As Unizulu is a typical small-town university in South Africa, it is interesting to note the response to this question. Table 15 indicates that males are far more likely (than females) to have sex with person they do not know well. Thirty seven percent (37%) of male students chose the lower order categories of 0, one two and three. In contrast, fifteen percent (15%) of female chose the lower order categories. These findings indicate that females have a much higher likelihood of avoiding sex with a stranger than males. This appears to indicate that females have a higher perception of the severity of HIV/Aids. The statistic also supports the hypothesis that: Female students are more likely to feel they are at risk of contracting HIV and Aids.

5.2.7 Attitudes towards condom use

Uys (2002) found that students generally had a negative attitude towards condom use. The results of this study imply that although students know that risky behaviour can result in the contraction of HIV, they still engaged in unsafe sex. Participants were asked to respond to the statement: "I feel as though I will contract HIV/Aids anyway, so I feel what the point of wearing a condom is? Strongly Agree, Agree, Neutral, Disagree, or Strongly Disagree." This study also researched the self-efficacy of participants concerning condom use. The majority of participants felt that they could insist that a condom be used when engaging in sexual activity. This suggests that students feel empowered in being able to make such a decision. However it does not indicate whether in reality, students actually do insist on using a condom, merely how they feel with regards to being able to insist on the use of this contraception. It is also noteworthy that twenty two percent (22%) of students chose categories nought, one, two and three, indicating uncertainty or a negative response to the question). It is evident that the majority of students do regard wearing condoms in a positive manner. However, 26% of respondents felt they were likely to contract HIV infection anyway. This means that over eighty (80) respondents are likely to have inconsistent or no condom use which is high risk behaviour and will perpetuate the pandemic. This supports the hypothesis that condoms are not used consistently, by either gender, when having penetrative sex

5.3 Stigmatization and Voluntary Counselling and HIV Testing

5.3.1 Students who attended VCT

According to the study, fifty eight percent (58%) of participants had received VCT. However, Kalichman and Simbayi (2003) research indicated that, the usual percentage of participant's in research investigations undergoing VCT is sixty five percent (65%). Their study explored the relation between HIV testing history, attitudes towards testing, and stigmatization associated with HIV/Aids. Their study also revealed that people only received VCT if they perceived stigmatization in their community to be at an acceptable level or if they perceived that by receiving VCT, it may reduce perceptions of stigmatization. It should be kept in mind that individuals who were tested for HIV/Aids do not necessarily have a positive attitude towards VCT. However it does indicate that they are open to the testing process. In the present study, of the women, sixty percent (60%) had undergone testing and only fifty five percent (55%) of the male respondents had undergone VCT. This indicates that in the present study, female respondents are more likely than male respondents to receive VCT. These results underpin the study hypotheses that: Female students are more likely to feel they are at risk of contracting HIV and Aids – as a result they are more likely to go for VCT counselling. It also points toward supporting the assumption that: VCT counselling is perceived in a negative manner by both genders as forty percent of females and forty five percent of males had not attended VCT.

5.3.2 Stigmatizing attitudes

Research amongst American students shows that positive attitudes towards VCT and a willingness to be tested for HIV have been linked with a higher readiness of students to be in contact with PLWHAs (Stephenson; 2004). Results from the present study indicate that the majority of the respondents, eighty four percent (84%) would go as often to a restaurant if they were aware that the chef was HIV positive. Only sixteen percent would avoid, go less frequently or not go as often to the restaurant. This may indicate that attitudes and behaviour are less stigmatizing than in the past. However, sixteen (16%) percent of the respondents relates to more than sixty persons in the sample who would be likely to show stigmatizing attitudes towards PLWHA. It is likely that this is also linked to the othering of HIV and Aids. Individuals are less likely to want to eat at a restaurant where the chef is HIV positive or has Aids because then they have to face the other who fundamentally looks (acts and behaves) like them. This means they have to "face" the disease which they are not prepared to do. This type of behaviour and attitude leads to discrimination and stigmatization. The fact that a notable proportion of the respondents reported to being homosexual is likely to have had an impact on the study results as such individuals are likely to face stigmatization, cognitive dissonance and othering. This suggests that the assumption VCT counselling is perceived in a negative manner by some students is correct which is likely to result in ongoing stigmatization of people who are HIV infected.

5.3.3 The VCT process

Fifty five percent (55%) of male participants and 60 percent (60%) of female participants had received VCT. This suggests that women are more likely to be tested for HIV infection. This could indicate that women are engaging in more responsible behaviour by being tested or that they are more anxious about their HIV/Aids status and therefore go for testing. In total, fifty eight percent (58%) of participants had received VCT. According to De Paoli et al. (2004), willingness to accept VCT is linked to perceived high personal susceptibility. Fifty two percent (52%) of the respondents felt that the counselling process was impersonal. A further twenty six percent (26%) of participants indicated that they were neutral to the question. Twenty one percent (21%) of the sample disagreed with the statement indicating that they felt the counselling process was not impersonal. This statistic underpins the result that participants find some negatives in the VCT process. Research indicates that people are not opposed to VCT, but that there is a great deal of mistrust towards health care professionals. Shell (2000) found that a general fear of discrimination and rejection existed from medical professionals, related health care professionals, and sexual partners and from the community. The present study seems to underpin the assumption that students may generally feel negative towards VCT.

