An exploration of HIV/AIDS-related Knowledge, Attitudes and Risky sexual behaviour of first-year Psychology students at the University of the Western Cape

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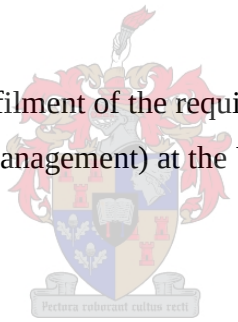

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Declaration

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SUMMARY

HIV/AIDS risky behaviour remains a critical health concern for adolescents, specifically at university level. In South Africa, as in many other developed countries, the primary method of HIV/AIDS transmission is heterosexual intercourse (UNAIDS, 2006). Consequences of risky behaviour include unplanned and unprotected sex, HIV/AIDS and sexually transmitted infections (STIs). Adolescents who decide to delay their first sexual experience sexual debut, will certainly have a better chance of not having their lives at risk with HIV/AIDS infections, than those who have an earlier sexual debut.

In light of the above, this study was conducted to explore the level of sexual knowledge and attitudes about risky sexual behaviour and to identify trends in misinformation among young adults about HIV/AIDS. The study made use of a quantitative research approach. A self-administered baseline questionnaire, used for data collection, was administered to a group of students in a South African university setting. The survey focussed on the areas of HIV/AIDS and sexual reproductive health, in order to better understand young adults' knowledge, attitudes, beliefs and risky sexual behaviour around HIV/AIDS. A sample of (n=220) first-year Psychology students, with ages ranging between 18 and 24 years, were invited to participate in the study. Respondents had an average age of 19.7 years, and were 164 female and 56 male undergraduates. A total of 220 respondents responded to the questionnaire, resulting in a return response rate of 100%.

The findings indicated that over 80% of the students have high levels of knowledge and attitudes with regard to HIV/AIDS. They would on the other hand, refuse having sexual intercourse with a partner without a condom during sexual intercourse. Over 80% had chosen to abstain from sex till their wedding day. Fourty-eight percent (48%) felt that more educational and awareness programmes with regard to HIV/AIDS are necessary. Changing behaviour proves to be the key variable which can impact on the spreading and prevention of the HI-virus.

Furthermore, the study will make recommendations for future preventative interventions to address the HIV/AIDS pandemic.

OPSOMMING

MIV/Vigs is ‘n kritiese gesondheidsbekommernis vir adolessente veral op universiteitsvlak. In Suid-Afrika, sowel as in ander ontwikkelde lande, is die primêre metode van oordrag deur middel van heteroseksuele geslagsomgang. Adolessente wat besluit om hul eerste seksuele ondervinding (seksuele debuut) te vertraag, staan sekerlik ‘n beter kans om nie blootgestel te word aan MIV-Vigs infeksies nie. Anders as diegene wat wel aan ‘n vroeer seksuele debuut blootgestel word. Die doel van hierdie studie is om ondersoek in te stel rondom die seksuele kennis en houdings omtrent hoë-risiko seksuele gedrag en om neigings rakende MIV/Vigs onder jong volwassenes te identifiseer.

‘n Kwalitatiewe benadering is in hierdie studie gebruik. ‘n Self-administreerde grondslag vraelys was aan ‘n groep studente in ‘n Suid-Afrikaanse universitiet uitgereik vir data insameling. Die fokus van die vraelys behels areas van MIV/Vigs en seksuele reproduktiewe gesondheid om sodoende die kennis, houdings en hoë-risiko seksuele gedrag van jongmense te verstaan. ‘n Steekproef van (n=220) eerstejaar Sielkunde studente, van die ouderdomsgroepe 18-24 jaar, was ewekansig geselekteer om aan die studie deel te neem. Die gemiddelde ouderdom van die studente was 19.7 jaar met 164 vroulike en 56 manlike voorgraadse studente. Al 220 studente het die vraelys voltooi dus was daar ‘n responssyfer van 100%.

Resultate dui daarop dat meer as 80% van die studente het hoë kennis- en houdingsvlakke met betrekking tot MIV/Vigs. Daarteenoor sou hulle seksuele omgang met ‘n maat weier indien hul nie ‘n kondoom kan gebruik nie. Meer as 80% het gekies om afstand van seks te neem tot en met hul troudag. Agt-en-veertig persent (48%) voel veel meer opvoeding-en bewustheidsprogramme met betrekking tot MIV/Vigs is noodsaaklik. Gedragsverandering is die enigste werklike veranderlike wat ‘n impak kan hê op die verdere voorkoming en verspreiding van die MIV-virus.

Verder word aanbevelings vir toekomstige voorkomende ingryping wat die MIV/Vigs pandemie aanspreek, voorgestel.

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OUTLINE OF THE CHAPTERS

- **Chapter 1** introduces the scope of this study. It also includes the research problem, the research objectives as well as the aim and the significance/rationale of the study,

- **Chapter 2** discusses the relevant literature about HIV, specifically focusing on the background context of the pandemic, knowledge and attitudes related to HIV, along with risky sexual behaviour. The literature will be grounded within a theoretical framework.

- **Chapter 3** outlines the research methodology. It also includes the research design, sampling method, data collection and data analysis. The chapter also deals with ethical considerations.

- **Chapter 4** presents the analysis of the results and the discussion thereof. It further covers the measuring instrument and how the data was analysed using descriptive statistics. The significant results will then be summarised.

- **Chapter 5** concludes describing the limitations of the current study and making recommendations for future research.

CHAPTER 1: INTRODUCTION

1.1 Background

HIV/AIDS is a pandemic which proves to be one of the biggest challenges the youth in Sub-Saharan Africa currently face. Adolescents in Sub-Saharan Africa increasingly face the risk of contracting HIV infections, with women being far more susceptible than men, report Glynn, Carael, Auvert, Kahindo, Chege, Musonda, Kaona and Buve; Stover and UNAIDS, as cited in Maro, Roberts and Sorensen (2009). Many studies, globally and nationally have been particularly busy with studies on youth and HIV. With our local HIV/AIDS statistics continuing to skyrocket beyond expectation, we must confront the fact that, for the most part, our agendas for research and intervention have thus far done very little to affect the course of the epidemic (Leclerc-Madlala, 2002).

An estimated 22.5 million people were living with HIV in Sub-Saharan Africa at the end of 2009, including 2.3 million children (http://www.avert.org). A study which was done by the South African Department of Health in 2009 reported that, of a sample of 32,861 women who attended antenatal clinics in all nine provinces, 29.4% of pregnant women (aged 14-49) were living with HIV (http://www.avert.org). Until 1998 South Africa had one of the fastest expanding epidemics in the world, but since 2006 HIV prevalence appears to have stabilised amongst pregnant women (http://www.avert.org/safricastats.htm).

Prevalence is 17.8 percent among those aged 15-49, with some age groups being particularly affected (WHO, UNICEF and UNAIDS, 2010). According to their own estimate of total population, this implies that above 5.6 million South Africans were living with HIV at the end of 2009, including 300,000 children under 15 years old. The Actuarial Society of South Africa 2003 model produces a similar estimate of 5.4 million people living with HIV in mid-2006, or around 11% of the total population. It predicts that the number will exceed 6 million by 2015, by which time around 5.4 million South Africans will have died of AIDS (The Centre for Actuarial Research, South African Medical Research Council and Actuarial Society of South Africa cited on http://www.avert.org, 2010). It predicts further that by 2015, the 5.4 million South Africans

would have died of AIDS. WHO, UNICEF and UNAIDS (2010) estimated that AIDS claimed 310,000 lives in 2009 – almost 850 everyday. The National HIV Survey done by Shisana, Rehle, Simbayi, Parker, Jooste, Pillay-van Wyk, Mbelle and van Zyl (2009) was the third of its kind to be conducted across the whole of South Africa. The above survey recorded data which included a vast amount of variables, e.g. age, race, wealth and education. Participants were also simultaneously interviewed about factors such as behaviour, knowledge and risk awareness which might have influenced their risk of HIV infection.

In 2010, the South African government has been quite pro-active in a welcoming manner by launching a major counseling and testing campaign. This HCT (Counselling and testing campaign) raises awareness of HIV and aims to reduce the HIV incidence rate by 50 percent by June 2011, noted SANAC (2010).

A study done by Pettifor, Rees, Steffenson, Hlongwa-Madikizela, MacPhail, Vermaak, and Kleinschmidt (2004) found that many South African youth know about HIV/AIDS first-hand; among South Africans aged 15-24, 26% personally know someone with HIV/AIDS, and 45% personally know someone who had died of AIDS. UNAIDS reported in Anderson, Beutel and Maughan-Brown (2007) that in South Africa, as in many other less developed countries, the primary method of HIV/AIDS transmission is heterosexual intercourse, and most South African youth know that HIV/AIDS can be transmitted this way (Eaton and Flisher, 2000; Shishana, Rehle, Simbayi, Parker, Zuma, Bhana, Jooste and Pillay-van Wyk (2005). However, this may often include risky sexual behaviour in a direct or perhaps in an indirect manner, e.g. research has shown that adolescents are inclined to "experiment" with risk-taking behaviour, which would therefore increase the chance of them participating in risky sexual behaviours.

As revealed in various research reports, risky behaviour may be described as the early age of sexual debut, high levels of premarital sexual activity and high levels of sexual partners with irregular use or lack of barrier contraceptives, such as condoms (Abruquah & Bio, 2008; Hartell, 2005; Kaaya, Flisher, Mbwambo, Schaalma, Aarø and Klepp, 2002; Barden-O'Fallon, de Graft-Johnson, Bisika, Sulzbach, Benson and Tsui, 2004). As HIV/AIDS is one of the highly stigmatised diseases, first-year students may "down-play" their levels of vulnerability amongst

themselves, due to not being seen as part of a "stigmatised" group. In addition, adolescents may also be "active" in risky sexual behaviour due to peer pressure within this group.

Ironically, report Anderson, Beutel and Maughan-Brown (2007), although engagement in high risk HIV/AIDS behaviours, (e.g. multiple sex partners and inconsistent condom use), has been found in Africa, despite the knowledge about HIV/AIDS. Thus, having the knowledge may not necessarily include having the motivation to protect him/herself against the disease. Based on the above statement, it becomes clear that the myth of "I am untouchable" seems to play quite an extensive role amongst adolescents. Other studies have found positive associations between HIV/AIDS knowledge and HIV/AIDS prevention behaviours (MacPhail & Campbell, 2001; Tillotson & Maharaj, 2001). This implies that campaigns to increase knowledge about HIV/AIDS may be having an effect on behaviours, at the same time it stresses the importance of assessing knowledge of HIV/AIDS research.

1.2 Rationale

First-year university students as a group are exposed to risks, whether it is the transition from high school to university, or risky sexual behaviour. College-/university students as a group are particularly vulnerable to HIV infection. Additionally, they may be at higher risk of engaging in risky sexual behaviours; especially if they are under the influence of alcohol or drugs, respond to peer pressure, or lack maturity (Centers for Disease Control and Prevention, 2007).

Throughout South Africa, the AIDS epidemic is affecting large numbers of adolescents, leading to serious psychological, social, economic and educational problems (Coombe cited in Hartell, 2005). First-year Psychology students fall in this age range. Having a high turnover of sexual partners, influences the likelihood of exposure to HIV. Other literature found that, of the age groups 15-24 years, of this group is already infected with the disease, and has increased since 2002 (Pettifor, Rees, Steffenson, Hlongwa-Madikizela, MacPhail, Vermaak and Kleinschmidt cite in Dawood, Bhagwanjee, Govender and Chohan, 2006).

Comprehensive sexual education is generally considered an important means of addressing adolescent risk behaviour (Harrison, Newell, Imrie and Hoddinott, 2010). However, empirical evidence of this important issue exists to a limited degree. Regardless of being acquainted with some form of knowledge and education, first-year students still indulge in risky behaviour. Thus, changing risky behaviour and mindsets will probably lead to safer decision-making amongst first-year Psychology students at a South African university.

1.3 Research problem

As adolescence form part of a highly vulnerable group for HIV infection, there is a need to identify effective prevention approaches. Motivation for more research to increase our knowledge, while addressing the HIV/AIDS problem amongst this group is also required. In order to do so effectively, risky behaviour needs to be identified and highlighted.

1.4 Aim of the study

The aim of this study is two-fold. Firstly, to explore the knowledge, attitudes and behaviour of first-year Psychology students, in order to identify their current level of knowledge of risky sexual behaviour. Secondly, to provide recommendations for future education programmes within the university.

1.5 Research objectives

The current study attempts to:

- Describe the level of knowledge and attitudes about risky sexual behaviour.
- Identify trends in misinformation (myths) among young adults about HIV/AIDS.
- Investigate how the levels of knowledge and attitudes influence risky behaviour of first-year Psychology students.
- Make recommendations for future preventative intervention to address the HIV/ AIDS pandemic.

1.6 Conclusion

In this chapter the scope of the study was introduced. The research problem, the aim, the research objectives and the significance of the study were also highlighted.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter focuses on presenting the relevant literature which is appropriate for the issues under investigation in this study. It firstly outlines the background context of HIV/AIDS. It then moves onto discussing significant studies applicable to topics such as knowledge of HIV-related issues and attitudes towards risky sexual behaviour. Theories on behaviour change will also be briefly explored. The chapter will conclude with looking at the impact of the relevant studies, touch on the lack of further studies pertaining to various aspects of HIV/AIDS, as well as looking at current and future preventative intervention planning/strategies.

2.2 Knowledge of HIV-related issues

Within the South African context, there seems to be a need for research on the risky sexual behaviour of adolescents in South Africa. When it is considered that 40% of the South African population is less than 15 years of age and that 15.64% is infected with HIV, one recognises that HIV/AIDS represents a devastating pandemic among the youth of South Africa, support Coombe and the Department of Education, as cited in Hartell (2005). In order to refuse further transmission, information pertaining to the existing knowledge of risky sexual behaviour amongst youth (ages 15-24 years), may provide an important basis for preventative, as well as educational preventions. With its slick billboard adverts, magazine supplements and television programmes, the LoveLife Campaign is by far the most visible, often provocative, and certainly the most far-reaching South African initiative undertaken to address the particular needs of youth in the context of HIV/AIDS (Leclerc-Madlala, 2002).

A study which was done by Magnani, McIntyre, Karim, Brown and Hutchinson (2005) revealed that exposing youth to lifeskills topics related to sexual-reproductive health knowledge, skills and behaviours, may have a positive impact on helping them to not only acquire knowledge about reducing the risk of HIV, but also to change selected behaviours. Thus far, the South African government's response to the pandemic proved to be effective, through the

implementation of the currently offered lifeskills and HIV/AIDS Education programme in secondary schools as well as in university (for example: UWC) programmes such as Education and BPsych (Bachelor of Psychology) degrees.

The researcher believes that the aims of this study serve to increase the levels of knowledge, at the same time developing the necessary skills of students across the board. The main objective in this instance should then effectively be to encourage, promote and motivate positive risky sexual attitudes and behaviour amongst students at all year levels. Through knowledge of HIV/AIDS prevention, an increase in the proportion of the sample knew that abstaining from sex is an indication of protective behaviour (Magnani et al., 2005). The researcher believes that, for adolescents, abstinence is the surest means of controlling STI's and the HIV/AIDS pandemic.

The findings of a National Survey of HIV and sexual behaviour among young South Africans that was done by Hale, Householder and Greene (2003) predicted that there would be significant relationships between knowledge of HIV transmission, and testing for HIV, educational level, and gender. Testing behaviour was also predicted to be associated with gender and knowing someone who has HIV/AIDS, or someone who has died of the disease. The results of the current study will briefly highlight the gender aspect in relation to knowing someone living with HIV. However, the analysis of variance (ANOVA) of Hale et al. (2003) further showed that, as education levels increased, so did knowledge of HIV.

According to Hartell (2005), 97% of respondents showed a high awareness about HIV and AIDS. However, 10% said that staying with a faithful partner and using a condom will not protect them from HIV/AIDS. Surprisingly, the majority felt that they are not susceptible to HIV infections. A National HIV Prevalence study done by Shishana et al. (2009), found that females aged 15-24 years had the lowest scores at 40.6%, while males in the 15 and older age group had higher levels of accurate knowledge about HIV transmission.

Eaton and Flisher (2000) reviewed HIV/AIDS knowledge among South African youth aged 14-35 years and found that young people are very aware that AIDS is a disease that is sexually transmitted and fatal. However, with regard to how HIV is physically transmitted from one

person to another, as well as the methods of prevention, indicated a degree of less awareness on the part of the young adults. This study also found that decision-making becomes very challenging during the adolescent stage. Thus, adolescents' ability to understand true objectivity of others seems to be quite limited. Adolescents at this stage do not fully understand consequences of their thoughts and actions (Piaget, 1964; Lance, 2001). Unfortunately for young adults, society and its current processes appear to be identified with risky sexual behaviours.

