# UNIVERSITY OF THE WESTERN CAPE STUDENTS' PERCEPTIONS OF ALCOHOL USE AS A RISK FACTOR TO HIV INFECTION

TARRYN LEE KELLY

Student number: 2954360

SUPERVISOR: Professor Kelvin Mwaba
UNIVERSITY of the
WESTERN CAPE

A mini-thesis submitted in partial fulfillment of the requirements of the M.Psych degree in the Department of Psychology at the University of the Western Cape, Bellville.

2009

# UNIVERSITY OF THE WESTERN CAPE STUDENTS' PERCEPTIONS OF ALCOHOL USE AS A RISK FACTOR TO HIV INFECTION

# **Tarryn Lee Kelly**

# **KEYWORDS**

Human Immunodeficiency Virus (HIV)

HIV risk factor

High risk sex

Unprotected sex

Casual sex

Multiple partners

Transactional sex

Alcohol consumption

Information Motivation Behavioural Model

Prevention strategies



# **ABSTRACT**

Alcohol remains the most commonly abused substance in South Africa and several studies have shown associations between alcohol use and risky sexual behaviours, which pose a risk of HIV infection. Research indicates that the age group of 15-24 years is a high risk group for HIV infection. This study aimed at examining the perceptions of alcohol as a risk factor to HIV infection amoungst a sample of university students. Specifically, this study tested the hypotheses that most students perceive that those who consume alcohol were more likely to engage in unprotected sex, sex with multiple partners, casual sex and transactional sex. The Information Motivation Behavioural (IMB) skills model provided the theoretical framework for the study. Using a quantitative research design, a survey questionnaire was used to collect the data. The sample consisted of 240 first year psychology students (192 females, 48 males). Data analyses indicated support for the hypotheses that alcohol consumption was perceived as high risk for unprotected sex, casual sex and sex with multiple partners. However, the data showed no support for the hypothesis of alcohol increasing the risk of transactional sex. The data also indicated that non-drinkers were more likely to perceive alcohol as a risk factor than drinkers. The recognition by students of alcohol as a risk factor for HIV infection provides an opportunity for raising awareness about safer sex practices at institutions of higher learning in South Africa.

# **DECLARATION**

I declare that *UWC students' perceptions of alcohol use as a risk factor to HIV infection* is my own work, that it has not been submitted for any other degree or examination in any other university, and that all sources that I have used or quoted have been acknowledged by complete references.

Full name	Date	
Signed		
	UNIVERSITY of the	

WESTERN CAPE

# **ACKNOWLEDGEMENTS**

I wish to thank my supervisor, Professor Kelvin Mwaba, for all his encouragement, support and dedication in helping me complete this study in this short space of time. A special thanks to all the other MPsych staff who have been understanding and supportive throughout this research process.

I would like to thank my parents for their continued support throughout my studies.

Finally, I would like to thank my husband for his support and encouragement during this

WESTERN CAPE

year.

5

# **CONTENTS**

		<u>Page</u>
KEY	WORDS	2
ABS'	TRACT	3
DEC	LARATION	4
ACK	NOWLEDGEMENTS	5
CON	ITENTS	6
LIST	T OF FIGURES	7
ABB	REVIATIONS	11
СНА	PTER 1: INTRODUCTION	
1.1	BACKGROUND TO THE STUDY STITY of the	12
1.2	RATIONALE FOR THE STUDY	14
1.3	RESEARCH QUESTION	15
1.4	HYPOTHESES	16
1.5	DEFINITIONS	16
1.6	OVERVIEW OF THE STUDY	17

# **CHAPTER 2: LITERATURE REVIEW**

2. 1	INTRODUCTION	19
2.2	HIV/AIDS PREVENTION STRATEGIES	19
2.2.1	South African HIV/AIDS communication programmes	21
2.3	RISK BEHAVIOUR	22
2.3.2	Perceptions of risk	23
2.4	ALCOHOL USE IN SOUTH AFRICA	25
2.4.1	Alcohol use in youth	25
2.5	SEXUAL BEHAVIOUR IN SOUTH AFRICA	28
2.6	HIGH RISK SEX	30
2.6.1	Sexual debut	31
2.6.2	Intergenerational sex and its association with transactional sex	32
2.6.3	Multiple sexual partners UNIVERSITY of the	33
2.6.4	Unprotected sex WESTERN CAPE	34
2.6.5	Gender	35
2.7	THE INTERPLAY BETWEEN ALCOHOL, RISKY SEX	36
	AND HIV	
2.8	HIV/AIDS IN SOUTH AFRICA	39
2.9	THEORETICAL FRAMEWORK	40
2.9.1	Information Motivation Behavioural skills model (IMB)	41
2.10	CONCLUSION	44

# **CHAPTER 3: RESEARCH METHODOLOGY**

3.1	INTRODUCTION	46
3.2	RESEARCH QUESTION	46
3.3	HYPOTHESES	46
3.4	RESEARCH DESIGN	47
3.5	SAMPLE	48
3.5.1	Sample characteristics	48
3.5.2	Sampling procedure	49
3.6	RESEARCH INSTRUMENT	51
3.7	DATA ANALYSIS	51
3.8	ETHICAL CONSIDERATIONS	52
3.9	CONCLUSION	53
	UNIVERSITY of the	
CHAI	PTER 4: RESULTS WESTERN CAPE	
4.1	INTRODUCTION	54
4.2	ALCOHOL USE	54
4.2.1	Alcohol drinkers and non-drinkers	55
4.2.2	Frequency of drinking	55
4.3	RESPONSES TO SURVEY STATEMENTS	55
4.3.1	STATEMENT 1	55

