An Exploratory Study of Rhodes Students' Attitudes and Perceptions towards HIV/Aids

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DECLARATION

I declare that this dissertation titled **AN EXPLORATORY STUDY OF RHODES STUDENTS' ATTITUDES AND PERCEPTIONS TOWARDS HIV/AIDS GUIDED BY THE HEALTH BELIEF MODEL** is my own work and that all the sources that have been used or quoted, have been indicated and acknowledged by means of complete references.

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Robyn Weston
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ABSTRACT

The present study explores Rhodes students' perceptions and attitudes towards HIV/Aids issues. This study focuses on risk behaviour, stigmatisation, social perceptions and voluntary counselling and HIV testing (VCT). There is a lack of research on student attitudes, knowledge and behaviour at Rhodes University. It was therefore deemed pertinent to research this topic in that context. It was envisaged that the study would provide insights to be used in the formulation of improved strategies for HIV/Aids programs and education, ultimately impacting on the exponential increase of the pandemic in the Southern African region.

A sample of six hundred and seventy five Rhodes University undergraduates completed a survey and its findings were interpreted in terms of relevant literature. A mixed methods approach using qualitative and quantitative methods was used. A focus group consisting of seven post-graduate students informed the development of the survey along with relevant literature. Four departments from the faculties of Commerce, Humanities, Science and Law were randomly sampled for the survey phase. Statistica was used to calculate descriptive statistics while the chi-square statistic was applied to examine the relationships between the variables.

The findings show that the majority of students have high intention levels in planning to use preventative behaviour. However, in practise, this may not be the case. Many students feel that they belong to high or medium risk groups, as opposed to the low-risk groups. In terms of motivation levels, only sixty three percent of students are highly motivated to protect themselves from HIV/Aids and one third of respondents felt that they could not ask their partner to accompany them for an HIV/Aids test. In addition, students who had received VCT were more likely to be positive about the counselling process.

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CHAPTER ONE

LITERATURE REVIEW

1.1 Context

In terms of HIV/Aids prevalence, the epidemic in underdeveloped countries such as India, China and Africa, has reached its highest proportions. According to Barnett and Whiteside (2002) it is estimated that four million people are infected in India and half a million infected in China. These experts suggest that there is minimal data on HIV/Aids in either country. Sub-Saharan Africa is the area that has been devastated by the HIV/Aids pandemic, statistics show that at least one adult in five is infected (Barnett & Whiteside, 2002). In July, 2005, the South African National Health Department stated that the number of HIV-positive South Africans is between 6.29 and 6.57 million – this is almost two million more than Statistics South Africa figures (Merten, 2005).

It is vital that the attitudes of young South Africans towards HIV/Aids issues be investigated so that government can introduce relevant policies to curb this epidemic. The present study is situated in a South African context where there is a growing trend of research emerging (Flisher, Wolf, Selikow, Ketye, Pretorius & Mathews, 2006).

This literature review begins by noting key research areas of this topic, before looking at the Health Belief Model (HBM) and the Protection Motivation Theory (PMT). They are linked as they are both psychological models which can be used to understand, explain and predict behaviour or behavioural intentions. Health behaviours are viewed by both models as being connected to attitudes and intentions (Ogden, 2004; Rosenstock, Strecher & Becker, 1994). These are both cognition models which were used as a conceptual framework for the development of an

interview schedule for the present study. Both models pay particular attention to severity, susceptibility and self-efficacy which can be related to risk-taking behaviour, stigmatisation and VCT. In order to see why it is important to investigate Rhodes students' attitudes towards such issues, this review explores sexual risk-taking behaviour, substance abuse and risky behaviour, stigma in relation to social perceptions and VCT, disclosure and othering of the disease. The latter concept refers to the idea of being separate from the retrovirus and not being at risk of being infected by it (Uys, 2002).

1.1.1 Key research

In terms of the subject field of HIV/Aids, this topic is diverse and wide-ranging. Key issues include consciousness and denial; susceptibility – epidemic roots, cases and high prevalence in Africa; vulnerability and impact on individuals, households and communities, orphans and the elderly; development and economic growth; government and governance; and globalisation and inequality. The majority of research on HIV/Aids can be captured under the heading of KAPB which stands for knowledge, attitudes, practices and beliefs (Tillotson & Maharaj, 2001). Research has shown that in many populations, risk behaviours are increasing – it has been stated that: "These developments may be the result of a false sense of security following a perception that HIV is now a normal treatable disease" (Monitoring the AIDS Pandemic, 2000, p.20). It is evident that attitudes and perceptions need to be studied in order to understand specific risk behaviours linked to sexual practices that are associated with the spread of the pandemic. Research could be conducted by stakeholders such as Non Governmental Organisations (NGO's) and researchers,

psychologists and professionals from the public health sector. Three particular problems have been identified for the present study:

- students' attitudes towards voluntary counselling and HIV testing (VCT)
- students' perceptions of risk and risk-taking behaviour
- social perceptions of students with an emphasis on stigmatisation.

1.2 Cognition models

According to Ogden (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 that behaviour. The HBM and the PMT are both considered to be cognition models. As such they examine the predictors and precursors to health behaviours (Ogden, 2000). Such models do not focus on the social context of cognitions; rather they emphasise individual cognitions, and perceive behaviour to be the result of rational information processing. Cognition models are still relevant to the present research. It is individual attitudes and cognitions related to HIV/Aids which are deemed central to the present study. In addition, the HBM treats cognitive components (such as perceived susceptibility and severity) separately (Ogden, 2004). This can be seen as an advantage. According to Sheeran and Abraham (1996) the HBM is not ruled by strict guidelines as to how its individual variables, such as perceived susceptibility, predict behaviours. It is a flexible model and has the advantage of being able to predict various health behaviours for instance risky sexual behaviour, as explored in the present study.

1.2.1 The Health Belief Model

The interview schedule for the focus group discussion will be guided by the HBM developed by Rosenstock (1974) and Hochbaum (1958) which uses the wish to avoid a negative health consequence as its main motivation. This model was originally developed during the 1950s by social psychologists in the United States Public Health Service in an effort to understand the lack of public support for health screening and prevention programmes. At that stage a free tuberculosis screening project had received minimal support, initiating the researchers' investigation. Hochbaum (1958) studied the few who did attend the screening programmes, and investigated their motivation for attending. He learned that their perceived risk of disease and perceived benefits of action were vital motivating factors. The HBM was further developed by Becker and his colleagues in the 1970s and 1980s. This later contribution enabled the model to predict preventive health behaviours and behavioural response to treatment among patients with acute and chronic conditions. In recent years, the HBM has been used to predict a diverse group of health-related behaviours (Ogden, 2000).

The HBM is a psychological model that explains and predicts health behaviours based on individuals' attitudes and beliefs (Rosenstock et al., 1994). This model has been used in projects involving factors influencing the acceptability of voluntary counselling and testing (VCT) (de Paoli, Manongi & Klepp, 2004); attitudes of patients in relation to their adherence to antiretroviral therapy (Malcolm, Ng, Rosen & Stone, 2003); stigmatisation (Airhihenbuwa & Obregon, 2000); HIV risk behaviour (Neff & Crawford, 1998); and influences of knowledge of HIV/Aids on sexual activity of college students (Hollar & Snizek, 1996). The HBM is developed from the idea that a health-related action (for instance, the use of condoms) will be enacted if

the individual feels firstly that a negative health state can be avoided; secondly, if the individual believes that he/she can achieve the recommended course of action; and thirdly if he/she has a positive expectation that by taking a suggested course of action, he/she will avoid a negative health consequence (Glanz and Rimer, 1997). This framework is useful for the present study as the perceptions and attitudes of Rhodes students can be related to the above three determinants of health-related actions.

The HBM is based on six major concepts: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action and self-efficacy (Glanz and Rimer, 1997). In response to criticism, the original HBM has been altered and now includes health motivation and perceived control. The following HBM concepts are identified as being relevant to the development of an interview schedule for the focus group of the present study:

perceived susceptibility, perceived severity, perceived benefits and barriers, self efficacy and health motivation. These concepts will be explored in further detail below.

1.2.2 The key concepts of the Health Belief Model

The HBM proposes that the following five core beliefs should be implemented to predict the likelihood that a behaviour will take place.

- Perceived susceptibility

According to Rosenstock, Strecher and Becker (1994), this refers to a subjective assessment of whether one is at risk of becoming infected with a health condition. An example would be the extent that students believe that they can get sexually transmitted diseases (STD's), HIV or cause a pregnancy. In terms of STD screening or HIV testing, perceived susceptibility would refer to the extent that a person

believes themselves to have been exposed to STD's or HIV (Glanz and Rimer, 1997). In the focus group discussion, participants were asked if they came across risky behaviour in terms of HIV/Aids on campus (see Appendix B).

- Perceived severity

This concept refers to sentiments about the consequences of being infected with an illness or leaving the health condition untreated. This includes evaluating the potential medical, psychological and social consequences (Rosenstock et al., 1994). An example of perceived severity, in terms of condom use, would be the extent that students believe the consequences of contracting STD's or HIV are significant enough to try and avoid. In terms of testing, an example would be the extent that youth believe the consequences of being HIV positive without knowledge or treatment are significant enough to attempt to avoid (Glanz and Rimer, 1997). Perceived susceptibility and perceived severity together are related to the perceived threat of a situation characterized by being infected by a particular disease. This risk perception may influence an individual's risk reduction strategy and affect motivation to avoid the threat (Floyd, Prentice-Dunn & Rogers, 2000).

The focus group discussion for this study covered the topics of risk behaviour (including condom use and unsafe sex) and VCT (see Appendix B). Participants were asked to comment on their reaction towards people with HIV/Aids and this provided a foundation for a discussion on the social and psychological consequences of the retrovirus (see Appendix C).

- Perceived benefits

This refers to individual convictions about the efficacy of the advised course of action to reduce the impact or risk of the hecalth-related condition. In terms of testing, an example would be the extent that an individual believes that getting tested for HIV or

STD's will be of benefit. Such benefits might include early treatment or preventing the infection of others (Glanz and Rimer, 1997). For the interview schedule it was planned that focus group participants would be asked their thoughts on the VCT process and that condom use would be discussed.

- Perceived barriers

This refers to one's conviction of the physical, psychological and financial costs associated with taking particular health actions (Rosenstock et al., 1994). An example of an identified personal barrier would be the perception that condoms limit sexual gratification. Barriers to getting tested might include practical problems like getting to the clinic, or issues of stigmatisation (Glanz and Rimer, 1997). The interview schedule for the focus group discussion included the topics of condom use, VCT and stigmatisation.

- Self efficacy

This concept refers to the individual's belief in being able to successfully accomplish the behaviour needed for the required outcome (Rosenstock et al., 1994). It has also been described as the individual's confidence in his/her ability to execute an appropriate behaviour. It may require training, guidance and positive reinforcement In terms of condom use, an example would be the training of youth to use a condom correctly – by using anatomically correct models. Regarding HIV testing, an example would be the organisation of guidance lessons so that students learn where they can get tested and how to make an appointment (Glanz and Rimer, 1997). The interview schedule for the focus group discussion asks what respondents perceive to be risky behaviour in terms of HIV. This is intended to trigger a discussion concerning the ability of students to avoid inappropriate risk behaviour.

- Health motivation

This concept indicates a person's readiness to be concerned about health matters (Ogden, 2000). The interview schedule for the focus group discussion at Rhodes University uses the question on risk behaviour to explore this topic (see Appendix B).

1.2.3 Conceptual model

Below is a diagram depicting a conceptual model of one aspect of the HBM. It includes an example of an individual perception - perceived susceptibility and the factors which would influence this perception. In this example, other modifying factors which affect how a respondent might behave include the perceived threat of the disease and cues to action. In addition it looks at the factors which would effect how an individual would predict the likelihood that a behaviour will occur.

Figure 1 indicates that likelihood of action might be influenced by perceived benefits to changing one's behaviour while considering barriers to behaviour change (Glanz, Rimer, & Lewis, 2002, p. 52).

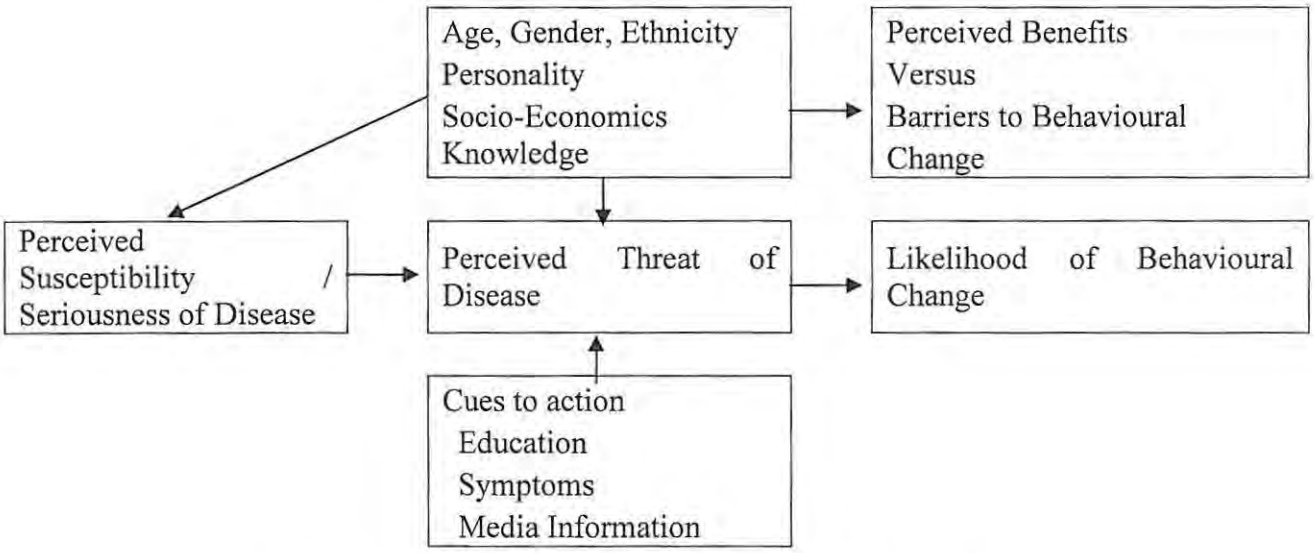

Figure 1. Diagram showing how action might be influenced by perceived benefits

1.2.4 Rationale for the Health Belief Model

Developed in the 1950s, the HBM has functioned effectively to promote condom use; medical compliance and health screening. In addition, it has been used successfully as a framework during the development of health education strategies. Between 1974 and 1984 various HBM-based prevention programmes were implemented concerning various health actions. A research project reviewed forty six studies during this period, results produced empirical confirmation of the efficacy of the HBM (Glanz and Rimer, 1997). In relation to HIV/Aids infection, this model describes how individual's perception of their vulnerability is determined by their understanding of the retrovirus and its transmission.

1.2.5 Limitations of the Health Belief Model

The HBM, however, does have limitations: it has been criticised for emphasising the individual (rather than including the social and economic environment); and for the absence of a role for emotions like fear and denial (Ogden, 2004). According to Stroebe (2000) a major weakness of the HBM is the fact that determinants of health behaviour are not included (for instance, positive results of negative behaviours and social impact).The HBM has been criticised for focusing on the conscious processing of information (for example, it would suggest that the use of condoms is determined by weighing up the positives and negatives). The interrelationship between the different core components has also been questioned. Issues such as how they should be measured and how they are related to each other have become concerns (Ogden, 2004). In addition, it has been questioned whether models such as the HBM are applicable among minority groups as there is a lack of research concerning the HBM in minority populations (Neff & Crawford, 1998). Seydel, Taal and Wiegman (1990)

suggest that other factors such as outcome expectancy and self-efficacy predict health behaviour. Shwarzer (1992) has further critiqued the HBM saying that its core components/ beliefs occur simultaneously with minimal flexibility for change, development or process. Finally, it has been suggested that the perception of symptoms affects health-related behaviour rather than individual factors (as proposed by the HBM) (Leventhal et al., 1997).

Nevertheless, the HBM is deemed an appropriate model for the current project due to its extensive use in the field of HIV/Aids and its contribution to research and health-related behaviour. Unlike other models which have proved to be methodologically difficult to operationalise, the HBM treats cognitive components separately which makes implementation easier (Ogden, 2004). The HBM proves thus to be the most appropriate model to use for this study, in spite of its limitations.

Despite the age of this model and its various limitations, the HBM has many advantages. The HBM's predictions are supported by several studies. According to research, dietary compliance, safe sex, having vaccinations, and partaking in regular exercise are connected to the individual's perception of susceptibility to the problem; to perceived severity; and to their belief that the benefits of preventive action outweighs the costs (Ogden, 2004). Norman and Fitter (1989) studied health screening behaviour and observed that perceived barriers are the best predictors of clinic attendance. 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 healthy conduct. This information is relevant to the present study, particularly as it attempts to explain and predict health behaviour by focusing on individuals' attitudes and beliefs (Rosenstock et al., 1994).

1.2.6 The Protection Motivation Theory

Rogers (1983) developed the protection motivation theory (PMT) which extended the HBM. The original PMT saw four components as predicting behavioural intentions and in turn producing health-related behaviours: severity, susceptibility, response effectiveness and self-efficacy. Rogers (1983) also proposed a fifth factor, fear, as a reaction to education or information. This extension of the HBM was important to consider for the current research.

The PMT explains protection in terms of perceptions of threat and coping appraisal (Boer & Seydel, 1996). This theory sees threat appraisal as being related to severity, susceptibility and fear. Coping appraisal is viewed as connected to response effectiveness (for instance, "Altering my diet would enhance my health") and self-efficacy (for instance, "I am confident that altering my diet would enhance my health.") According to this model there are two types of information-sources: environmental and intrapersonal. While the former would include verbal persuasion and observational learning, the latter would include prior experience. Ogden (2004) states that these information sources affect the five components of the PMT, bringing about either an adaptive coping response or a maladaptive coping response. Rogers (1983) amended his original PMT to include response efficacy. The revised PMT views the intention to protect oneself as based on four factors: perceived severity, perceived probability, perceived response efficacy and perceived self-efficacy. Response efficacy refers to the efficacy of the recommended preventative behaviour. In compiling the interview schedule for the focus group discussion, information from the PMT was taken into account. Preventative behaviour was addressed through the question on risk behaviour (see Appendix B). Participants were also asked to comment on their reaction towards people with HIV/Aids. They were asked how they

felt about taking part in a discussion about HIV/Aids. Did they feel that it was a sensitive or uncomfortable topic? These questions related to ideas of protection and fear.

1.2.7 Support for the Protection Motivation Theory

Rippetoe and Rogers (1987) conducted a study examining the outcomes of giving women information about breast cancer. The effects of this information were evaluated in relation to the components of the PMT and the women's intentions to carry out breast self-examination. The findings indicated that the best predictors of intentions were response effectiveness, severity and self-efficacy. A similar study was conducted on the influence of appeals to increase exercise and intentions to exercise. These were observed using the components of the PMT. Findings indicated that susceptibility and self-efficacy predicted exercise intentions (Ogden, 2004). Beck and Lund's study (1981) produced relevant findings which concerned people's beliefs about tooth decay. The results indicated that persuasive communication increased fear and that severity and self-efficacy were in turn connected to behavioural intentions. Finally, a study conducted by Norman, Searle, Harrad and Vedhara (2003) used the PMT in order to predict whether children with eye-problems would wear an eye-patch. Parents completed a questionnaire on their beliefs and a follow-up questionnaire after two months about their child's adherence. Perceived susceptibility and response costs were found to be significant predictors of adherence in wearing the eye-patch.

1.2.8 Limitations of the Protection Motivation Theory

The PMT has been less widely critiqued than the HBM. However, many of the criticisms made about the HBM can be applied to the PMT. For instance, this model does not take into account habitual behaviours, nor does it account for social and environmental factors. This implies that individuals are conscious information processors (Ogden, 2004).

1.3 Theoretical perspectives

A significant amount of research on risk-taking behaviour has been carried out among university and high school students in South Africa. Fisher et al. (as cited in Moeketsi, 1998) found that risky sexual practice was ranked as the highest of the risk-taking behaviours. Studies relating to risk and HIV/Aids revolve predominately 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.

Threat appraisal and coping appraisal are two concepts that commonly appear in studies on perceptions of risk. It was important to discuss these perspectives as they give insight into risk behaviour and attitudes such as fear among Rhodes students. Boer and Emons (2004) conducted a study in Northern Thailand using concepts from the HBM. They describe how threat appraisal depends firstly on perceived severity and secondly perceived vulnerability. Response efficacy and self efficacy were studied in order to gain a better understanding of coping appraisal. All of these concepts are connected to the HBM and PMT. According to the study, people who showed stigmatising beliefs towards PLWHA's were likely to have incomplete beliefs about transmission. Incomplete beliefs were also evident in people who had a lower

vulnerability concerning HIV infection, and in those with a lower self-efficacy concerning protection.