2.3 Attitudes towards HIV-related issues

HIV prevalence in South Africa is highest among young people, with 11.2% HIV prevalence among people between the ages of 15 and 24 living in the Western Cape, as revealed by Shishana and Simbayi (2002). Almost similar findings were obtained by another national survey done by LoveLife in 2001, which reported that 9.3% of South Africans aged 15-24 years were infected with HIV, with 12% women and 6% now testing HIV positive. However, suggest Mwaba and Naidoo (2005), although the data on HIV prevalence among young South Africans is a cause for concern, it should also provide a real opportunity to reverse the course of the AIDS pandemic. The researcher tends to agree that more research which focuses on a pro-active preventative measures may certainly assist in reversing the disquiet of AIDS.

Attitudes towards AIDS and/or those persons with AIDS may also help predict behaviour change; however, the existing literature is inconclusive, note Uwalaka and Matsuo (2002). Unfortunately negative attitudes regarding AIDS still exist to this day. Schoofs refers in Akande (2001) to these negative attitudes as "Schizophrenic attitudes" towards AIDS; because of the shame and stigma attached to the disease. Because attitudes and the level of knowledge of people are closely linked, one may assume that, the more knowledge one has of HIV-related issues, the more positive the attitudes towards AIDS will expand. To date, most interventions conclude that infection among the youth occurs because young people are not adequately educated about AIDS and the epidemiology of the disease. However, HIV/AIDS education is widely touted as the preferred intervention, comment Levine and Ross (2002).

2.4 Risky sexual behaviour

Past research has shown that South African youth report high rates of risk behaviours, multiple sex partners and infrequent condom use (Simbayi, Kalichman, Jooste, Cherry, Mfecane and Cain 2005; Eaton, Flisher and Aarø, 2003; Kelly, Ntlabati, Oyosi, Van der Riet and Parker, 2002). Based on this statement, it is clear that adolescents expose themselves to high risk which results in them contracting various sexual diseases by conducting unprotected sex. Thus far facility-based survey research has provided important information about the HIV risks of young people in South Africa, but these data are limited to persons attending school or receiving health services, reveal Simbayi et al. (2005). Findings from the same study demonstrated that lower AIDS knowledge scores were significantly associated with higher HIV risk index scores among men.

A study done by Peltzer (2001) at the University of the North found that, of a sample of 98 participants the overall knowledge about correct condom use was high in this sample. However, more than one third (35.9%) of the sample reported never using condoms, 27.5% always, 16.7% regularly and 20% irregularly in the last 3 months. Thus, although heterosexuals have nowadays increased the usage of condoms, the overall usage seems to remain low. From a gender perspective, women are increasingly exposed to vulnerability in the "expected" cultural norms through frequent rape and sexual abuse in the South African context. Other studies have shown that women are commonly discriminated against with regard to educational, employment and health care. This dependence and subordination make it extremely difficult for women to assert themselves sexually as they often have little control over prevention sexual practices, cite Van Dyk and UNAIDS in Eaton and Flisher (2003).

Risky sexual behaviour is defined as the infrequent practice of safe sex behaviours in the realm of contracting HIV, and is a critical factor contributing to this pandemic in Africa (Centres for Disease Control and Prevention (CDC), 2007; Shobo, 2007). As the issue of sexual behaviour include having any form of unprotected sex during intercourse, research findings have thus far supported the fact that adolescents are more focussed on falling pregnant than about HIV/STDs. Jessor (1991) defines the term risky behaviour as any behaviour that can compromise the

psychosocial aspects of successful adolescent development. Young adults usually have the "need" to engage in risky behaviour, for example: smoking, alcohol and substance abuse, in order to gain peer acceptance and respect. A study done by Brown and Vanable (2007) found high rates of alcohol use and unprotected sex among college students. In addition, engaging in risky sexual behaviour may lead adolescents from the "young adulthood" stage to the level of maturity to seem "grown-up" to their parents. Usually this risky behaviour (or action) unfortunately causes increased levels of anxiety and uncertainty within adolescents (Eaton, et al., 2003).

Studies done by Abruquah & Bio (2008), Leigh (1999) and O'Hare (1999) offer support in O'Hare (2005). The findings demonstrated that sexual promiscuity is on the increase among adolescents. The reason being they had either heard or seen people younger than them engaging in sexual activity. The fact that adolescents showed little knowledge of STIs and other modes of transmission of HIV and cure for AIDS is mainly because their main sources of information have been the electronic media and friends, which may lack factual content (Dawood, et al., 2006; Cohall, Kassotis, Parks, Vaughan, Bannister and Northridge, 2001). At the same time, young adults who have not been exposed to risky sexual behaviour, face additional anxiety of their sexual debut, as well as the risk of experiencing the use of substances as a result of peer pressure combined with inadequate knowledge of sex and sexual behaviour, making them vulnerable to HIV/AIDS (Mwarogo, 2007). Sexually inexperienced youth who view themselves as at risk of HIV infection at some point in the future, may try to delay first sex – the gateway to further HIV risk behaviours (Anderson et al., 2007).

Studies done by Brown, Nwokocha and Nwakoby as cited in Parmar, Bhatia, and Parmar (2007) motivate the need for an intensive campaign against the spread of HIV/AIDS. The campaign should focus on health education prior to onset of high-risk behaviour. However, for educators to play an effective role in conveying current and correct knowledge, they need to acquire in-depth knowledge of HIV/AIDS. Although the mass media have promoted HIV/AIDS via television through programmes such as Soul City, which dramatizes health issues around HIV and how the virus is spread, this programme has not been evaluated for its impact in the various communities comment Harrison et al. in Peltzer & Seoka (2004). However, Harvey, Stuart and Swan in

Peltzer and Seoka (2004) conducted an evaluation of a drama-in-education programme to increase AIDS awareness in South African high schools. According to Peltzer and Seoka (2004), improvements in knowledge and attitudes about HIV/AIDS, as well as an increase in condom use were demonstrated in schools receiving the drama programme, compared to schools who received written information alone.

Roche, Mekos, Alexander, Astone, Bandeen-Roche and Ensiminger, (2005) suggested that positive parental influence can buffer adolescents against the influence of negative peer norms that could lead to risky sexual behaviour, including delaying early sexual intercourse. Conversely, research studies have shown that adolescents with poor or no parental supervision are more likely to engage in early onset of sexual intercourse, increasing their vulnerability to diseases and sexually transmitted infections (Ellis, Bates, Dodge, Fergusson, Horwood, Pettit, and Woodward, 2003; Rasamimari, Dancy and Smith, 2008).

The question that springs to mind is: "What possible reasons would make an adolescent perhaps consider promoting preventative behavioural methods?" Various studies have found that the desired effect of improving the level of sexual knowledge about AIDS and its prevention maybe that individuals will become motivated enough to alter the behaviours that put them at risk for contracting the virus (Barden-O'Fallon, et al., 2004; Kaaya, et al., 2002; Anderson, Santelli and Morrow, 2006). However, it might be perceived that when adolescents know someone close to them with, or who has died of HIV/AIDS, this might refrain or postpone their first sexual experience. Thus far, not many studies have seeked to understand how young adults have characterised their own vulnerability to HIV infection, although they may find themselves in the category as the "key" parties in this pandemic. Hence, it is imperative to also explore models of risk that recognise the qualitative differences between risk factors and their associations with youth's perception of vulnerability to HIV infection (Shobo, 2007; Barden-O'Fallon, et al., 2004; Simbayi, et al., 2004; Shishana & Simbayi, 2002).

Studies done by Abruquah and Bio (2008) and Hartell (2005) found that high-risk sexual behaviour increased with age and class, and was significantly higher among females than males, and that condom use and general knowledge of STIs are low among adolescents. This study

confirmed the need for more education interventions to keep young adults informed about HIV/AIDS. However, these studies excluded to focus on the personalities of males and females, which also play a role in the decision-making process.

Adolescents find themselves in a phase where they seek sensation and "thrills", hence taking risks with their lives through risky behaviour (for example: not using condoms and varied sexual actions) Rosenbloom (2003). This statement may be explained by young adults being "dared" by their peers and not being able to refuse the "dare" fearing loss of regard by their peers. Miller, Lynam, Zimmerman, Logan, Leukefeld and Clayton (2004) argue that personality processes are conspicuously absent from models of sexual risk taking, which are dominated by attitude and peer influence variables. However, their apparent findings included that sensation seeking amongst adolescents was predominantly related to a number of risky sexual behaviours. Additional ways for example include the unpredictable need to having unprotected sex.

Within the South African context, going to university usually involves moving away from the parental "nest". Thus, this proves to be a very important period of upheaval or transition, as the first-year student now has to be responsible for his/her own life, at the same time having to manage their sexual relationship(s) and classes. Downing-Matibag and Geisinger (2009) recommend that, in order to enable us to promote the well-being of this peer-dominated "culture and landscape", we need to understand the rules and practices thereof, as well as their implications for sexual risk prevention. In this instance, the South African Department of Health needs to be aware of the fact that condoms are used by two people; therefore making this resource more readily available is a critical task for this department. At the same time, the effective usage of condoms should be monitored and evaluated on a continuous basis. It seems that the South African health system has no framework in place for monitoring social and behavioural responses to the epidemic, suggest Kelly, et al. (2002). However, in a South African National Survey done by the HSRC, Shishana et al. (2009) the findings revealed that, although there have been a shift in the levels of condom negotiating skills, there is also an increased openness in the community to discuss sex and condoms among youth.

The above named research will therefore assist the researcher with understanding the gap in the existing literature by enhancing and looking at the current literature surrounding HIV/AIDS-related knowledge and risky behaviour from a quantitative perspective. The findings may direct us to improve our understanding of the above point of view, and this insight could lead to improved educational interventions.

2.5 Theories of behaviour change

In order to create a better understanding of HIV-risk behaviour, several major theories of behavioural change have been applied in various studies. These include the Health Belief Model noted in Becker (1974; 1988), Janz & Becker (1984), Rosenstock (1966), as well as the AIDS Risk Reduction Model of Catania, Kegeles and Coates (1990), and Social Cognitive Learning Theory (Bandura, 1986; Eaton et al., 2003).

For the exploration purpose of this research article, the researcher will attempt to briefly describe the two commonly used socio-cognitive theories: the Health Belief Model and the Social Cognitive Learning Theory. The research will also touch on the AIDS Risk Reduction Model for the purpose of this research report. However, none of these theories will be utilised as a theoretical framework in the current study. The researcher believes that these theories will be relevant with regard to understanding the content of this research article.

2.5.1 Health Belief Model (HBM)

Boskey (2010) defines the Health Belief Model as a realistic tool that scientists use to try and change health behaviours. Originally developed in the 1950's, and updated in the 1980's, it is based on the theory that a person's willingness to change their behaviour is primarily due to the following factors:

- **Perceived susceptibility**: People will not change their health behaviours unless they believe that they are at risk (e.g. subjective evaluation of HIV risk).

- **Perceived severity**: The probability that a person will change his/her health behaviours to avoid a consequence depends on how serious he or she considers the consequence to be (e.g. seriousness of HIV risk).
- **Perceived barriers**: People think changing their behaviours is going to be hard, physically and socially. (e.g. inconvenience, embarrassment).
- **Cues to action**: The external events that prompts a desire to make a health change. (e.g. seeing a condom poster on a train).
- **Self-efficacy**: If a person beliefs he/she has the ability to make the health related change. (e.g. having the faith that you can do it), or as Agha (2002) believes: "ones's own ability to take preventative action."

Very few adolescents tend to perceive themselves to be at risk for HIV/AIDS or any STI. Although adolescents have the necessary knowledge about the severity of the disease; very small numbers of young adults see the need for safe sex as serious, and they downplay seeing AIDS as a personal threat.

2.5.2 Social Cognitive Learning Theory

This theory (Bandura, 1986, 1991) dubbed "social-cognitive" within the health psychology literature mainly deals with factors within the triad:

(i) behaviour,
(ii) personal factors,
(iii) interpersonal factors and processes.

Eaton et al. (2003) believe that although the social-cognitive theories have been found to be valid and useful, specifically written, designed in the context of the Western Countries. However, they neglect the objective aspects of social influences and the culture of society's context (Eaton et al., 2003).

Although adolescents live and learn in various societies, the HIV prevention "compass" needs to be adapted to suit each person and his/her context for intervention purposes. For example: by

having well-trained teachers or peer educators in HIV-related issues will certainly assist with the effective reduction of risky sexual behaviour among adolescents.

2.5.3 AIDS Risk Reduction Model

This three-staged model, which was introduced in 1990, provides a framework for explaining and predicting behaviour change, efforts of individuals, specifically in relationship to the sexual transmission of HIV/AIDS (Catania et al., 1990). The AIDS Risk Reduction Model incorporates several variables from other behaviour change theories, including the Health Belief Model, such as efficacy theory, emotional influences and interpersonal processes. Catania et al. (1990) identify the three stages as follows:

STAGES	HYPOTHESIZED INFLUENCES
STAGE 1: Recognition and labeling of one's behaviour as high risk	• Knowledge of sexual activities associated with HIV transmission. • Believe that one is personally susceptible to contracting HIV. • Believing that AIDS is undesirable. • Social norms and networking.
STAGES	**HYPOTHESIZED INFLUENCES**
STAGE 2: Making a commitment to reduce high-risk sexual contacts and to increase low-risk activities.	• Cost and benefits. • Enjoyment (e.g. will the changes affect my enjoyment of sex?) • Response efficacy (e.g. will the changes successfully reduce any risk to HIV infection?) • Self-efficacy.
STAGES	**HYPOTHESIZED INFLUENCES**
STAGE 3: Taking action	• Social networks and problem-solving choices (e.g. self-help, informal- and formal help).

This stage has <u>three</u> phases: • Information seeking. • Obtaining remedies. • Exacting solutions. Depending on the individual, phases may occur concurrently, or may be skipped.	• Prior experiences with problems and solutions. • Level of self-esteem. • Ability to communicate verbally with sexual partner. • Sexual partner's beliefs and behaviours.

The AIDS Risk Reduction Model only focuses on the individual. It does not consider the socio-cultural issues which may influence an individual's behaviour choices, and his/her ability to take action, critiques Family Health International (2004). In some cultures women are encouraged to guard their virginity in order not to appear promiscuous. Men, however, are encouraged to proof their "machoness" by having more sexual experiences. Thus, a woman who wants to practice safe sex in her marriage has no control over a promiscuous husband/partner with more than one sexual partner. The woman therefore remains vulnerable to the disease, unless she decides to communicate with her sexual partner in this regard.

2.6 Conclusion

The literature review focused on previous and current studies, indicating how undergraduate university/college students participate in risky sexual behaviour, regardless of their level of awareness and knowledge of HIV/AIDS. This study will attempt to investigate how the level of knowledge and attitude influence risky sexual behaviour among first-year psychology students in a university setting, as well as identify the trends in misconception among young adults at UWC. The literature review also highlights lack of studies around risky sexual behaviour among university/college students in a socio-cultural context. Thus, there is a gap in current education programmes which need to (i) tighten its current form, as well as (ii) include the sensitivity of cultural- and gender contexts. This study will attempt to make the necessary recommendations in this regard.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1. Introduction

This chapter describes the research design, the respondents, sampling method and the data collection tool. The chapter continues to explain the procedure of data collection, the method of data analysis as well as discussion around the ethical considerations regarding the study.

3.2. Research design

The survey used a descriptive research method. Contact must therefore be made with the individuals whose characteristics, behaviours, or attitudes are relevant to the investigation, recommends Christensen (2007). For the size of the sample in this study, the survey research will be the best method to collect the required data. Surveys may be used for descriptive, explanatory and exploratory purposes (Babbie and Mouton, 2001). The paradigm of this study is located within quantitative research. Quantitative research effectively deals more with knowing, while the qualitative research method deals with understanding (Welman, Kruger and Mitchell, 2005). In this instance the sample (220 respondents) will be quite large and unable to determine adolescents' attitudes by requiring them to complete a questionnaire (Babbie, 2007).

3.3. Research question

In an attempt to reach the aims noted in Chapter 1 which include investigating the level of knowledge and how attitudes influence risky behaviour of first-year Psychology students, to describe the level of knowledge and attitudes about risky sexual behaviour, to identify trends in misinformation among young adults about HIV/AIDS, and to make recommendations for future preventative intervention to address the HIV/ AIDS pandemic. The researcher will therefore ask the following question: "How do HIV/AIDS-related knowledge and attitudes influence risky sexual behaviour of first-year Psychology students?"

3.4. Method

3.4.1. Participants

The survey was conducted at the University of the Western Cape (UWC), during the 2010 academic year. Respondents for this study included 56 (25.5%) males and 164 (74.5%) females of undergraduate students aged between 18 – 24 years, currently registered in their first-year of studying Psychology. They also constituted the target population for this study and were predominantly selected on the above inclusion criteria.