5.4 Qualitative results of the study

Qualitative results generated by the focus group indicate that the participants in the group perceived sexual risk behaviour to be high at Unizulu. Participants noted that substance abuse was likely to add to high risk behaviours. The group also indicated a general concern in terms of VCT. They felt that the way counsellors approached

students' who went for VCT was generally negative. This concern is probably related to othering and because counsellors feel uncomfortable having to face individual's who may prove to be HIV positive. It can be likened to looking at self through a mirror and counsellors may not have enough training to deal with the negative feelings they may experience. It was also noted that the focus group participants felt that pre and post counselling was boring for both the counsellors and the client and it should be stopped, for they could not see any benefits). This is again most likely related to the othering of the disease and anxiety related to fear of the disease.

5.5 Conclusion

Harrison, et al. (2000) state that much research has been conducted in South African tertiary institutions on social conditions, economic factors and behaviour and how they relate to the HIV and Aids pandemic. However, ongoing research needs to be conducted as the South African social, economic and environmental context is a dynamic one. This study has focused on a sample of tertiary institution (Unizulu) undergraduates and focused on, students' perception of risk and perception of risk-taking behaviour, social perceptions with an emphasis on stigmatization and students' attitudes towards voluntary counselling and HIV testing (VCT).

The HBM and PMT and other relevant literature was used as a foundation for the focus group interview schedule and the results of the focus group were used to prepare the survey questionnaire. The survey could therefore be contextualized to Unizulu students. The findings of the survey were analyzed and interpreted in terms of related theory. By

interpreting the findings in terms of relevant theory, a better understanding of health behaviour (s) pertaining to the HIV/Aids pandemic in a tertiary institution was generated.

It appears that generally students have good knowledge of the pandemic and know what preventative behaviours are. However, in reality intention may not translate into actual behaviour. A worrying statistic was that many students perceive themselves as belonging to low or medium-risk groups in terms of being susceptible to being infected with HIV. This is more likely to relate to the othering of HIV and Aids than lack of knowledge about high risk groups. However, more research needs to be undertaken to be sure of this inference.

Kalichman (2000) suggest that moderate levels of fear result in the most responsible behaviour. Regarding protective behaviour, the majority of respondents agreed with the statement that they would be able to suggest to their partner to go for an HIV/Aids test at the beginning of a relationship. This indicates that the majority of respondents feel that they are able to take this preventative behaviour. However, it is unclear if intention relates to behaviour. The inference is that it does not as the level of HIV infection and Aids deaths in the region continues to rise.

It was revealed that male participants take part in more risky behaviour than females yet they are less likely to go for VCT. Participants generally perceived condoms as being a fairly effective protective device in preventing infection with HIV/Aids. However, some of the respondents did not view condoms as being completely effective. If sexually active it is likely that they would see themselves as being susceptible to HIV/Aids. A portion of respondents answered in the negative about the likelihood of a condom preventing HIV

infection. This indicates the need for a sharper focus on the preventative ability of condoms in HIV prevention programmes. It is possible that some students distrust condoms as a form of complete prevention and may be misinformed about their preventative ability. It should be noted that there are a portion of the respondents who believe that they belong to the high risk group, yet they do believe that using a condom can prevent HIV infection. This suggests that some respondents may believe in the preventative ability of condoms, but are not using them. It is possible that cognitive dissonance results in a discrepancy between participants' attitudes and behaviour (Sarafino, 2002). However, the majority of students illustrated high self-efficacy by answering in the affirmative regarding being able to insist that a condom be used when engaging in sexual activity. It is unclear though whether they answer in the affirmative because they perceive the answer to be the correct one and then do not actual “do” the behaviour. It does seem likely that students are saturated with information and, although they say one thing, it is likely they do (or indulge in risky behaviours) another. This would explain the ever higher rate of incidence of infection in the area and amongst individuals of the age demographic of the respondents.

This study reveals that not all respondents are highly motivated to protect themselves from contracting of HIV. This was measured by ascertaining whether participants would have sex with a person that they did not know very well. Males were far more likely to have sex with someone they did not know well than females. This finding could be due to the fact that patriarchy still exists or that saturation levels have been reached in terms of HIV/Aids education. This may result in men ignoring the information given to them. The findings indicate

that the HIV epidemic among undergraduate students continues, in part because, although in theory, students show high intention levels, in practice they do not participate in low risk behaviour.

Overall the findings seem to indicate that students have knowledge but this does not always translate into actual behaviours. This is likely to result in cognitive dissonance where there is a discrepancy between what respondents believe and how they act. Cognitive dissonance also has an influence on the othering of HIV and Aids and high levels of fear. It is also noteworthy that forty of the respondents reported to being homosexual. These students may choose to fill in survey's which helps them, essentially, have a voice. It is likely that these students face more stigmatization and also suffer from cognitive dissonance as being "gay" in a patriarchal culture has many challenges. These inferences are underpinned by the study results. It is also likely that as the institution is the workplace of students such results can be found amongst individuals who are below the age of thirty five in the workplace. The results point towards the continuance and further spread of the pandemic as an important proportion of the sample respondents indulge in high risk behaviours and have negative attitudes towards VCT.