1.4 Sexual risk-taking behaviour

1.4.1 Global trends

Global trends indicate a similar pattern to those found in research projects in South Africa. In the USA, less than 20 percent of college students were found to consistently use condoms during sexual intercourse. The study aimed to test various concepts from the HBM in terms of the ability to explain and predict college students' intentions regarding condom use. Its second aim was to investigate the relationship between safer sex behaviour and students' knowledge, concerns or attitudes about HIV/Aids. The findings indicate that having the knowledge is not enough to reduce risk-taking behaviour. Poureslami, Roberts and Tavakoli (2001) suggest that a person's beliefs and attitudes need to change regarding the consequences of risky behaviour, before behaviour change will occur.

One of the most important risk-taking behaviours associated with HIV/Aids is risky sexual behaviour(s). Since the discovery of the HIV retrovirus, research has developed ways to predict and promote safe sex. Van der Velde and Van der Pligt (1991) conducted a study in Amsterdam using cognitions and the PMT to predict sexual behaviour. This study was conducted in the context of HIV and attempted to integrate various models of health behaviour. The project consisted of one hundred and forty seven homosexual and eighty four heterosexual participants. In the previous six months they had had multiple partners. The subjects completed a questionnaire rated on a 5-point Likert scale which dealt with the following topics: sexual behaviour and behavioural intentions, protection motivation variables and additional beliefs.

According to Van der Velde and Van der Pligt (1991), the variables of the PMT were predictive of behaviour and behavioural intentions in both the homosexual and heterosexual subjects. The results however were enhanced with additional variables. For instance, improved associations with future behaviour emerged when social norms and previous behaviour were also taken into account. Although fear was a good predictor of behavioural intentions, it was found that when levels of fear were very high, then fear was no longer an accurate prediction of behavioural intentions. The authors suggest that this may be because participants, who experienced high levels of fear, directed their attention toward controlling anxiety rather than altering their behaviour.

In terms of studies on risky sexual behaviour(s), it is important to consider people's attitudes toward condom use. Smith, de Visser, Akande, Rosenthal and Moore (1998) consider Australian and South African undergraduates' attitudes, knowledge and behaviour towards HIV/Aids with a particular focus on risky behaviour(s). The findings show that 42 percent and 48 percent of Australian women and men respectively indicated that they always used a condom when having sex with a regular partner. Twenty nine percent of female and 27 percent of male South African students agreed to the same statement. The general trend shows that students are not in favour of the use of condoms.

This trend which indicates that students are not in favour of condom-use, has become problematic, as condom-use is a major preventative method for the contraction of HIV/Aids. Yep (1993) studied the predictive value of the HBM in relation to prevention of HIV infection among Asian-American college students. Many of the constructs examined could be linked to risk-taking behaviour(s) regarding sexual practise. Three research hypotheses were given, postulating a

positive relationship between perceived susceptibility, severity and benefits and HIV-preventive behaviour. A fourth hypothesis proposed a negative relationship between perceived barriers to prevention and actual HIV-preventive behaviours. The results showed that severity and barriers are significant predictors of the adoption of HIV-preventive behaviours. 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 toward safer sexual behaviour. On the other hand, perceived barriers were a significant predictor of becoming more careful about the selection of intimate partners, reducing the number of sexual partners and ensuring that sexual partners are not HIV infected. It is also reported that it is vital for cultural factors, such as beliefs about HIV, illness, prevention and sexuality, to be included into tests of the model in order to increase its predictive utility.

Findings on self-reported attitudes and behaviour indicate that men are more likely to engage in risky sexual behaviour(s) (Baumeister, Catanese, & Vohs, 2001). When conducting research on attitudes about sex, it is important to consider that males may be more honest in reporting risky sexual behaviour(s). Alexander and Fisher (2003) conducted a study which revealed that women may be more sensitive to social expectations and were not as likely to tell the truth about sexual experience and behaviour. Females tend to under-report their sexual behaviour(s) because they feel pressure to conform to sex-role stereotypes: Women perceive that they should not be promiscuous and should be relationship oriented. In this way, women reveal their fear of stigmatisation. It should also be considered however that men are not necessarily more honest. They may exaggerate their sexual behaviour because of stigmatisation (Wittrock, 2004).

1.4.2 African trends

The HBM concept of perceived susceptibility can be useful in terms of analysing 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 quantitative study revealed that females have a greater knowledge about this disease than males. Females scored higher in knowledge about the risk of HIV transmission through oral sex. Another result indicated that males take part in more risky behaviour(s) than females. Sexual behaviour(s), in the context of the prevailing paradigm of patriarchy, which still exists in South Africa, is likely to inhibit the ability of women to discuss matters relating to sexuality. This indicates that the male respondents in this study perceived lower severity. Seeley, Grellier & Barnett (2004) state that in sub-saharan Africa, unequal gender relations exist and this affects the impact of HIV/Aids. In Africa, there is much research showing quantitative, demographic comparisons but there are few cases of qualitative research studies on the topic of HIV and risk. This may be because of attitudes toward sexual behaviour(s).

Moeketsi (1998) conducted his thesis on psycho-cultural factors which mediate acquisition and use of condoms by African males. The study investigated risk prevention in terms of HIV. Moeketsi (1998, p. 5) defines risk-taking behaviour in this context as "behaviour which leads to unwanted pregnancies, and sexually transmitted diseases (STD's)." Moeketsi's thesis is relevant to the present study as it involves interviews with African males in a university context. The study's findings reveal that various factors mediate the acquisition and use of condoms: these include fear, embarrassment, self-concept, trust, university culture and cultural norms. The

PMT would emphasise fear in this study as a major contributing factor to behavioural intentions and behaviour.

1.4.3 South African trends

In line with the above recommendations, Uys (2002) conducted a study of students at Rand Afrikaans University using both qualitative and quantitative components. Her research is an example of just one of the many research projects conducted on university and high school students in South Africa. Her study determined the HIV status of respondents and established levels of awareness and knowledge of HIV/Aids. This knowledge and awareness is seen as affecting students' vulnerability to contracting HIV. The project studies whether awareness is reflected in the students' sexual activities – for instance, did they engage in safe sex by using condoms and did they limit sexual partners. Possible reasons for the differences in findings between the qualitative and quantitative methods are given. The author indicates that students are generally aware of causes and are knowledgeable about the transmission of HIV/Aids. In addition, it was found that students had generally negative attitudes towards condom use. Studies' results differed in terms of whether students' awareness would affect their level of risk in behaviour. Uys's (2002) study indicates that students know that risky behaviour could result in the contraction of HIV and they could pin-point high-risk behaviour, yet they still engage in unsafe sex. They did not want to use condoms for protection. This research has similar findings to that of Fisher et al. (as cited in Moeketsi, 1998) (previously mentioned) who found that risky sexual practice was ranked as the highest of the risk-taking behaviours. Although infection can be passed through deep (French) kissing, it is unlikely. Individuals with lesions in their mouth or gum disease can infect others through French kissing, but it is unlikely that

casual kissing (peck on the cheek or mouth) can result in transmission of the retrovirus (Erbelding, 2002).

Research indicates that males and females differ in their attitude towards condom use. Foreman (1999) views women as not being able to protect themselves from HIV infection. He states that men often seem to deliberately refuse to use condoms, despite having the opportunity to protect themselves. Why, if people know the consequences of their actions, do they continue with such dangerous behaviour? The HBM uses the desire to avoid a negative health experience as its prime motivation (Glanz and Rimer, 1997). This concept is related to the issue of why students do not avoid HIV/Aids risk behaviour (unsafe sex) when they have condoms at their disposal.

Further South African research on men refusing to wear condoms, shows the statistic that only 28 percent of respondents thought that their fellow students at the University of the Western Cape used condoms during sex (Barnes, 2000). This study looks at the impact that the HIV/Aids pandemic is having on higher education and the crucial role that tertiary education institutions should play in dealing with this impact. As well as stressing the academic effects of the disease, the study also emphasises the effect on society. This research involved case studies of how HIV/Aids impacts on various universities in Africa. The responses of staff, students and management are used to develop policies to address the epidemic. Kelly (2001) states that on campuses in general, sexual relationships are not monogamous. He emphasises in particular, the fact that in small university communities, partners change frequently. Steele, Esat & Van Vlaenderen (2002) conducted a Social Marketing Survey involving Rhodes University students. They found that 51 percent of the students in their perceptions sample thought that other students would have had casual sex with one to three partners (on average) during the previous year. This seems particularly relevant to the

present study of Rhodes University's students. In 2004, Rhodes University had a relatively small student population of six thousand, one hundred and sixty six students (Rhodes University Digest of Statistics, 2005).

Andersson et al. (2004) explored South African school pupils' 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, and that the response to learning about behaviour transformation is not as positive as anticipated. This project is relevant to the current study in terms of general misconceptions about HIV/Aids. The study indicated that more females had attitudes that would result in them being at high risk of HIV infection. One third of the participants indicated that they thought they may be HIV-positive. The authors associated this with misconceptions about the risk of HIV/Aids infection and with sexual violence.

Levine and Ross (2002) conducted a study of the perceptions and attitudes of young adults at the University of Cape Town towards HIV/Aids. They state that students' knowledge and social constructs of HIV/Aids are important. The paper showed that participants tend to imagine that they have an immunity to the virus and consequently they continue to practise unsafe sex. This study shows similar findings to that of Poureslami, Roberts and Tavakoli (2001), who found that American college students, although knowledgeable on the topic, do not practice safe sex. This is despite their knowledge of modes of HIV/Aids infection, or of their educational background. As a result, this study questions education as a means of prevention and stresses the importance of gathering information about young adult's attitudes and perceptions to HIV/Aids issues. This information can be used in the formulation of more constructive efforts to prevent the spread of this pandemic, as education

interventions have not been reaching intended audiences in an efficient way (Flisher et al., 2006).

1.5 Substance abuse and risky behaviour

1.5.1 Global trends

Mahoney, Thombs and Ford (1995) conducted a study which used the multidimensional Condom Use Self-Efficacy Scale. The sample consisted of three hundred and sixty six college students between the ages of eighteen and twenty four and they were put into three groups: non-users, (19 percent); sporadic users (43 percent); and consistent users (29 percent). Discriminant analysis showed that sporadic users of condoms were distinguished from consistent and nonusers through various behavioural variables. These included a self-efficacy factor marked as assertive; the number of sex partners in the past year; frequency of drunkenness during sexual intercourse; and perceived susceptibility to HIV/Aids and other STD's. The results showed that sporadic users of condoms had significantly more sex partners than consistent users; were drunk more often during sexual intercourse; perceived themselves to have greater susceptibility to HIV/Aids and other STD's; and showed less confidence in insisting on condom use with a partner. Analyses indicated that there were statistically significant differences across condom use groups for the following measures: perceived susceptibility of partner, perceived susceptibility of self, assertiveness, partner disapproval of condoms, intoxicants, number of sex partners and inebriation during sexual intercourse.

The abuse of substances such as alcohol can be related to sexual risk behaviour. Neff and Crawford (1998) examined seriousness/susceptibility variables and their link to HIV risk behaviours among Anglo, African-American and Mexican-Americans.

The research specifically concentrates on the role that alcohol-related expectancies play in acting as a barrier to preventive behaviours. This included a study of the anticipation of the disinhibitory impact that alcohol has on sexual behaviour. The authors evaluate the HBM in their study and this assessment brings about an emphasis of the links between demographic and seriousness/susceptibility variables. From a sample of one thousand, three hundred and ninety participants, it was found that alcohol-related expectancies (barriers in this case) could have a greater relationship to risk behaviour among males when compared to females. In the case of the present study, 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 (Rhodes Counselling Center, 2000).

According to Falck, Siegal, Wang and Carlson (1995) dimensions of the HBM could predict which injection drug users (IDUs) would take part in needle-use practises which lessened the risk of contracting HIV/Aids. Interview-administered questionnaires were administered in order to establish the participants' drug-use behaviour over the previous thirty days and to determine their health beliefs. The results determined that two health beliefs, perceived self-efficacy and perceived susceptibility were significantly related to safer use of injections. This was determined through the use of logistic regression analysis.

1.5.2 South African trends

Uys (2002) acknowledges that there is a relationship between alcohol abuse, casual relationships and unsafe sex. By implication, HIV/Aids would be a component of this cycle. The author indicates that in most of the studies concerning tertiary-level students' attitudes, it seems that students do not perceive themselves as being at risk

of catching HIV/Aids. This is supported by Levine and Ross' (2002) study – as mentioned above – which mentions the false sense of immunity that students feel in relation to the retrovirus. Barnes (2000) also recognises that alcohol plays a role in creating an environment that perpetuates risky behaviour. Notably, the relationship between alcohol, drugs and condom use has been studied using various measures of safer sex and drug use. Different research methods have generated varying predictions as to the degree that alcohol and other drugs are related to unsafe sex practices (Donovan & McEwan, 1995).

1.6 Othering of the disease

1.6.1 Global trends:

Uys (2002, p. 388) describes the concept of othering as "the belief that it only happens to other people." Globally research has been conducted on this topic with particular focus on its link to HIV/Aids conceptions. Flowers (2001) conducted a study involving homosexuals and HIV/Aids risk management in Great Britain. In this study, risk-taking is studied in conjunction with the process of othering, which was found to be connected to the attribution of responsibility and blame.

1.6.2 South African trends

Uys (2002) states that most studies show that university students do not perceive themselves to be at risk of catching HIV. They view themselves as being separate from the retrovirus. This, he attributes to othering of the disease. Othering within HIV/Aids discourse is usually directed towards groups such as homosexuals, the uneducated, the poor, black groups and students who stay in residence. His study found that participants felt that students who live in residence are more likely to be

involved in risky behaviour. Many participants believed that they were invincible to HIV/Aids and were not at risk in spite of reporting that their peers engaged in high-risk behaviour. The research found that for some students the causality of the retrovirus was the fact that they did not consider themselves as being at risk of HIV/Aids infection. Students perceive that others have a greater likelihood of being infected, and do not take responsibility for their own actions.

Brouard (2005) studies othering and race which are particularly relevant in the South African context. One of the social aspects which drive this epidemic is extreme poverty and in South Africa it is the black population which largely constitutes this demographic. Petros, Airhihenbuwa, Simbayi, Ramlagan and Brown (2006) conducted research on cultural and racial contexts of behaviour relevant to the risk of HIV infection. They explored the themes of othering which emerged in the study. It was found that othering could be related to the perception of the self as good and obedient whereas the other was viewed as bad or deviant. The outcome of the research indicated that PLWHAs were othered through various forms of othering including religion, race, gender, homophobia and xenophobia.

1.7 Stigmatisation and social perceptions

This section discusses how stigmatisation affects various attitudes and perceptions relating to HIV/Aids issues such as inaccurate beliefs and knowledge, threats, risk and risk stereotypes and disclosure. Closely related to the othering syndrome are the issues of social perception and stigmatisation. Petros et al. (2006) discuss how cultural and racial attitudes affect perceptions of those seen as responsible and in turn vulnerable to HIV/Aids infection. It is further suggested that the othering of blame needs to be considered in understanding why people see the other as responsible and

vulnerable to HIV/Aids infection. Their study emphasises the need to make people aware of the problem of othering and the burden of stigmatisation that groups like black women seem to carry. These are core issues relating to HIV/Aids. The HBM can contribute to explanations of distancing processes through its concepts of perceived susceptibility and perceived severity.

1.7.1 Global trends

Stigmatisation and social perceptions can be closely linked to the accuracy of information that people have about HIV/Aids. Boer and Emon's (2004) study conducted in Northern Thailand reveals an assessment of the correlation between groups with accurate and inaccurate beliefs about HIV transmission and stigmatising attitudes; and emotional reactions to PLWHAs and Aids risk groups. Participants with inaccurate beliefs showed more fear and irritation and more stigmatising attitudes towards PLWHAs. This was apparent through their higher perceived risk in casual contact and their unwillingness to engage with homosexuals or sex workers. In order to assess the participants' motivation to protect from HIV infection, five of the components of Roger's PMT were measured:

1. A seven-point item was used to measure perceived severity of Aids. The statement given was: "If you found out that you were HIV positive, how would you feel? (not scared at all (1)... very scared (7)" (Boer & Emons, 2004, p. 169).
2. Perceived vulnerability was measured through the statement "I think that people who are having unsafe sex have a high risk of being infected with HIV. (very unlikely (1)...very likely (7)" (p. 169).

3. Response efficacy was measured in terms of the use of condoms, through the statement: "If I have sex, using a condom can prevent me from HIV infection" (p. 169).
4. Self efficacy of condom use was measured through two statements: "When I want to, I know that I can insist on using a condom" and "Suppose that your sexual partner does not want to use a condom and you do want to do you think you could convince him/her to use one" (p. 169)?
5. Motivation to protect from HIV infection was measured through the participant's intention to use condoms and to avoid casual sex. The following statements were considered: "If I am sexually active, I intend to use a condom" and "I would avoid having sex with a person I don't know well" (p. 169).

Lew-Ting and Hsu (2002) state that some studies show that inaccurate beliefs about HIV transmission promote fears about contagion. This in turn leads to further stigmatisation of PLWHAs. Fear is only one of the psychological effects that is motivated by inaccurate beliefs.

Stangor and Crandall (2000) suggest that stigmatisation behaviour may have its purpose in protecting the self from a threat. It has been documented that in locations where there is a high HIV/Aids risk, fears about contagion and stigmatising attitudes have a high incidence (Alubo, Zwandor, Jolayemi & Omudu, 2002). Abrahams (2006) conducted research on HIV/Aids-related stigma among Muslims in a Cape Town community. She states that when Muslims in her study knew more about the causes and effects of HIV, this lessened the likelihood of a negative response to PLWHAs. She states that her participants were aware of having to protect themselves from HIV/Aids and that this could be viewed as a barrier to people reaching out to those who are infected with HIV/Aids. It is important to consider why students may

stigmatise those who have HIV/Aids or those who are seen as vulnerable or responsible.

Herek and Glunt (1988) stated that the HIV epidemic is closely linked to the epidemic of stigmatisation. Their findings suggest that stigmatisation perpetuates infection and that it is possible to reduce stigmatisation. However, this involves a culture of forgiveness, tolerance and adherence to religious values.

1.7.2 African trends

Becker, Dozon, Obbo and Touré (1999) broach the subject of stigmatisation from an African perspective. This volume looks at the social constructions and implications of HIV/Aids in countries such as Sudan, Tanzania, Nigeria and South Africa with various articles on perceptions and attitudes. The authors 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. The authors reject stereotypes such as age-old customs and sexual promiscuity which are often blamed for the spread of HIV. They highlight the economic, social and political factors as well as the manner in which Africans interpret the epidemic.

Reid and Walker (2005) have contributed to studies on stigmatisation in Southern Africa through observing attitudes to homosexuality and its association with HIV/Aids related deaths. They look at cultural norms and their relation to secrecy, as well as stereotypes.

1.7.3 South African trends

Stigmatisation behaviour can be connected to the use of stereotypes in the South African context. Stangor and Crandall (2000) suggest that such stigmatisation behaviour may have its purpose in protecting the self from a threat. They note how group stereotypes can result in risk stereotypes of HIV infection-related behaviour. An example of such a risk stereotype would be promiscuous conduct. It is likely that the use of such stereotypes undermines the giving and receiving of knowledge associated with HIV/Aids infection. For example, it becomes problematic when such stigmatising attitudes result in people perceiving themselves as being at less risk of HIV infection simply because their personal behaviour is different from the stereotyped HIV risk behaviour. Burkholder, Harlow and Washkwich (1999) view this as particularly relevant in the South African context where multiple race and class structures could be seen to perpetuate stigmatisation. They suggest that through social stigmatisation, the individual can distance oneself from the disease or behaviour associated with the stigmatised group.

Mohan, Nzewi and Peltzer (2004) engage in similar research as that of Boer and Emons (2004) in their cross-sectional study of six hundred first-year students from South Africa, South India and the United States of America. They study students' readiness to engage in personal forms of contact with PLWHAs. Regression analysis used on South African and American students showed pity and irritation to be effective predictors of students' contact readiness with PLWHAs. Such behaviour is linked to stigmatisation and social perceptions.

Related to the topic of stigmatisation and social perceptions is the issue of social context. 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 interventions: stigmatisation, the pathologisation of youth sexuality and negative images of youth. This study explores how different understandings of the causes and ways to manage HIV/Aids serve to exacerbate the failure of HIV-prevention initiatives.

Many HIV-positive people have engaged in prevention initiatives by declaring their HIV-status openly. Kahn (2004) conducted a relevant interview with South African Justice Edward Cameron on the topic of stigma and HIV/Aids. This interview touches on various topics including Cameron's own public declaration that he is HIV-positive. He feels that in central Africa, levels of stigmatisation will remain high until HIV/Aids starts to affect every household, family and organisation. In addition, he speaks about South Africa's well developed HIV/Aids activist community, including the Treatment Action Campaign (TAC). Within this organisation, there has always existed visibility and openness for those with HIV/Aids, contributing to a reduction in stigmatisation. Cameron is quoted as saying that the "brute reason" for stigmatisation continuing to be a problem is that sexually transmitted diseases are connected with "closeting, privacy, taboo, shame, guilt" (Kahn, 2004, p. 295). Justice Edward Cameron's statement provides insight into the challenge of overcoming stigmatisation in South Africa today. By learning more about students' attitudes towards HIV/Aids issues, more can be discovered about stigmatisation and social perceptions.