Due to the diverse cultures in South Africa, the majority of the respondents were required to describe themselves into their preferred designation. The first group was either the coloured/mixed race (57.3%). The next group indicated they were Black/African (34.1%), others described themselves as Indian (2.7%), and the White group made 2.3% of the sample (*see Figure 4.3.1.3*). A small group of respondents (3.2%) described themselves as "Other" (3.2%), while one respondent (.5%) completed the questionnaire, but declined to complete the race/ethnicity category (see Category "0"). According to Simbayi, Chauveau and Shisana (2004) in the urban areas, the sample needs to be stratified by race: African, Coloured, Indian and White. Christensen (2007) recommends that, when referring to racial and ethnic groups, it is important to remember that designations can become outdated and sometimes negative.

All respondents were volunteers for this convenient sample. First-year Psychology students were informed of the purpose of the research before the questionnaire was administered. A total of 220 respondents were approached with questionnaires which were distributed at the end of the Research Psychology lecture. In total 220 students responded to the questionnaire. Table 3.1 briefly represents the biographical characteristics of the study sample. The below named characteristics will be explored further in terms of cumulative counts and percentages in Chapter 4.

TABLE 3.1 *Distribution of biographical characteristics of the study sample (n= 220)*

Variables	***N***	***%***
Gender		
Male	*56*	*25.5*
Female	*164*	*74.5*
Age		
< 18 years	*2*	*.9*
18 years	*34*	*15.5*
19 year	*70*	*31.8*
20 year	*35*	*15.9*
>21years	*79*	*35.9*
Race/Ethnicity		
No response	*1*	*.5*
Black/African	*75*	*34.1*
Coloured/Mixed race	*126*	*57.3*
Indian/Asian	*6*	*2.7*
White	*5*	*2.3*
Other	*7*	*3.2*
Language		
Afrikaans	*61*	*27.7*
English	*91*	*41.4*
isiXhosa	*42*	*19.1*
isiZulu	*3*	*1.4*
Setswana	*4*	*1.8*
Other	*19*	*8.6*
Work		
Employed	*166*	*75.5*
Unemployed	*36*	*16.4*
Other	*18*	*8.2*
Area		
No response	*1*	*.5*
Informal Settlements	*7*	*3.2*
Rural	*33*	*15.0*
Townships	*31*	*14.1*
Urban	*148*	*67.3*

Variables	*N*	*%*
Caregiver		
Father and Mother	*116*	*52.7*
Father only	*9*	*4.1*
Mother only	*53*	*24.1*
Sibling (brother/sister)	*6*	*2.7*
Grandmother and Grandfather	*2*	*.9*
Grandmother	*6*	*2.7*
Specify	*27*	*12.3*
Missing cases	*1*	*.5*
Family Members		
Invalid categories	*2*	*.9*
Two	*12*	*5.5*
Three	*37*	*16.8*
Four	*58*	*26.4*
Five	*44*	*20.0*
Six	*30*	*13.6*
Seven or >	*36*	*16.4*
Missing cases	*1*	*.5*

3.4.2. Measuring instrument

The self-administered questionnaire constructed for this study consisted of 51 questions. The questionnaire consisted of the following five sections:

SECTION A: Biographic information

SECTION B: Sexual history and beliefs on sexual behaviour practices

SECTION C: Knowledge on HIV/AIDS

SECTION D: Attitudes towards HIV/ AIDS

SECTION E: Sources of information about HIV/AIDS

Pilot Study

In order to ensure that the items of the questionnaire were culturally acceptable and easily understood the researcher conducted a pilot study. This process provided the researcher with more confidence and experience with the research process. According to Christensen (2007) a pilot study is a run-through of the experiment with a small number of respondents, and provides the researcher with a great deal of information and experience with the procedure. The questionnaire of this study was pre-tested by 5 male and 5 female (n=10) first-year Psychology

students of comparable age, who did not form part of the final sample. No changes were made to the questionnaire after the pilot study. This indicated that questions would possibly be acceptable and easily understood among the respondents in the actual study.

Actual Study

For the purpose of this study, the researcher used self-constructed questionnaires which were combined with an adapted version of the Medical Research Council of South Africa (MRC) Youth Risk Behaviour Survey (MRC, 2008). An adapted version of the World Health Organisation's (1990) Knowledge, Attitudes, Beliefs and Practices (KABP) survey on AIDS, also available on the internet was also integrated with the self-constructed items. This adapted version was more context-specific and was better suited to achieve the objectives of this study. This study serves as a baseline assessment of HIV/AIDS KAP, and therefore a hypothesis was not presented. Thus, all significant findings are reported as part of baseline results. Reporting of all significant results will provide in-depth analysis of the independent and dependent variables at play in an HIV/AIDS Knowledge, Attitudes and Practices (KAP) survey at a workplace study site according to Grötzinger (2006).

Respondents were informed about: (i) the research process, (ii) the necessary information pertaining to, as well as (iii) the purpose of the study. Informed consent forms and questionnaires were distributed and administered during the same timeslot. The informed consent form included details of the significance of the study, assured respondents of anonymity and confidentiality, as well as the right to withdraw from the study at any time. None of the respondents were given a time limit to complete the questionnaire. Although the researcher did not effectively lecture any of the participants, they were assured that participation/non-participation would not be detrimental to their grades or academic performance in any way. Furthermore, although English was not the first language of most students, it is the standard language used at this university. Thus, the questionnaire was administered in English and was completed by all participants within 30 minutes.

3.5. Data analysis

In preparation for the data analysis, the completed data was captured in an MS Excel spreadsheet. The data was captured from the responses of each question into valid prevalence by means of variables noted on the questionnaire. Biographic characteristics (independent variables) were explored, which included gender, age, race, language, work, regions, caregivers and family members. The dependent variables such as knowledge, attitudes and sexual practices relating to HIV/AIDS were also included in this part of the 51-question survey. Quantitative data were then imported from MS Excel into a statistical analysis software programme called STATISTICA.

Descriptive analyses and generated frequencies were employed as statistical techniques. Comparisons with sexual knowledge, attitudes and behaviour were made. Demographics and questions were posed regarding sources where young adults obtain sexual information from. Demographic (biographic) and socio-demographic data were presented using frequency tables, indicating valid/invalid percentages, means, mode and standard deviations.

3.6. Ethical considerations

After the necessary permission and consultation were acquired from the supervisor, Ms Anja Laas, ethical clearance had been obtained from the Human Research Ethics Committee of Stellenbosch University. Further permission was granted by the Head of the Department of Psychology at UWC, while ethical approval was also obtained from the Senate Committee for Higher Degrees (Research Ethics Committee) of UWC. The information sheet allowed respondents to understand the significance of their participation. Respondents were informed that participation was voluntary, and that they may withdrew from the study at any point. Informed consent forms bore clear details of ensured anonymity and confidentiality. Questionnaires were administered to all respondents in an envelope. The researcher did not at any time leave the room before and during the completion of the questionnaires. The researcher personally collected each questionnaire in an envelope, sealed by the respondents, and took the documents to a secure place (ie. lockable safe) of storage for safe keeping.

Before completion of the questionnaire, the researcher took the respondents step-by-step through the research process, which included:

(i) the purpose of the study, (ii) concepts of confidentiality and anonymity, (iii) significance of total honesty while completing the questionnaire, (iv) secure storage of data at the Community Health Sciences Faculty of UWC after completion of the study, and (v) in the event that a participant require necessary counselling due to issues of HIV/AIDS, the Centre for Student Support Services would be available for follow-up referrals/counselling.

3.7. Conclusion

In this chapter the research method used in the study, the research design, sampling method, data collection and data analysis were briefly discussed. Ethical considerations were also discussed. Chapter 4 will give a presentation of the statistical analyses, which will include descriptive statistics and frequency tabulations.

CHAPTER 4: ANALYSIS OF THE RESULTS AND FINDINGS

4.1. Introduction

This chapter contains the results of the statistical analysis of the data collected, which attempts to meet with the study objectives, such as: to investigate how the level of knowledge, beliefs and attitudes influence risky behaviour of first-year Psychology students, to describe the level of knowledge and attitudes about risky sexual behaviour, to identify trends in misinformation (myths) among young adults about HIV/AIDS, and to make recommendations for future preventative intervention to address the HIV/ AIDS pandemic.

4.2. Statistical analysis

The first step in data analysis is to organise and present the data so that the essential features of the data are easily communicated (Pretorius, 2007). The statistical analysis in this section will attempt to meet the objectives of the study. The statistical software programme STATISTICA was utilised to present the statistical analysis. Summaries of the data will be presented in descriptive statistics and frequency tables.

4.3.1. DEMOGRAPHIC DATA/BIOGRAPHIC DETAILS

Sample distribution of respondents by age and gender

Gender distribution

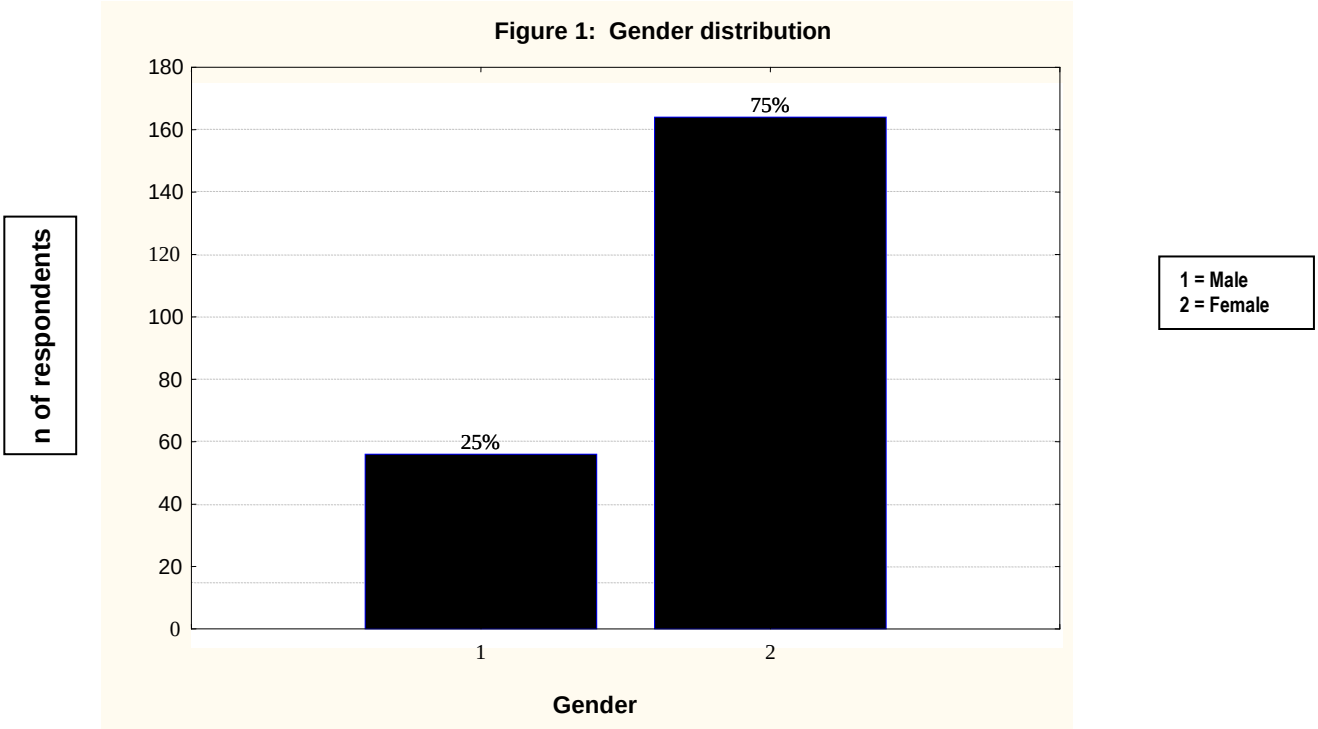


Figure 1 illustrates the gender distribution and the number of respondents (n=220) that participated in the questionnaire[1]. Of this group of respondents, **25%** were male and **75 %** were female.

This is an important observation for this study as women are largely considered as the most vulnerable and at risk to HIV/AIDS. "The vulnerability of women and girls is well-documented in sub-Saharan Africa overall, women are 30% more likely to be infected with HIV than men…", reports UNAIDS in WHO (2006).

Age distribution

[1] See ANNEXURE A for the questionnaire.

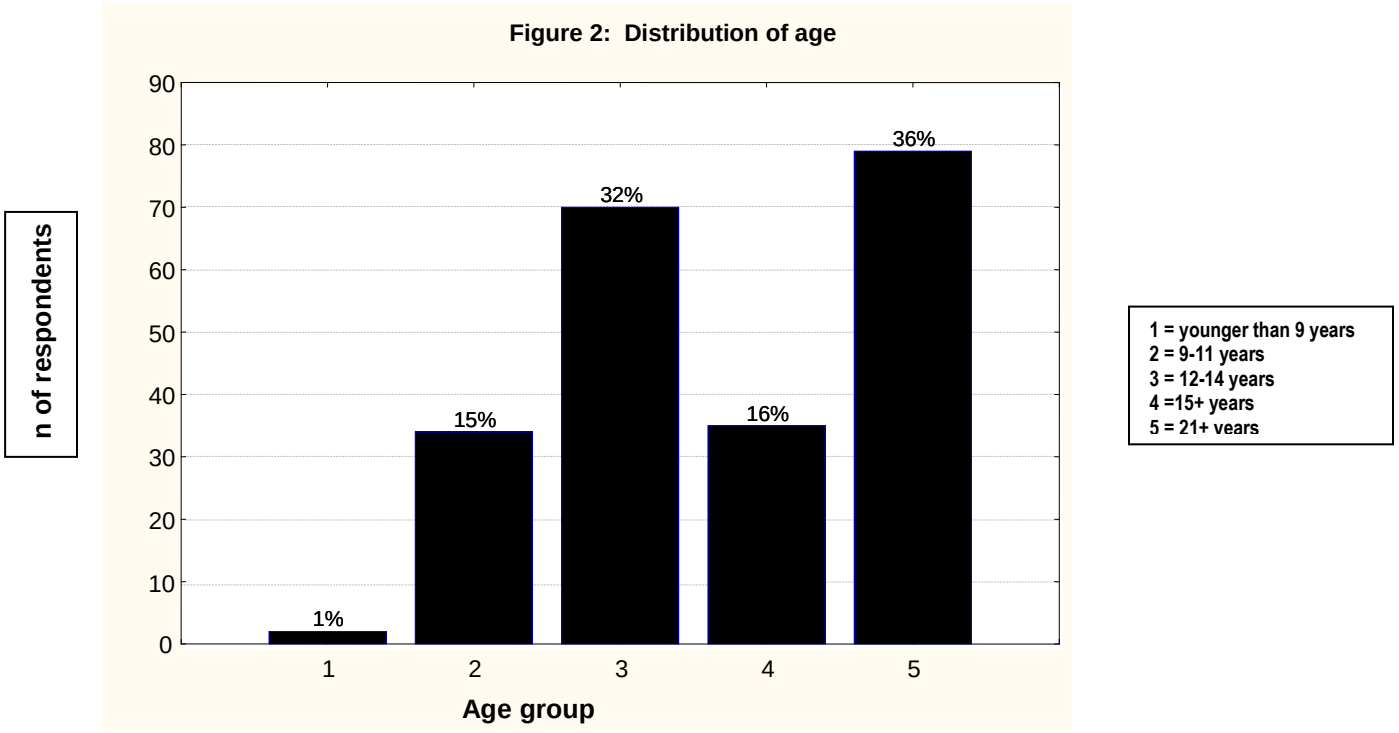


Figure 2 reflects the age groupings of the participants. Interestingly, the largest group in this study is the age group older than 21 years, making **35.9%** of the sample. Furthermore, **0.9%** of the participants was younger than 18 years; **15%** was of age 18 and **16%** was 20 years of age.