CHAPTER 6: STUDY RECOMMENDATIONS

6.1 Implications of the research and Recommendations

The following recommendations are made:

- cognitive dissonance should be studied further in order to understand why respondents continue to engage in risky behaviour. This could involve both qualitative and quantitative studies. Further research should focus on barriers to VCT, as this could inform prevention activities. Findings need to be reported to the counselling centres on university campus so that VCT initiatives are successful;

- the present study indicates that perceived risk for HIV infection is medium to high. It would be informative to generate data regarding how many students have been tested for HIV in relation to different perceptions of risk. As it is difficult to change set behaviours, Petzer (2003) recommends that education programmes be implemented at an early stage to encourage healthy behavioural patterns. As knowledge can be a predictor of reduced risk behaviour, it is worthwhile to sustain any program that increases knowledge. Thus, institutions should continue with education programmes but at the same time address risky behaviours more aggressively;

- the results of this survey should be communicated to the university to emphasizing the groups at risk, making it a personal behaviour identification

exercise linking it with safer sexual practices exercises and behaviour change options within a university setting;

- It is recommended that further research by a follow-up KAPB survey in about two to three years to see if there is a change in the trends. Another alternative would be for universities can conduct smaller KAPB surveys more regularly to receive updated information on a more regular basis, for example a three question mini survey on condom use next to condom dispensers;

- universities that have engaged in KAPB surveys should make their results available sharing how they have tried or intend to address some of the problems areas identified in the studies. It is important that universities start to learn from each other's mistakes and successes;

- as there is a gap in research on cost to companies relating to HIV/Aids, it is important to conduct future research in these areas especially in Southern Africa where the disease is the highest.

6.2 Methodological Limitations of the study

The following methodological limitations were found:

- the sample was not randomized thus more powerful statistics could not be used. For instance, independent T tests and ANOVA's;
- the sample was not diverse in terms of ethnicity;

- and it must be noted that with such a large sample the Chi-square statistic has limitations as it is more likely to show significant results. An independent T-test would have been more appropriate for such a large study.

6.3 Methodological strengths of the study

The following methodological strengths were found:

- The study used a questionnaire piloted by Nel (2003) and expanded on it thus using a tested tool;
- the sample was a convenience one but it used students who are homogenous in terms of age and educational abilities thus adding reliability and validity to the study;
- descriptive statistics enable a holistic picture of the data to be given

6.4 Ethical issues

Due to the stigmatization of HIV and Aids and human rights issues connected to the pandemic, this subject matter has become a sensitive topic of discussion. It was necessary for this research to include a clear description of the measures that would protect the participants involved. During the focus group research participants were told that participation was voluntary and that if they felt uncomfortable speaking about certain issues (See Appendix C), they should not feel pressure to contribute. The survey questionnaire states that it is completely confidential and anonymous and not possible to establish the participant`s identity through their response. The language used to communicate this information was

appropriate to participant`s level of education. Informed consent forms were completed by every participant in the focus group discussion (See Appendix A). The rights of the participants in this study to make their own decisions and give their own opinions were recognized. The ethical issues and confidentiality were undertaken using the Health Professions Council of South Africa guidelines.

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ABBREVIATIONS

HIV - Human Immune- Deficiency Virus

Aids - Acquired Immune Deficiency Syndrome

PLWHA - People Living with HIV/Aids

VCT - Voluntary Counselling and Testing

Unizulu - University of Zululand

WHO - World Health Organization

UNAIDS - Unite Nation of Acquired Immune Deficiency Syndrome

KAPB - Knowledge Attitude Practice and Behaviour

HBM - Health Belief Model

PMT - Protection Motivation Theory

TB - Tuberculosis

STI`s - Sexual Transmitted Infections

BSE - Breast Self-Examination

ARV`s - Anti-retrovirus

NGO`s - Non Governmental Organization

ABC - Abstain, Be faithful and Condomize

APPENDICES

Appendix A:

Ethical standards protocol for focus group

UNIVERSITY OF ZULULAND

AGREEMENT BETWEEN STUDENT RESEACHER AND RESEARCH PARTICIPANT

I agree to participate in the research project of Vuyelwa Nqojane on the attitudes and perceptions of University of Zululand students towards condoms in the prevalent of HIV/Aids.

I understand that:

1. The researcher is a student conducting the research as part of the requirements for a Master`s degree at University of Zululand
2. I understand that this study will cover the following topics: risk and risk-taking behaviour, voluntary counselling and testing (VCT), and stigma and social perception.
3. My participation will involve my involvement in a focus group which will take about 60 minutes, and will involve a discussion on broad trends and individual perspectives and attitudes toward condom use and HIV/Aids.
4. I may be asked to comment on my personal experience/attitude or perceptions toward condom use and HIV/Aids but can choose not to answer any questions/or contribute to the discussion at any moment.
5. I am invited to voice to the researcher any concerns I have about my participation in the study and to have these addressed to my satisfaction.
6. My participation in this focus group is completely voluntary. I am free to withdraw from the study at any time-however I commit myself to full participation unless some unusual circumstances occur or I have concerns about my participation which I did not originally anticipate.
7. The report on the project may contain information about my personal experiences, attitudes and behaviour, but the report will be designed in such a way that I will not be able to be identified by the general reader.