1.7.4 The links between stigmatisation, risk and disclosure

Green and Sobo (2000) explore the stigmatisation attached to HIV within the context of risk. They explore identity change, the experience of living with HIV/Aids and

how an individual can manage the social risks of HIV. For instance, in relation to disclosure, PLWHAs often maintain secrecy about their disease and this can lead to a heightened sense of shame. The authors explore many of the issues around stigmatisation, which cause people to avoid disclosing their HIV positive status. Findings indicate that mainstream cultural models lay the foundation for perceived risks of self-disclosure. This involves ideas of what is moral in terms of disclosing; and models for friendship, family and romantic relationships. According to Green and Sobo (2000) there are various reasons for why it might be dangerous to disclose. For instance, double stigma, is evident when HIV is associated with high-risk groups and behaviour which is disdained in a cultural sense. Other reasons include double disclosure (by admitting to having an HIV positive status, an individual may have to admit to being part of a high-risk group such as having a homosexual identity); disbelief, especially if the discloser does not fit HIV/Aids stereotypes; and over-attentive treatment. Other fears involving disclosure and stigmatisation include burdening others, fear of gossip and fear of rejection. It is proposed, however, that through disclosure of the individual's HIV positive status, HIV/Aids can be given a face and thus be perceived as manageable (Moeketsi, 1998).

1.8 Perceptions towards voluntary counselling and testing (VCT)

1.8.1 Information about types of testing

It is more difficult to locate information specifically on tertiary students' attitudes towards VCT, there is a great deal of information pertaining to the descriptions of the tests themselves. Before gaining insight into attitudes of students, it is important to be informed about the testing methods used for HIV/Aids. Rhodes University students are likely to be affected by the specific procedure used on campus. Rhodes medical

services state that rapid testing is not used on campus as it is considered unreliable. Instead a Normal Test procedure is undertaken and it takes a week for results to be obtained. Pre-test counselling is a legal requirement before the test is conducted, and post-test counselling is provided a week after the test is done.

The conventional HIV testing begins with an enzyme immunoassay (EIA). Different body fluids can be used for this test, and usually the result will be available after three to four days. If the EIA tests negative, this result is considered accurate – no further testing is done. (Keenan, Keenan & Branson, 2005). The Western blot technique is used for confirmation if the EIA continues to test positive: in this instance it can take a week for the final result to be confirmed.

People's attitudes towards having VCT can be affected by their demographic make-up. Hollander (2005), for instance, conducted a study on five thousand, seven hundred and forty four pregnant women – 84 percent agreed to be tested for HIV and were enrolled in the study. The findings showed that women younger than thirty were significantly more likely to agree to testing. Black women showed a higher chance of agreeing to VCT than white women.

1.8.2 Global trends - stigmatisation and HIV/Aids testing

Research has been conducted on the varying effects of stigmatizing attitudes on the testing process. Peltzer, Nzewi and Mohan (2004) conducted a study describing how stigmatizing attitudes towards PLWHAs could have an effect on respondents' willingness to be tested for HIV. In addition this article examines attitudes towards HIV testing and scrutinizes attitudes of university students towards PLWHAs. A cross-sectional population of six hundred first-year university students from South India, South Africa and America was used for the study. It involved a self-

administered questionnaire which revealed outcomes such as attitudes. Ten percent of the Indian students admitted that they had had an HIV test and almost 20 percent of the American and South African students admitted to having been tested. This research implied that Americans. They had a far stronger intention to have VCT than the other groups. can students had more positive attitudes towards HIV testing than the other groups. Such positive attitudes were linked with students' readiness to be in contact with PLWHAs. This research produced findings that are vital for strategies for effective counselling in HIV/Aids courses on campus as it maps out the likely influences on university students' participation in risk reduction counselling. It also is important for health programmes as the study provides suggestions of how medical practitioners can reduce misperceptions of people being tested through clarification and discussion.

1.8.3 African trends – stigmatisation and HIV/Aids testing

A significant amount of research has been conducted in Africa on attitudes towards voluntary counselling and HIV testing (VCT). De Paoli, Manongi and Klepp (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 showed that 42 percent of women were willing to accept VCT. Despite the added factor of pregnancy this study is relevant to university students' attitudes about HIV/Aids issues as it deals with similar attitudinal factors. Willingness to accept VCT was affected by perceived high personal susceptibility to HIV/Aids, issues regarding confidentiality, partner involvement and religion. De Paoli et al. (2004) focus on the psychological consequences of testing: it

is mentioned that women's fear of blame and rejection becomes an important factor when sharing a positive HIV/Aids diagnosis.

Magnussen, Ehiri, Ejere and Jolly (2004) produced a study exploring the transformation in safe sex practices, knowledge about HIV/Aids transmission and prevention, perception of HIV/Aids/STD risks and uptake of VCT. Thirteen out of sixteen studies conducted for this project were in Africa. The study looked at those aged eleven to twenty five and therefore included those in their late teens and early twenties. The research investigated the different projects in terms of intervention format. This included looking at setting (school or community), education, role-plays and videos. Control groups were compared with groups who had experienced intervention. Groups who had experienced intervention were not very successful in increasing knowledge of HIV/Aids, changing attitudes and influencing positive behaviour.

1.8.4 South African trends – stigmatisation and HIV/Aids testing

According to Van Dyk and Van Dyk (2003) VCT programmes are a vital strategy in managing this disease at a global level. However, there is sometimes limited success because of attitudes that act as psychological barriers. The authors consider people's reasons for resistance to VCT programmes through a survey using a semi-structured questionnaire on one thousand, four hundred and twenty two respondents. It revealed that while participants were not opposed to VCT, there was a profound mistrust of health-care professionals. A general fear of discrimination and rejection from these professionals, from sexual partners and from the community was revealed. In addition, respondents revealed anxiety about how to disclose their HIV-positive status

and about psychological problems in the event of testing positive. Respondents worried that testing might not include follow-up support and treatment.

Kahn (2004) conducted an interview with Justice Edward Cameron where the judge states that the availability of treatment in the future (in South Africa) will transform people's attitudes towards getting tested. Harvey (1998) conducted his research on knowledge, attitudes and behaviour among Zulu speaking high school students concerning HIV/Aids. Although the participants were school students as opposed to tertiary-level students, this study is relevant in terms of its discussion about attitudes towards testing.

Kalichman & Simbayi (2003) conducted a study which focused principally on VCT. They claim that only one in five South Africans who are knowledgeable about VCT has in fact undergone testing. The objectives of the study were 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 stigmatisation. 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. Their findings showed 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 yet for testing, tended to be far more positive about the testing procedure. Those who had not been tested for HIV showed higher HIV/Aids related stigmatisation, and connected greater shame, guilt and social disapproval to HIV-infected people. The study concluded that in order to promote VCT in South Africa people will have to be educated about the benefits of testing and

of reducing stigmatisation toward PLWHAs. It is suggested that by reducing HIV/Aids stigmatisation, resistance to seeking VCT will be reduced (Kalichman & Simbayi, 2003).

1.9 The Rhodes University context

Global studies indicate that university students are a population group who are likely to engage in promiscuous behaviour. Fajardo, Garcia-Bernal, Klaskala and Baum (1998) conducted a risk behaviour survey which found that alcohol, drug abuse, promiscuity and inconsistent condom use were associated with high risk behaviour among university students. These activities were associated with the contraction of STD's and HIV/Aids. In addition, Kelly (2001) states that in small university communities, sexual partners tend to change fairly frequently. This study focuses on stigmatisation, risk behaviour and VCT, all issues which are of relevance to Rhodes University and directly or indirectly relate to sexual behaviour.

There is a lack of research on student attitudes, knowledge and behaviour (relating to HIV/Aids) at Rhodes University. It was therefore deemed pertinent to research this topic. As Rhodes University is a typical small-town campus where drug and alcohol problems do exist, it is an ideal context for the present study (Steele et al., 2002). Student Counselling Services at Rhodes University indicate that alcohol and substance abuse are not common issues to be discussed during consultations. The main issues discussed in consultation sessions between 1 January and 31 May were recorded. Only two percent of students discussed alcohol abuse during individual contact sessions, two percent discussed substance abuse and three percent discussed rape and sexual assault. Nineteen percent of contact sessions involved HIV and pre and post-test counselling and three percent of students discussed HIV and Aids

(Personal communication, Dr C. Young, August 14, 2007). It should be noted that although issues such as alcohol and substance abuse are not frequently raised, this does not mean that they are not a problem.

CHAPTER TWO

RESEARCH METHODS

2.1 Research Goals

The aim of the research is to explore the perceptions and attitudes of Rhodes University students towards HIV/Aids issues. Specifically, this study will focus on three questions: What are

- students' attitudes towards voluntary counselling and HIV testing (VCT)?
- students' perception of risk and perception of risk-taking behaviour?
- students' social perceptions with an emphasis on stigmatisation?

The survey will then be analysed and discussed by relating the findings back to theory already presented.

2.2 Research Design

Bless and Higson-Smith (1997) discuss research design and how the focus of research can be understood through three categories: condition, orientation or action. This study looks at orientations which are concerned with attitudes and beliefs of participants. A vital decision emerges in choosing whether to use qualitative or quantitative research or a combination of both. Tillotson and Maharaj (2001) emphasise that in terms of studies in risk behaviour, qualitative research results in an understanding of how characteristics of different contexts can have an impact on beliefs, attitudes and practices. They suggest that qualitative research can be used effectively to investigate a sensitive topic such as HIV or sexual behaviour. They state that only then is it possible to comprehend risk behaviour and the contexts that affect beliefs, attitudes and practices.

However quantitative research produces findings which reveal which factors play significant roles in the extent of risk behaviour. The main methods include surveys through self-administered questionnaires (quantitative) and semi-structured interviews (qualitative research).

According to relevant literature, a triangulation method using both qualitative and quantitative studies, is becoming increasingly popular in research practice. Quirk and Rhodes (1998) explain how qualitative studies can complement and question quantitative methods of measuring risk behaviour. This is particularly relevant to studies on perceptions and attitudes towards HIV/Aids. Zeller (1993) suggests that if both qualitative and quantitative studies produce similar accounts of the nature of a phenomenon, then validity can be determined. Knowledge, attitudes, practices and beliefs (KAPB) research commonly uses survey methods such as self-administered questionnaires (Uys, 2002).

A mixed methods approach using qualitative and quantitative methods was used to gain a broad understanding of Rhodes University students' perspectives. This approach is referred to as triangulation. It allowed for an investigation of the three sub-goals from the students' perspective. The first phase of the research was constituted by a focus group. It formed the qualitative part of the study which was used to inform the development of questions.

2.3 Focus group, data collection

Data was collected in the focus group by constructing the interview schedule based on the theory. The results were analysed and interpreted. They were then used to develop questions for the survey. The survey was a way of testing the findings of the focus group with a large number of students. Therefore, one focus group was facilitated.

The focus group was useful to this particular study, as it generated themes and ideas for the survey questionnaire. It allowed the study to be contextualised to Rhodes University Students and it contextualised the literature. It provided initial results that could then be verified by a large group. Bless and Higson-Smith (1997) state that the focus group allows participants to share their views with each other. They trigger new thoughts in each other, and take into account a range of opinions, before answering the researcher's question. Students completed informed consent forms indicating their willingness to be part of the focus group (see Appendix A)

2.3.1 ***Research participants***

Convenient sampling was used to choose seven members for the group. Convenient sampling was used to choose seven members for the group. According to Nachmias and Nachmias (1990) convenience sampling is used when researchers use sampling units which are convenient and available to them. As the focus group was used to provide initial results which could later be verified by the larger survey group, it was felt that this was a suitable sampling method.

The focus group was needed to spark ideas for the survey questionnaire. It was felt that a post-graduate group of students would have similar ideas as undergraduates yet they would be more likely to engage in mature discussion. They also have already experienced under-graduate student-life. Focus group participants therefore had to be older than twenty one. Participants heard about the study through word-of-mouth, and if they showed interest in the study, were asked if they would like to participate. Participants consisted of both male and female post-graduate students from the following faculties: Education, Humanities, Law and Science. Their ages varied between twenty two and twenty eight.

2.3.2 Interview schedule for focus group

The HBM and other relevant literature was used as a foundation for the focus group interview schedule. Having reviewed research on HIV/Aids issues in universities in South Africa, three principal themes were chosen to be focused upon for the research. An interview schedule was generated about the areas of risk and risk-taking behaviour, VCT, and stigmatisation (see Appendix B). This schedule was used to guide the facilitation of the focus group.

Participants were provided with a comfortable venue with refreshments that created an environment conducive to discussion. A note-taker recorded the process for a period of one hour and ten minutes. She was introduced to the group with the assurance that although she would not be taking part, she too understood that what was shared during the focus group was confidential. According to Krueger and Casey (2000) the note-taker helps the discussion to be more free-flowing and spontaneous, as he or she allows the researcher to focus on facilitating the group. It also allows for a more accurate transcription.

A thematic analysis was conducted on the material produced by the focus group – this involved reporting a number of distinct themes (Webb, 2003). The analysis was done according to the principles explained in Smith (1992).

2.4 Survey

The themes that were generated from the focus group were used to formulate the survey questions. They included the following: treatment of retrovirus, stigmatisation, HIV/Aids awareness, VCT, HIV status, risk behaviour 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).

2.4.1 Development of questionnaire

The themes produced from the focus group were used in the survey: By using larger numbers of students, the results from the focus group could then be tested. The quantitative part of the project was used to verify data from the focus group. The focus group generated the following themes: treatment of the retrovirus, stigmatisation, HIV/Aids awareness, VCT, HIV status, risk behaviour 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))." This statement relates to the themes of risk behaviour, risky sexual behaviour and HIV/Aids awareness on campus. The themes of risky behaviour, risky sexual behaviour and HIV/Aids on campus can be linked to the following statements: "If I have sex, using a condom can prevent me from HIV infection (very unlikely (0)...very likely (6)" and "When I want to, I know that I can insist on using a condom (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":

- I found the counselling process to be impersonal

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

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

- 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")?
- How do you view the disease/virus? ⓪ A guarantee of death, ① Curable, ② A treatable chronic condition for which I will take medication for the rest of my life, or ③ None of the above.

2.4.2 *Survey research participants*

One thousand survey questionnaires were handed out to undergraduate students from different faculties at Rhodes University. The survey sample of 675 undergraduate students represented the Rhodes (Grahamstown) student population of 4456 undergraduate students (Rhodes University Digest of statistics, 2005). The survey questionnaire was targeted at undergraduate students from the Humanities, Sciences, Law and Commerce faculties. Departments included were English, Psychology, Chemistry and Tax. In this way, students with a range of aptitudes were included in the study. Due to the low response rate often recorded in such research (Bless & Higson-Smith, 1997), the questionnaires were handed out to all of the students identified for the sample. This data collection procedure was adopted to improve the

probability of securing as many respondents from the identified sample as possible. This strategy worked as the response rate was 68 percent.

Student populations can be deemed homogeneous in terms of two key variables, age and level of education. They were grouped according to race, gender, year of study, nationality, socio-economic status and department. Multistage sampling was used: this consists of a number of techniques. Random sampling was used to choose at least four departments from the faculties of Commerce, Humanities, Science and Law. Within each department further samples were chosen through proportionate stratified sampling (Diamantopoulos & Schlegelmilch, 1997). In this case, the different strata were constituted by different years of academic study, namely first, second and third year undergraduate students. This was done in order to generalise to the population.

2.4.3 Data collection method

Questionnaires were drawn up with a cover letter emphasising 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). Bless and Higson-Smith (1997) advise that the pilot study is constructive in measuring the feasibility of a project; the accuracy of concepts; and the sufficiency of the method and instrument of measurement. Permission was asked from the relevant course-coordinators for questionnaires to be distributed and answered during lecture-periods. Bailey (1987) states that the response rate of any survey will improve if it is easy to complete and return the questionnaire, if it is concise and if the respondents are interested in the survey. He suggests that a response

rate of at least 50 percent is needed for analysis and reporting. The majority of questions were interpreted according to a 5-point Likert scale and the questionnaires were marked by respondents on Optical Marker Reader sheets for simple transference of data.

Students from the following departments were asked to respond to the questionnaire: Chemistry, English, Psychology, and Tax. In total, six hundred and seventy five participants responded.

2.4.4 Analysis

Before analysis the data set was checked for errors and these were then corrected. Some answers had to be deleted if the participant chose a non-possible answer on the Optical Marker Reader sheet. These answers were discarded. This was the most common error. Terre Blanche and Durrheim (2002) suggest that checking for errors can be done by selecting a random number of cases. It is suggested that between 10 and 15 percent of cases should then be recoded. If any errors exist, the data should be re-entered. However if no errors exist, all of the variables can be checked for impossible codes through the use of frequency tables and histograms. Once the integrity of the data set was established, Statistica was used to calculate descriptive statistics to summarize and present data. This included frequency tables and histograms. Cross-tabulations were also used. For instance, demographic information such as age, academic year of study and race were cross-tabulated with attitudes about VCT, risk and risk-taking behaviour and stigmatisation.

Inferential statistics were applied to examine the relationships between the variables. Chi-square Tests were used to investigate variables relating to themes concerning perceptions of VCT, risk and risk-taking behaviour and stigmatisation. It

should be noted that using the Chi-square Test with such a large sample could be problematic as statistical significance is more likely to be found. However, the present study is still useful in the information that it offers. The Two-Sample Chi-square Test tested independence and dependence between variables through categorical data. Neuman (2000) states 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. For instance, it tested whether perceived risk group was dependent on the individual's race. By finding out which variables are dependent on others, it was possible to gain insight into why risk behaviour occurs and which demographics belong to people who have similar attitudes. This information could also be used for further education strategies on the topic of HIV/Aids. These findings were then compared with the literature.

CHAPTER THREE

RESULTS

3.1 Introduction

This section focuses on the results produced by the focus group and the survey of students at Rhodes University. A summary of the various patterns of thought which emerged during the focus group discussion is given. This is followed by a presentation of graphs and histograms reflecting the survey results. 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 stigmatisation were highlighted in grey and ideas related to VCT were highlighted in green. Statements relating to the theme of risk behaviour were highlighted in pink (See Appendix C).

The survey results are presented according to themes. Firstly demographics are given in order to provide background information about the participants. Then results are presented under the main headings of:

- risk taking behaviour
- stigmatisation and social perceptions
- stigmatisation and VCT

Under these headings questions are sorted into themes which are introduced throughout the section.

The results of this study will be interpreted in light of the study's goals. Essentially, the project aims to explore the perspectives and attitudes of Rhodes students towards HIV/Aids issues. 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 stigmatisation.

3.2 Focus Group

From the focus group notes it was possible to generate such themes as treatment of the HIV retrovirus, stigmatisation, HIV/Aids awareness, VCT, HIV status, risk behaviour and social issues (see Appendix C). These themes informed the development of the survey questionnaire. Questions in the survey revolved around the three major themes of stigmatisation, risk behaviour and VCT.

The focus group discussion established various patterns of thought. Most participants had not come into contact with PLWHAs. Participants felt that social conditions, income and education would affect the chances of an individual being infected. Participants thought that some poor black groups of society felt that no matter what their actions were, they would be infected with HIV/Aids. Participants perceived that as a result, these groups did not see the point in wearing a condom. .

Regarding stigmatisation, focus group participants felt worried about how their friends would react if they were HIV-positive. They felt comfortable taking part in the focus group discussion as long as the discussion did not become too personal. One participant felt that if an individual was infected with HIV/Aids, then that person must have done something to deserve being infected. This indicated an attitude of blame. Another participant felt angry that an HIV-positive friend of hers should have known better. Participants felt concern that if someone who had HIV/Aids cooked their food, their own health may be affected. One participant stated: "Two of our cooks died of Aids. It's a bit concerning because they cooked our food." This indicates that the participant did not feel content with an infected person preparing a meal for her. It is implied that the participant felt vulnerable to infection as a result. Another participant remarked: "People who know some-one with Aids have a different outlook from those

who don't know some-one with Aids." It is implied that those who are more aware of HIV/Aids issues, are less likely to stigmatise PLWHAs.

In terms of VCT, students showed a generally negative sentiment towards this process. They felt that the counselling part of VCT was impersonal, uncomfortable, useless and should be voluntary. One participant stated: "I felt really uncomfortable talking about it – they should do it some other way. It lasts ten minutes and they're asking if you have thought about your future." Participants perceived counsellors to be bored and that they did not care anymore. One participant felt that people who were promiscuous did not generally go for VCT. She stated: "The people who sleep around are too scared to go (for testing) ..." In this way, the participant implies that those who "sleep around" are more likely to be HIV-positive. This indicates that she has knowledge of the ways in which people are infected with HIV/Aids. It also highlights the fact that statistics showing how many students are infected may not be accurate as many who are infected may be less inclined to go for testing. It was felt that upon becoming romantically involved, HIV testing should take place. Participants perceived however that it was difficult to do this and that it led to the risk of insulting the individual's partner. One participant stated: "It's so important to know your status. It took me and my boyfriend until the third term to have an Aids test. We should have gone at the beginning of our relationship. " It seems that students know what they should do in terms of protecting themselves through VCT, yet they do not necessarily follow through with the intended behaviour.