Sample distribution of race/ethnic grouping

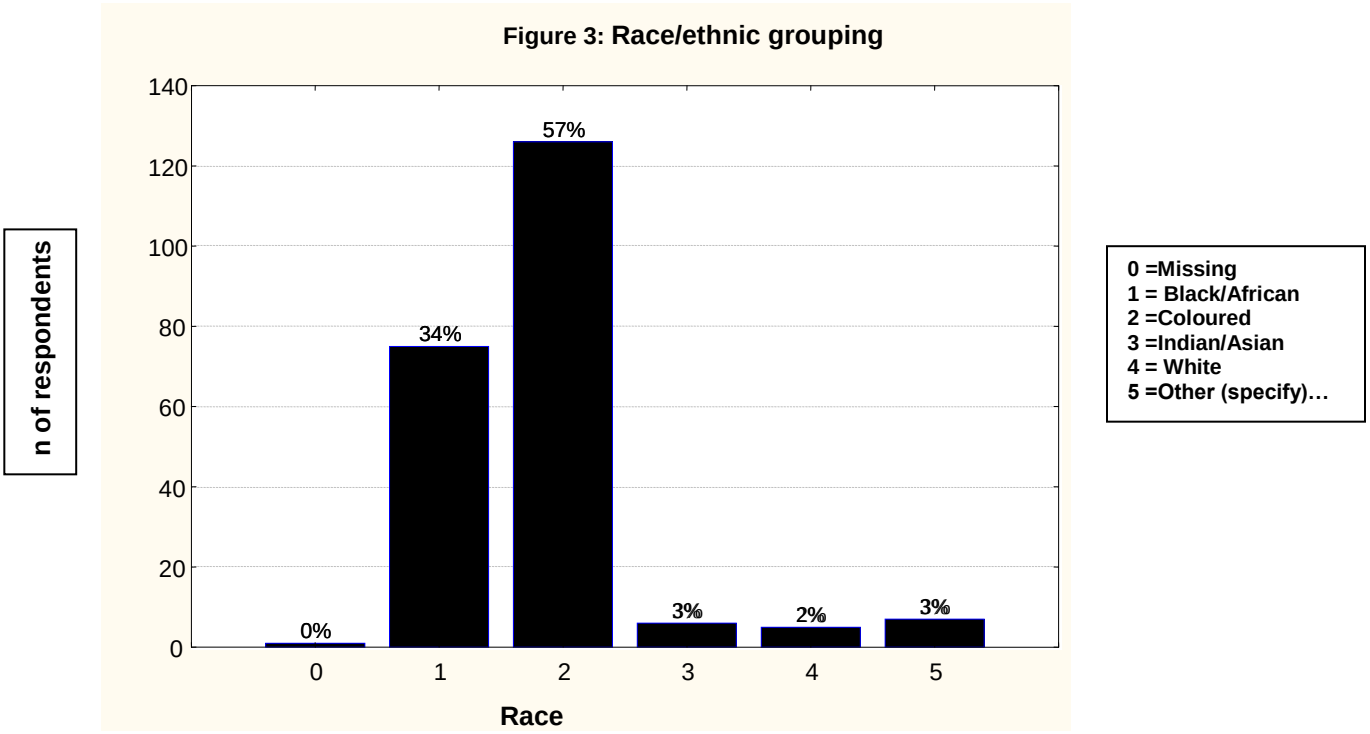


Figure 3 describes the sample distribution of race/ethnic grouping of the respondents in the survey. In this category, **0%** (only 1 respondent) preferred not to be categorized in a particular race group, **34%** (75 respondents) categorised themselves as "Black/African"; **57%** (126 respondents) as "Coloured" (the highest percentage in this category); **3%** (6 respondents) as "Indian/Asian" and **2%** (5 respondents) as "White" ethnic category. The remaining **3%** (7 respondents) were amongst the "Other" ethnic category. Three of these respondents categorized themselves as "Pedi", while four respondents were amongst the "Venda" grouping. Regarding the aspect of race/ethnic grouping, it was not feasible for this study to focus on this aspect, as all race groups were not adequately represented. The outcome of this study will thus have no impact on the variables, (i) race/ethnic groups (ii) language (iii) work (iv) region (iv) caregiver and (vi) family members as they are not statistically feasible for this study, further than descriptive.

4.4 Summary of the most significant results

This section will highlight the most significant results of each question based on the responses received. Although the following sections appear differently on the questionnaire, the presentation of the findings will occur in the following order:

- SECTION 1: Knowledge on HIV/AIDS
- SECTION 2: Attitudes towards HIV/AIDS
- SECTION 3: Sexual history and beliefs on sexual behavioural practices, and
- SECTION 4: Sources on information about HIV/AIDS.

In the statistical analysis of this study, some tables/graphs present additional variables such as: "invalid" – where respondents had incorrect responses, and "missing" – where respondents did not respond at all. The researcher believes that, because the focus of this study is not to make inferences, but to describe, the "invalid" figures would not affect the study negatively. So, these figures were not included in the observations of this study.

In this section of the research article, questions will be posed above each relevant figure/table and will be briefly interpreted.

<u>SECTION 1</u>: KNOWLEDGE ON HIV/AIDS

It is safer for both partners to use condoms at the same time during sexual intercourse.

Condoms safer for both partners during sex	Count	Percent
Invalid	3	1.3
Yes	87	39.5
No	89	40.4
Don't Know	39	17.7
Missing	2	0.9

Interestingly **39.5%** respondents knew that both partners should wear condoms during sexual intercourse, while a very close percentage of **40.4%** did not agree that both partners should wear a condom during sexual intercourse. Of the total sample **17.7%** of respondents were uncertain

whether it was safer for both partners to wear a condom during sexual intercourse, while **0.9%** did not respond to the question.

Which contraceptive method is the most effective in preventing HIV infection?

Best contraceptive method for HIV prevention	Count	Percent
Invalid	2	0.9
Injections	8	3.6
Pills	10	4.5
Condoms	166	75.4
Emergency contraceptive	3	0.9
Withdrawal	20	1.3
Other	10	9.0
Missing	1	4.5

The majority (**75.4%**) of respondents agreed that condoms are the best contraceptive method to prevent HIV infection. A small group of **3.6%** preferred the injection and **4.5%** agreed that pills are the best contraceptive method for HIV prevention. A minority of **0.9%** considered emergency contraceptive, **1.3%** on withdrawal and **9.0%** other methods as effective contraceptive methods against HIV.

A person can contract HIV the first time he or she has sexual intercourse.

Contract HIV during first sexual experience	Count	Percent
Invalid	1	0.4
Yes	195	88.6
No	16	7.2
Don't Know	8	3.6
Missing	0	0.0

The majority of respondents **(88.6%)** agreed that one can contract HIV during your first sexual intercourse. A minority of **7.2%** responded "no" and **3.6%** did not know the answer.

HIV is a virus that remains in the body for years before it causes AIDS.

HIV remains in body before causing AIDS	Count	Percent
Invalid	1	0.4
Yes	205	93.1
No	8	3.6
Don't Know	6	2.7
Missing	0	0.0

The majority of respondents (**93.1%)** knew that the HIV virus can remain in the body before it causes AIDS. A very small group of **3.6%** disagreed and **2.7%** was uncertain how to respond.

Do mosquito bites cause HIV?

Mosquito bites cause HIV	Count	Percent
Invalid	1	0.4
Yes	25	11.3
No	165	75.0
Don't Know	28	12.7
Missing	1	0.4

75% of the respondents knew that mosquito bites do not cause HIV. Interestingly 53 **(24%)** participants did not know, nor were they sure whether mosquito bites cause HIV.

Does more than one sexual partner increase your chance of getting HIV?

HIV increase each time you have another sexual partner	Count	Percent
Invalid	2	0.9
Yes	208	94.5
No	5	2.2
Don't Know	5	2.2
Missing	0	0.0

The majority (**94.5%**) of respondents knew that your chances of getting HIV increases each time you have another sexual partner, while a minority of **2.2%** did not agree and was uncertain how to respond, respectively.

<u>SECTION 2</u>: ATTITUDES TOWARDS HIV AND AIDS

If you had unprotected sexual intercourse, do you need to get tested for HIV?

Testing for HIV after unprotected sex	Count	Percent
Invalid	2	0.9
Yes	205	93.1
No	8	3.6
Don't Know	5	2.2
Missing	0	0.0

A high response rate of respondents (**93.1%**) indicated that if you had unprotected sex you need to get tested for HIV. A minority of **3.6%** disagreed, while a minority **(2.2%)** was unsure how to respond.

Who would you prefer speaking about sex with?

Preference to speak to about sex	Count	Percent
Invalid	5	2.2
Parent/Caregiver	30	13.6
Brother/Sister	9	4.0
Grandparent	2	0.9
Teacher	6	2.7
Peer Educator	25	11.3
Friend	133	60.4
Other (specify)	9	4.0
Missing	1	0.4

The majority of respondents (**60.4%**) would prefer to speak to a friend about sex. Those who reported that they prefer talking to their parent/caregiver had a **13.6%** response rate, and those who prefer talking to their peer educator had a response rate of **11.3%.** A small percentage indicated to talking to a brother/sister **(4%)**, grandparent **(0.9%)** and teacher **(2.7%)**.

Can you tell if a person has HIV by looking at them?

Can tell a person has HIV by looking	Count	Percent
Invalid	3	1.3
Yes	6	2.7
No	209	95.0
Don't Know	2	0.9
Missing	0	0.0

A high response rate of respondents (**95%**) agreed that one cannot tell if a person has HIV by looking at them. A minority of **2.7%** disagreed, while **0.9%** did not respond.

Can you get HIV by touching an HIV positive person?

By touching an HIV+ person cause HIV	Count	Percent
Invalid	2	0.9
Yes	3	1.3
No	214	97.2
Don't Know	1	0.4
Missing	0	0.0

The majority of respondents **(97.2%)** agreed that you cannot get HIV by touching an HIV positive person. A minority of **1.3%** agreed that one can get HIV by touching an HIV positive person, while **0.4%** was unsure how to respond.

Only homosexuals (gays) can get infected with HIV.

Only homosexuals get infected with HIV	Count	Percent
Invalid	3	1.3
Yes	6	2.7
No	209	95.0
Don't Know	2	0.9
Missing	0	0.0

Two hundred and nine respondents (**95%**) agreed that not only homosexuals can get infected with HIV. A minority of **2.7%** disagreed, while **0.9%** was unsure how to respond.

HIV infected persons can get rid of HIV by having sexual intercourse with a virgin.

Sex with a virgin cures HIV	Count	Percent
Invalid	3	1.3
Yes	3	1.3
No	213	96.8
Don't Know	0	0.0
Missing	1	0.4

A majority of respondents **(96.8%)** agreed that HIV infected persons cannot cure HIV by having sexual intercourse with a virgin, while a small group (**1.3%)** believed that HIV infected persons can cure HIV by having sexual intercourse with a virgin.

If you are infected with HIV, you can get rid of it by having a shower.

A shower cures HIV	Count	Percent
Invalid	3	1.3
Yes	3	1.3
No	212	96.3
Don't Know	2	0.9
Missing	0	0.0

A majority of two hundred and twelve respondents (**96%**) agreed that you cannot get rid of HIV by having a shower after sexual intercourse. A minority of **1.3%** agreed that one can get rid of HIV by having a shower, while **0.2%** was unsure how to respond.

Know someone who is HIV positive?

Know a HIV positive person	Count	Percent
Invalid	3	1.3
Yes	120	54.5
No	85	38.6
Don't Know	12	5.4
Missing	0	0.0

The table indicates that **54.5%** of respondents knew someone who was HIV positive, while **38.6 %** did not know someone who was HIV positive. A minority of **5.49%** was unsure how to respond.

HIV positive children should not mix with other children.

HIV + children not mix with other children	Count	Percent
Invalid	3	1.3
Yes	17	7.7
No	195	88.6
Don't Know	5	2.2
Missing	0	0.0

Overall one hundred and ninety five respondents (**88.6%**) responded that HIV positive children should indeed mix with other children, while the minority **(7.7%)** agreed that HIV positive children should not play with other children. Of the total sample **2.2%** was unsure how to respond.

SECTION 3: *SEXUAL HISTORY AND BELIEFS ON SEXUAL BEHAVIOURAL PRACTICES*

These questions aimed to assess a baseline of sexual practices, while comparing the knowledge of students, including their attitudes with their self-reported sexual experiences and practices. In this study condom use will be included as part of sexual practices, as it plays a significant role in sexual practices.

Do you have a boy-/girlfriend right now?

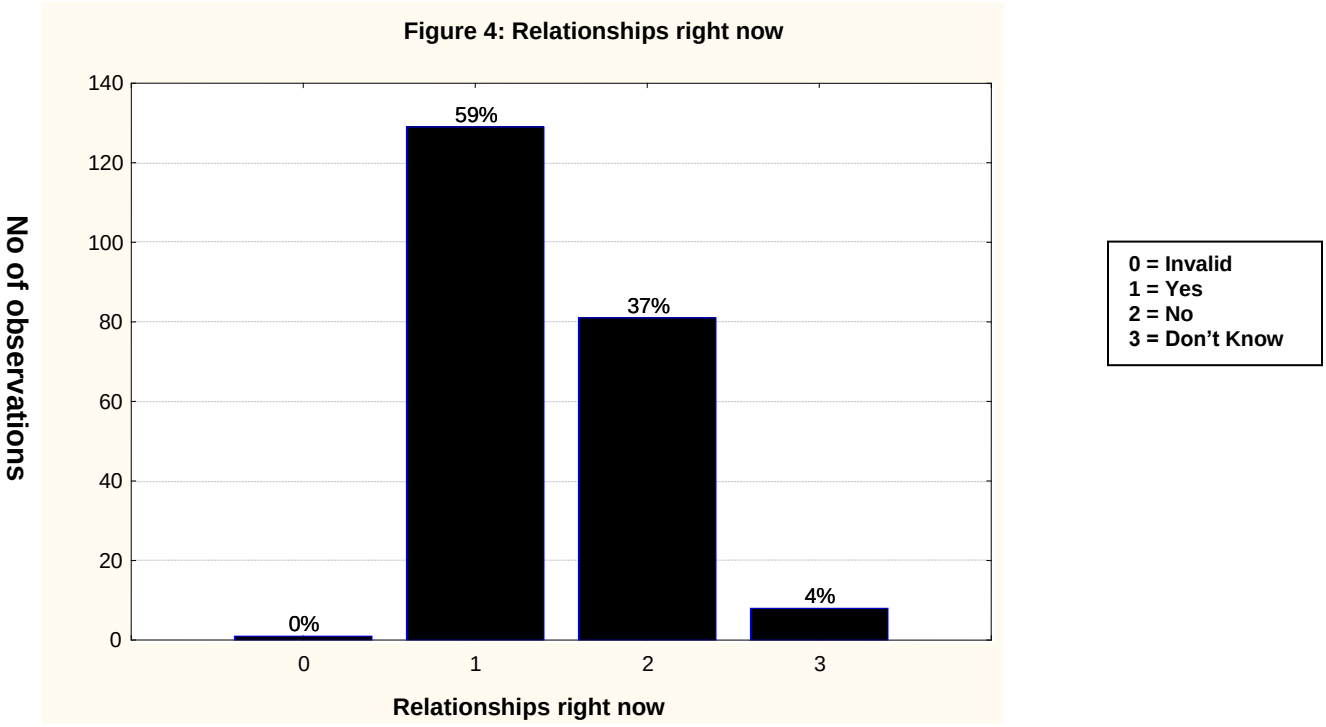


Figure 4 highlights that **59%** of the respondents were in a relationship (with boyfriend/girlfriend) at the time. Of the total sample **37%** reported that they were not in a relationship, while a minority of **4%** was uncertain if they were in a relationship.

If YES? The number of boy-/girlfriends?

Number of current relationships	Count	Percent
Invalid	55	25.0
One	118	53.6
Two	12	5.4
Three	2	0.9
Four	8	3.6
Missing	25	11.3

The table highlights that **53.6%** respondents had one boy/girlfriend. A minority of **0.9%** had three partners and **3.6%** reported having four boy/girlfriends at presents. Adolescents may have

the tendency to do "false-reporting" due to appearing "living on the edge" in the group, as the gap between the first group and the last named two groups seems incredibly large.

Age when you had your first boy-/girlfriend?

Age at first relationship	Count	Percent
Younger than 9 years	6	2.7
9-11 years	10	4.5
12-14 years	49	22.2
15+ years	139	63.1
Never had a boyfriend/ girlfriend	10	4.5
Don't know	4	1.8
Missing	2	0.9

The largest group of respondents (**63.1%**) indicated that they had the onset of their relationships when they were older than 15 years, with **22%** having their onset between ages 12 – 14 years. A minority of **4.5%** had their first relationship between 9-11 years, while **2.7%** was younger than 9 years of age. Interestingly, **4.5%** never had a boy/girlfriend before or at the time of the study.

Have you ever had sexual intercourse?

Ever had sex	Count	Percent
Yes	144	65.4
No	66	30.00
Don't Know	3	1.3
Missing	7	3.1

The largest group of respondents (**65.4%**) indicated that they already had sex. Of the total sample **(30%)** of respondents never had sexual intercourse at the time of the study, and **1.3%** was uncertain how to respond to the question.

If YES, how old were you when you had sexual intercourse for the first time?

Age of sexual debut	Count	Percent
Invalid	9	4.0
Younger than 9 years	0	0.0
9-11 years	1	0.4
12-14 years	10	4.5
15+ years	129	58.6
Don't know	6	2.7
Never had sexual intercourse	58	25.4
Missing	7	3.1

The largest group of respondents (**58.6%**) reported that they had their first act of sexual intercourse when they were 15 years or older.

How old was your partner the first time you had sexual intercourse?

Age of partner at sexual debut	Count	Percent
Invalid	9	4.0
Younger than 9 years	0	0.0
9-11 years	4	1.8
12-14 years	8	3.6
15-20 years	94	42.7
21-26 years	34	15.4
27+ years	8	3.6
Don't know	2	0.9
Never had sexual intercourse	53	24.0
Missing	8	3.6

In the table the ages of the respondents' partners at sexual debut range from 12 to 29 years, with a median age of 20. The largest group of respondents (**42.7%**) was in a relationship with partners during sexual debut, aged 15-20 years, with the next group (**15.4%**) having their partner's ages at sexual debut at 21-26 years.

The first time you had sexual intercourse, was it forced?