…… …….

Signature Signed on (date)

Supervisor
Dr. K.A. Nel

Appendix B

Interview Schedule of Questions

1. Effect on every-day life

1.1 How much has it actually affected your lives? For instance do you personally know people who have been affected? And has this influenced your perception of HIV/Aids?

2. Attitudes

2.1 How do you feel about taking part in a discussion like this about HIV/Aids? Is it a sensitive topic for you or do you feel comfortable?

3. HIV Status

3.1 Should people be open about their HIV Status?

4. Risky behaviour

4.1 What do you think risk behaviour in terms of HIV? Do you come across this on campus?

4.2 What do you think risk behaviour is like at University of Zululand in comparison with other university/institution?

5. Government

5.1 Do you feel the government is addressing the HIV/Aids pandemic sufficiently?

6. Stigma/Social Perceptions

6.1 Comment on your reaction toward people with HIV/Aids.

6.2 Are there certain demographic groups that you would consider to be more at risk of contracting HIV?

7. Other topics to be discussed

7.1 Prevention/Campaigns

7.2 VCT-Voluntary Counselling and Testing

7.3 Use of condoms.

Appendix C:

Transcription of post-graduate focus group

Name (Pseudonyms)	Abbreviation	Qualification/Position	Age
Jack	Ja	(group facilitator)	24
Boni	B	Honours in Psychology	31
Joy	Jo	Masters in Social Development	24
Sihle	S	Masters in Psychology	24
Thulani	T	Masters in Economics	24
Musa	Mu	Masters in Social Development	23
June	Ju	Post Graduate Certificate in Education (PGCE)	23
Melly	Me	Honours in Computer Science	25
Nolizwe	N	Masters in Economics	26

Colour coding key

For the transcribed focus group it was possible to generate the following themes:

Themes	Colour
Treatment of retrovirus	Pink
Stigmatization	Violet
HIV/Aids awareness	Yellow
VCT	Blue
HIV status	Grey
Risk behaviour	Red
Social issues	Green

Ja: This focus group will be used to inform a survey for my thesis on students` attitudes or perceptions around HIV/Aids issues.

It is a sensitive topic so if you do not feel comfortable talking about any issue, that's` fine. I have questions to promote discussion, but I really just want you to feel free to speak. I will do my best to keep you on topic by asking new questions, do not worry if you have less to say or too many opinions- that is helpful in itself.

Every-day life

Ja: How much has it actually affected your lives? For instance do you personally know people who have been affected? And has this influenced your perception of HIV/Aids?

B: I know people with virus a lot and had influenced me. Have three relatives and one friend.

S: Have family members, a sister (some passed away due to accidents, but were infected).

Mu: Now nobody, but the community assume when a person start to loose weight and say it HIV/Aids

Ju: Know people, had a sister who passed away due to the virus. With other people we cannot see, look normal.

Me: Know someone, an uncle. Who told them it good.

Jo: Not everyone is infected. Have affected her positively and this HIV is out there and people are living positive about it. People do not tell that they are infected.

Attitudes(Stigma)

Ja: How do you feel about taking part in a discussion like this about HIV/Aids? Is it a sensitive topic for you or do you feel comfortable?

General: Comfortable

Jo: Feels comfortable, as everyone talks about it. It advisable to talk about it so people will know when an individual get sick and be able to take care of you.

S: Okay, people do not tell while they are still fine ,but start talking when they are weak. Cannot force people to tell that they are infected with HIV ,because they should be ready about the outcomes.

B: Comfortable, after the sister was so indenial about being infected, until forced to get tested. People decide to keep it to themselves.

Me: Comfortable, we speak our mind out and we share ideas with other people. The sad thing our role models, celebrities do not talk about being infected

HIV Status

Ja: Should people be open about their HIV Status?

S: Cannot force people to be open, it their choice to do it.

B: Being open, did affect her sister, it turned her life around, some people treated her the same as before.

Me: Let people not be forced to open up. The uncle feels bad or hurt when sees adverts about HIV/Aids.

Risky behaviour

Ja: What do you think risk behaviour in terms of HIV? Do you come across this on campus?

General: Yes

B: Risk behaviour is high looking at the high rate of pregnancy and not everybody get tested. And people are engaged in sexual behaviour. People turn to sleep with others with the belief that being infected can be cured by sleeping with a virgin.

Jo: Boys have more than one girlfriend as much girls.

Ju: It is associated with drinking

Me: Some infections are biological. Some students think that we are all virgins.

N: Have unprotected sex under influence of alcohol (multiple infections)

S: We got (abos`bali) married men or not from around Empangeni and KwaDlangezwa, who visit our sister and bring the virus to the campus.

Ja: What do you think risk behaviour is like at University of Zululand in comparison with other university/institution?

Me: Not know, but I have heard about Durban University of Technology and University of Mangosuthu

S: Not there, but just read about other institution.

Government action

Ja: Do you feel the government is addressing the HIV/Aids pandemic sufficiently?

N: Yes. Spreading awareness is been so sufficient. There are support groups. Counselling is provided. Need to do follow up. Qhompilo there in rural areas, visit each house. Rural people trust them since they are willing to help.