Focus group participants indicated that they perceived sexual risk behaviour to be high at Rhodes University. Participants were concerned about which risk group they belonged to. They felt that Rhodes students were at a high risk of contracting the retrovirus, yet in comparison to less educated people in society, they would have a

lower risk. One participant stated: "I worked at a pre-primary for a while, and a little boy died (from HIV/Aids). He was from a poorer background. We think we're a lower risk group, but are we?" This indicates that she was questioning whether poorer people have a greater risk of being HIV-positive. Another participant responded to her question about risk group by saying: "In 2nd year we had a talk and they said that if you had sex with seven people at Rhodes, one of them would have Aids. The scary thing is that that stat still puts us in a low-risk group." Participants seemed knowledgeable about how HIV is spread. It was felt that risky sexual behaviour is usually connected to drinking of alcohol at Rhodes. This behaviour was seen to result in loss of inhibitions. One participant stated: "Rhodes is like a 10c a shot whorehouse – people think it's so funny but it's not. And as much as we get irritated with the university, it (risky sexual behaviour) is connected to alcohol." This implies that students get irritated by the university's campaigns to reduce the consumption of alcohol. However, the participant indicates that risky sexual behaviour is connected to alcohol. It is implied then that the consumption of alcohol could have an affect on people being infected with HIV/Aids. One participant mentioned that when using condoms, there was always a risk of contracting HIV as they could break. This indicates that students are aware that even so-called "safe-sex" through condom-use is not the safest option in terms of protection from HIV/Aids.

3.3 Demographics

Various demographics were used in this study – they included gender, race, faculty, sexual orientation, where students live (i.e. in residence or digs), social year and academic year. Social year refers to the total number of years that a student has been

at university, while academic year refers to the year or level that a student has reached in a particular subject (for instance, English 1, English 2 or English 3).

In total six hundred and seventy five questionnaires were used in this study, although not all of these were completed fully. Respondents ranged between eighteen and twenty three years of age.

3.3.1 Gender

Table 1:
Frequency table of gender

Gender	Percentage of respondents
Male	32%
Female	68%

Table 1 (above) shows that 32 percent of respondents were male while 68 percent of students were female. The ratio of male to female respondents for the present study is similar to the ratio of male to female students at Rhodes University. In 2004, overall 57 percent of students were female and 43 percent were male. Of the Humanities students, 33 percent were male while 67 percent were female. Of the Commerce students 55 percent were male and 45 percent were female. Of the Science students, 60 percent were male and 40 percent were female (Rhodes University Digest of Statistics. 2005). However when looking at whether the present sample is an accurate representation of the student population, it should be taken into account that 52 percent of the respondents belonged to the Humanities faculty.

3.3.2 Social year

Table 2:
Frequency table of social year

Social year	Percentage of respondents
First	**36%**
Second	**31%**
Third	**25%**
Fourth	**6%**
Fifth	**1%**

Table 2 indicates that in terms of social year, 36 percent of students are in first year, 31 percent of students are in second year, 25 percent of students are in third year, six percent are in fourth year and one percent of students are in fifth year. This corresponds with the university statistics as there are more students in first year than second year, and more second years than third years (Rhodes University Digest of Statistics. 2005).

3.3.3 Academic year

Table 3:
Frequency table of academic year

Academic year	Percentage of respondents
First	**40%**
Second	**31%**
Third	**29%**

Table 3 shows that 40 percent of respondents were in first (academic) year, 31 percent of respondents were in second year and 29 percent of respondents were in third year. It seems that the majority of respondents are in first year. This again corresponds with the university statistics as there are more students in first year than second year, and more second years than third years (Rhodes University Digest of Statistics, 2005).

3.3.4 Race

Table 4
Frequency table of race

Race	Percentage of respondents
Black	**28%**
White	**62%**
Asian/Indian	**7%**
Coloured	**3%**

Table 4 (above) shows that 28 percent of participants in the study were black, 62 percent of participants were white, seven percent were Asian/Indian and three percent were coloured. It seems then that the majority of participants are white while there are still many black students involved in the study. Again this seems to correspond with Rhodes University Digest of Statistics, 2005. Statistics show that in 2004, 43 percent were black, 45 percent were white, seven percent of undergraduates were Asian, and five percent were coloured (Rhodes University's Digest of Statistics, 2005). Three respondents chose the category of Other. This option was provided for those students who did not feel that one of the given categories applied to them, or for those who would like to comment further. These respondents gave the following answers: "My mother is white, father Indian, therefore I don't like to choose one over the other and I don't consider myself coloured", "Italian" and "...insulted: I hate the race questions." Race was considered as an important demographic to include in this study as other research has found that people of different races have different attitudes towards HIV/Aids issues (D'Alessandro, Mikl & Kelley, 1995).

3.3.5 Faculty

Table 5:
Frequency table of faculty

Faculty	Percentage of respondents
Commerce	**22%**
Humanities	**53%**
Science	**22%**
Law	**2%**
Other	2%

The following departments were used from various faculties: Tax (Commerce faculty), English and Psychology (Humanities faculty) and Chemistry (Science faculty). Participants in various departments claimed that they belonged to the Law Faculty. Table 5 indicates that 22 percent of respondents belonged to the Commerce faculty, 53 percent of respondents belonged to the Humanities faculty, 22 percent of respondents belonged to the Science faculty and two percent of respondents belonged to the Law faculty. Of the respondents who chose the option Other, six students stated that they belonged to the Pharmacy faculty. These students are likely to have been taking a course in Chemistry. Nine other students chose this option but did not state which faculty or department they belonged to.

This indicates the majority of participants consisted of students who belong to the Humanities faculty. This would be an accurate representation of the student population however, as data shows that 36 percent of undergraduate students at Rhodes University in 2004 were registered in the Humanities faculty. There are similar ratios of Humanities respondents when compared to all respondents (for this particular study) and Humanities students when compared to all students at Rhodes University. It appears then that the student sample in this study and the population of Rhodes University are both homogeneous.

3.3.6 Sexual orientation

Table 6:
Frequency table of sexual orientation

Sexual orientation	Percentage of respondents
Heterosexual	**94%**
Bisexual	**4%**
Homosexual	**2%**
Other	0.30%

Table 6 indicates that 94 percent of participants are heterosexual, four percent of participants are bisexual and two percent of participants are homosexual. Of the two respondents who chose Other, the one stated that she was lesbian, and the other stated: "I choose not to label my sexuality – I fall in love with whoever I fall in love with." 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 about HIV/Aids. Derlega, Sherburne and Lewis (1998) found that the male participants in their research reported more negative behaviour when interacting with a homosexual versus a heterosexual HIV-positive person. The above demographics indicate that the overwhelming majority of respondents are heterosexual (93 percent), making it unlikely that a valid study can be made comparing the attitudes of those who are bisexual (four percent) and homosexual (two percent) to those who are heterosexual.

3.3.7 Living situation

Table 7:
Frequency table of living situation

Living situation	Percentage of respondents
Residence	**68%**
Digs	**27%**
Home	**5%**

Table 7 looks at the living situation of respondents. 68 percent of respondents live in residence halls at Rhodes University. This corresponds to the fact that the majority of participants are first years, who usually live in residence. 27 percent of respondents live in digs in Grahamstown, while five percent of participants live at home. It is important to know the demographics concerning where students live, as research shows that students who live in residence are perceived as being more likely to have the HIV/Aids virus (Uys, 2002).

3.4 Risk-taking behaviour

3.4.1 Perceived risk-group

The results indicate that high risk behaviour is taking place at Rhodes University. Participants were asked to rate whether they belonged to a high, medium or low risk group concerning the likelihood that they would contract HIV/Aids. Uys (2002) states that most studies show that university students do not perceive themselves to be at risk of catching HIV. However, this is seen as a result of othering where groups including black people and homosexuals are viewed as belonging to the 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 race

to perceived risk group. The test is used in studying categorical data drawn from independent samples. One assumption has to be met for this test: the expected frequencies must not be too small. When using a 2 x 2 table 80 percent of the expected frequency must not be less than five, and if a larger table is used, frequencies should exceed two (Diamantopoulos & Schlegelmilch, 1997). The assumption was met for the hypothesis as follows:

H_0: Perceived risk group is independent of race

H_1: Perceived risk group is dependent on race

A chi-square analysis revealed that there was a significant difference, χ^2 (15, N = 671) = 55.30, p = 0.00, suggesting that there is a relationship between race and perceived risk group. Therefore perceived risk group is dependent on race.

Table 8:
Cross-tabulation of race compared to perceived risk group

	Race	Risk group high	Risk group medium	Risk group low
Percentage of respondents	**Black**	**25%**	**29%**	**46%**
	White	**6%**	**31%**	**63%**
	Asian/Indian	**5%**	**27%**	**68%**
	Coloured	**16%**	**21%**	**63%**
	All groups	12%	30%	58%

Participants were asked the following question and the response was presented in Figure 2:

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

⓪ A high risk group

① A medium risk group?

② A low risk group?

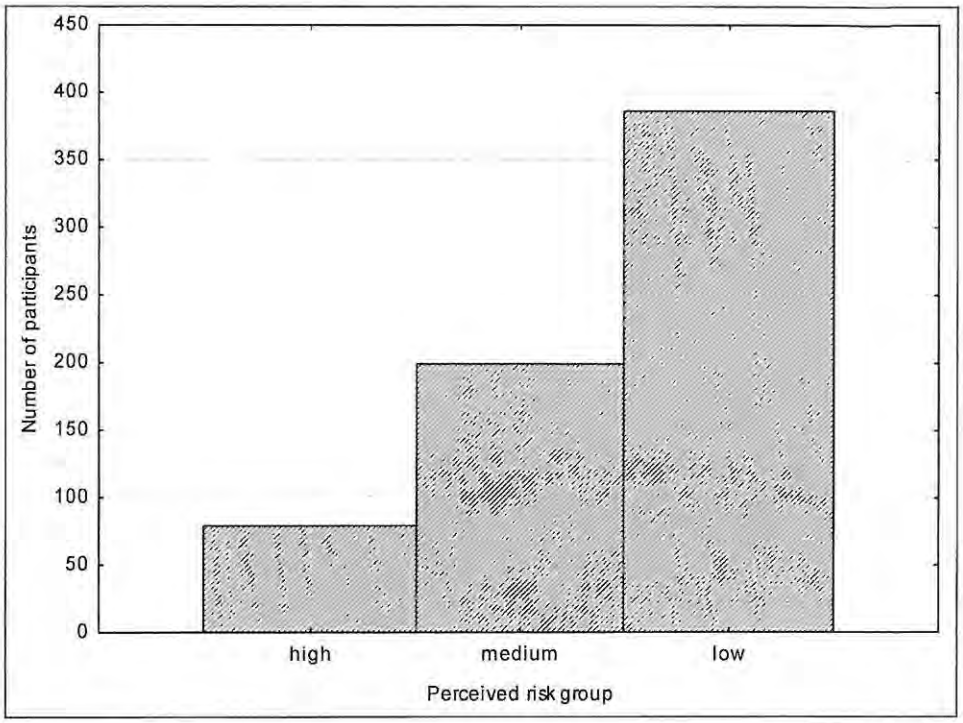

Figure 2. Perceived risk group

Table 8 and Figure 2 indicate that 12 percent of students (both male and female) consider themselves to belong to a high risk group, 30 percent consider themselves to be part of a medium risk group and 58 percent consider themselves to be part of a low risk group. In total, 42 percent of students therefore consider themselves to be at risk.

The results appear to indicate that the different race groups show different perceptions concerning their vulnerability to HIV/Aids (see Table 8). This is particularly evident among the black, white and Asian/Indian students.

Of the black students, 25 percent perceived themselves to be part of the high-risk group, 29 percent perceived themselves as belonging to the medium-risk group and 46 percent saw themselves as belonging to the low-risk group. This indicates that the majority of black respondents felt that they were unlikely to contract HIV/Aids. However it is notable that one quarter of black students thought that they were at high risk.

Of the white students, six percent perceived themselves to be part of the high-risk group, 31 percent perceived themselves as belonging to the medium-risk group, and 63 percent saw themselves as belonging to the low-risk group. Again, the majority of white students felt that they were unlikely to contract HIV/Aids. The responses of white participants when compared with the responses of black participants appear to indicate that white participants perceived a lower risk of contracting HIV/Aids. Asian/Indian and coloured participants indicated a perceived lower risk of contracting HIV/Aids than both the white and black participants.

Of the Asian/Indian students, five percent perceived themselves to be part of the high-risk group, 27 percent perceived themselves as belonging to the medium-risk group and 68 percent saw themselves as belonging to the low-risk group. These findings are similar to those concerning the white participants in this study.

Of the coloured students, 16 percent considered themselves to belong to the high risk group, 21 percent perceived themselves as belonging to the medium-risk group and 63 percent perceived themselves as belonging to the low-risk group. This indicates that the majority of coloured students did not feel that they were likely to contract HIV/Aids.

Most importantly, Table 8 and Figure 2 indicate that risk behaviour is high. 54 percent of black students and 37 percent of white students feel by their own admission that they have a medium-high risk of being infected with HIV/Aids. The question needs to be asked why? It seems that students are indicating that they have a fair chance of contracting HIV/Aids. This suggests that a considerable amount of risky behaviour is occurring. It is likely that these figures even underplay how much risky behaviour is occurring. It should also be considered that students may indicate that

they feel that they are at medium-high risk for infection if they do not trust their partners or if they feel that they may contract the retrovirus through other means.

3.4.2 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 of gender versus perceived risk group

	Risk group		
	High	**Medium**	**Low**
Male	15%	32%	53%
Female	11%	29%	60%

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_0: Perceived risk group is independent of gender

H_1: Perceived risk group is dependent on gender

A chi-square analysis revealed that there was no significant difference, χ^2 (2, N = 664) = 3.61, p = 0.16, suggesting that there is no relationship between gender and perceived risk group. Whether the individual perceives him/herself as belonging to the low, medium or high risk group is not dependent on his/her gender.

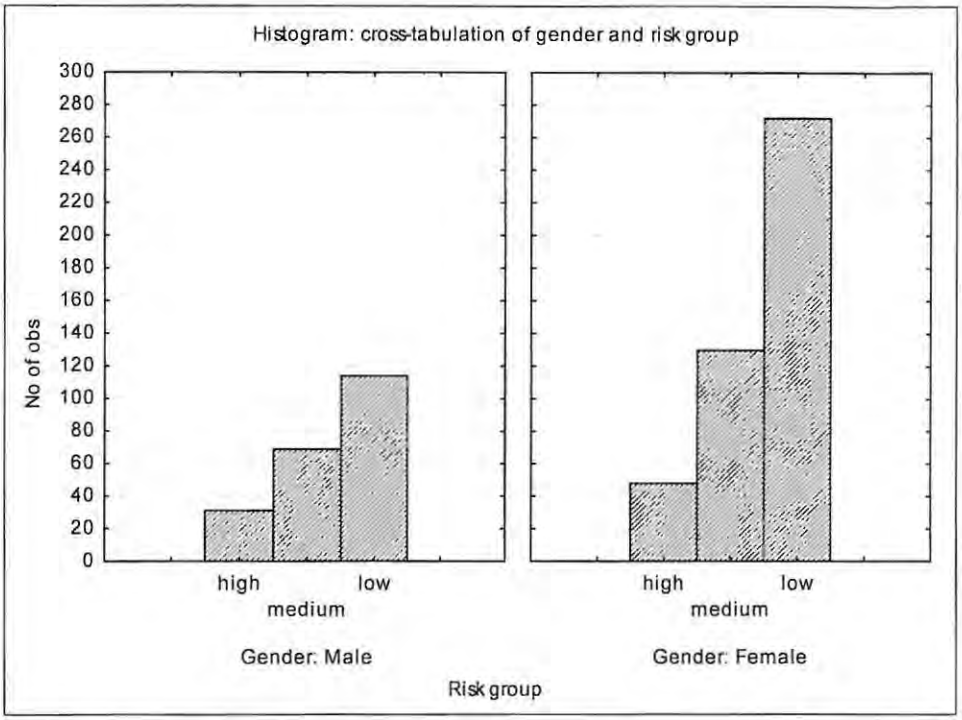

Figure 3. Perceived risk group according to gender

There are differences in perception between men and women. Fifteen percent of men perceive themselves to be part of the high risk group, whereas 11 percent of women perceive themselves to be part of a high risk group. 32 percent of men perceive themselves to belong to a medium risk group, whereas 29 percent of women perceive themselves to be part of a medium risk group. 53 percent of men perceive themselves to be part of the low risk group, whereas 60 percent of women perceive 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 male undergraduates seem to perceive themselves as being more vulnerable to HIV/Aids as compared to females.

47 percent of males and 40 percent of females perceive themselves to be at medium to high risk. These findings suggest that risky sexual behaviour(s) may be occurring. It can be surmised that within the university context, unprotected sex could be one of the risk behaviours.

3.4.3 Ranking risk behaviour

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

> Rate the following 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).
>
> ⓪ ① ② ③ ④ ⑤ ⑥
>
> Having unprotected sex

Table 10:
Frequency table ranking risk behaviours: unprotected sex

Category	Percentage of respondents
0 – no risk	1%
1	1.%
2	0.30%
3	1%
4	2%
5	**9%**
6 – extreme risk	**85%**

As illustrated by Table 10, 85 percent of students chose category 6 which means that most students felt that unprotected sex is extremely risky in terms of contracting HIV/Aids. Nine percent of students chose category five, which means that in total 94 percent of respondents rated unprotected sex in the two highest categories (five and six).

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.

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

Intention to use a condom	Percentage of respondents
0 – very unlikely	**3%**
1	2%
2	1%
3	2%
4	**6%**
5	**14%**
6 – very likely	**67%**

Table 11 shows that the majority of students chose category four, five and six (87 percent in total). Six percent chose category four, 14 percent chose category five and 67 percent chose category six. This is a large percentage of students who intend to use condoms. It is noteworthy that three percent of students chose the category nought indicating that they are very unlikely to use condoms. Students admit intention to use condoms yet perceived risky behaviour is still high (see Table 8 and 11).

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

If you found out you were HIV positive, how scared would you feel if 0 was not at all and 6 was paralysing fear. Please colour in the appropriate answer

⓪ ① ② ③ ④ ⑤ ⑥

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

Fear	Percentage of respondents
0 – not at all	1%
1	1%
2	3%
3	6%
4	**10%**
5	**23%**
6 – paralysing fear	**56%**

Table 12 suggests that the majority of students were extremely fearful in their response to how they would feel if they contracted HIV/Aids. 10 percent of respondents chose category four, 23 percent of students chose category five and 56 percent of students chose category six. This amounts to 89 percent of participants who chose higher order categories signifying a fearful response. It is noteworthy that a high number indicate a fearful response as it suggests that respondents have knowledge that being infected with HIV/Aids would be a scary experience. They would experience a high degree of fear in such a case.

3.4.4 Intention to use condoms

The frequency tables showing fear and intention to use condoms will be cross tabulated in order to establish the relationship between them. According to the results it is evident that fear causes people to intend to wear condoms. This has implications for the designs of education/awareness campaigns. The following statements were used for the cross-tabulation:

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

⓪ ① ② ③ ④ ⑤ ⑥

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 13:
Cross-tabulation of fear and intention to use condoms

Fear	**4 Medium to high intention**	**5 High intention**	**6 Very high intention**
0 – not at all	0%	13%	50%
1	0%	0%	71%
2	13%	6%	50%
3	8%	15%	62%
4	5%	14%	76%
5	5%	16%	68%
6 – paralysing fear	8%	12%	**68%**

Table 13 indicates that students who would feel paralysing fear (those who chose category six) made up a significant percentage (68 percent) of those who had the greatest intention to use condoms. Only high intention values are shown in Table 13.

3.4.5 Gender and risk behaviour

Table 14:
Cross-tabulation of gender and intention to use condoms

	0 - Little intention	**1**	**2**	**3**	**4**	**5**	**6 - Very high intention**
Male	5%	3%	2%	5%	**11%**	**14%**	**61%**
Female	4.67%	0.70%	0.47%	6%	**5%**	**12%**	**71%**

Table 14 indicates that more females than males show the intention to use a condom if sexually active. It is important to note that intention to use a condom is different from actual behaviour. This study of the Rhodes undergraduate sample indicated that of the males, 11 percent chose category four, 14 percent chose category five and 61 percent chose category six. This means that 86 percent of the male students chose the three highest categories in terms of intending to use condoms. Five percent of females chose category four, 12 percent of females chose category five and 71 percent of females chose category six. In total 88 percent of females chose the three highest categories in terms of intending to use condoms and when combined together, 88 percent of both males and females chose the highest three categories. The findings show that males and females have similar intentions in terms of their intention to use condoms. It is indicated that there could be much risky behaviour amongst the respondents which can likely be extrapolated to the student population as a whole. It should be considered that although approximately 12 percent of students do not intend to use condoms, this does not mean that they are having sex and are engaging in risky behaviour.

3.4.6 Choice of partner

The participants were asked to respond to the following statement:

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

Table 15 presents data showing what percentage of students are careful about their choice of sexual partner.