Was sexual debut forced	Count	Percent
Invalid	10	4.5
Yes	10	4.5
No	131	59.5
Don't Know	7	3.1
Never had sexual intercourse	54	24.5
Missing	8	4.1

The table indicates that **59.5%** of respondents reported that their sexual debut was not forced, with a minority of **4.5%** who indicated that their sexual debut was forced, which warrants further investigation. Of the total sample **3.1%** was unsure how to respond to the question.

How many sexual partners have you had in the past 6 months?

Number of sexual partners past 6 months	Count	Percent
Invalid	9	4.0
None (0)	84	38.1
One (1)	92	41.8
Two (2)	17	7.2
Three (3) or more	11	5.0
Missing	7	3.1

The table indicates that **41.8%** of respondents reported they had one sexual partner in the past 6 months. Almost an equal percentage (**38.1%**) of the sample reported that they had no sexual partners in the past 6 months. A minority of **7.2%** had two partners and **5.2%** reported having three/more partners in the past 6 months.

Right now, how many sexual partners do you have?

Number of current sexual partners	Count	Percent
Invalid	9	4.0
None (0)	114	51.8
One (1)	82	37.2
Two (2)	4	1.8
Three (3) or more	4	1.8
Missing	7	3.8

As highlighted in the table, interestingly the largest group of respondents (**51.8%**) reported that they have no sexual partners at present. Of the sample, a total of **37.2%** had one sexual partner, while an equal percentage **(1.8%)** reported that they have two or more than three respectively.

Did you or your partner use a condom the last time you had sexual intercourse?

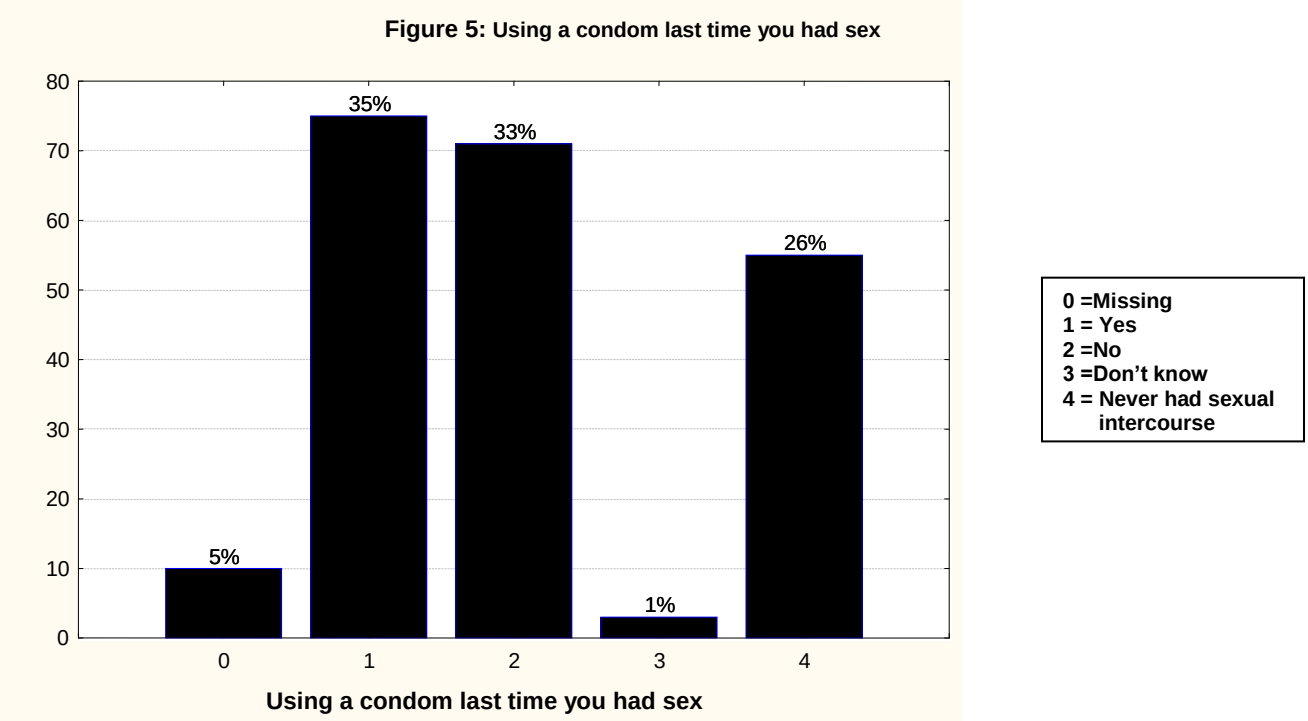


Figure 5 indicates that **35%** of the respondents reported that they used a condom during their last sexual intercourse; while **33%** reported that they did not. This clearly indicates a level of risky sexual behaviour.

If you did not use a condom, did you use another contraceptive method?

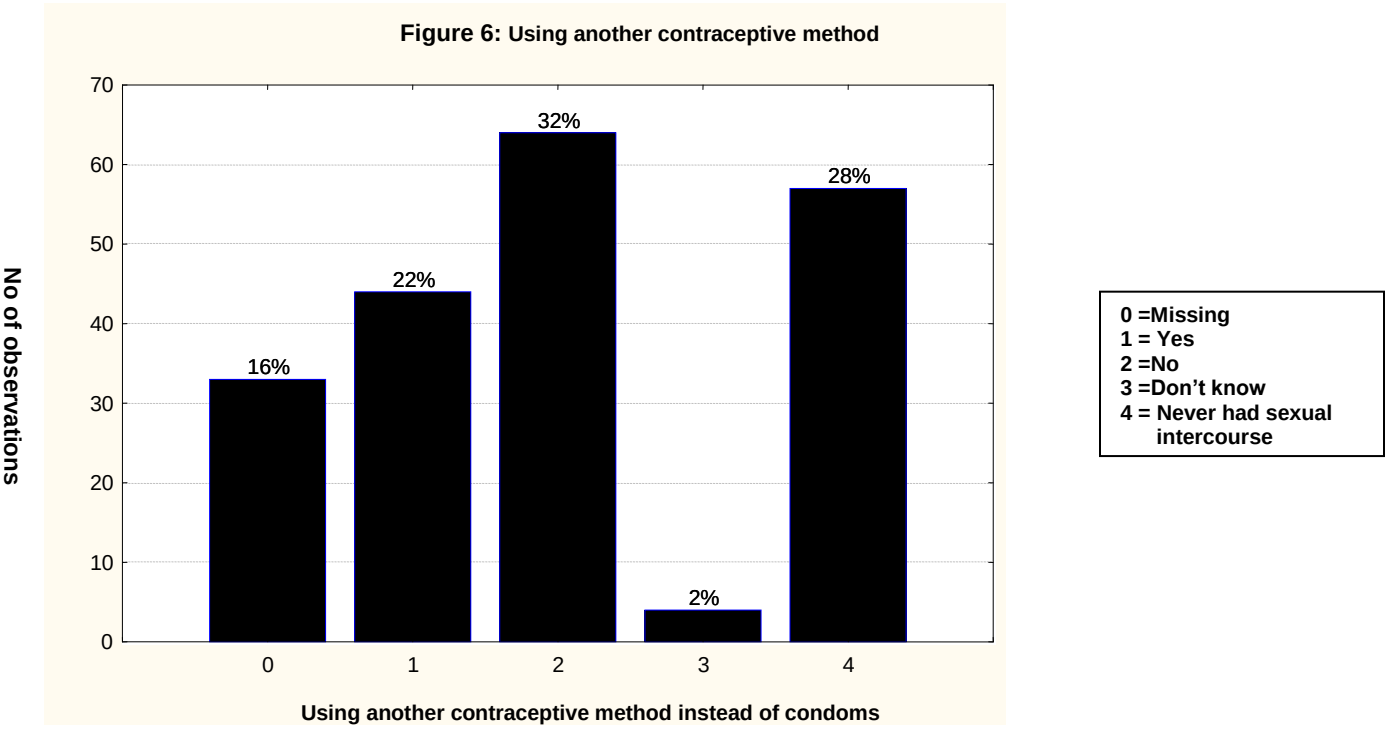
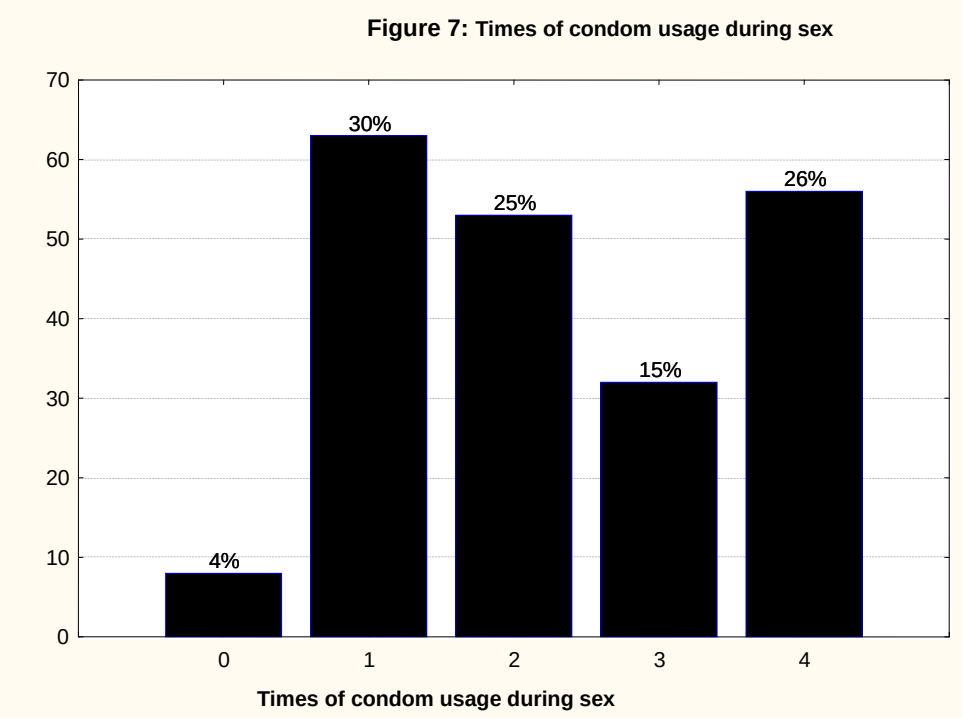


Figure 6 highlights that the largest group of respondents (**32%**) reported that they did not use any other contraceptive method and **22%** made use of an alternative contraceptive method.

How often do you use a condom when having sexual intercourse?



As highlighted in figure 7, the largest group of respondents (**30%**) used condoms each time when having sexual intercourse. Of the total sample, **25%** used condoms sometimes when having sexual intercourse. This indicates a level of responsibility/attitude towards risky sexual behaviour. Fifteen percent (**15%**) of the students reported never using a condom when having sexual intercourse, indicating the level of negative attitude towards risky sexual behaviour.

Have you ever been pregnant or made a girl pregnant?

Ever been/made someone pregnant	Count	Percent
Invalid	8	3.6
Yes	47	21.3
No	153	69.5
Don't Know	7	2.7
Missing	5	2.2

Overall **69.5%** of respondents responded that they have never been or made a girl pregnant. Of

the sample **21.3%** reported that they have made or have been pregnant before. The minority of **2.7%** was unsure how to respond to the question.

Have you ever been tested for HIV?

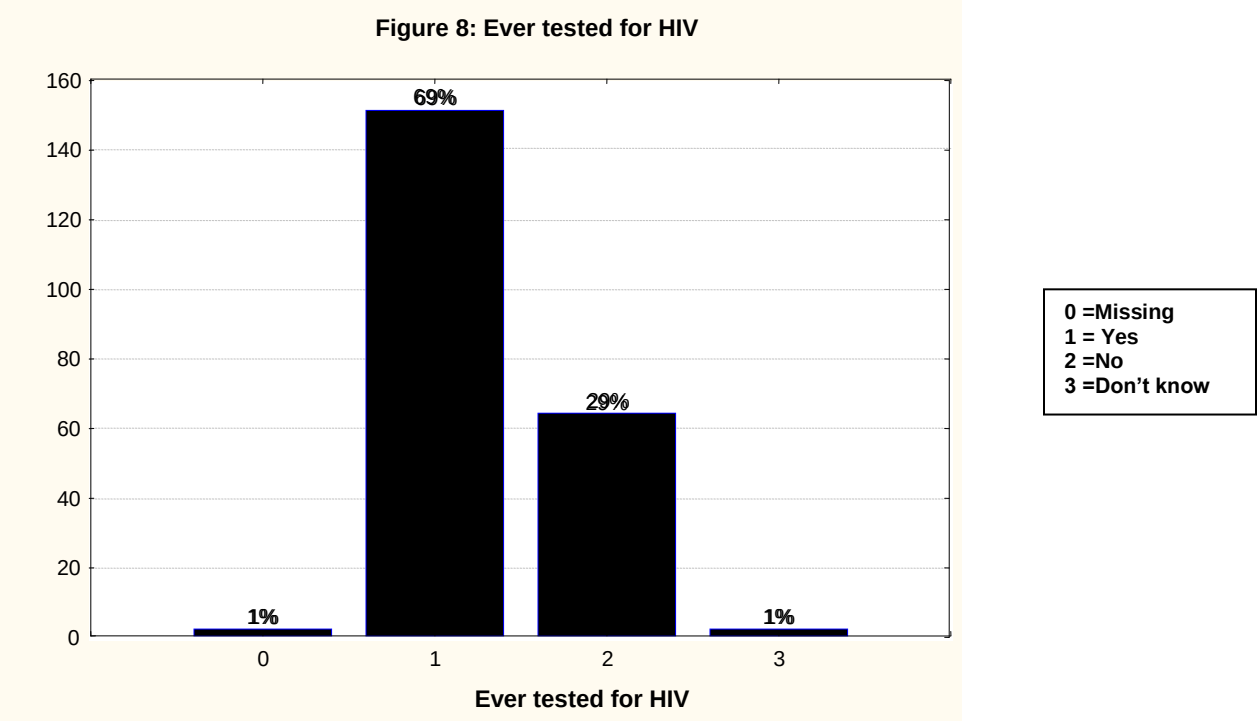


Figure 8 highlights that one hundred and fifty four respondents **(69%)** reported that they have been tested for HIV. Of the same sample **29%** reported that they have never been tested for HIV, while a minority of **1%** was not confident to respond to the question.

Do you plan to get tested for HIV this year?

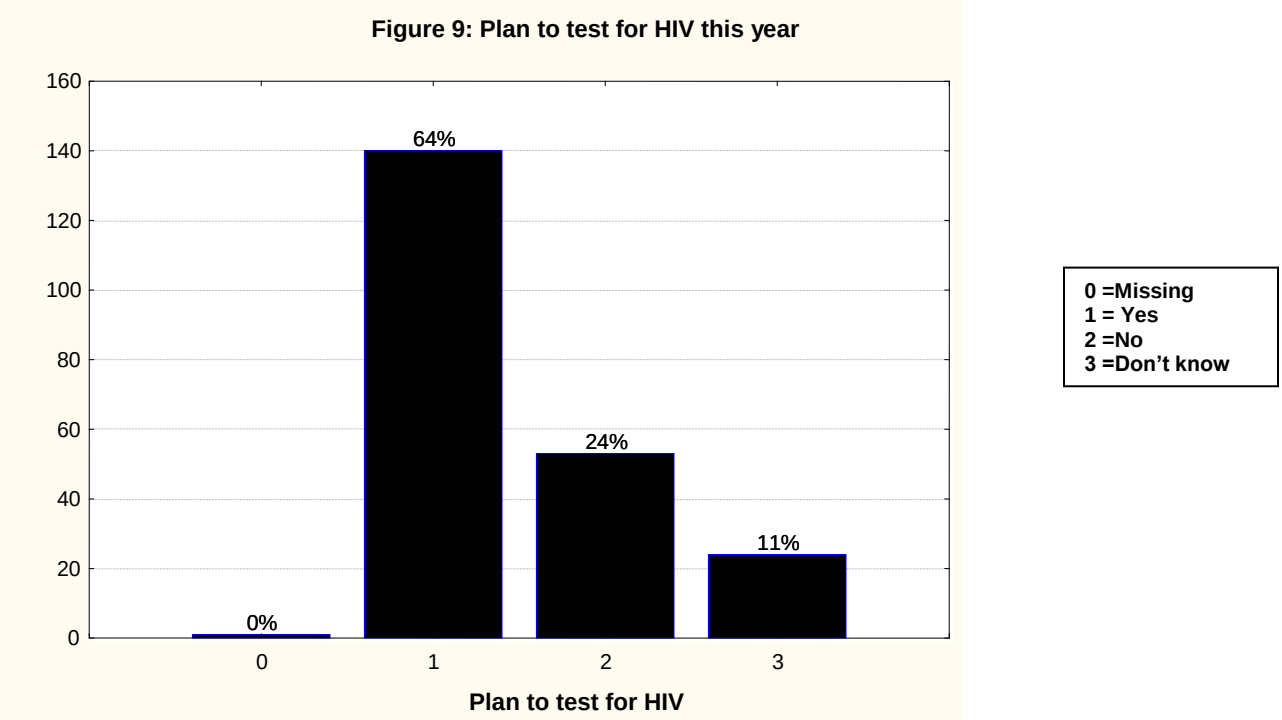


Figure 9 indicates that overall **64%** of respondents responded positively that they plan to test for HIV this year. A group of **24%** indicated that they do not plan to get tested for HIV this year, which warrants further investigation. A minority of **11%** was not confident to respond to the question.