Jo: Yes, the problem is with us people, we still have stigma. We are aware of HIV/Aids, but it hard to accept that it exist. We need to open up about the disease. We are still in denial.

Mu: Yes, but it is difficult to disclose

Me: Get sick, never tested just put it in your mind and the government has done a lot but not enough. Have address issues about HIV/Aids. Must also focus on food, treatment and counselling not only aware nesses. What the point if cannot bring me food. The government must create jobs for people.

S: It okay some times. I have never seen them in my area. People decide to be infected so that they can receive grant.

B:Not market themselves enough, not arrest people who sleep with others knowing that they are positive. Companies are losing employees ever day what is done about that. It my duty to know and testing is free. The government is very lenient and must stop pulgralism.

T: People are happy that they are positive because they receive grant, they see nothing wrong by being HIV positive.

Stigma/Social Perceptions

Ja: Comment on your reaction toward people with HIV/Aids.

B: We still get shock when we see thin people no matter how educated we are. I am

anger because we turn not to listen. Once see glands we start diagnosing people.

N: People need to be educated, it seems like some need more information about the virus. I love them for they need emotional counselling and accept them the way they are. I suspect if a cough for more than two weeks. People who are positive kill themselves by keeping it as a secret. Even Christian still criticizes HIV/Aids people.

T: The way we get so infected we love so much then put trust aside.

Me: Feel sad for children who stay behind when their parents passed away because it likes they are paying for their parents sins by remaining with the virus. Anyway HIV/Aids it just likes all other sickness we have in the world. Students are scare to disclose, have the fear what other students are going to say.

Ju: I used to be suspicious of people who turn to be thin out of the blue from being fat.

Jo: We turn to conclude that even people who are suffering from Tuberculosis, they are HIV positive for there is a link between the two.

S: I would not like it dying thin if I found out that Iam HIV positive. I would not feel happy to bring stress for my family.

Mu: I would be happy to die peacefully.

Me: With condom breaking one can get it

Ja: Are there certain demographic groups that you would consider to be more at risk of contracting HIV?

General: Zulu People

B: Zulu people-men leave their women and go away looking for job when they turn back they do not appreciate them. Zulu`s always live superstition.

S: Who said only Zulu people, also other race as Coloureds, Xhosa, White, Swati`s and Sotho people. I notice there is a lot of stigma.

N: I would agree, with B, it in the system for Zulu guys not to let a lady pass by without passing remarks. Zulu people are so ignorant, they do not read much and they are so resistance to change. They like to say “Iam Zulu- asibuyele emasisweni-let get back to the old ways we use to do things”.

T: Depend on the population, this is like crime. Statistics in South Africa for HIV/Aids not Unizulu (2003) the internal survey showed that 80 percent of people infected with the disease are Zulu people

Jo: We are now being stereotypical, why Zulus` only.

Other topics to be discussed

Ja: Prevention/Campaigns

Ju: Problem is the treatment, people do not co-operate due to side effect. Some people prefer traditional medicine.

Jo: Workshops are done; we have Love Life in South Africa that educated everybody about issues of HIV/Aids.

B: Student do not receive full treatment around the campus since there is no support group or Antiretroviral (ARV`s) being offered to students who find out that they are having the virus.

T: There is no proper nutrition for use around the campus we always get the same meal every week.

Mu: How many people do we know that never complains about the after effects from

ARV?

Ju: We are sick of hearing one and the same message from the media every day about HIV as if it is the only disease in South Africa and around the world.

Ja: VCT-Voluntary Counselling and Testing

T: The pre-counselling take it time forgetting that time is money.

B: The way the counsellors talk to us, it makes one feel as if they already know that you are HIV positive.

S: I feel that counsellors take this personally and I feel uncomfortable about discussing issues of HIV/Aids with other people especially concerning my love life.

Ju: Counselling should be voluntarily, nobody should be forced to go for VCT

Me: Do you feel scared, that means you are doing bad thing behind your partner.

Mu: Pre or post counselling is boring for both the counsellors and the client, it should be stopped, for there is no benefits for others.

Jo: Let the person make a choice to chose whether they need counselling or not.

Appendix D:

Questionnaire HIV/Aids

UNIVERSITY OF ZULULAND

AGREEMENT BETWEEN STUDENT RESEACHER AND RESEARCH PARTICIPANT

I agree to participate in the research project of Vuyelwa Nqojane on the attitudes and perceptions of University of Zululand students towards condoms. The information obtained will be used to complete a dissertation that will add to the research base on the subject undertaken at South African Universities. Participants are requested not to write down your name to ensure that the material is completely anonymous. It is important that you be honest when you fill in the questionnaire otherwise the study will be of little worth.

I understand that: the researcher is a student conducting the research as part of the requirements for a Master`s degree at University of Zululand. I understand that this study will cover the following topics: risk and risk-taking behaviour, voluntary counselling and testing (VCT), and stigma and social perception. My participation will involve my involvement in answering the questionnaires on broad trends and individual perspectives and attitudes around HIV/Aids.

…… …….