Table 15:
Frequency table showing likelihood of avoiding having sex with a stranger

Likelihood of having sex with a stranger	**Percentage of respondents**
0 – very unlikely	5%
1	3%
2	5%
3	7%
4	**8%**
5	**9%**
6 – very likely	**63%**

Table 15 indicates that the majority of students chose the highest categories of four, five and six. Eight percent of students chose category four, nine percent chose category five and 63 percent chose category six. This amounts to 80 percent of respondents who showed an affirmative response to the question. This indicates that university students may perceive sexual intercourse with a stranger to be a risky activity. However there are 20 percent of students who are not so careful as indicated by categories nought, one, two and three. It is likely that it is these respondents who are involved in risky behaviour(s).

Table 16 indicates the different genders' responses to the following statement:

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

3.4.7 Gender and choice of partner

Table 16:
Cross-tabulation of gender and likelihood of avoiding having sex with a stranger

I would avoid having sex with a stranger Gender	0 Very unlikely	1	2	3	4	5	6 - Very likely
Male	7%	5%	9%	13%	11%	13%	42%
Female	4%	2%	3%	5%	6%	8%	72%

Table 16 indicates that of the male respondents for this study, 11 percent chose category four, 13 percent chose category five and 42 percent chose category six. This amounts to 66 percent of male respondents who chose the highest three categories indicating that they would avoid having sex with a stranger.

Of the female respondents, six percent chose category four, eight percent chose category five, and 72 percent chose category six. In total, 86 percent of female respondents chose the higher categories indicating that they were far more likely to avoid having sex with a stranger than males. This indicates a higher level of risky behaviour on the part of the men.

Table 16 also indicates that men are far more likely (than females) to have sex with a person they do not know well. 34 percent of male students chose the lower order categories of nought, one, two and three. In contrast, only 14 percent of females chose the lower order categories.

Looking at students who generally disagreed with the statement (i.e., chose categories one, two and three), 20 percent of them were males. 13 percent chose category three which can be considered a middle-option. Among the females, four percent chose category nought, two percent chose category one and three percent

chose category two. In total, nine percent of females showed disagreement with the question (i.e., chose categories nought, one and two) while five percent chose category three.

Findings indicate that women have a much higher perceived severity than that of men. 86 percent of female respondents chose the higher categories indicating an extremely high perception of the severity of HIV/Aids, whereas only 66 percent of male respondents chose the highest three categories.

3.4.8 Protective behaviour

If students are able to suggest going for HIV/Aids testing to their partner(s), they will be engaging in protective behaviour and could prevent themselves from being infected with HIV/Aids.

Table 17 presents data which explores respondents' ability to suggest HIV/Aids testing to a partner. Being unable to do so 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.

⓪ Yes

① No

② Does not apply

Table 17:
Frequency table of ability to suggest HIV/Aids testing to a partner

Ability to suggest testing to partner	**Percentage of respondents**
Yes	**43%**
No	**22%**
Does not apply	35%

Table 17 indicates that 43 percent of students 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. 22 percent of students disagreed with the statement. This means that almost double the students who disagreed with the statement, indicated that they would be able to suggest to their partners to go for HIV testing. However, only two thirds of the sample (who answered yes or no to the statement) felt empowered enough to be able to suggest going for an HIV/Aids test. 35 percent of students chose the option does not apply. This is over one third of the sample. It can be surmised that they may not be sexually active, they may not be in a long-term relationship when sexually active, or they do not feel comfortable answering the question.

3.4.9 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 18:
Perception of whether a condom can prevent HIV/Aids

Using a condom can prevent HIV	**Percentage of respondents**
0 – very unlikely	5%
1	8%
2	9%
3	22%
4	19%
5	23%
6 – very likely	15%

The majority of students chose category three, four and five. 19 percent chose category four and 23 percent chose category five. Fifteen percent of students chose category six. This indicates that they thought that it was very likely that a condom would prevent HIV/Aids infection. Table 18 has varied responses and this suggests that their may be a lack of knowledge about condoms' ability to protect the individual from HIV infection. Students may be unsure if condoms are a safe preventative device or they may have a lack of trust or confidence in condoms' preventative ability. This table therefore points to another barrier to HIV/Aids prevention.

Table 19 displays perception of risk group and explores student's own assessment of whether they are at risk of being infected. By identifying which risk group students feel they belong to, the researcher is able to infer whether risk behaviour is occurring. Participants responded to the following statement:

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

⓪ A high risk group

① A medium risk group?

② A low risk group?

Table 19:
Table of perceived risk group

Perceived risk group	Percentage of respondents
High	**12%**
Medium	**30%**
Low	**58%**

Table 19 reveals that 12 percent of students feel that they belong to the high-risk category. 30 percent of students feel that they belong to the medium risk category. This reveals a high percentage of students (42 percent in total) who feel they belong to the medium or high risk groups. This suggests that the many of these respondents have been engaging in risky behaviour(s).

3.4.10 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 20:
Cross-tabulation of risk group and perception of condoms' preventative ability

Condoms' preventative ability Risk group	0 Very unlikely	1	2	3	4	5	6 - Very likely
High	**5%**	**8%**	**6%**	15%	**21%**	**27%**	**18%**
Medium	**4%**	**8%**	**10%**	25%	**14%**	**23%**	**15%**
Low	**5%**	**7%**	**9%**	22%	**21%**	**22%**	**14%**

21 percent chose category 4, 27 percent chose category five and eighteen percent chose category 6. It seems then 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 those participants who perceived themselves as belonging to the medium risk group, 52% chose category 4, 5 and 6 indicating that they believe that a condom can prevent HIV infection. Of these participants, 14 percent chose category 4, 23 percent chose category 5 and 15 percent chose category 6. Of those who perceived themselves belonging to the low risk group, 57% chose category 4, 5 and 6 indicating that they believed that a condom could prevent HIV infection. Of these participants, 21% chose category 4, 22% chose category 5 and 14% chose category 6. It was expected that an inverse relationship would exist: If a participant had confidence in the preventative ability of condoms it was expected that the individual would feel at low risk of HIV/Aids infection. The findings showed 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 20 also suggests that respondents (whether they perceive themselves as belonging to the high or low risk group) may believe in the preventative ability of condoms, yet it is likely that they still do not use them. This implies that they may be engaging in cognitive dissonance and reinforces the suggestion that risk behaviour is occurring. However there is also the likelihood that students feel they belong to a high or medium risk group because they are engaging in other risk behaviour(s) for instance, drinking alcohol (which may lead to risky sexual behaviour) (Personal communication, Dr C. Young, August 14, 2007). Student counselling services indicate that two percent of students consult them for both alcohol abuse and substance abuse. Eighteen percent of consultations involve VCT and three percent involve HIV/Aids problems

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.

It is evident that the assumption was met for the present Chi-square test.

H_0: Perceived risk group is independent of response efficacy

H_1: Perceived risk group is dependent of response efficacy

A Chi-square analysis revealed that there was a significant difference, χ^2 (12, N = 640) = 9.14, p = .69, suggesting that there is no 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 could prevent them from HIV infection. This might suggest that other factors like trust of partner and knowledge about how they could be infected play a role in students' perceptions of which risk-group they belong to.

3.4.11 Attitudes towards condom use

Respondents answered the following statement:

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

⓪ Strongly Agree

① Agree

② Neutral

③ Disagree

④ Strongly Disagree

Table 21:
Attitudes towards condom use

What is the point of wearing a condom?	Percentage of respondents
Strongly Agree	1%
Agree	1%
Neutral	3%
Disagree	**10%**
Strongly Disagree	**85%**

Table 21 shows that most students see condoms as being important in preventing infection with HIV/Aids. 10 percent of students disagreed and 85 percent strongly disagreed, whereas only two percent of respondents showed an affirmative response (by choosing strongly agree and agree). It is evident that Table 18 and Table 21 produce contradictory findings. Whereas Table 18 suggests a varied response to the preventative ability of condoms, Table 21 seems to indicate that most students really do regard wearing a condom as a worthwhile activity. This discrepancy could be explained by the fact that students disagree with the clause "I feel as though I will

contract HIV/Aids anyway." Even if they are not completely sure of the preventative ability of condoms, students might be likely to disagree or strongly disagree. In this way they arouse cognitive dissonance as there is a discrepancy between what they believe and how they act (Helweg-Larsen & Collins, 1997).

It is notable that while most students disagree or strongly disagree with this statement, high risk behaviour is still occurring, as suggested by students' own perceptions of which risk group they belong to (see Table 9).

3.4.12 Ability to insist on condom use

In Table 22, students' confidence in their ability to insist on condom-use is explored. Students who cannot insist on the use of a condom could be 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 22:
Insistence on use of condom

Insistence on use of condom	Percentage of respondents
0 – very unlikely	4%
1	1%
2	4%
3	6%
4	5%
5	10%
6 – very likely	70%

Table 22 indicates that 70 percent of students chose category six as a response to this question. This means that 70 percent of respondents felt it very likely that when they

wanted to they could insist on using a condom. This indicates that they have greater self-efficacy than the other participants. In total 86 percent of respondents chose category four, five and six (the highest categories). In contrast only nine percent of respondents chose the lowest three categories (category nought, one and two).

It is interesting to note that students generally think they can insist on condom use, yet many of them feel they belong to high or medium risk groups (see Table 19).

Table 23:
Cross-tabulation of gender and likelihood of insisting on condom use

Insistence on use of condoms	**Percentage of male respondents**	**Percentage of female respondents**	**Row Total**
0 – very unlikely	1%	3%	4%
1	1%	0%	1%
2	1%	2%	4%
3	1%	4%	6%
4	1%	4%	5%
5	**4%**	**6%**	**10%**
6 – very likely	**21%**	**49%**	**70%**

Table 23 indicates that it was very likely that 70 percent of respondents would be able to insist on using a condom. Of these respondents, 49 percent were females and 21 percent were males and this indicates a noticeable difference. It seems that females were far more likely to perceive themselves as being very likely to insist on condom use. This indicates that females had a greater self-efficacy.

3.4.13 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 24
Cross-tabulation of gender and participant's confidence that they can insist on condom use

I can insist on using a condom **Gender**	**0** **Very unlikely**	**1** **Low likelihood**	**2** **Medium to low likelihood**	**3** **Medium likelihood**	**4** **Medium to high likelihood**	**5** **High Likelihood**	**6** **Very likely**
Male	4%	2%	5%	5%	4%	13%	**68%**
Female	4%	1%	3%	6%	6%	9%	**72%**

Table 24 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 68 percent of men chose category six (reflecting that they were certain they could insist on condom use), 72 percent of women chose the same category. In total 85 percent of men chose category four, five and six and 86 percent of women chose the same categories. Although women were more likely to choose category five and six, men and women showed a similar response to category four, five and six (when grouped together). In this study, men and women indicated a similar perception of their confidence in insisting on condom use. This means that both female and male participants are able to discuss issues such as sex and condom-use with their sexual partners and this may have a positive impact on prevention efforts.

3.4.14 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 25:
Motivation to protect from HIV infection through condom use

I intend to use a condom	Percentage of respondents
0 – very unlikely	5%
1	1%
2	1%
3	6%
4	7%
5	13%
6 – very likely	**68%**

Table 25 indicates that the majority of students are likely to use a condom if sexually active. Eighty eight percent of students chose categories 4, 5 and 6 and 20 percent of respondents chose category 4 and 5. This indicates a lack of certainty and laissez-faire attitude regarding their intention to use a condom and their motivation to protect from HIV infection. It appears that respondents may have cognitive dissonance. They 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 (see Table16, 24 and 25).

3.5 Stigma and social perceptions

3.5.1 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 in 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 26:
Risk of kissing an HIV-positive person

Risk of kissing an HIV-positive person	Percentage of respondents
0 – very unlikely	18%
1	25%
2	20%
3	20%
4	7%
5	3%
6 – very likely	5%

Table 26 shows that 18 percent of participants chose category nought indicating that the act of kissing some-one with HIV held no risk of catching HIV/Aids. Twenty five percent of respondents chose category one, 20 percent of participants chose category two, 20 percent of participants chose category three, seven percent chose category four, three percent chose category five and finally, five percent of students chose category six indicating that they felt that kissing is an extremely risky behaviour. 63

percent of participants chose category nought, one and two (in total) and this indicates that the majority of participants do not perceive that kissing is a risky behaviour in terms of being infected with HIV/Aids. The majority of students are well-informed regarding the risk of HIV/Aids infection through kissing.

Participants were asked to respond to the following statement in order to ascertain how severe respondents perceived an HIV-positive status to be:

If you found out you were HIV positive, how scared would you feel if 0 was not at all and 6 was paralysing fear. Please colour in the appropriate answer

⓪ ① ② ③ ④ ⑤ ⑥

Table 27:
Table of fear levels upon discovery of HIV positive status

Fear level	**Percentage of respondents**
0 – not at all	1%
1	1%
2	3%
3	**6%**
4	**10%**
5	**23%**
6 – paralysing fear	**56%**

Table 27 shows that the majority of students chose category six (56 percent 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. Six percent chose category three, 10 percent chose category four and 23 percent chose category five (39 percent of participants in total).

Research has shown that people with inaccurate beliefs about HIV/Aids had greater fear levels (Boer and Emon, 2004). The following two statements were cross-

tabulated in order to establish the relationship between fear levels and belief in the condom's ability to prevent HIV/Aids infection:

If you found out you were HIV positive, how scared would you feel if 0 was not at all, and 6 was paralysing fear. Please colour in the appropriate answer

⓪ ① ② ③ ④ ⑤ ⑥

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

The first statement concerns how respondents perceive their fear levels if they were to find out that they are HIV positive. The second looks at respondents' beliefs regarding condoms and their ability to prevent themselves from being infected with HIV/Aids.

Table 28:
Cross-tabulation of relationship between fear levels and belief in the condom's ability to prevent HIV/Aids infection

Fear Levels **Preventative Ability of Condom**	**0 Not at all**	**1**	**2**	**3**	**4**	**5**	**6 Paralysing fear**	**Row Totals**
0 – very unlikely	0%	0%	0%	0%	1%	0%	0%	1%
1	0%	0%	0%	0%	1%	0%	0%	1%
2	0%	0%	0%	0%	1%	0%	0%	3%
3	1%	0%	0%	1%	2%	1%	1%	6%
4	0%	0%	1%	2%	2%	3%	1%	**10%**
5	1%	1%	3%	5%	5%	5%	3%	**23%**
6 – very Likely	3%	5%	4%	13%	**9%**	**13%**	**9%**	**56%**

Table 28 indicates that generally participants felt that condoms provided protection from the contraction of HIV/Aids. 10 percent of respondents chose category four, 23 percent chose category five and 56 percent chose category six (the latter indicating that they felt it was very likely that a condom would prevent them from HIV/Aids infection). Fifty six percent of respondents chose category four, five and six (in total) indicating high levels of fear. 14 percent of the respondents would feel paralysing fear (chose category six). Of these respondents, the majority chose category four, five and six for the statement regarding their perception of the condom's ability to prevent HIV/Aids. Of the participants who chose category six indicating that it was very likely that a condom would provide protection, nine percent chose category four, 13 percent chose category five and nine percent chose category six, indicating that fear levels were generally high. Table 28 indicates that medium and high fear indicated fairly accurate beliefs about the extent that condoms can prevent HIV/Aids. Respondents who had extreme fear levels indicated less accurate beliefs about HIV/Aids prevention.

3.5.2 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 29:
Risk of HIV infection through unsafe sex

Unsafe sex and risk of HIV	Percentage of respondents
0 – very unlikely	**4%**
1	**1%**
2	**1%**
3	5%
4	**6%**
5	**12%**
6 – very likely	**63%**

Table 29 again measures participants' perceptions of immunity to the retrovirus. This concept relates to othering of the retrovirus. The above frequency table shows that sixty three percent of respondents chose category six reflecting a high perceived vulnerability. Six percent of participants chose category four, 12 percent chose category five and 68 percent chose category six. In total 81 percent of learners 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. Four percent of students chose category nought, reflecting that they think it is very unlikely that people who are having unsafe sex have a high risk of being infected with HIV. One percent of students chose category one and one percent of students chose category two. This amounts to seven percent of respondents who showed a negative response by choosing category nought, one and two.

3.5.3 Motivation to protect from HIV infection

Participants responded to the following statement:

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

Participants were considered to be highly motivated to protect themselves from HIV/Aids infection if they chose category five or six.

Table 30:
Frequency table of likelihood of choosing to have sex with a stranger

Likelihood of choosing to have sex with a stranger	**Percentage of respondents**
0 – very unlikely	**5%**
1	**3%**
2	**5%**
3	8%
4	8%
5	9%
6 – very likely	**63%**

Table 30 shows that 63 percent of participants chose category six, which reflects that they are very unlikely to have sex with a partner that they do not know well. It is evident that this is the largest group by far. Five percent of students chose category nought, showing that they had very little motivation to protect themselves from contracting the HIV/Aids virus. 12 percent of students chose category nought, one and two (in total).

3.6 Stigmatisation and voluntary counselling and HIV testing (VCT)

This section provides information on the number of students in the sample who have received VCT and compares the responses of both females and males. It explores stigmatising attitudes and cross-tabulates students' openness to testing and attitude

towards people with HIV/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 detail in order to ascertain whether students perceive this process to be an effective preventative procedure

3.6.1 Quantity of participants who have received VCT

Respondents answered the following question:

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

⓪ Yes

① No

Table 31:
Frequency table showing students who have received VCT

I have received VCT	Number of respondents	Percentage of respondents
Yes	231	**35%**
No	427	**65%**

Table 31 indicates that 35 percent of students in the sample admitted to having had HIV/Aids testing. Sixty five percent had not received VCT.

3.6.2 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 32:
Cross-tabulation of gender and people receiving VCT

Gender	VCT –Yes	VCT – No
Male	**30%**	70%
Female	**37%**	63%

Table 32 suggests that 30 percent of the male respondents had received VCT, whereas 37 percent of female respondents had received VCT. This indicates that more female respondents than males had received VCT. This may indicate that females 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.

3.6.3 Stigmatising attitudes

Research has found that people are reluctant to receive VCT if there is a notable amount of stigmatisation towards PLWHAs in their community (Kalichman & Simbayi, 2003). It was important to consider the relationship between students' attitude towards PLWHAs and their openness to VCT.

Participants responded to the following statement:

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

⓪ Avoid the restaurant completely

① Simply lessen my frequency of dining there

② Still go there just as often as before

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

⓪ Yes

① No

Students' openness to testing and attitude towards people with HIV/Aids was explored in Table 33.

Table 33:
Cross-tabulation indicating students' openness to testing and attitude towards people with HIV/Aids

If I found out my chef was HIV-positive **VCT – Yes or No**	**Avoid Completely**	**Lessen Frequency**	**Go as often**
Yes	**17%**	27%	**56%**
No	**20%**	30%	**50%**

Table 33 shows a list of frequencies of students who have or have not received VCT and this is compared to their attitudes toward PLWHAs. The table indicates that 56 percent of respondents, who said they had undergone VCT, would go just as often to a restaurant even after having found out that the chef was HIV-positive. Seventeen percent of these respondents would avoid the restaurant completely. However, 50 percent of participants who had not gone for testing stated that they would go just as often to the same restaurant.

20 percent of participants who said "No" to having had VCT would avoid the restaurant completely which shows a higher percentage than the seventeen percent of participants (who would avoid the restaurant completely) who said "Yes" to having had VCT testing. This is a small and insignificant different (as indicated by the Chi-square below).

A Chi-square test was used: Participants were asked whether they had or had not received VCT and this data was compared with their perception of how they would act if they found out that the chef at their restaurant had HIV/Aids.

H_0: Individual's attitude towards PLWHAs is independent of whether they have or have not undergone VCT.

H_1: Individual's attitude towards PLWHAs is dependent on whether they have or have not undergone VCT.

The chi-square statistic indicated that there was no significant difference, χ^2 (2, N = 633) = 2.30, p = .32. As p > .05 it indicates that there is no relationship between an individual's attitude towards PLWHAs and whether they have or have not received VCT. The variables are independent meaning that an individual's attitude towards PLWHAs is not dependent on whether a participant has or has not received VCT.

3.6.4 Perceived risk and Voluntary Counselling and Testing

In this study, 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.

Participants responded to the following statements:

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

⓪ Yes

① No

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

⓪ A high risk group

① A medium risk group?

② A low risk group?

Table 34:
Cross-tabulation of perceived risk group and number of students who have received VCT

I have received VCT? Perceived risk group	Yes	No
High	45%	55%
Medium	38%	62%
Low	32%	68%

Table 34 shows that of the participants who perceived that they belonged to the high risk group, 45 percent had received VCT and 55 percent had not. Of the participants who perceived themselves as belonging to the medium risk group, 38 percent had received VCT and 62 percent had not. Of those who perceived themselves as belonging to the low risk group, 32 percent had received VCT and 68 percent had not. This indicates that students who perceive themselves as belonging to the high risk group, were more likely to have received VCT than any other risk group. Participants who perceived themselves as belonging to the low risk group were the 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 a high risk group. This emphasises the need for awareness campaigns to encourage 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 or have not undergone VCT.