Would you have sexual intercourse with a partner if they did not wear a condom?

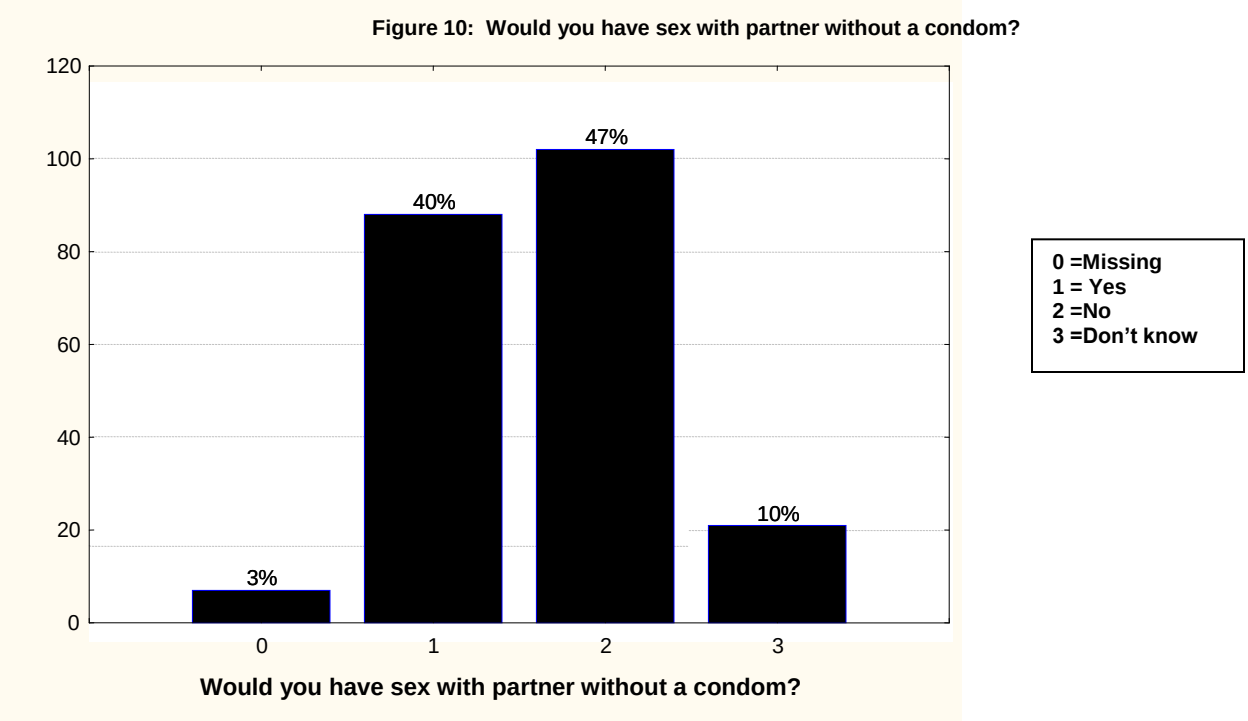


Figure 10 highlights that the largest group of respondents (**47%**) reported that they would not have sexual intercourse with a partner if they did not wear a condom. Of the same sample, 88 respondents (**40%**) indicated that they would have sexual intercourse with a partner if they did not wear a condom. A small group of 21 students **(10%)** was uncertain how to respond to the question.

Have you ever had a Sexually Transmitted Infection (STI)?

Ever had an STI	Count	Percent
Invalid	6	2.7
Yes	5	2.7
No	202	91.8
Don't Know	6	0.9
Missing	1	0.4

A high response rate of respondents (**91.8%**) reported never to have had a sexually transmitted infection (STI). A minority of **2.7%** had a sexual transmitted disease, while **0.9%** was unsure how to respond.

Have you ever been taught about AIDS or HIV infection and STIs at school?

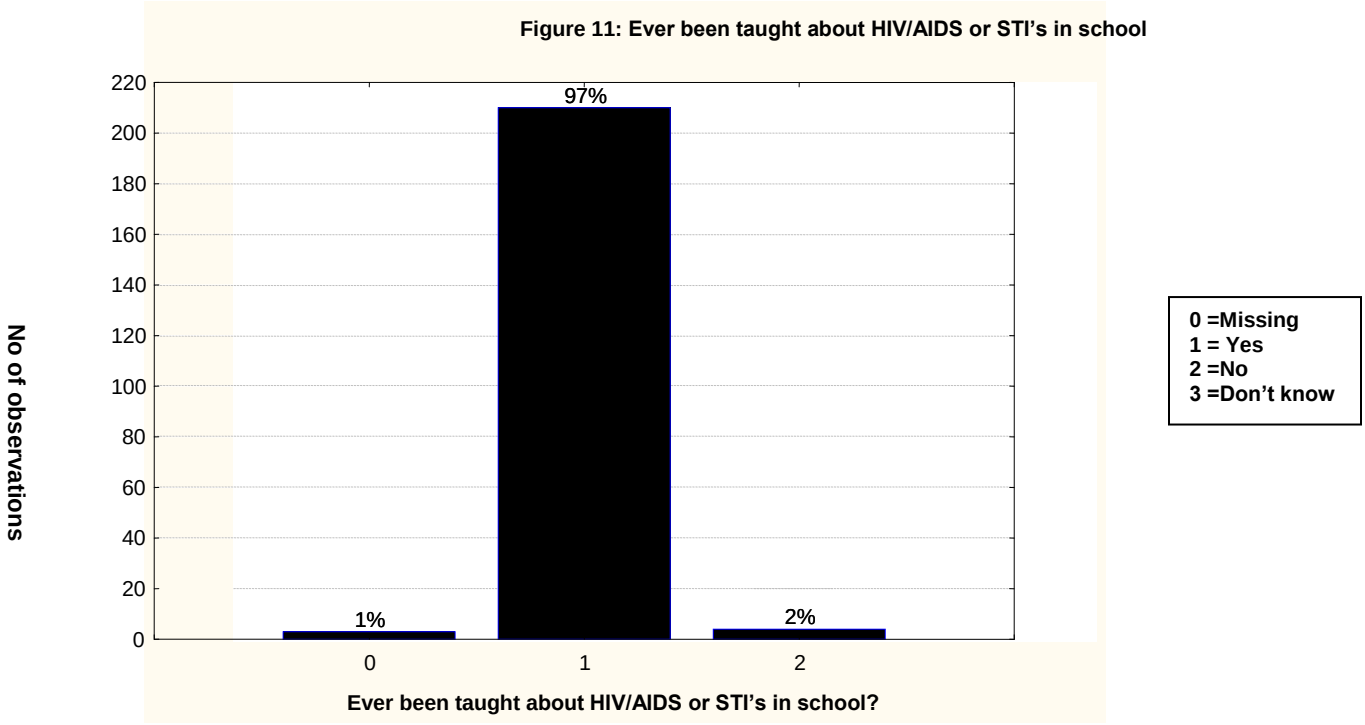


Figure 11 summarises that a majority of respondents (**97%**) reported that they been taught about AIDS or HIV infection and STIs at school. This clearly indicates that the government of the day is surely playing an important role in educating the nation about the pandemic. A minority **(2%)** indicated that they have never been taught about AIDS or HIV infection and STIs at school.

Have you ever drunk alcohol?

Ever drunk alcohol	Count	Percent
Invalid	4	1.8
Yes	159	72.2
No	52	23.6
Don't Know	4	1.8
Missing	1	0.4

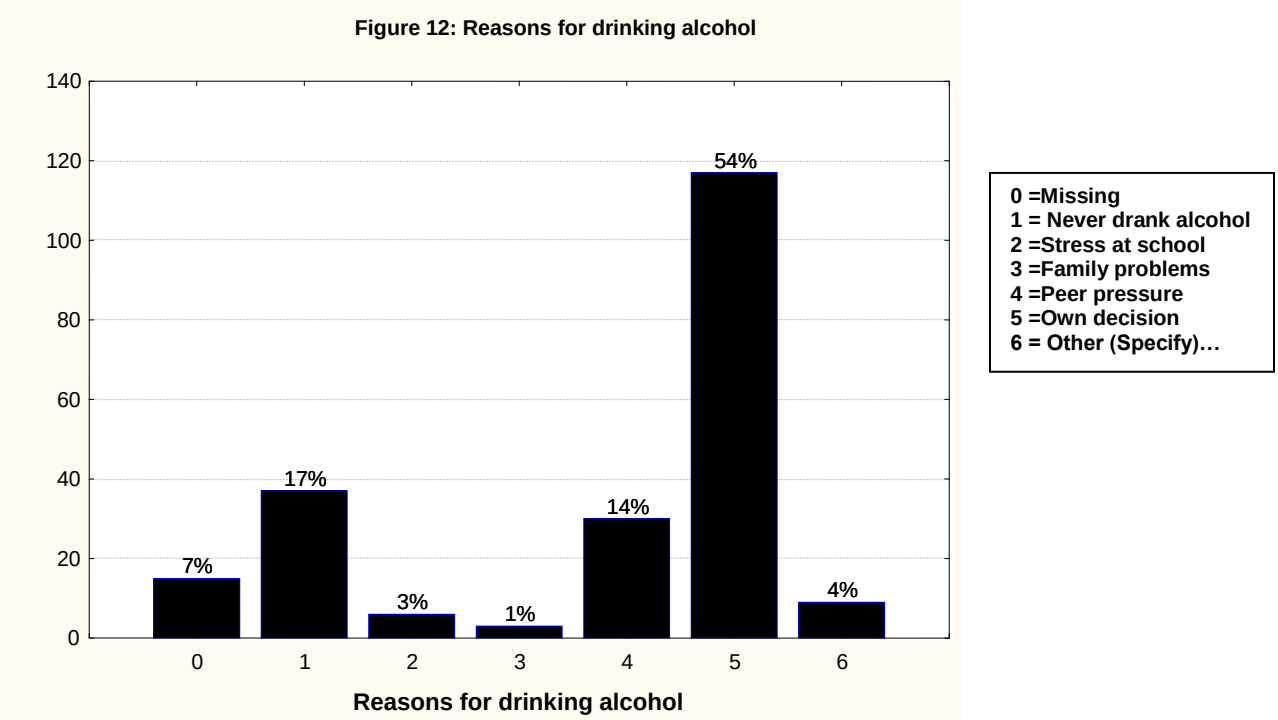
The table indicates that overall **72.2%** of respondents responded using alcohol at some stage of their lives, while **23.6%** reported not consuming alcohol at all at any time. Of the total sample, **1.8%** was unsure how to respond to the question.

If YES, how old were you when you first tried alcohol?

Age of first alcohol use	Count	Percent
Invalid	16	7.2
< than 10 years	6	2.7
10-13 years	31	14.0
14+ years	124	56.3
Never tried alcohol	40	18.1
Missing	1	1.3

In the table, a high response rate of one hundred and twenty four respondents (**56%**) indicated that they were exposed to alcohol for the first time at the ages of 14 years and over. Fourteen percent (**14%**) of students had tried alcohol for the first time between the age ranges of 10-13 years, while **18%** had never tried alcohol at all. A very small number **(2.7%)** of the sample tried alcohol for the first time when they were younger than 10 years.

What made you drink alcohol?



As highlighted in figure 12, the largest group of students (**54%**) drank alcohol out of their own choice. Of the sample, thirty seven students (**17%**) never drank alcohol and a total of 30 students (**14%**) drank due to peer pressure. A minority of **4%** drank alcohol because of boredom, **3%** drank alcohol due to stress at university/school, while **1%** drank as a result of family problems.

Have you ever tried drugs?

Ever tried drugs	Count	Percent
Invalid	2	0.9
Yes	66	30.0
No	151	68.6
Don't Know	1	0.4
Missing	0	0.0

The table highlights that overall **68.6%** respondents indicated that they had never tried drugs, while a total of 66 (**30%**) respondents had. Of the total sample **0.4%** was unsure how to respond to the question.

If YES, how old were you when you first tried drugs?

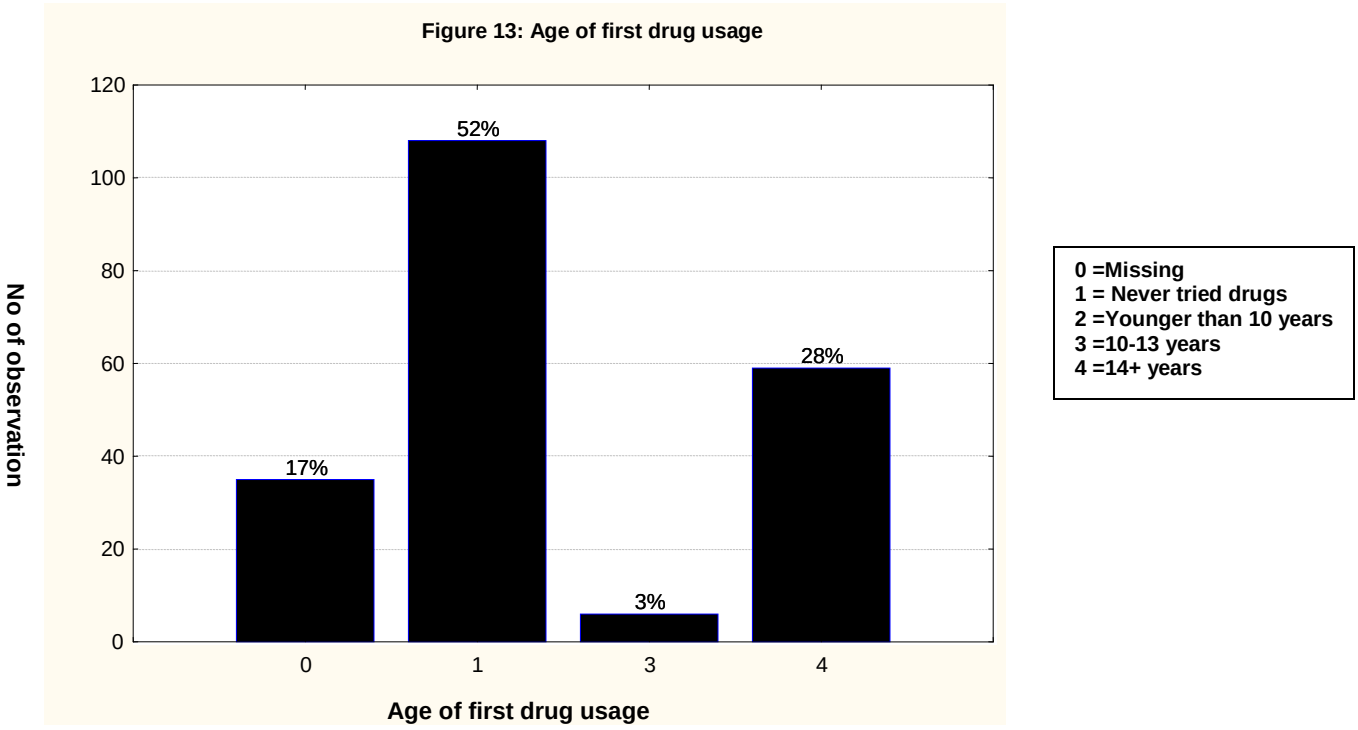


Figure 13 summarises that the majority of respondents have never tried drugs. Twenty-eight percent (**28%)** have started using drugs for the first time from age fourteen and over. A minority of **2.7%** reported using drugs between ages 10-13 years.

SECTION D: SOURCES OF INFORMATION

Who is the main person that gives you information on sex?