Signature Signed on (date)

Supervisor

Dr. K.A. Nel

NOW PLEASE ANSWER THE FOLLOWING QUESTIONS:

INSTRUCTIONS: MAKE A TICK NEXT TO YOUR CHOICE OF ANSWER, OR WRITE THE ANSWER THAT IS REQUIRED IN THE GIVEN SPACE. READ EACH QUESTION CAREFULLY. THERE ARE 43 QUESTIONS, PLEASE ANSWER ALL OF THEM.

Demographic Questions

1. Which age group do you fall under?

1) 17 to 25
2) 26 to 30
3) 31 to 35
4) 36 and 40
5) 41 and above

2. Are you male or female?

1) Male
2) Female

3. What is your social (actual) year of study (how long have you been studying)?

1) First
2) Second
3) Third
4) Fourth

4. What is your academic year of study?

1) First
2) Second
3) Third
4) Fourth
5) Post graduate

5. Which racial category do you belong to?

1) Black
2) White
3) Indian
4) Couloured
5) Asian
6) Other

6. Which faculty are you in?

1. Commerce, administration and law
2. Art
3. Education
4. Science and agriculture

7. What is your sexual orientation?

1) Heterosexual

2) Bisexual

3) Homosexual

4) Other

8. Where do you live in Empangeni?

1) In residence

2) In digs

3) At home

4) Off campus

9. Do you drink alcohol?

1) Yes

2) No

10. Do you take drugs?

1) Yes

2) No

11. Do you know the possible consequences of practicing unsafe sex?

1) Yes

2) No

12. How many people do you know with HIV/Aids?

1) None

2) One person

3) Two to five people

4) Six to ten people

5) More than ten people

13. If you know someone with HIV/Aids, has this influenced your perception of HIV/Aids?

1) Greatly

2) Moderately

3) Slightly

4) Not at all

5) Not applicable as I know no-one with HIV/Aids

14. The incidence rate of HIV/Aids on this campus is very low

1) Strongly agree

2) Agree

3) Neutral

4) Disagree

5) Strongly disagree

15. Fear of stigma results in people not admitting to having an HIV/Aids positive status

1) Strongly agree
2) Agree
3) Neutral
4) Disagree
5) Strongly disagree

16. HIV/Aids can be avoided

1) Strongly agree
2) Agree
3) Neutral
4) Disagree
5) Strongly disagree

17. How do you view the disease/ virus?

1) A guarantee of death
2) Curable
3) A treatable chronic condition for which I will take medication for the rest of my life
4) None of the above

18. If you find out you were HIV positive, how scares would you feel if 0 was not at all, and 6 was paralysing fear. Please tick the appropriate answer.

(0)(1)(2)(3)(4)(5)(6)

19. Peer pressure is an important factor in perpetuating risk behaviour in terms of HIV/Aids

1) Strongly agree
2) Agree
3) Neutral
4) Disagree
5) Strongly disagree

20. Risky sexual behaviour (in terms of contracting HIV) is connected to the abuse of alcohol

1) Strongly agree
2) Agree
3) Neutral
4) Disagree
5) Strongly disagree

21. I feel as though I will contract HIV/Aids anyway, so I feel what's the point of wearing a condom?

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree

22. If there were a cure, people would engaged in HIV risk behaviour more readily

1) Strongly agree
2) Agree
3) Neutral
4) Disagree
5) Strongly disagree

Rate the following behaviours in terms of how much risk you think they will put you at in being infected with HIV/Aids(0 means no risk and 6 means extreme risk)

23. Eating from the same plate as some-one who is HIV-positive

(0) (1) (2) (3) (4) (5) (6)

24. Having unprotected sex

(0) (1) (2) (3) (4) (5) (6)

25. Shaking hands with some-one who is HIV-positive

(0) (1) (2) (3) (4) (5) (6)

26. Kissing some-one who is HIV-positive

(0) (1) (2) (3) (4) (5) (6)

27. Sharing needles when taking drugs

(0) (1) (2) (3) (4) (5) (6)

28. Using the same bathroom facilities as someone who is HIV-positive

(0) (1) (2) (3) (4) (5) (6)

29. In terms of catching HIV/Aids, do you perceive yourself to be part of

1) A high risk group
2) A medium risk group
3) A low risk group

30. It is important to know one's status

1) Strongly agree
2) Agree
3) Neutral
4) Disagree
5) Strongly disagree

If you answered Strongly Agree or Agree to the above question, then answer question 31 below. If you answered Neutral, Disagree or Strongly Disagree, skip to question 31.

31. It is important to know one's HIV status because: (choose the most applicable statement)

1) I can have peace of mind
2) I will be less likely to infect some-one else
3) I can start taking medication to prolong my life
4) All of the above
5) None of the above
6) Other (please write question number and answer on back of answer sheet)

32. I am put off going for HIV testing because of what I have heard about the counselling process.

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree

33. I have undergone Voluntary Counselling and Testing (VCT) for HIV/Aids. If you answer "Yes" to this question, continue from question 33. If: No", skip to question 35.