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

The chi-square statistic indicated that there was no significant difference, χ^2 (2, N = 650) = 6.50, p = .04. As p < .05 it indicates that there is a relationship between individuals' perception of risk group and whether they have or have not undergone VCT. The variables are dependent which indicates that whether a participant perceives that they belong to the high, medium or low risk group is dependent on whether they have received VCT.

3.6.5 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 Rhodes University. It is important to consider how the students react to the counselling process in order to determine whether it is a valuable procedure.

Participants responded to the following statement:

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

⓪ Strongly Agree

① Agree

② Neutral

③ Disagree

④ Strongly disagree

Table 35:
Being put off by the counselling process

I am put off HIV testing because of counselling process	**Percentage of respondents**
Strongly Agree	8%
Agree	17%
Neutral	**23%**
Disagree	**30%**
Strongly Disagree	**22%**

The majority of students disagreed with the statement above. Thirty percent of students disagreed with the statement that they are put off going for HIV testing because of what they have heard about the counselling process. A further 22 percent strongly disagreed and 23 percent remained neutral. This means that in total 51 percent of participants showed a negative response to the statement:

I found the counselling process to be impersonal

⓪ Strongly Agree

① Agree

② Neutral

③ Disagree

④ Strongly disagree

Table 36
The counselling process – extent that it was found to be impersonal

The counselling process is impersonal	Percentage of respondents
Strongly Agree	3%
Agree	7%
Neutral	**12%**
Disagree	10%
Strongly Disagree	5%
Missing cases	**63%**

Table 36 reflects that 63 percent of participants did not respond. This is due to the fact that participants who had not received VCT were not required to answer the question.

The results indicate that most participants, who did respond, answered neutral (12 percent). This indicates that respondents did not feel strongly about the topic. It could also be considered that students did not know enough about it or that the questionnaire for the study was too long. Sixty three percent of participants did not answer the question.

CHAPTER FOUR

DISCUSSION

4.1 Introduction

The discussion of the results of this study are underpinned by the relevant literature as presented in the literature review. It will also account for the study's goals which aim to explore the perspectives and attitudes of Rhodes students towards HIV/Aids issues. 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 stigmatisation of HIV/Aids.

4.2 Risk-taking behaviour

4.2.1 Race

This study explored the relationship between race and perceived risk group. This was considered to be an important cross-tabulation as literature shows that research that people of different races have different attitudes towards HIV/Aids issues (D'Alessandro, Mikl & Kelley, 1995). If students of different races have different perceptions of risk it may indicate that certain races engage in more risky behaviour than others or that they are more aware of the retrovirus and how an individual may be infected.

Table 8 reflects whether students felt they belonged to a low, medium or high-risk group in terms of contracting HIV/Aids. It indicates that 63 percent of white respondents and 46 percent of black respondents felt that they belonged to the low-risk group. Findings indicate that the majority of both white and black students felt that they belonged to the low risk group in terms of their perception of whether they

might contract HIV/Aids. However, far more white participants chose the low risk group. As clarified by the chi-square, it is evident that perceived risk group is dependent on race.

According to Uys (2002) there is a trend whereby black people are othered and assumed more likely to catch HIV/Aids than other race groups. In terms of participants' perceptions about their own race group, the findings from the present study seem to support such research. For instance, of the students who felt that they belonged to the high risk group, 25 percent were black participants, six percent were white participants, five percent were Asian/Indian and 16 percent were coloured participants. This indicates that black students' perception of their risk group was a great deal higher than that of any other race group. This may indicate that black students engage in more risky behaviour than other students or that they are more aware of the retrovirus and how it is spread.

4.2.2 Rating risk behaviour

Students rated unprotected sex in terms of how much risk the individual would have in being infected with HIV/Aids. Table 10 indicates that 85 percent of respondents chose category six. Most respondents therefore indicated that they felt that unprotected sex was extremely risky. Nine percent 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.

4.2.3 Fear

Witte (2001) uses the Extended Parallel Process Model (EPPM) 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.

The literature states that fear is a good predictor of behavioural intentions. However, it was also found that high levels of fear weakened the tendency of students to make the safest decisions in terms of avoiding being infected with HIV/Aids. Van der Velde and Van der Pligt (1991) 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 56 percent of the present sample chose category six (paralysing fear) when rating the extent of the reaction they would feel if they found that they were HIV positive. 23 percent chose category five (the next highest category indicating fear). This indicates that most students are extremely fearful with regard to HIV/Aids infection and that students have knowledge of the retrovirus. Yet when compared to current behaviour (risk behaviour exists), there is an incongurency. It is necessary to find an explanation as to why risk behaviour happens when knowledge levels are high.

The present study shows that of students who would feel extreme fear (those who chose category six), a significant percentage (68 percent) had the greatest intention to use condoms. This is evident in Table 13. It seems then that fear is a good predictor of behavioural intentions among Rhodes University undergraduate students. This finding appears to contradict the previous suggestion that in practise, students focus on reducing anxiety rather than changing their behaviour. It should be taken into

consideration that there is a difference between a student's rating of how he/she perceives that he/she would act (intention), and how he/she would actually feel/act. Hale, Householder and Greene (2003, p. 259) assert that traditional attitude-behaviour research has found "weak correlations between attitude measures and performance of volitional behaviours." Helweg-Larsen and Collins (1997) discuss cognitive dissonance in terms of why information does not necessarily lead to behaviour change. An individual might know the rational reasons for using a condom but might be afraid of introducing the topic to a partner. Awareness campaigns should note that if cognitive dissonance has been evoked, then intention and behaviours are more likely to change if participants realise the inconsistency between their attitude and behaviour. Behaviour change would be more likely to occur through such a realisation rather than through the dissemination of new information. Cognitive dissonance can also be aroused when people have a high level of HIV/Aids information saturation.

This study has established that students have knowledge of HIV/Aids and that students are extremely fearful of being infected with HIV/Aids. Yet they may still engage in risky behaviour (indicated by the fact that many participants perceive that they may belong to the medium or high risk group) (See Table 19). Participants also show high intention to use condoms (See table 14). This indicates that there is an inconsistency between participants' attitudes and behaviour.

4.2.4 Gender and intention

In total 87 percent of both female and male respondents indicated that they have a high intention to use condoms. This is indicated in Table 11 where six percent chose category four, 14 percent chose category five and 67 percent chose category six. Reisen and Poppen (1995) indicate that according to their study, condom use was

more likely to occur in shorter relationships and for women who perceived low barriers to the use of condoms.

The difference in intention to use condoms in terms of the male and female groups in the present study is marginal. It should be emphasised that intention and actual practise may not be the same (Hale, Householder & Greene, 2003). According to Helweg-Larsen and Collins (1997) knowing the facts about HIV/Aids transmission is vital but it does not mean that people will change their behaviour. Cognitive dissonance can be aroused when an individual acts inconsistently with his/her attitudes. To reduce the resulting distress or anxiety, the individual feels motivated to eliminate the discomfort by changing the inconsistent behaviour or attitude.

4.2.5 Choice of partner

According to Yep (1993), 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 15. It shows that 63 percent of respondents would be very likely to avoid having sex with a person that they do not know well. A further 17 percent of the participants replied in the affirmative to the question. It must be noted however that some participants may choose not to have sex with a person they do not know well for moral or religious reasons.

In addition, Table 16 indicates that men were far more likely to disagree with the statement: "I would avoid having sex with a person I don't know well – (very unlikely

(0)... very likely (6))," than women were. Where 21 percent of the men disagreed with the above statement, only nine percent of the women disagreed. This indicates that the male respondents in this study may perceive lower severity. This could be due to several reasons: Seeley, Grellier & Barnett (2004) state 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 saturation point.

4.2.6 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 (Yep, 1993). This indicates that they would be more likely to engage in protective behaviour.

Table 17 indicates that 43 percent 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. 22 percent of students disagreed with the same statement. These students do not feel comfortable communicating safe sex practices to their partner. 35 percent of respondents chose the option "does not apply." Perhaps they chose this response as they do not have a partner or have not had a relationship. It is also possible that they do not feel comfortable answering the question.

Chwee, Eke-Huber, Eaddy and Collins (2005) conducted a study examining undergraduate Nigerian college students' HIV knowledge and perceptions. This study showed that males take part in more risky behaviour than females. Risky sexual

behaviour as measured through respondents' reactions to barriers indicates that the different genders behave differently. Kelly (2001) states that in small university communities, sexual partners tend to change fairly frequently. As Rhodes University is a typical small-town university in South Africa, it is interesting to note the response to this question.

This study's results show that 66 percent of males show an affirmative response to the statement: "I would avoid having sex with a person I don't know well – (very unlikely (0)... very likely (6))." An affirmative response was measured through respondents who chose categories four, five and six. This is indicated by Table 16. Eighty six percent of females showed an affirmative response to the same question. This is a noticeable difference of 20 percent, indicating that males are more likely to engage in risky sexual behaviour. It should be noted that studies find that while males are more prone to risky behaviour(s), they tend to be more honest in reporting their behaviour than females (Alexander & Fisher, 2003).

4.2.7 Perceived risk

Chwee et al. (2005) report that males take part in more risky behaviour than females. This study investigated perceived risk through various questions. Regarding the statement: "If I have sex, using a condom can prevent me from HIV infection (very unlikely (0)... very likely (6)" (as evident in Table 18), most participants chose category three, four and five (64 percent in total). This suggests that students do perceive condoms as being a fairly effective protective device in preventing infection with HIV/Aids. Twenty two percent of participants chose category 0, 1 and 2 (in total) indicating lack of knowledge. It could also be considered however that some participants may lack trust and confidence in condoms rather than lacking knowledge. It is clear in Table 18 that the majority of students do not see condoms as being one

hundred percent safe protection: thus if sexually active, it is likely that they perceive themselves to be susceptible to HIV/Aids. However it is necessary to take into account extraneous factors such as the fact that some participants who are sexually active are likely to be in a long-term relationship.

Perceived risk was also monitored in the present study through the statement: "HIV/Aids can be avoided." The following answer options were included: "Strongly Agree, Agree, Neutral, Disagree or Strongly Disagree." The findings indicated that only three percent of respondents had a negative response to this question and six percent chose neutral. According to the results 90 percent of respondents answered in the affirmative indicating that they do feel that HIV/Aids can be avoided. This infers that students feel empowered in terms of being able to protect themselves from being infected with HIV. This seems to contradict the findings of Table 19 which indicates that only 58 percent of respondents saw themselves as belonging to a low risk group for contracting HIV/Aids. This finding seems to suggest that respondents are aware that they can avoid contracting HIV/Aids, yet many of them may be engaging in risky sexual behaviour. An extremely high percentage of participants view themselves as belonging to a medium or high risk group (42 percent in total), but it should be considered that if misperceptions exist as to how the retrovirus is spread, then students' perception of risk group may be inaccurate.

4.2.8 Perception of exposure to HIV/Aids

Participants in the present study were asked to respond 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))." The findings from this question relate to issues of immunity, as it indicates a false sense of how safe an individual is. Table 24

indicates that 26 percent of respondents are not one hundred percent convinced of the fact that people having unsafe sex have a high risk of being infected with HIV (this statistic is generated by subtracting both the participants who chose category six and the missing participants from one hundred percent). It is possible that people who are in committed long-term relationships have unsafe sex. It may also be that one of the partners is not monogamous.

In the present study a cross-tabulation was conducted comparing consumption of alcohol and intention to use a condom. Participants responded to the following statements: "If I am sexually active, I intend to use a condom (very unlikely (0)... very likely (6)" and "Do you drink alcohol? Yes or No?" Sixty seven percent of respondents, who drink alcohol, chose category six. This indicated that it was very likely that they intended to use a condom. 71 percent of respondents who did not drink alcohol chose category six. This suggests that there is a greater possibility of a non drinker indicating that they are very likely to use a condom. However, this is a very small difference.

4.2.9 Risk and preventative ability of condoms

It was expected that if participants perceived that condoms were very likely to provide protection from HIV/Aids infection, they would perceive themselves as belonging to the low risk group. However, it should be considered that students may perceive that they are at risk of being infected because of other reasons. They may be anxious about an unfaithful partner, or they may feel that they could be infected through the use of dirty needles during drug-taking. It is also possible that they could have misconceptions like the myth that HIV/Aids is an air-borne retrovirus. The findings indicated 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 (See Table 20).

The chi-square test was used to study the relationship between perceived risk group and perceptions of a condom's ability to prevent HIV/Aids infection. Participants were asked whether they saw themselves belonging to a low, medium or high-risk group and this was compared with their perception of how likely it was that a condom could prevent them from HIV infection. The chi-square indicates that the perceived risk group is independent of respondents' perception about the condom's preventative ability: χ^2 (12, N= 640) = 9.14, p = .69. Whatever risk group participants felt they belonged to, did not determine whether they were likely to view a condom as being an effective source of protection.

It should be noted that various factors could play a role in students' perceptions of the efficacy of a condom. 57 percent of students chose the highest three categories when responding to the statement: "If I have sex, using a condom can prevent me from HIV infection (very unlikely (0)… very likely (6))." More than half the sample answered in the affirmative indicating their belief that a condom can prevent HIV infection. This is shown in Table 18. It is notable that 22 percent of respondents chose the first three categories, indicating their doubt that a condom can prevent HIV infection. Various factors could play a role in students' perceptions of the efficacy of a condom. For instance, there could be mistrust of condoms in terms of quality.

4.2.10 Attitudes towards condom use

Uys (2002) found that students generally had a negative attitude towards condom use. The results of the study implied that although students knew that risky behaviour could result in the contraction of HIV, they still engaged in unsafe sex. In the present

study, participants were asked to respond to the statement: "I feel as though I will contract HIV/Aids anyway, so I feel what is the point of wearing a condom? Strongly Agree, Agree, Neutral, Disagree, or Strongly Disagree." Table 21 suggested that 95 percent of participants showed a negative response to this question. Only two percent of participants indicated an affirmative response. This shows that students do not have a defeated attitude with regards to catching the virus/disease. A defeated attitude implies that students might feel as though they would be infected with HIV/Aids no matter what their actions were.

This study also researched the self-efficacy of participants concerning condom use. The majority of participants (86 percent) felt that they could insist that a condom be used when engaging in sexual activity (see Table 22). This statistic was generated by adding the percentage of participants who chose category four, five and six. 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 14 percent of students chose categories nought, one, two and three, indicating uncertainty or a negative response to the question.

The present research investigated motivation to protect from HIV infection through the statement: "If I am sexually active, I intend to use a condom – (very unlikely (0) ... very likely (6))." Table 25 indicated that 68 percent of respondents chose category six regarding their intention to use a condom. These respondents are very likely to use a condom if sexually active. This suggests that it is only this group of students who are certain of their intention to use a condom. This however does not

necessarily reflect that the other students are risk-takers as they may be in a committed long-term monogamous relationship.

4.3 Stigmatisation and social perceptions

4.3.1 Risk behaviour and fear

According to Boer and Emon (2004) participants in their study who showed inaccurate beliefs showed more fear and irritation and more stigmatising attitudes towards people with HIV/Aids. It may be that respondents are already confused and then become more fearful because they are scared of the HIV/Aids pandemic thus they become less inclined to change their behaviour. According to Van der Velde and Van der Pligt (1991) anxiety levels increase because of stressors such as this confusion and individuals do not focus on preventative behaviour(s). It may be that respondents are overwhelmed by the fast paced technological world of the twenty first century and by the demands on their time. Consequently it is not a priority to focus on preventative behaviour(s).

Table 26 indicates that five percent of students chose category six in their perception of whether kissing is a risk behaviour. Participants used a rating scale where 0 means no risk and 6 means extreme risk. This suggests that they perceive kissing to be an extremely risky way of contracting the condition. This is in fact not the case as although infection can be passed through deep (French) kissing, it is unlikely (Erbelding, 2002).

As mentioned before extreme levels of fear have been found to be associated with bad decision-making concerning preventative behaviour and HIV/Aids (Van der Velde & Van der Pligt, 1991). Participants in the study who had high fear levels were

found to focus their energy on reducing their anxiety levels rather than engaging in preventative behaviour. According to the literature misconceptions about HIV/Aids may result in high anxiety levels. In turn, this may result in increased fear and less preventative behaviour.

Table 27 indicates fear levels that students had if they were to find out that they had a positive HIV status. The results suggest that over half the sample would feel paralyzing fear if they were to find this out. This indicates that the majority of students may have high anxiety levels and may be focusing on reducing these levels rather than focusing on preventative behaviour.

Fear levels and respondents' perceptions of whether a condom could prevent them from HIV/Aids infection were examined. Participants rated their fear if they were to discover that they were HIV-positive. 0 was "not at all" ... and 6 was "very scared." This was cross-tabulated with findings relating to respondents' perceptions of whether a condom could prevent them from HIV infection.

Table 28 shows that generally high fear indicated fairly accurate beliefs about HIV prevention. It was found that 56 percent of respondents chose category four, five and six (in total) indicating high levels of fear if they were to find out that they were HIV positive. 14 percent of participants indicated extreme fear. It has been established that 42 percent of participants in the study perceive themselves as belonging to the medium or high risk group (See Table 19). From this information it is possible to infer that many participants in this study are presently very afraid of being infected.(even before being given an HIV-positive diagnosis).

Lew-Ting and Hsu (2002) suggest that inaccurate beliefs about HIV transmission promote fears about contagion. The findings of the research show that medium and high fear indicated fairly accurate beliefs about HIV prevention. Respondents who

had accurate beliefs about the extent that condoms can prevent HIV/Aids tended to show high fear levels. However respondents who showed extreme fear levels generally showed less accurate beliefs about the extent that condoms can prevent HIV/Aids.

4.3.2 Perceived risk of having unsafe sex

The research investigates perceived risk of having unsafe sex and accuracy of beliefs about HIV/Aids through the 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)" (see Table 24). Four percent of students chose category nought, reflecting that they think it is very unlikely that people who are having unsafe sex have a high risk of being infected with HIV. In total seven percent of participants chose the lowest three categories indicating that they think it is unlikely that people having unsafe sex have a high risk of being infected with HIV. This is a much lower percentage than the 91 percent of students who chose the highest three categories (in total).

4.3.3 Self-efficacy of condom use

The study uses a cross-tabulation of self-efficacy of condom use and gender to form a comprehensive understanding of such social perceptions. Self-efficacy refers to the participants' perceived ability to perform recommended behaviour (Tay, Watson & Radbourne, 2001). Self-efficacy of condom use in this instance refers to the respondents' perception of whether they can in fact insist on condom use. Sixty eight percent of men indicated that they were certain they could insist on condom use and 72 percent of women chose the same category (see Table 24). Men and women indicated a similar perception of their confidence in insisting on condom use. This

implies that both male and female participants are able to discuss topics such as sex and condom use and this may assist in prevention efforts.

4.3.4 Motivation to protect from HIV infection

Uys (2002) mentions that othering of the disease is directed towards homosexuals, the poor, black groups and students who stay in residence. For some, the causality of the retrovirus was the fact that they did not consider themselves as being at risk of HIV/Aids infection. Stangor and Crandall (2000) explain how group stereotypes result in risk stereotypes of HIV infection-related behaviour. An example of such a risk stereotype would be promiscuous conduct. Some people perceive themselves to be at less risk of HIV infection because they do not have the same characteristics as people commonly thought (of as high risk) to contract the retrovirus. For instance, if a wealthy individual believes the stereotype that most HIV/Aids sufferers are poor, the individual may believe him or herself to be immune to the virus.

Motivation to protect from HIV infection has been measured in other studies such as that of Boer and Emons (2004). Their study measured motivation firstly through participants' intention to use condoms and secondly through their intention to avoid casual sex. The latter was used in the present study to observe motivation to protect from HIV infection. Motivation to protect from HIV infection can be measured through the statement: "I would avoid having sex with a person I don't know well – (very unlikely (0)... very likely (6)" (see Table 31). In terms of the sample, it reflects that only 63 percent of students are highly motivated to protect themselves from the contraction of HIV/Aids. Five percent of the respondents chose the category which reflected that they were very unlikely to avoid having sex with a person they do not know well. They would engage in sexual intercourse with a stranger without it being a

concern. 12 percent of students chose category nought, one and two (in total). This is a relatively high percentage of students who, it seems, show little motivation to protect themselves from being infected with the virus.

4.4 Stigmatisation and Voluntary Counselling and HIV Testing

4.4.1 Quantity of students who know their status

Peltzer et al. (2004) conducted a study which inferred that 20 percent of the students in the survey admitted to having been tested. According to the survey 20 percent of American students reported that they had been tested while only 10 percent of Indian students admitted to having been tested for HIV/Aids.

According to the study, 35 percent of participants had received VCT. This is indicated in Table 31. This is a higher percentage than that of the study conducted by Peltzer et al. (2004). However Kalichman & Simbayi's (2003) findings indicated that 47 percent of their participants had undergone VCT, and that both those who had and had not been tested experienced high risks for exposure to HIV. Their study explored the relation between HIV testing history, attitudes towards testing, and stigmatisation associated with HIV/Aids. Their study also revealed that people only received VCT if they perceived stigmatisation in their community to be at an acceptable level or if they perceived that by receiving VCT, it may reduce perceptions of stigmatisation. 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, Table 33 shows that of the women, 37 percent had undergone testing. This is close to the 42 percent found by De Paoli, Manongi and Klepp (2004).