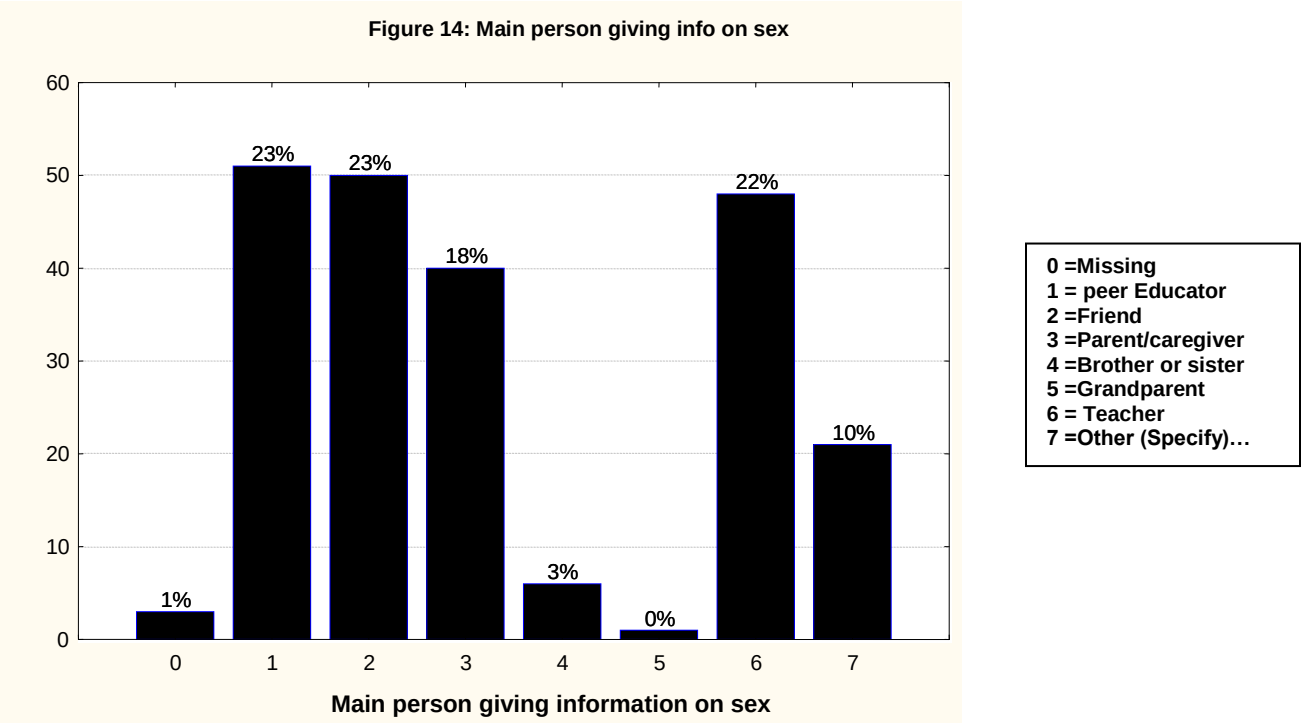
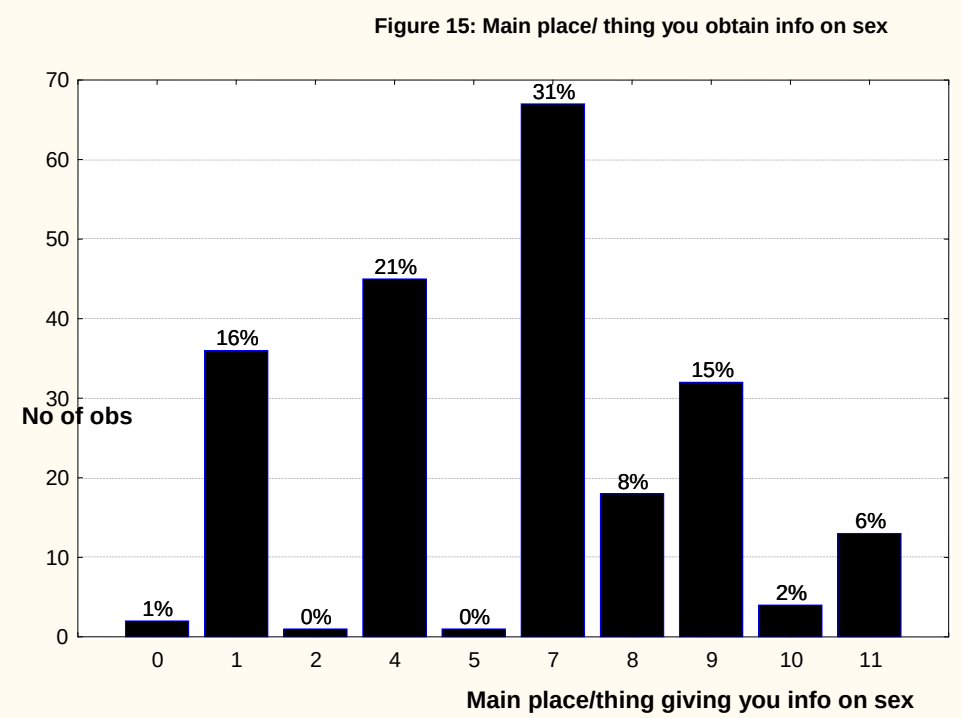


Figure 14 gives a summary of the sources which gives information on sex to the respondents. Overall, respondents reported that they obtain sexual information from peer educators and friends (**23%**) respectively. The teacher (**22%**) and the parent/caregiver (**18%**) were also classified as two main sources. Other main sources included the pastor and youth leader in church **(10%).**

Who is the main place/thing that you go to get information on sex?



As highlighted in figure 15, sixty-seven respondents (**31%**) received their sex-related information from the health centre, while the internet (**21%**) television (**16%**) and school **(15%)** proved to be three of the more frequent places/things where respondents obtained information on sex-related issues. Other sources included the youth centre **(8%)** and the church/pastor **(6%)**.

How do you think we can stop people in South Africa from getting infected with HIV?

In this section open-ended questions were posed to respondents. Respondents were allowed to provide their own opinions regarding possible prevention methods within the South African context.

Prevention in the South African context	Count	Percent
Invalid	28	12.7
Abstinence	33	15.0
Don't know	8	3.6
Right attitudes/mindset towards sex	2	0.9
Condoms more freely available	18	8.2
Education and awareness programmes	106	48.2
Compulsory HIV testing	6	2.7
Self-responsibility and good morals	11	5.0
Law against unprotected sex	4	1.8
More TV programmes	1	0.5
Death penalty against rape	1	0.5
No more media about sex	2	0.9
Missing	0	0.0

A total of one hundred and six respondents (**48.2%**) felt that more education and awareness programmes are required, while 33 respondents (**15%**) suggested abstinence should be a major form of prevention. Of the sample 11 respondents (**5%**) felt that prevention is each person's own responsibility, and that good morals should play a crucial role in our sexual lives. Eight percent **(8%)** felt that free condoms should be more readily available in the communities and not only at university. Minor reporting **(2.7%)** covered the following variables such as compulsory HIV testing, having a law against unprotected sex **(1.8%)**, and the right attitudes/mindset towards sex **(0.9%).** A minority of **0.5%** wanted more TV programmes and the death penalty against rape, while **0.9%** reported no more media about sex. A minority of **3.6%** was uncertain how to respond to the question.

4.5 Conclusion

The results generally indicate quite a high level of knowledge and positive attitudes towards HIV/AIDS. However, bearing this knowledge in mind, reported risky sexual behaviour of some students still remains an area of concern. As these risky sexual behaviours may produce dire consequences for the first-year Psychology students, it is imperative that this study identifies appropriate interventions. The results of this chapter were presented in the form of descriptive statistics, and will now be briefly discussed in an integrated fashion in the next chapter, including the limitations of the study and recommendations for future research.

CHAPTER 5: DISCUSSION, LIMITATIONS, RECOMMENDATIONS AND CONCLUSION

5.1 Introduction

This chapter concludes with a brief discussion of the findings of the current study, describing its limitations, and making recommendations for future research. Key results will further be compared with those of similar studies. A brief discussion will be done by the researcher by following a thematic approach, instead of linking the discussion to each objective. The following themes will be discussed:

(i) knowledge and attitudes towards HIV-related issues;
(ii) risky sexual behaviour;
(iii) sources of information about HIV/AIDS;
(iv) identifying trends in misinformation (myths) among young adults about HIV/AIDS, and
(v) limitations of the current study and their possible outcomes on the results.

5.2 Discussion

5.2.1 Knowledge and attitudes towards HIV-related issues

This study explored how the levels of knowledge and attitudes of HIV-related issues influence risky sexual behaviour of first-year Psychology students at a South African university. The results of this study showed that the majority (75%) of the young adults in this study reported that condoms are the best contraceptive method to use in preventing HIV infection. These results are consistent with the findings of the national surveys done by Shishana et al. (2002, 2009), where one of the key findings was a dramatic increase in the number of people reporting condom use, specifically seen among youth aged 15-24 years.

In the current study one could assume that the students in this sample were academically equipped to negotiate condom use with their partners. However, Mwaba and Naidoo (2005) advise that the encouraging finding on attitudes towards condom use must also be interpreted with caution because students' reporting of condom use may not necessarily reflect actual

behaviour. Akande (2001) recommends in his study that condom use does require communication and is not a private act. Even though the intention to use a condom is important, there is no one-to-one correspondence between intention and behaviour.

Findings of the present study are consistent with the 97% respondents of Hartell (2005) and 80% of Steyl (2007) who showed a high awareness about HIV/AIDS. The present study found high levels of knowledge towards HIV as 88.6% agreed that one can contract HIV during your first sexual intercourse experience. Ninety three (93.1%) respondents knew that HIV can remain in the body before it causes AIDS, while 94% knew that HIV increases each time you have another sexual partner.

Similar to the above studies, findings of a study done by Eaton and Flisher (2000) with youth, aged 14-35 years, indicated that young people are very aware that AIDS is a disease that is sexually transmitted and fatal. However, comment Shishana et al. (2009) and Eaton and Flisher (2000), while levels of knowledge in South Africa are generally high, there are some major gaps in knowledge. Having sufficient knowledge does not necessarily improve the adolescent's to make decisions (Piaget, 1964; Lance, 2001; Shishana et al., 2002).

Further findings in this study include that 94.5% respondents agree that more than one partner increases your chance of getting HIV. These findings are inconsistent with the study of Shishana et al. (2009) who found that a minority of 10% of respondents said that staying with a faithful partner and using a condom will not protect them from HIV.

On the whole, the results related to HIV attitudes of the current study generally demonstrate that the majority of respondents express attitudes of acceptance towards people living with HIV/AIDS. A total of 209 respondents (95%) agreed you cannot tell if a person has HIV by looking at them. Ninety seven percent respondents (97.2%) knew you could not get HIV by touching an HIV positive person. Shishana et al. (2002) agreed in their survey that better knowledge of HIV transmission has been shown to have a positive relationship with both prevention behaviours and positive attitudes, but it is a necessary condition. The results of the current study are similar with the above study in terms of the majority of the South African

population attitudes of acceptance towards people living with HIV/AIDS. As there seem to be an overlap between misconceptions (myths) and attitudes, the rest of the attitudes will be discussed in section 5.2.3.

5.2.2 Risky sexual behaviour

Relationships

Adolescence is generally marked by elevated levels of sexual risk behaviour that can lead to various sexually diseases, such as HIV and unplanned pregnancy. The findings of this survey, which covers the behaviour of sexually active adolescents, raise concerns regarding the likelihood of them contracting HIV and other sexually transmitted infections. While most heterosexual college students know they are at risk for HIV infection, most do not feel at risk themselves (Lance, 2001).

The findings of this study show that 129 of the respondents (58.6%) reported being currently in a monogamous relationship, while eight (3.6%) reported having more than three partners. Although eight (3.6%) warrants reason for further investigation; in the case of adolescents this figure may perhaps have to be treated with caution. The findings are in stark contrast with those of the national survey done by Shishana et al. (2002), where 84.7% of youth only had one partner. However, almost similar findings with the Shishana et al. (2002) study were reported in a study done by Menda (2006) which indicated that 74% of respondents only had one partner.

Interestingly more than half (63.1%) of the respondents had their onset of relationship >15 years, with 22% between age 12-14 years. At the time of the study, 10 (4.5%) had never been in a relationship before. This study found that more than half (59.5%) reported that their sexual debut was not forced. This is in contrast to findings of a study done by Menda (2006) in Zambia where 74% respondents reported that their sexual debut was not forced. An encouraging figure of 24.5% respondents reported that they never had sexual intercourse. Similar findings were reported in Menda's (2006) study where 48% of schoolgirls had their first sexual intercourse experience for the simple reason of experimentation. Findings of the Pettifor et al. (2004) study reported that 30% had their sexual debut due to experimentation.

The findings in this study show an encouraging 51.8% of the respondents have no sexual partners right now, while 37.2% respondents reported having one sexual partner at the moment. However, it is important to recognize that previous research on dishonesty in dating and HIV/AIDS has found that 25% of heterosexual students are dishonest about their sexual encounters (Lance, 2001).

Condom use

Less than half (35%) of respondents reported that they used a condom during their last sexual intercourse. This is quite lower than the findings in a study done by Phillips and Malcolm (2006) and Lance (2001) where 50% reported using a condom at their last sexual intercourse. These findings are slightly lower than studies done by Peltzer (2000) of 40.5% and Taylor, Dlamini, Kagore, Jinbhai, and de Vries (2003) of 45.4%. The low rate of condom usage, specifically in this study (33%) is of quite concern, as 97% of these respondents have been taught about AIDS or HIV infection and STI's at school. The study of Peltzer (2001) at a predominantly Black university in South Africa found that 35.9% respondents reported never using a condom, 27.5% always using a condom, 16.7% regularly using a condom and 20% irregularly used a condom in the last 6 months. These findings were similar to the findings of this study. Phillips and Malcolm (2006) had a similar finding of 78.9% of learners who reported the consequences of unprotected sex for they were informed about HIV/AIDS at school. Menda (2006) found that 80% of students indicated that they received HIV and AIDS education from their university. Levine and Ross (2002) still found in their study that HIV/AIDS and STI education proves to be the preferred form of intervention.

A concern of this study is the 15% of respondents who reported never using a condom during sexual intercourse. While this situation reeks of negative attitudes towards risky behaviour, Hartell (2005) found in his study that those adolescents, who know and accept the practice of using contraceptives and condoms, were unable to access them. However, in the current university environment condoms are dispensed right across campus, from students' residences to all general bathrooms, students' clinics and counseling services. Eaton et al. state in Phillips and Malcolm (2006) that there is uncertainty about the correct use of condoms among South African youth and this could explain the low rate of condom use, which links to these findings. Potard,

Courtois, and Rusch (2008) revealed that adolescence is not a time of life when one tends to exercise the forethought necessary for contraceptives.

One hundred and fifty-one respondents (69.6%) of the sample reported they have already tested for HIV. These findings are in stark contrast with a study done by Shapiro and Charchian (1999) where 36% respondents reported previously being tested for HIV, while 58% planned having an HIV test. Similar findings of Simbayi et al. (2005) showed that 39% of respondents had been tested for HIV in their lifetime. There is evidence that voluntary counseling and testing (VCT) services influence behaviour change. However, only 28.2% of students have undergone HIV-testing, which contradicts the findings in a study done by Othero, Aduma, and Opil (2009). Interestingly this study found that 64% of respondents plan to test for HIV this year, while 24% have no plans to test for HIV this year.

It is encouraging that this study found 91.8% respondents who reported that they never had a sexual transmitted infection. A total of eighty-eight respondents (40%) indicated that they would have sexual intercourse with a partner if they did not have a condom.

Alcohol use

Findings point to high rates of respondents (72.2%; 159 in total) reported alcohol consumption, while 23.6% never consumed alcohol at anytime. A concern is the alcohol consumption of participants <10 years of age. One could assume that risky behaviour may result in early sexual debut for children at that age. The majority of this sample (56.3%) tried alcohol for the first time at age 14+ years. However, Cooper (in Brown and Vanable, 2007) clarifies that studies involving adolescents and college students point to an association between alcohol use and sexual risk during first time encounters.

High rates of respondents (54%) confirmed that their reason for alcohol consumption is out of their own free will. In this case, adolescents' choice to experiment comes to mind. Thirty respondents (17%) reported that they never drank alcohol, and 14% drank out of boredom. Very low rates (3%) drank alcohol due to university stress/problems. The study done by Brown and

Vanable (2007) found that drinking on college campuses is often a primary social outlet for students to seek out new partners.

Drug use

More than half of respondents (68.6%) reported that they had never tried drugs, with 66 participants (30%) admitted to drug consumption. At the same time, 28% have started using drugs from 14 years of age and beyond. The researcher believes that at this level of higher education, it is not expected from students to pay attention to any drug at university level. A national survey done by Shishana et al. (2009) at the HSRC is consistent with findings of this study, as it found that both alcohol and drug use are associated with increased risks for HIV infection. This is due to the impairment in both judgment and decision-making which leads to users' risky sexual behaviour. Similar findings by the Centre for Disease Control and Prevention (2007) found that college/university students may be at a higher risk of engaging in sexual behaviour, if they are under the influence of drugs and alcohol.

5.2.3 Sources on information about HIV/AIDS

Most respondents (23%) received information on sex from key persons such as a friend and a peer educator. Other main persons include teachers (22%), parent/caregiver (18%) and pastor/youth leader (10%). These findings were similar to those in studies done by Ellis et al. (2003) and Rasamimari et al. (2008) who found that adolescents without parental supervision are more likely to emerge in early sexual debut, increasing their vulnerability to HIV and STIs. This is in contrast with a study done by Dawood et al. (2006) who found that the preferred sources of information included television (84%), teachers (39%), friends (32%) and parents (28%).

Sixty-seven (31%) received their information on sex from key places such as the health centre, from the internet (21%), television (16%) and school/university (15%). Additional sources included youth centres (8%) and the church (6%). These findings have been corroborated by Shishana and Simbayi (2002) in a national survey, where the health personnel in health facilities, followed by schools and parents (for young people aged 12-24 years), were seen as main sources of interpersonal HIV/AIDS information. Faith-based organisations rated higher than AIDS organisations and youth groups and sports clubs.