1) Yes
2) No

34. I found the counselling process to be impersonal

1) Strongly agree
2) Agree
3) Neutral
4) Disagree
5) Strongly disagree

35. The counselling part of Voluntary Counselling and Testing (VCT) is

1) Too short
2) Just right
3) Too long

36. The counselling part of the testing process should be voluntary

1) Strongly agree
2) Agree
3) Neutral
4) Disagree
5) Strongly disagree

37. People who sleep around are more likely to go for HIV/Aids testing

1) Strongly agree
2) Agree
3) Neutral
4) Disagree
5) Strongly disagree

38. Near the beginning of a relationship I am able to suggest to my partner that we go for an Aids test

1) Yes
2) No
3) Does not apply

39. If I found out that the chef at my favourite restaurant was HIV –positive I would

1) Avoid the restaurant completely
2) Simply lessen my frequency of dining there
3) Still go there just as often as before

40. If you are homosexual you are more likely to be HIV infected than if you are heterosexual

1) Strongly agree
2) Agree
3) Neutral
4) Disagree
5) Strongly disagree

41. How would you react if a friend told you he/she was HIV-positive as a result of his/her own risky behaviour?

1) I would distance myself from him/her
2) I would be supportive
3) Other (please write question number and answer on back of answer sheet)

42. I think that people who are having unsafe sex have a high risk of being infected with HIV (very unlikely (0)…..very likely (6))

(0)(1)(2)(3)(4)(5)(6)

43. If I have sex, using a condom can prevent me from HIV infection ((very unlikely (0)…..very likely (6)))

(0)(1)(2)(3)(4)(5)(6)

44. When I want to, I know that I can insist on using a condom (very unlikely (0)…..very likely (6))

(0)(1)(2)(3)(4)(5)(6)

45. If I am sexually active, I intend to use a condom-(very unlikely (0)…..very likely (6))

(0)(1) (2) (3) (4) (5) (6)

46. I would avoid having sex with a person I do not know well-

(very unlikely (0)…..very likely (6))

(0) (1) (2) (3) (4) (5) (6)

Appendix E:

Development of survey questionnaire

Statement/s from focus group participants and related theme	**Related question from survey questionnaire**
• It (risky sexual behaviour) is connected to alcohol • Have unprotected sex under influence of alcohol (multiple infections). Theme: risk behaviour	9. Do you drink alcohol? 1) Yes 2) No
• Not every one is infected. Have affected her positively and this HIV is out there and people are living positive about it. People do not tell that they are infected. • Know someone, an uncle. Theme: HIV/Aids awareness	12. How many people do you know with HIV/Aids? 1) None 2) One person 3) Two to five people 4) Six to ten people 5) More that ten people
• We still get shock when we see thin people no matter how educated we are. • I am angry because we turn not to listen.	13. If you know someone with HIV/Aids, has this influenced your perception of HIV/Aids? 1) Greatly 2) Moderately 3) Slightly

• I used to be suspicious of people who turn to be thin out of the blue from being fat. Theme: stigmatization	4) Not at all 5) Not applicable as I know no-one with HIV/Aids
• Risk behaviour is very high looking at the high rate of pregnancy and not everybody get tested. • Boys have more than one girlfriend and vice versa. Theme: HIV/Aids awareness, risk behaviour	14. The incidence rate of HIV/Aids on this campus is very low 1) Strongly agree 2) Agree 3) Neutral 4) Disagree 5) Strongly disagree
• Problem is the treatment, people do not co-operate due to side effect. Some people prefer traditional medication. • People turn to sleep with others with the belief that being infected can be cured by sleeping with a virgin. We are aware of HIV/Aids, but it hard to accept that it	17. How do you view the disease/ virus? 1) A guarantee of death 2) Curable 3) A treatable chronic condition for which I will take medication for the rest of my life 4) None of the above

exists. Theme: treatment of retrovirus, social issues, HIV/Aids awareness.	
• We are sick of hearing one and the same message from the media every day about HIV/Aids as if it is the only disease in South Africa and around the world. • People decide to be infected so that they can receive grant. Theme: social issue, risk behaviour	16. HIV/Aids can be avoided 1) Strongly agree 2) Agree 3) Neutral 4) Disagree 5) Strongly disagree
• The way the counsellors talk to us, it makes one feel as if they already know that you are HIV positive. Theme :VCT	18. If you find out you were HIV positive, how scares would you feel if 0 was not at all, and 6 was paralyzing fear. Please tick the appropriate answer. (0)(1)(2)(3)(4)(5)(6)
• Boys have more than one girlfriend and vise verse. • Married men's bring virus to the campus.	19. Peer pressure is an important factor in perpetuating risk behaviour in terms of HIV/Aids 1) Strongly agree 2) Agree

Theme: risk behaviour.	3) Neutral 4) Disagree 5) Strongly disagree
• It is associated with drinking. Theme: risk behaviour.	20. Risky sexual behaviour (in terms of contracting HIV) is connected to the abuse of alcohol 1) Strongly agree 2) Agree 3) Neutral 4) Disagree 5) Strongly disagree
• It in the Zulu men not to let a lady pass by without passing remarks. Theme: social issue, risk behaviour	21. I feel as though I will contract HIV/Aids anyway, so I feel what's the point of wearing a condom? 1. Strongly agree 2. Agree 3.Neutral 4.Disagree 5.Strongly disagree