It is suggested however that only 30 percent 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.

4.4.2 Stigmatising attitudes

Research among 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 (Peltzer, Nzewi & Mohan, 2004). A cross-tabulation in the present study of whether students have or have not been tested and their attitude towards PLWHA's revealed that 56 percent of respondents who said they had received VCT, would go just as often to a restaurant even after having found out that the chef was HIV-positive (see Table 33). This corroborates the findings of Peltzer, Nzewi and Mohan (2004). However, 50 percent of participants who had not gone for testing stated that they would go just as often to the same restaurant. This indicates that among those who have not been tested, almost half the sample showed a positive attitude to PLWHAs. It also indicates that half the sample (who had not been tested) showed stigmatising attitudes towards those with HIV/Aids. The results infer that if an individual has received VCT, he/she is more likely to have a positive attitude towards PLWHAs. This indicates that prevention activities should include a focus on increasing VCT on campus. According to results gleaned from the chi-square test, an individual's attitude towards PLWHAs is independent of whether they have or have not received VCT. It can be inferred that prevention activities should not only be centred on the VCT process, but also on other activities on campus such as awareness campaigns.

4.4.3 The VCT process

Thirty percent of male participants and 37 percent of female participants had received VCT (see Table 32). This suggests that women are more likely to be tested. 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, 35 percent of participants had received VCT (see Table 31).

According to De Paoli et al. (2004), willingness to accept VCT is linked to perceived high personal susceptibility. This indicates that those who are willing to be tested for HIV/Aids, are likely to perceive them Table 34 indicates that participants who perceived that they belonged to the high risk group were more likely to have received VCT than those who chose the medium or low risk group. The Chi-square test confirms that there is a significant relationship between these variables.

selves as susceptible to being infected with the retrovirus.

Table 35 looks at students' reaction to the statement that they are put off going for HIV testing because of what they have heard about the counselling process. In total, 52 percent of participants showed a negative response to the statement, while 25 percent showed an affirmative response.

In trying to find out why participants might have problems with VCT, respondents were asked if they found the counselling process to be impersonal. Participants were only asked to respond to this question if they had received VCT. However, the majority of respondents (63 percent) did not respond to the question. Table 37 infers that the majority of participants who responded, gave a neutral response (33 percent). This may indicate that students did not feel strongly about the statement and were not critical of the counselling part of VCT for being impersonal. It could also imply lack of knowledge about the process of VCT.

Research indicates that people are not opposed to VCT, but that there is a great deal of mistrust towards health care professionals. Van Dyk and Van Dyk (2003) found that a general fear of discrimination and rejection existed from medical professionals, related health care professionals, sexual partners and from the community. The present study seems to underpin the assumption that students are not opposed to VCT.

CHAPTER FIVE

CONCLUSION

5.1 Final conclusion

Much research has been conducted in South African tertiary institutions on social conditions, economic factors and behaviour. However, ongoing research needs to be conducted as the South African social/cultural/economic and environmental context is a dynamic one. The research is therefore appropriate to the context.

This study has used a sample of six hundred and seventy five Rhodes University undergraduates and has focused on:

- students' perception of risk and perception of risk-taking behaviour
- social perceptions with an emphasis on stigmatisation.
- students' attitudes towards voluntary counselling and HIV testing (VCT)

The HBM 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 contextualised to Rhodes University students. The findings of the survey were analysed and interpreted in terms of related theory. By interpreting the findings in terms of relevant theory, a better understanding of health behaviour was generated, and it provided a foundation for interventions to advance public health.

The findings indicate that students show high intention levels to engage in preventative behaviour. However, in reality intention may not translate into actual behaviour, as many students perceive themselves as belonging to a high or medium-risk group in terms of being infected with HIV.

Findings indicate that respondents may evoke cognitive dissonance where intention does not translate into behaviour change (Helweg-Larsen & Collins, 1997). Such findings underscore the need for clarification of perceived risk of infection in order to understand why students engage in risk-taking behaviour. For this study, perceived risk group was dependent on race. Black students' perception of their risk group was higher than that of any other race group. This may indicate that black students are engaging in more risky behaviour in terms of being infected with HIV/Aids or that they are more aware of how people are infected with the retrovirus. As a result they may perceive themselves to belong to higher risk group than they belong to in reality.

Over half of the sample indicated that they would experience high levels of fear if they were to find out that they were HIV-positive. Those with medium and high fear indicated fairly accurate beliefs about the extent that condoms can prevent HIV/Aids. Respondents who had extreme fear levels indicated less accurate beliefs about HIV/Aids prevention.

Many students have some misconceptions which, according to the literature, may result in high anxiety levels. In turn, this may result in increased fear and a focus on reducing anxiety rather than increasing preventative behaviour (Van der Velde & Van der Pligt (1991). This could be an explanation as to why a well-educated person might engage in risky behaviour.

Respondents who had accurate beliefs about the extent that condoms can prevent HIV/Aids tended to show high fear levels. However respondents who showed extreme fear levels generally showed less accurate beliefs about the extent that condoms can prevent HIV/Aids. This finding supports the conclusions made by Van der Velde and

Van der Pligt (1991) which suggest that moderate levels of fear result in the most responsible behaviour.

Regarding protective behaviour, two thirds 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. One third of respondents disagreed with the same statement. This indicates that the majority of respondents feel that they are able to take this preventative behaviour.

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 the majority of 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. One fifth of respondents answered in the negative about the likelihood of a condom preventing HIV infection and only one fifth of respondents thought that it was very likely that condoms could prevent HIV/Aids. This indicates the need for a focus on the preventative ability of condoms in prevention programmes. It seems that students distrust condoms as a form of complete prevention and may be misinformed about their preventative ability. However, it should be noted that there are a significant number of students 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 unlikely to be using them. It is possible that cognitive dissonance results in a discrepancy between participants' attitudes and behaviour (Helweg-Larsens & Collins, 1997). 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.

This study reveals that less than two thirds of students are highly motivated to protect themselves from the contraction of HIV/Aids. 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.

This study then explored issues relating to stigmatisation and VCT. One third of participants had received VCT and female respondents indicated that they were more likely to have VCT than males. Results show that students who had received VCT showed less stigmatising attitudes towards PLWHAs. However an individual's attitude towards PLWHAs was not dependent on whether the participant had received VCT. Participants who perceived that they belonged to the high risk group were more likely to have received VCT than the medium and low group. This may indicate that people organise to receive VCT when they perceive that they may be HIV positive rather than as a precautionary procedure. This finding suggests that awareness campaigns on campus should emphasise the need for VCT before engaging in sexual activity with a partner. Those who had received VCT, had a more positive attitude towards the counselling process.

The findings indicate that the HIV epidemic among undergraduate students continues, in part because, although in theory, students show high intention levels, in practise they do not participate in low risk behaviour. Over a third of students indicate that they perceive themselves belonging to high or medium - risk groups as opposed

to the low risk group. The findings seem to indicate that this could be due to the fact that students have sex with other students that they do not know well and due to misconceptions about condoms as preventative behaviour. They engage in cognitive dissonance where there is a discrepancy between what respondents believe and how they act. Respondent's attitudes indicate that this could be as a result of factors like patriarchy which still exists in society today.

5.2 Limitations

Some respondents felt that due to their sexual orientation, certain questions did not apply to them. For instance, when answering the following statement: "When I want to, I know that I can insist on using a condom (very unlikely (0)... very likely (6)," the respondent stated: "Does not apply. I am a lesbian." The respondent's comment is invalid as some lesbians and homosexuals do have sex with heterosexuals (Lippa, 2000).

In addition, it can be inferred that a few students felt that the race question was inappropriate and refused to answer it. One student stated: "My mother is white, father Indian, therefore I don't like to choose one over the other and I don't consider myself coloured." Another respondent stated: "insulted: I hate the race questions." However, it was felt that the race question was relevant to this study. Previous research has shown connections between race and concepts like othering and these comparisons are relevant to the present study (Uys, 2002).

A further limitation was the inadequate completion of questionnaires. Some items were incomplete. These omissions may indicate sensitivity to some questions. Perhaps the questionnaire was too long or respondents did not fully understand the questions.

Literature is limited on VCT, particularly regarding barriers. This study could contribute to current knowledge available in this regard.

With such a large sample the chi-square statistic does have limitations as it is more likely to show significant results. An Independent T test would have been more appropriate for such a large study.

5.3 Further research

Research could investigate cognitive dissonance further in order to understand why respondents continue to engage in risky behaviour. This could involve both quantitative and qualitative 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 campuses 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.

Research could be conducted involving a survey questionnaire with multi-item scales. This would result in increased reliability of measures (Babbie & Mouton, 2006).

Finally, a study could be conducted involving the application of parametric statistics. This would mean a lesser chance of statistical significance being found as the sample is made up of six hundred and seventy five respondents.

5.4 Ethical issues

Due to stigmatisation and human rights issues connected to HIV/Aids, 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 recognised.

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APPENDICES

Appendix A:

Ethical standards protocol for focus group

RHODES UNIVERSITY
DEPARTMENT OF PSYCHOLOGY
AGREEMENT
BETWEEN STUDENT RESEARCHER AND
RESEARCH PARTICIPANT

I (particpant's name) _____ agree to participate in the research project of Robyn Weston on the attitudes and perceptions of Rhodes students towards 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 Rhodes University.

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 perceptions.

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 around HIV/AIDS.

4. I may be asked to comment on my personal experience/ attitude or perceptions around 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.

7. 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.

8. The report on the project may contain information about my personal experiences, attitudes and behaviours, but the report will be designed in such a way that I will not be able to be identified by the general reader.

Signed on (Date) _____

(Participant) _____

(Researcher) _____

(Witness) _____

2.2.1 Consent will be gained via the departmental Research Projects Review Committee, the Senate Ethical Standards Committee and the Higher Degrees Committee.

3.1.2 There is some risk that participants, third parties or the community at large will suffer harm, embarrassment or offence, as a result of the implementation of this project.

This is due to the sensitive nature of the HIV/AIDS topic: however it should be noted that the study is voluntary; participants may withdraw at any time; and if a problem is encountered, students will be referred to the counselling services on campus.

Reasons why the research should be conducted include such facts as the assistance that such a project will give to counselling services on campus; the development of research that will be applicable to the broader community; and its contribution to data about HIV/AIDS-related development programmes.

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 perceive to be risky behaviour in terms of HIV? Do you come across this on campus?

4.2 What do you think risk behaviour is like at Rhodes in comparison with other universities/ institutions?

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
Robyn	R	(group facilitator)	N/A
Mildred	Mi	Masters in Research Psychology	24
Martha	M	Post-graduate Certificate in Education (PGCE)	23
Lisa	L	PGCE	22
Katherine	K	Tax Honours	22
Jim	J	Masters in Entomology	24
Aneshri	A	PGCE	28
Sovita	S	Honours in Botany	22

Colour coding Key

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

Theme	Colour
Treatment of retrovirus	Red
Stigmatisation	Grey
HIV/Aids awareness	Yellow
VCT	Green
HIV status	Brown
Risk behaviour	Pink
Social issues	Turquoise

R: 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 absolutely fine.

Also don't worry if you don't have too many opinions – that is helpful in itself.

I have some questions to promote discussion, but I really just want you to chat. If the conversation seems to veer off course, that's fine too. I will try and keep you on topic by asking new questions, but only really if the conversation stops.

A video is shown, highlighting the frightening HIV/AIDS statistics in Africa. It is called Turning the tide on AIDS (director: Jonathan Crawford). It comments on how various organisations and Non Governmental Organisations can make a change to individuals' lives.

J: When was it made (referring to video)?

R: Last year.

S: How do babies not catch Aids from their parents?

J: Parents may get it when their children are very young. In shacks and huts and poor conditions you can catch it more quickly.

K: Isn't there that medicine that stops you getting it?

J: Ja, an antiretroviral.

Every day life

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

General: No

J: I know second-hand. People, like I know of them but not my close friends.

K: I know people who have died of TB, but it's difficult to know

J: But is it TB or "TB" in inverted commas?

A: Why don't we know of people who do have Aids, that's what comes to my mind?

S: We do, we just don't know they have it.

Treatment

J: You can get treatment to keep it away/delay it for ten years, so do your friends really need to know about it? How will they react about it? Realistically, people in our situation are different to those who get it and die in two years.

S: As students we can afford proper nutrition. It's the same bracket as flu…

J: Ja it's sitting inside your body – mutating at a high rate. It's about blocking pathways.

M: Aren't pharmaceutical companies making a lot of money out of Aids?

L: Are they? I didn't know that.

J: A private researcher who patents a cure for Aids – there must be people getting paid for it. It's only appropriate for making new money – They could have hidden a cure.

S: Rhodes has done so much research on an Aids cure.

K: Are they? I didn't know that?

S: But they won't ever find a cure because the virus mutates…

J: Some leading research on it has been done here. They may not get a vaccine because of mutation, but if you block the pathways… Huge money has been given from NGO's to fight Aids. I mean Bill Gates gave a hundred million dollars. It needs to be worldwide though. It needs to be funded in poor countries. First world countries can fund themselves.

Stigma

R: 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?

S: Well we're all friends so that makes a difference. I do feel comfortable.

M: It depends on how personal the questions are.

J: Well, we all don't know somebody whose been affected by it.

L: I actually know someone personally who does have it. I do feel uncomfortable talking about it, see that person has had a hard time. Talking globally is fine, but at a personal level… At a global level, it still seems surreal, even though I know someone…

J: Compared to how many people we know though, we don't know of that many with HIV. So many people are going to die – two percent of the population. But we're living in a branch of society where death is less likely.

M: I worked at a pre-primary for a while, and a little boy died. He was from a poorer background. We think we're a lower risk group, but are we?

J: In second year we had a talk, and they said that if you had sex with seven people at Rhodes, one of them would have Aids. The scary thing is that that stat still puts us in a low-risk group.

M: What are the stats?

R: No-one knows accurately.

J: They need to randomly sample, and they can't do that for HIV stats.

R: Rhodes won't reveal their stats.

J: They're unnatural statistics anyway. Irresponsible people who are worried about it (unsafe sex) go for testing.

S: Ok, maybe this is unrelated but a teacher we knew in Zim was in an accident and needed blood. They were given the wrong blood type and died.

Mi: Also in Zim, two of our cooks died of Aids. It's a bit concerning because they cooked our food. My mom's friend – a very respectable, wealthy person, had a blood transfusion and he got Aids.

J: Mildred, with food, if you expose the virus to nitrogen, it dies, so it would have to be wet blood.

M: At home where we live in Natal, there's mass burials every single weekend without fail.

J: That's because it's rural Natal – high incidence.

S: There are so many deaths from Aids in Zim. I heard they were digging up bodies to make space.

J: You can't get Aids except if you have a cut in your mouth or stomach ulcers…

Campaigns/ Aids Awareness

A: There don't seem to be so many campaigns looking at the seriousness of the situation.

L: Students get sick of campaigns though.

J: It doesn't really hit home. It's the same stuff (implied over and over again). It's so repetitive.

S: What are they hoping to achieve?

L: Hoping people will change their lifestyles.

S: How else would they go about doing it?

L: It only hits home when it hits home.

J: People who know some one with Aids have a different outlook from those who don't know some-one with Aids.

Testing

M: What do you think the stats are for people who go for testing?

J: People don't want to go for preparatory counselling.

S: The testing process is simpler now. My boyfriend and I went together. It was the most nerve-racking thing. You wonder how you could have gotten it. The counselling irritated me. It was so impersonal – really annoying. I felt really uncomfortable talking about it – they should do it some other way. It lasts ten minutes and they're

asking if you have thought about your future. I don't know if they should prolong the counselling though. I just wanted to have the test.

L: I heard the same, that people thought the counselling was really useless.

R: I heard that there wasn't enough counselling.

S: I had to go back the next day for more counselling. It just made me nervous and uncomfortable, nothing else.

J: People are worried about that – it's a big deterrent. You want to be in and out. It should be done properly.

S: If I did come back and had Aids, that counselling would not have helped. Counseling should be voluntary – at the beginning, the counselling did nothing.

K: Counsellors have just seen so many people. They don't care anymore. Caring interaction is so important. Those counsellors must get bored hearing the same thing every time. It's the same as a vet who has to distance himself from animals dying. It must be hard day in and day out.

J: That's animals, this is people. If they feel like that, they need more staff so they don't get tired of counselling.

K: But you can see where they are coming from.

J: But you're supposed to be personal in this

HIV Status

R: Should people be open about their HIV status?

S: It's important to know your HIV status. Even if you have no reason to believe you might have it, things might go wrong. For example, an operation… I had my appendix out, and two months later my doctor died of Aids. For your own peace of mind, you should have the test. Especially if you do get into a relationship. My mom did react a little crazy… I didn't want to tell her about it… she didn't understand why. I said,

"don't you think it's good to know your HIV status?" So many people go for HIV tests during that campaign.

J: It's about peace of mind personally.

S: It's important to remember the window period.

M: three months

J: six weeks now. When giving blood, they ask you: do you have any reason to believe you have HIV? If anything's wrong, they throw it out.

R: If you gay they won't take your blood.

S: Do they tell you?

J: Ja, they phone you if there's something wrong with your blood.

L: I got worried because the blood bank phoned me on my birthday. Zim students aren't allowed to donate blood.

(laughter)

L: No I mean because of malaria. There's too much risk.

Risk behaviour

R: What do you perceive to be risky behaviour in terms of HIV? Do you come across this on campus?

S: Rhodes is like a 10c a shot whorehouse – people think it's so funny but it's not. And as much as we get irritated with the university, it (risky sexual behaviour) is connected to alcohol.

J: Well with operations and that risk… you can't do anything about that.

S: I want to go to people and say "What are you doing" – with this guy last night. It (risky sexual behaviour) is so much associated with drinking. You lose your inhibitions. Lucky I have Ben (pseudonym for her boyfriend).

M: The problem is there's not much to do in Grahamstown.

L: The whole campaign-thing is only addressing that (risky sexual behaviour) this year. Before it's been more of a global thing. Campaigns here should be aimed at drinking – people don't want to hear that.

S: Sometimes what you don't want to hear, you need to hear.

J: It needs to be personally directed.

S: Don't say 'Don't get drunk, you'll get HIV' (implied on posters). But think. I'm sure alcohol is an important reason.

J: There are so many campaigns about not drinking now; they need another way of addressing it.

S: You need to make people aware of why we have an incredibly high rate. The people who sleep around are too scared to go – (implied: for testing). They would rather ignore it and think…

K: I had a friend at school, who had a boyfriend who had Aids. She still slept with him. She said she wore a condom, and wouldn't get it. But then she got pregnant.

J: With condoms breaking you can always get it.

M: I heard that among poor black people, there's a state of mind that you're going to get it anyway, it's like giving up. So why wear condom?

R: What do you think risk behaviour is like at Rhodes in comparison with other universities/institutions?

S: Rhodes is the same as any other university. University is university. Other universities are just as bad, whether a small campus or not. UCT and UNP. Wow in bigger towns, there's a breakdown. People will go home with whoever's in town.

J: At Rhodes you will only go out with another student; at bigger universities, you can go out with anyone.

M: Ja, I was at UNP and it's the same. The risky behaviour is very similar to Rhodes. It's a big drinking culture.

S: It's a phase we go through – promiscuity. People are definitely more sexually active at university than anywhere else.

J: University life is seen as the last years of your young life.

L: A lot has been done – speaking to first years. The interpersonal thing is more effective. I heard of first years who were scared to go out after that – maybe better.

J: It's important to make contact with people. When there are so many posters, it just goes over your head.

S: I heard a scary statistic – They ran out of a year's supply of morning-after pills during O-week either last year or this year.

M: At St Andrews, there's so much pressure on boys to not be a virgin by the time they leave school.

S: There's definitely more pressure on boys.

J: Use a condom then. It's really about looking after yourself, to reduce the risk. It's not about the orphans' thing for our age group. That will just be a stat for us.

S: We're at a stage where we over pressure…

M: It will affect us (referring to Aids-orphans). It will affect crime, the economy, and politics.

Government action

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

S: HIV doesn't cause Aids (said ironically).

J: There is as strong a correlation between poverty and Aids and HIV and Aids.

S: It's difficult for people with a lower income to look after themselves. Fruit is so expensive. It's crazy. I bought one orange for R2 the other day.

J: Well if they can't give them fruit and veg as often as they need it, they could at least give them Antiretrovirals. After the Anthrax scare in the USA, why did they produce a free Anthrax cure? But it's not just our country, it's across the board.

J: Whether the medication is free or you have to pay - changes peoples' attitudes so much.

S: If they had a cure, it would make people care less about getting it.

J: The average citizen in Malawi earns less than the subsidy for a cow in the EU. The poverty issue is so huge, people can't afford (implied: ARVs). Should they charge people for ARVs?

K: Why does the government hand out a free bunch of condoms instead of saying don't do it?

A: That's just encouraging them.

L: The most successful story was Uganda. They had an abstinence policy – so then is it not a valid option?