In terms of the possible prevention methods within the South African context, findings of this study showed that one hundred and six respondents (48.2%) expressed a need for more educational and awareness programmes. Thirty-three respondents (15%) reported that abstinence should be a key form of prevention. Eleven respondents (5%) believed that responsibility should remain on the onus of the individual. Minor reporting (8%) included free condoms, in easily accessible places and not only on campus, while 3.7% reported that compulsory HIV testing, a law against unprotected sex (1.8%) and more TV programmes were suggested by 0.5% respondents. These findings are consistent with a study done by Levine and Ross (2002) where respondents argued that individuals were responsible for their own health, particularly in relation to sexual practices. In addition, findings suggested that religious morals and rules could halt the spread of the disease. Thus, abstinence before marriage and prohibitions on pre- and extra-marital sex. This is similar to Hartell's (2005) study who found that valuable messages of abstinence to adolescents will assist them to abstain or delay sexual activity.

5.2.4 Identifying trends in misconceptions (myths)

As there is a close link between attitudes and misconceptions, the researcher will integrate the two variables in this brief discussion. Although the findings of this study show high ratings of HIV-related knowledge very few misconceptions are currently held by the respondents of this specific study.

Two hundred and nine respondents (95%) disagreed that only homosexuals getting infected with HIV, while six (2.7%) believed the myth that only homosexuals could become infected with HIV. A high rate of 96.8% gave a negative response to the question whether having sex with a virgin could cure HIV, while three (1.3%) agreed that this myth was true. Further findings included two hundred and twelve respondents (96.3%) disagreed with the myth that a shower can cure HIV, while a discouraging three (1.3%) respondents believed that a shower could cure HIV. Similar findings were indicated in a national survey done by Simbayi et al. (2005) where survey respondents stressed the belief that washing one's genitals after sex reduces HIV. Simbayi et al. (2005) suggested that traditionally, more than five men believed that a person can cleanse their body of HIV by having sex with a virgin.

Findings of this study revealed that 11.3% believed the myth that mosquito bites cause HIV and 12.7% was not confident enough to respond to the question. Positively, the majority of respondents (75%) rejected the myth and responded correctly. In a study done by Tung, Ding, and Farmer (2008) among college students in Taiwan, it was found that 35.6% respondents agreed that mosquitoes cause HIV, 28% agreed that HIV could be contracted through toilet seats, 22.7% agreed that HIV could be spread through swimming pools and 2.3% believed the myth that HIV could spread through hugging an infected person.

Furthermore, one hundred and twenty respondents (54.5%) knew someone with HIV while eighty five (38.6%) did not know anyone with HIV. Interestingly 88.6% respondents disagreed with the myth that HIV positive children should not play with other children, while 7.7% of respondents agreed with this myth. Based on the level of intellect of these students, generalisation of these findings may only be utilised with caution.

5.2.5 Limitations and their outcomes

In spite of the key limitations of this study, the current research also comes with a few outcomes, which is included in the following:

- The sample came from one specific group of students within a South African university setting. This is not representative of the national universities of the entire South African population. Based on this, the obtained results of this study will be affected. Generalisation of these results may only be utilised with caution.
- The study had too little representation of the ethnicity groups. The current study therefore recommends that models should be culturally adapted or designed to suit individual ethnic needs.
- Knowledge, Attitudes, Beliefs and Practices (KABP) surveys have been criticised because their variables are poor predictors of respondents' actual behaviours. As the reliability of this adapted questionnaire surrenders to low levels of reliability, it remains a challenge for the researcher to make any assumptions on it. Katzenellbogen et al. in Mwaba and Naidoo (2005) recommended that KABP surveys may lack reliability and validity to answer different

questions about how to determine behaviour. The researcher believes that a "mixed method" should have been utilized in this study. In other words, the adapted KABP survey and a focus group encourage open discussion about taboo topics amongst the peers of the young adults.

- The respondents within this sample may, or may not have intentionally distorted their responses when the questionnaire was administered. These responses may therefore represent a source of bias, although the responses may be considered valid.
- The findings of this study may have been very different if this was perhaps students of another faculty, e.g. the Arts faculty. As this was a Psychology class from the Community of Health Sciences Faculty, their curriculum included HIV/AIDS as part of the Health Psychology and the LifeSkills and Health Education modules. This may have provided the study with an academic/intellectual advantage in terms of the sample. Furthermore, the first-year Psychology students were eager to participate in the study, as they had a better understanding of the focus of the study, which may not have been the case with another faculty sample.

5.3 Recommendations

In terms of HIV/AIDS research the following recommendations are proposed:

- Perhaps a more concentrated focus is needed more on changes in sexual behaviour and safer sex. The current and future programmes should be culturally centred and focus on the values and beliefs of the target group. It should be planned, developed, implemented, monitored and evaluated with the students and university management. Little research has been done on the evaluation and impact of AIDS education programmes on the sexual behaviour of adolescents (Hartell, 2005).
- Furthermore, as there seem to be a trend amongst young adults to be slightly dishonest in terms of unprotected sex and HIV/AIDS during dating their partners, awareness- and/or educational programmes should focus on culture, respect and restraint in terms of the reality of the disease. (for example: Arrange for a peer with HIV to speak with young adults about the true-life aspects about the disease in order for them to grasp the reality of the disease).
- The researcher agrees with Barden-O'Fallon et al. (2004) and Shobo (2007) who suggested that future research should include more longitudinal designs. Thus, these type of studies

have to: (i) measure an individual's current level of knowledge, (ii) include the prevention of risk, (iii) how he/she will behave in future in terms of their current HIV status, and (iv) how this would affect their health outcomes.

- Young adults should be effectively informed about health centres, which offer confidential and adolescent-friendly resources in their own communities. The current study found that adolescents do not necessarily consult with their parent/caregiver about HIV or sexual issues. In order to offer the necessary reproductive health care without parental consent/permission, these centres need to be adequately equipped. The benefit of the adolescents' and their well-being should constantly remain the main focus areas of the centre.
- Many adolescents in this study felt that their parents should also become involved in educating them as the youth from a young age about the disease. Thus, parents could be targeted to attend health and risk behaviour programmes at primary school level. This would improve their own knowledge, as well as the levels of their children, attitudes and perceptions of the pandemic. At the same time the programme could assist all parties in addressing their concerns and record their suggestions for future HIV/AIDS education and prevention programmes. Dawood et al. (2006) recommended that the emphasis should be on building and sustaining partnerships among family, religious, school, media, business and other community groups.

5.4 Conclusion

This chapter gave a summary and outlined the relevant points pertaining to the current study. It also made recommendations for future actions. This study has attempted to provide a better understanding of how the risky sexual behaviour of first-year Psychology students influences variables such as HIV-related knowledge, beliefs and attitudes. Trends of misconceptions or myths about HIV/AIDS among young adults were also identified. From the results of this study it is evident that first-year Psychology students at the University of the Western Cape commonly engage in lower levels of risky sexual behaviours than those informed in South African literature from national and international populations. This particular population revealed quite a high level of HIV-related knowledge and a reasonably high level of positive attitudes towards safe-sex behaviour. More than half of the sample (51.8%) does not find themselves effectively in relationships at this stage. This

may indicate that there is still an opportunity for them to be taught in a didactic way by means of role-play and group discussions how to continue incorporating a risk-free lifestyle. During this educational approach, young men may be taught how to respect, support and assist women in the decision-making process during sexual relationships. It is hoped that the results of this study can contribute positively towards the streamlining of the current effective, culture, target-specific HIV-prevention programmes within the University of the Western Cape.

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FOR OFFICE USE ONLY

Year: _____

Date Completed: _____

Questionnaire Number: _____

ANNEXURE A: Baseline Questionnaire - 2010

Dear Student,

- This questionnaire will focus on the following areas: biographical information, sexual history and beliefs on sexual practices, respondents' knowledge on HIV and AIDS, attitudes on HIV/AIDS and sources of information.
- It has been developed to assist the researcher to better understand young people's knowledge, attitudes, beliefs and risky behaviours as well as help us produce workshops that are valuable to young people like you.
- Participation in this study is **completely voluntary**. You may also refuse to answer any questions you don't want to answer and still remain in the study.
- This questionnaire is **totally anonymous** and has received ethical approval from an accredited university. There is **no way** that we can trace the answers back to you. **DO NOT WRITE YOUR NAME** on this questionnaire. Once completed please hand sealed it to the researcher in the envelope provided.

INSTRUCTIONS

- **Please answer EACH question by circling ONLY ONE answer for each question.**

EXAMPLE:

Number	Question	Answer	Circle Answer	Skip to question
1.	Are you a male or a female?	Male	(1)	
		Female	2	

Thank you very much for your co-operation.

Questions focusing on: **Biographical Information**				
Question Number	**Question**	**Answer**	**Circle answer**	**Specify**
1.	Are you a male or a female?	Male	1	
		Female	2	
2.	How old are you today?	Younger than 18 years	1	
		18 years	2	
		19 years	3	
		20 years	4	
		21+ years	5	

3.	How do you describe yourself?	Black/African	1	
		Coloured	2	
		Indian/Asian	3	
		White	4	
		Other (specify)……..…	5	
4.	What is your home language?	Afrikaans	1	
		English	2	
		isiXhosa	3	
		isiZulu	4	
		Setswana	5	
		Other (specify)…….....….	6	
5.	What type of work does the head of your household do?	Employed (specify)	1	
		Unemployed	2	
		Other (specify)	3	
6.	In which area do you live?	Informal Settlements	1	
		Rural	2	
		Township	3	
		Urban	4	
7.	Who mainly takes care of you at home?	Father and Mother	1	
		Father only	2	
		Mother only	3	
		Sibling (brother or sister)	4	
		Grandmother and Grandfather	5	
		Grandmother only	6	
		Grandfather only	7	
		Other (specify) ....……....….	8	
8.	How many people including yourself are living in your house?	Two (2)	1	
		Three (3)	2	
		Four (4)	3	
		Five (5)	4	
		Six (6)	5	
		Seven (7) or more	6	
Questions focusing on: **Sexual history and beliefs on sexual behavioural practices**				
9.	Right now, do you have a boyfriend/ girlfriend?	Yes	1	
		No	2	
		Don't Know	3	
10.	If YES, how many boyfriends/ girlfriends do you have at the moment?	One (1)	1	
		Two (2)	2	
		Three (3)	3	

		Four (4) or more	4	
11.	How old were you when **YOU** first had a boyfriend/girlfriend?	Younger than 9 years	1	
		9-11 years	2	
		12-14 years	3	
		15+ years	4	
		Never had a boyfriend/girlfriend	5	
		Don't know	6	
12.	Have you ever had sexual intercourse?	Yes	1	
		No	2	
		Don't know	3	
13.	If YES, how old were you when you had sexual intercourse for the first time?	Younger than 9 years	1	
		9-11 years	2	
		12-14 years	3	
		15+ years	4	
		Don't know	5	
		Never had sexual intercourse	6	
14.	How old was your partner the first time you had sexual intercourse?	Younger than 9 years	1	
		9-11 years	2	
		12-14 years	3	
		15-20 years	4	
		21-26 years	5	
		27+ years	6	
		Don't know	7	
		Never had sexual intercourse	8	
15.	The first time you had sexual intercourse was it forced?	Yes	1	
		No	2	
		Don't know	3	
		Never had sexual intercourse	4	
16.	How many sexual partners have you had in the past six months?	None (0)	1	
		One (1)	2	
		Two (2)	3	
		Three (3) or more	4	
17.	Right now, how many sexual partners do you have?	None (0)	1	
		One (1)	2	
		Two (2)	3	

		Three (3) or more	4	
18.	Did you or your partner use a condom the last time you had sexual intercourse?	Yes	1	
		No	2	
		Don't know	3	
		Never had sexual intercourse	4	
19.	If you did not use a condom, did you use any other contraceptive method?	Yes	1	
		No	2	
		Don't know	3	
		Never had sexual intercourse	4	
20.	How often do you use a condom when having sexual intercourse?	Each time	1	
		Sometimes	2	
		Never	3	
		Never had sexual intercourse	4	
21.	Have you ever been pregnant or made a girl pregnant?	Yes	1	
		No	2	
		Don't know	3	
22.	Have you ever been tested for HIV?	Yes	1	
		No	2	
		Don't know	3	
23.	Do you plan to get tested for HIV this year?	Yes	1	
		No	2	
		Don't know	3	
24.	Would you have sexual intercourse with your partner if they did not wear a condom?	Yes	1	
		No	2	
		Don't know	3	
25.	Have you ever had a Sexually Transmitted Infection (STI)?	Yes	1	
		No	2	
		Don't know	3	
26.	If **YES**, did you go for treatment?	Yes	1	
		No	2	
		Don't know	3	
		Never had an STI	4	
27.	Have you ever been taught about AIDS or HIV infection and sexually transmitted infections at school?	Yes	1	
		No	2	
		Don't know	3	
28.	Have you ever drunk alcohol?	Yes	1	
		No	2	
		Don't know	3	

29.	If **YES**, how old were you when you first tried alcohol?	Younger than 10 years	1	
		10-13 years	2	
		14+ years	3	
		Never tried alcohol	4	
30.	What made you drink alcohol?	Never drank alcohol	1	
		Stress at school	2	
		Family problems	3	
		Peer pressure	4	
		Own decision	5	
		Other (specify)…….....…...	6	
31.	Have you ever tried drugs?	Yes	1	
		No	2	
		Don't know	3	
32.	If **YES**, how old were you when you first tried drugs?	Never tried drugs	1	
		Younger than 10 years	2	
		10-13 years	3	
		14+ years	4	
33.	What kind of drugs did you take?	None (0)	1	
		Dagga	2	
		Tik /Umgwinvo	3	
		Cocaine	4	
		Petrol sniffing	5	
		Glue sniffing	6	
		Others(specify)…….....	7	
Questions focusing on: **Knowledge on HIV and AIDS**				
34.	When having sexual intercourse, it is safer for each partner to wear a condom (at the same time)?	Yes	1	
		No	2	
		Don't know	3	
35.	Which contraceptive method is the **most effective** in preventing HIV infection? (Choose **ONLY ONE**).	Injections	1	
		Pills	2	
		Condoms	3	
		Emergency contraceptive	4	
		Withdrawal	5	
		Other (specify)…….…….....….	6	
36.	A person can get HIV the first time he or she has sexual intercourse.	Yes	1	
		No	2	
		Don't know	3	
37.	HIV is a virus that can remain in the body for years before it causes AIDS.	Yes	1	
		No	2	
		Don't know	3	

38.	Can HIV be passed on from mosquito bites?	Yes	1	
		No	2	
		Don't know	3	
39.	If you have more than one sexual partner at a time, does this increase your chance of getting HIV?	Yes	1	
		No	2	
		Don't know	3	
Questions focusing on: **Attitudes on HIV and AIDS**				
40.	If you had unprotected sexual intercourse, do you need to get tested for HIV?	Yes	1	
		No	2	
		Don't know	3	
41.	Who would you prefer speaking about sex with? (Choose **ONLY ONE**)	Parent/Caregiver	1	
		Brother or sister	2	
		Grandparent	3	
		Teacher	4	
		Peer educator	5	
		Friend	6	
		Other(specify).....	7	
42.	Can you tell if a person has HIV by looking at them?	Yes	1	
		No	2	
		Don't Know	3	
43.	Can you get HIV by touching an HIV positive person?	Yes	1	
		No	2	
		Don't Know	3	
44.	Only homosexuals (gays) can get infected with HIV.	Yes	1	
		No	2	
		Don't Know	3	
45.	If you are infected with HIV, you can get rid of it by having sexual intercourse with a virgin?	Yes	1	
		No	2	
		Don't Know	3	
46.	If you are infected with HIV, you can get rid of it by having a shower?	Yes	1	
		No	2	
		Don't Know	3	
47.	I know someone who is HIV positive.	Yes	1	
		No	2	
		Don't Know	3	
48.	Children who are HIV positive should not be allowed to mix with other children.	Yes	1	
		No	2	
		Don't Know	3	

Questions focusing on: **Sources of Information**				
49.	Who is the MAIN PERSON that gives you information on sex? (Choose **ONLY ONE)**	Peer Educator	1	
		Friend	2	
		Parent/caregiver	3	
		Brother or sister	4	
		Grandparent	5	
		Teacher	6	
		Other (specify)…….....	7	
50.	Where is the MAIN PLACE/THING that you go to get information on sex? (Choose **ONLY ONE)**	Television	1	
		Radio	2	
		Newspaper	3	
		Internet	4	
		Poster	5	
		Billboard	6	
		Health Centre	7	
		Youth Centre	8	
		School	9	
		Pharmacy	10	
		Other (specify)	11	
51.	How do you think we can stop people in South Africa from getting infected with HIV?			

Thank you for your time and thought in completing this questionnaire.
Your participation is appreciated ☺☺