• I start suspecting if they cough for more that two weeks. Even Christians criticizes HIV/Aids people. Theme: stigmatization, HIV/Aids awareness	Rate the following behaviours in terms of how much risk you think they will put you at in being infected with HIV/Aids(0 means no risk and 6 means extreme risk) 23. Eating from the same plate as some-one who is HIV-positive (0) (1) (2) (3) (4) (5) (6)
• With condom breaking one can get it Theme: risk behaviour	24. Having unprotected sex (0) (1) (2) (3) (4) (5) (6)
• Do you feel scared, that means you are doing bad things behind your partner Theme: risk behaviour, HIV/Aids awareness	27. Sharing needles when taking drugs (0) (1) (2) (3) (4) (5) (6)
• Risk behaviour is very high looking at the high rate of pregnancy and not everybody get tested. • With condom breaking one can get it.	29. In terms of catching HIV/Aids, do you perceive yourself to be part of 1) A high risk group 2) A medium risk group 3) A low risk group

Theme: risk behaviour, social issues	
• Cannot force people to be open, it their choice to do it. • Do you feel scared, that means you are doing bad things behind your partner Theme: VCT, HIVstatus	30. It is important to know one's status 1) Strongly agree 2) Agree 3) Neutral 4) Disagree 5) Strongly disagree
• Being open, did affect her sister, it turned her life around, some people treated her same as before. • Let people make a choice to chose whether they need counselling or not Theme: HIV status, VCT	31. It is important to know one's HIV status because: (choose the most applicable statement) 1.I can have peace of mind 2.I will be less likely to infect some-one else 3. I can start taking medication to prolong my life 4.All of the above 5.None of the above 6.Other(please write question number and answer on back of answer sheet)

• Let people make a choice to chose whether they need counselling or not • Do you feel scared, that means you are doing bad things behind your partner • I feel that counsellor take this personally and I feel uncomfortable about discussing issues of HIV/Aids with other people especially concerning my love life Theme: VCT	32. I am put off going for HIV testing because of what I have heard about the counselling process. 1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5.Strongly disagree
• The way the counsellors talk to us, it makes one feel as if they already know that you are HIV positive Theme: VCT, risk behaviour	33. I have undergone Voluntary Counselling and Testing (VCT) for HIV/Aids. 1) Yes 2) No
• I feel that counsellor take this personally and I feel uncomfortable about	34. I found the counselling process to be impersonal 1.Strongly agree

discussing issues of HIV/Aids with other people especially concerning my love life Theme: VCT	2.Agree 3.Neutral 4.Disagree 5.Strongly disagree
• Pre-or post counselling is boring for both the counsellor and the client, it should be stopped, for there is no benefits for others Theme: VCT	35. The counselling part of Voluntary Counselling and Testing (VCT) is 1) Too short 2) Just right 3) Too long
• Let people make a choice to chose whether they need counselling or not • Counselling should be voluntarily, nobody should be forced to go for VCT Theme: VCT	36. The counselling part of the testing process should be voluntary 1. Strongly agree 2.Agree 3.Neutral 4.Disagree 5.Strongly disagree
• Do you feel scared, that means you are doing bad things behind your partner	37. People who sleep around are more likely to go for HIV/Aids testing 1) Strongly agree 2) Agree

Theme: risk behaviour, VCT	3) Neutral 4) Disagree 5) Strongly disagree
• We turn to conclude that even people who are suffering from Tuberculosis, they are HIV positive for there is a link between the two Theme: stigmatization	38. Near the beginning of a relationship I am able to suggest to my partner that we go for an Aids test 1) Yes 2) No 3) Does not apply
• I start suspecting if they cough for more that two weeks. Even Christians criticizes HIV/Aids people. Theme: stigmatization,	39. If I found out that the chef at my favourite restaurant was HIV –positive I would 1. Avoid the restaurant completely 2. Simply lessen my frequency of dining there 3. Still go there just as often as before
• We still get shock when we see thin people no matter how educated we are.	40. If you are homosexual you are more likely to be HIV infected than if you are heterosexual 1) Strongly agree

Theme: stigmatization	2) Agree 3) Neutral 4) Disagree 5) Strongly disagree
• I am angry because we turn not to listen. Theme: risk behaviour, HIVstatus	41. How would you react if a friend told you he/she was HIV-positive as a result of his/her own risky behaviour? 1.I would distance myself from him/her 2.I would be supportive 3.Other(please write question number and answer on back of answer sheet)
• With condom breaking one can get it. Theme: risk behaviour	42. I think that people who are having unsafe sex have a high risk of being infected with HIV (very unlikely (0)…..very likely (6)) (0)(1)(2)(3)(4)(5)(6) 43. If I have sex, using a condom can prevent me from HIV infection ((very unlikely (0)…..very likely (6))) (0)(1)(2)(3)(4)(5)(6)

	44. When I want to, I know that I can insist on using a condom (very unlikely (0).....very likely (6)) (0)(1)(2)(3)(4)(5)(6) 45. If I am sexually active, I intend to use a condom-(very unlikely (0).....very likely (6)) (0)(1) (2) (3) (4) (5) (6)
• We got married men or not from around Empangeni and KwaDlangezwa, who visit our sisters and bring the virus to the campus Theme: risk behaviour	46. I would avoid having sex with a person I don`t know well-(very unlikely(0)…very likely (6)) (0) (1) (2) (3) (4) (5) (6)