S: The problem is now you've set a precedent. Everywhere you go there are free condoms. So you can't take them away now.

J: Worldwide people are having sex younger and more of them

S: It's because of the condom and the pill. They did the wrong thing by giving out free condoms.

Social perceptions and stigma

R: I just want to read a few lines from a newspaper article written in 1998.

"MOB KILLS WOMAN FOR TELLING TRUTH

Health worker stoned and beaten for confession about HIV

The brutal killing of an AIDS worker who was beaten to death after going public about being HIV positive has unleashed a wave of outrage.

Health worker Gugu Dlamini, 36, of KwaMancinza, near Durban, died after being assaulted by a mob who accused her of degrading her neighbourhood by disclosing that she had the disease.

She said that on the day of the attack, Dlamini had been slapped and punched by a man who had asked her why she had gone public about her status when there were a lot of others like her in the area who kept quiet about it" (Bareng-batho Kortjaas and S'Thembiso Msomi, 1998).

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

S: Not anger.

A: I don't know anyone but they must have done something to deserve it.

J: It only takes once – it can so easily happen.

A: If I met some-one, my first reaction would be, they deserve it.

L: It depends on the person and the context. I'm sympathetic to children. But with my friend, I was angry, because I felt he should have known better.

R: Some-one I know slept with her boyfriend for the first time and got HIV.

J: It only takes once, some people just get away with it.

S: It's so important to know your status. It took me and my boyfriend until the third term to have an Aids test. We should have gone at the beginning of our relationship.

J: It's very difficult after a month (implied: of dating some-one) to say we should go for an Aids test. It's almost an insult.

S: I would never say – You, have an Aids test. Rather you should do it together. Still, you can't say in the heat of the moment, let's have an Aids test.

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

J: Stats show that percentage-wise there are correlates with lower income and education.

S: Ja, education…

K: We've been aware of it since we've been ten years old, were taught about Aids at school.

J: The important thing is we've grown up in houses with different rooms. In rural South Africa, there will be one bedroom for the whole family. Sooner or later, you're going to see sex, so you're sexually aware at a younger age. It's key in South Africa – poor people in those conditions…

Appendix D:

HIV/Aids Attitudes and Perceptions Questionnaire

Dear Student

As part of my Research Psychology Masters Thesis I am exploring the attitudes and perceptions of Rhodes undergraduate students towards HIV/AIDS issues. This study focuses particularly on risk-taking behaviour, testing and stigma.

Please note that this questionnaire is completely confidential and anonymous and it is not possible to establish your identity through your response. Your participation is voluntary, and much appreciated. If you would like feedback on this survey, please contact me at g01w0153@campus.ru.ac.za

Please colour in only one circle below for each question. If you wish to comment further on any questions, turn over the answer sheet and write the number of the question and your comment.

Demographic Questions

1. Are you male or female?
⓪ Male
① Female

2. What is your social (actual) year of study (i.e. how long have you been studying)?
⓪ First
① Second
② Third
③ Fourth
④ Fifth
⑤ Sixth

3. What is your academic year of study?
⓪ First
① Second
② Third

4. Which racial category do you belong to?
⓪Black
① White
② Indian
③ Coloured
④ Asian
⑤ Other _____ (please write question number and answer on back of answer sheet)

5. Which faculty are you in?

⓪ Commerce
① Humanities
② Science
③ Law
④ Other _____ (please write question number and answer on back of answer sheet)

6. What is your sexual orientation?
⓪ Heterosexual
① Bisexual
② Homosexual
③ Other _____ (please write question number and answer on back of answer sheet)

7. Where do you live in Grahamstown?
⓪ In residence
① In digs
② At home

8. Do you drink alcohol?
⓪ Yes
① No

9. Do you take drugs?
⓪ Yes
① No

10. Do you know the possible consequences of practising unsafe sex?
① Yes
② No

11. How many people do you know with HIV/AIDS?

⓪ None
① One person
② Two to five people
③ Six to ten people
④ more than ten people

12. If you know some-one with HIV/AIDS, has this influenced your perception of HIV/AIDS?

⓪ Greatly
① Moderately
② Slightly
③ Not at all
④ Not applicable as I know no-one with HIV/Aids

13. The incidence rate of HIV/AIDS on Rhodes campus (Grahamstown) is very low

⓪ Strongly Agree
① Agree
② Neutral
③ Disagree
④ Strongly Disagree

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

⓪ Strongly Agree
① Agree
② Neutral
③ Disagree
④ Strongly Disagree

15. How do you view the disease/virus?

⓪ A guarantee of death
① Curable
② A treatable chronic condition for which I will take medication for the rest of my life
③ None of the above

16. HIV/AIDS can be avoided:

⓪ Strongly Agree
① Agree
② Neutral
③ Disagree
④ Strongly Disagree

17. If you found out you were HIV positive, how scared would you feel if 0 was not at all, and 6 was paralysing fear. Please colour in the appropriate answer

⓪ ① ② ③ ④ ⑤ ⑥

18. Peer pressure is an important factor in perpetuating risk behaviour in terms of HIV/AIDS

⓪ Strongly Agree
① Agree
② Neutral
③ Disagree
④ Strongly Disagree

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

⓪ Strongly Agree
① Agree
② Neutral
③ Disagree
④ Strongly Disagree

20. I feel as though I will contract HIV/AIDS anyway, so I feel what's the point of wearing a condom?
⓪ Strongly Agree
① Agree
② Neutral
③ Disagree
④ Strongly Disagree

21. If there were a cure, people would engage in HIV risk behaviour more readily.

⓪ Strongly Agree
① Agree
② Neutral
③ Disagree
④ 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).

22. Eating from the same plate as some-one who is HIV-positive
⓪ ① ② ③ ④ ⑤ ⑥
23. Having unprotected sex
⓪ ① ② ③ ④ ⑤ ⑥
24. Shaking hands with some-one who is HIV-positive
⓪ ① ② ③ ④ ⑤ ⑥
25. Kissing some-one who is HIV-positive
⓪ ① ② ③ ④ ⑤ ⑥
26. Sharing needles when taking drugs
⓪ ① ② ③ ④ ⑤ ⑥
27. Using the same bathroom facilities as someone who is HIV-positive
⓪ ① ② ③ ④ ⑤ ⑥

28. In terms of catching HIV/AIDS, do you perceive yourself to be part of
⓪ A high risk group
① A medium risk group?
② A low risk group?

29. It is important to know one's HIV status
⓪ Strongly Agree
① Agree
② Neutral
③ Disagree
④ Strongly Disagree

If you answered Strongly Agree or Agree to the above question, then answer question 30 below. If you answered Neutral, Disagree or Strongly Disagree, skip to question 31.

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

⓪ I can have peace of mind
① I will be less likely to infect some-one else
② I can start taking medication to prolong my life
③ All of the above
④ None of the above
⑤ Other _____ (please write question number and answer on back of answer sheet)

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

⓪ Strongly Agree
① Agree
② Neutral
③ Disagree
④ Strongly disagree

32. 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.

⓪ Yes
① No

33. I found the counselling process to be impersonal

⓪ Strongly Agree
① Agree
② Neutral
③ Disagree
④ Strongly disagree

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

⓪ Too short
① Just right
② Too long

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

⓪ Strongly Agree
① Agree
② Neutral
③ Disagree
④ Strongly disagree

36. People who sleep around are more likely to go for HIV/AIDS testing
⓪ Strongly Agree
① Agree
② Neutral
③ Disagree
④ Strongly disagree

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

⓪ Yes
① No
② Does not apply

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

⓪ Avoid the restaurant completely
① Simply lessen my frequency of dining there
② Still go there just as often as before

39. If you are homosexual you are more likely to be HIV infected than if you are heterosexual
⓪ Strongly Agree
① Agree
② Neutral
③ Disagree
④ Strongly disagree

40. How would you react if a friend told you he/she was HIV-positive as a result of his/her own risky behaviour?
⓪ I would distance myself from him/her
① I would be supportive
② Other _____ (please write question number and answer on back of answer sheet)

41. 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

42. **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

43. **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

44. **If I am sexually active, I intend to use a condom – (very unlikely (0)... very likely (6))**
⓪ ① ② ③ ④ ⑤ ⑥

45. **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

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. It (risky sexual behaviour) is so much associated with drinking. You lose your inhibitions. Theme: risk behaviour	8. Do you drink alcohol? ⓪ Yes ① No
Why don't we know of people who do have Aids, that's what comes to my mind? We do, we just don't know they have it. Theme: HIV/Aids awareness	11. How many people do you know with HIV/AIDS? ⓪ None ① one person ② two to five people ③ six to ten people ④ more than 10 people
Well, we all don't know somebody whose been affected by it. People who know some one with Aids have a different outlook from those who don't know some-one with Aids. I actually know someone personally who does have it. I do feel uncomfortable talking about it, see that person has had a hard time. Talking globally is fine, but at a personal level… At a global level, it still seems surreal, even though I know someone… Theme: stigmatisation	12. If you know some-one with HIV/AIDS, has this influenced your perception of HIV/AIDS? ⓪ Greatly ① Moderately ② Slightly ③ Not at all ④ Not applicable as I know no-one with HIV/AIDS
In 2nd year we had a talk, and they said that if you had sex with 7 people at Rhodes, 1 of them would have Aids. The scary thing is that that stat still puts us in a low-risk group. Rhodes won't reveal their stats. Theme: HIV/Aids, awareness, stigma, risk behaviour.	13. The incidence rate of HIV/AIDS on Rhodes campus (Grahamstown) is very low ⓪ Strongly Agree ① Agree ② Neutral ③ Disagree ④ Strongly Disagree

Statement/s from focus group participants	**Related question from survey questionnaire**
I don't know anyone but they must have done something to deserve it. My mom did react a little crazy… I didn't want to tell her about it… she didn't understand why. I said don't you think it's good to know your HIV status. Theme: stigmatisation	
You can get treatment to keep it away/delay it for ten years. Realistically, people in our situation are different to those who get it and die in two years. But we're living in a branch of society where death is less likely. Theme: treatment of retrovirus, social issues, HIV/Aids awareness	15. How do you view the disease/virus? ⓪ A guarantee of death ① Curable ② A treatable chronic ③ None of the above
I heard that among poor black people, there's a state of mind that you're going to get it anyway, it's like giving up. So why wear condoms… Theme: social issues, risk behaviour	16. HIV/AIDS can be avoided: ⓪ Strongly Agree ① Agree ② Neutral ③ Disagree ④ Strongly Disagree
It was the most nerve-racking thing (referring to VCT). You wonder how you could have gotten it (HIV). Theme: VCT	17. If you found out you were HIV positive, how scared would you feel if 0 was not at all, and 6 was paralysing fear. Please colour in the appropriate answer ⓪ ① ② ③ ④ ⑤ ⑥
There's so much pressure on boys to not be a virgin by the time they leave school. There's definitely more pressure on boys. We're at a stage where we're over pressure… (reference to the stage of being at University) Theme: risk behaviour	18. Peer pressure is an important factor in perpetuating risk behaviour in terms of HIV/AIDS ⓪ Strongly Agree ① Agree ② Neutral ③ Disagree ④ Strongly Disagree
it (risky sexual behaviour) is connected to alcohol.	19. Risky sexual behaviour (in terms of contracting HIV) is connected to the

Statement/s from focus group participants	**Related question from survey questionnaire**
It (risky sexual behaviour) is so much associated with drinking. You lose your inhibitions. I was at UNP and it's the same. The risky behaviour is very similar to Rhodes. It's a big drinking culture. Theme: risk behaviour	abuse of alcohol ⓪ Strongly Agree ① Agree ② Neutral ③ Disagree ④ Strongly Disagree
I heard that among poor black people, there's a state of mind that you're going to get it anyway, it's like giving up. So why wear condoms… Theme: social issues, risk behaviour.	20. I feel as though I will contract HIV/ AIDS anyway, so I feel what's the point of wearing a condom? ⓪ Strongly Agree ① Agree ② Neutral ③ Disagree ④ Strongly Disagree
Also in Zim, two of our cooks died of Aids. It's a bit concerning because they cooked our food. My mom's friend – a very respectable, wealthy person, had a blood transfusion and he got Aids. Theme: stigmatisation, 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). 22. Eating from the same plate as some-one who is HIV-positive ⓪ ① ② ③ ④ ⑤ ⑥
I heard a scary statistic – They ran out of a year's supply of morning after pills during O-week either last year or this year. I had a friend at school, who had a boyfriend who had Aids. She still slept with him. She said she wore a condom, and wouldn't get it. With condoms breaking you can always get it. Theme: risk behaviour	23. Having unprotected sex ⓪ ① ② ③ ④ ⑤ ⑥
You can't get Aids except if you have a cut in your mouth or stomach ulcers… Theme: risk behaviour, HIV/Aids awareness	25. Kissing some-one who is HIV-positive ⓪ ① ② ③ ④ ⑤ ⑥

Statement/s from focus group participants	**Related question from survey questionnaire**
In 2nd year we had a talk, and they said that if you had sex with 7 people at Rhodes, 1 of them would have Aids. The scary thing is that that stat still puts us in a low-risk group. I worked at a pre-primary for a while, and a little boy died. He was from a poorer background. We think we're a lower risk group, but are we? With condoms breaking you can always get it. Theme: risk behaviour, social issues	28. In terms of catching HIV/AIDS, do you perceive yourself to be part of ⓪ A high risk group ① A medium risk group? ② A low risk group?
It's so important to know your status. It was the most nerve-racking thing. (reference to VCT). You wonder how you could have gotten it. Theme: HIV status, VCT	29. It is important to know one's HIV status ⓪ Strongly Agree ① Agree ② Neutral ③ Disagree ④ Strongly Disagree
For your own peace of mind, you should have the test… Especially if you do get into a relationship. My mom did react a little crazy… I didn't want to tell her about it… she didn't understand why. I said "don't you think it's good to know your HIV status?" Theme: HIV status, VCT	30. It is important to know one's HIV status because: (choose the most applicable statement) ⓪ I can have peace of mind ① I will be less likely to infect some-one else ② I can start taking medication to prolong my life ③ All of the above ④ None of the above ⑤ Other _____ (please write question number and answer on back of answer sheet)

Statement/s from focus group participants	**Related question from survey questionnaire**
People don't want to go for preparatory counselling. I heard the same, that people thought the counselling was really useless. I had to go back the next day for more counselling. It just made me nervous and uncomfortable, nothing else. Theme: VCT	31. I am put off going for HIV testing because of what I have heard about the counselling process. ⓪ Strongly Agree ① Agree ② Neutral ③ Disagree ④ Strongly disagree
Irresponsible people who are worried about it (contracting HIV through unsafe sex) go for testing. Theme: VCT, risk behaviour	32. I have undergone Voluntary Counselling and Testing (VCT) for HIV/AIDS ⓪ Yes ① No
Counsellors have just seen so many people. They don't care anymore… It's the same as a vet who has to distance himself from animals dying. But you're supposed to be personal in this. Theme: VCT	33. I found the counselling process to be impersonal ⓪ Strongly Agree ① Agree ② Neutral ③ Disagree ④ Strongly disagree
I heard that there wasn't enough counselling. People are worried about that – it's a big deterrent. You want to be in and out. It should be done properly. Theme: VCT	34. The counselling part of VCT (Voluntary Counselling and Testing) is ⓪ Too short ① Just right ② Too long
Counselling should be voluntary – at the beginning, the counselling did nothing. Theme: VCT	35. The counselling part of the testing process should be voluntary ⓪ Strongly Agree ① Agree ② Neutral ③ Disagree ④ Strongly disagree

Statement/s from focus group participants	**Related question from survey questionnaire**
Irresponsible people who are worried about it (contracting HIV through unsafe sex) go for testing. The people who sleep around are too scared to go – (implied: for testing). Theme: risk behaviour, VCT	36. People who sleep around are more likely to go for HIV/AIDS testing ⓪ Strongly Agree ① Agree ② Neutral ③ Disagree ④ Strongly disagree
It took me and my boyfriend until the third term to have an Aids test. We should have gone at the beginning of our relationship. It's very difficult after a month (implied: of dating some-one) to say we should go for an Aids test. It's almost an insult. Theme: VCT, stigmatisation	37. Near the beginning of a relationship I am able to suggest to my partner that we go for an AIDS test ⓪ Yes ① No ② Does not apply
Also in Zim, two of our cooks died of Aids. It's a bit concerning because they cooked our food. Theme: stigmatisation	38. If I found out that the chef at my favourite restaurant was HIV-positive I would ⓪ Avoid the restaurant completely ① Simply lessen my frequency of dining there ② Still go there just as often as before
If you gay they won't take your blood (Reference to donation of blood). Theme: stigmatisation	39. If you are homosexual you are more likely to be HIV infected than if you are heterosexual ⓪ Strongly Agree ① Agree ② Neutral ③ Disagree ④ Strongly disagree
I was angry, because I felt he should have known better. Theme: risky behaviour, HIV status	40. How would you react if a friend told you he/she was HIV-positive as a result of his/her own risky behaviour? ⓪ I would distance myself from him/her ① I would be supportive ② Other _____ (please write question number and answer on back of answer sheet)

Statement/s from focus group participants	**Related question from survey questionnaire**
With condoms breaking you can always get it. Use a condom then. It's really about looking after yourself, to reduce the risk. Theme: risky behaviour	41. 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 42. 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 43. 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 44. If I am sexually active, I intend to use a condom – (very unlikely (0)… very likely (6)) ⓪ ① ② ③ ④ ⑤ ⑥
Rhodes is like a 10c a shot whorehouse – people think it's so funny but it's not. And as much as we get irritated with the university, it (risky sexual behaviour) is connected to alcohol. It's a phase we go through – promiscuity. People are definitely more sexually active at university than anywhere else. Theme: risk behaviour	45. 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 .

Appendix F:

Additional commentary from research participants completing the survey

Sheet 123: question 13: unknown;
Question 22: depending on whether/ either both of you have cuts in your mouth; question 30: other people and you, yourself, should be further aware of further infecting some-one else. Also medication can start being taken.

Sheet 138, 139, 142, 207, 209, 213: question 5: Pharmacy.

Sheet 177: statement: You did not mention safe vs unprotected sex in and out of long term relationships. Surely this makes a difference if both partners know their status (limitation)?

Sheet 202: question 40: I'd freak out but still be the friend!

Sheet 243: statement: not sexually active.

Sheet 254: question 4: My mother is white, father Indian, therefore I don't like to choose one over the other and I don't consider myself coloured;
Question 6: I choose not to label my sexuality – I fall in love with whoever I fall in love with.

Sheet 315: question 11: There may be people I know with HIV/AIDS but I don't know their status;
Question 22: Unless they have open sores in their mouth & blood is transferred.

Sheet 318: question 4: Italian.

Sheet 347: question 43: Does not apply – I am lesbian.

Sheet 378: question 40: I would be shocked at first because it is not a common part of my intermediate interaction. However, I would go for counselling for myself in order to be supportive in all ways possible for my friend.

Sheet 413: question 40: Don't know.

Sheet 423: question 9: only weed; question 37: we expect that each other are clean.

Sheet 461: q 40: depending on how close a friend he/she is

Sheet 502: question 4: insulted: I hate the race questions;
Question 15: There is a hope that one day it will be curable and so we have to believe that it is;
Question 28: I perceive everyone to be; question 43 and 44: don't really apply to lesbians.

Sheet 304: question 4: I refuse to answer race question.

Sheet 517: question 30: I believe that if a person gets tested for HIV, then they would start panicking, and from that day onwards the body loses interest in fighting the disease.

Sheet 550: question 13: Would never know people's status (HIV).

Sheet 562: question 30: I can keep safe and stay away from any infections.

Sheet 647: question 30: If something happens to them and they are bleeding I would need to know the safety measures I would need to take.

Sheet 648: question 15: However, one could live for a very long time if they eat, exercise and have a positive attitude. Your body can sense this and is then willing to live longer and fight with you!
Question 16: But not all the time ie. blood transfusions;
Question 22: However if someone has a cut in their mouth and blood is somehow placed on to another's utensils, then there could be a chance, otherwise no risk!

Sheet 660: question 40: Suggest Christian counselling and be very supportive and encourage her to look to God more than her status. I strongly feel that people need to know Christ Jesus, and with this deeper revelation you can know him more and know that pre-marital sex is not what he has in store for you, but the right partner who also knows him and who knows that even when married he has to remain faithful, because he is God-fearing.

I promise you that if we all know that, no-one would engage in any behaviour that's unacceptable before God, we all need to know him more, and we would enjoy his purposes he has for us without stresses.

GLOSSARY OF TERMS

Aids	Acquired Immune Deficiency Syndrome
ARV	Antiretroviral
EIA	Enzyme Immunoassay
EU	European Union
HIV	Human Immuno-Deficiency Virus
IDUs	Injection Drug Users
NGO	Non Governmental Organisation
PGCE	Post-Graduate Certificate in Education
PLWHAs	People living with HIV/AIDS
STD	Sexually Transmitted Disease
TAC	Treatment Action Campaign
UCT	University of Cape Town
UNP	University of Natal/Pietermaritzburg
VCT	Voluntary Counselling and Testing