4.3.2	STATEMENT 2	56
4.3.3	STATEMENT 3	56
4.3.4	STATEMENT 4	57
4.3.5	STATEMENT 5	57
4.3.6	STATEMENT 6	58
4.3.7	STATEMENT 7	58
4.3.8	STATEMENT 8	59
4.3.9	STATEMENT 9	59
4.3.10	STATEMENT 10	60
4.4	CONCLUSION	63
СНАР	PTER 5: DISCUSSION	
5.1	INTRODUCTION UNIVERSITY of the	64
5.2	ALCOHOL USE AMOUNG STUDENTS	64
5.3	OVERVIEW OF STUDENTS' PERCEPTIONS	65
5.4	PERCEPTIONS BETWEEN	69
	DRINKERS AND NON-DRINKERS	
5.5	PERCEPTIONS BETWEEN MALES AND FEMALES	70
5.6	LIMITATIONS	72
5.7	RECOMMENDATIONS FOR FUTURE RESEARCH	73
5.8	CONCLUSION	74

REFERENCES 76

**APPENDIX 1: CONSENT LETTER** 

APPENDIX 2: SURVEY QUESTIONNAIRE



# **ABBREVIATIONS**

AIDS:	Acquired Immunodeficiency Syndrome
HIV:	Human Immunodeficiency Virus
STI:	Sexually Transmitted Infection
UWC:	University of the Western Cape

Alcohol or Drugs

**AOD**:

LIST OF FIGURES AND TABLES

UNIVERSITY of the WESTERN CAPE

Figure 1	IMB model for HIV prevention behaviour	43
Table 1	Demographic information for the sample	50
Table 2	Chi Square tests and percentages:	61
	perceptions between males and females	
Table 3	Chi Square tests and percentages:	62
	perceptions between drinkers and non-drinkers	

# **CHAPTER 1**

# INTRODUCTION

# 1.1 BACKGROUND TO THE STUDY

South Africa is experiencing an increase in alcohol and other drug (AOD) related problems (Parry et al., 2002). Alcohol is identified as the most commonly abused substance in the country (Pluddemann et al., 2006) and more concerning results indicate that the Cape Town metropole experiences the highest rates of risky drinking compared to other cities in South Africa (Reddy et al., 2003; Shisana et al., 2005).

The prevalence rate for heavy drinking episodes is much lower for females; however findings indicate that heavy-drinking episodes increased with age for both genders (Parry et al., 2002). The 2005 National HIV Survey indicates that adults aged 25-49 are most likely to be high-risk drinkers followed by 15-25 year olds (Shisana et al., 2005).

Alcohol in relation to sexual behaviour has been the focus of many studies in South Africa. Alcohol use is associated with diminished rational capacity and has unfavourable implications for HIV risks (Shisana et al., 2005). Several studies conducted in South Africa have found a close relationship between alcohol use and risky sexual behaviour (Mwaba, Simbayi & Kalichman, 2008; Rich, 2004; Simbayi et al., 2004).

Risky sexual behaviours can be defined as sexual behaviours that put people at high risk of contracting HIV, including unprotected sex, casual sex, multiple sex partners and transactional sex (UNAIDS, 2007).

The HIV prevalence among 15-24 year olds in South Africa is 8.7 % (Shisana et al., 2008). Research indicates that females are at higher risk of being infected than males. The prevalence rate for females is 13.3% and for males is 8.2%. Amoung females, HIV prevalence is highest in those in the 25-29 year age group, with an infection rate of 32.7%, while for males it is highest in the 30-34 year age group, with a prevalence of 25.8 % (Shisana et al., 2008).

HIV/AIDS is ravaging the world with recent global statistics estimating that a total 33 million people are living with the disease world wide (UNAIDS, 2007). Sub-Saharan African countries remain the hardest hit by this pandemic, with a total of 22 million infected people, this constitutes to two thirds of all people world-wide (UNAIDS, 2007).

It was estimated that there are currently 6.6 million people living with HIV in South Africa, with an estimated 1500 new infections and 600 people dying of an AIDS-related illness per day (UNAIDS, 2007). Data indicates that the age group of 15-24 years is a sub-population at tremendous risk of contracting the virus. The primary method of HIV/AIDS transmission in South Africa is through heterosexual intercourse (UNAIDS, 2007).

Considerable attention has gone into researching HIV in order to create successful prevention interventions. Many studies are investigating factors associated with increased risks for HIV infection, in order to create the most effective interventions possible, as this still remains the most cost-effective and most plausible way of dealing with the HIV/AIDS pandemic. Therefore, comprehensive HIV prevention strategies must continue to be a key elements of our countries attempt to manage the disease.

### 1.2 RATIONALE FOR THE STUDY

Cape Town has been identified as the province with the highest rates of risky drinking (Reddy et al., 2003; Shisana et al., 2005) which could have detrimental implications on HIV infection rates. Furthermore, HIV statistics are highlighting that the age group of 15-24 years is a sub-population at tremendous risk of contracting the virus (UNAIDS, 2007). University students comprise mostly of individuals in this high risk age group and university is often a period in which individuals are granted a newfound independence, hence alcohol use and engaging in sexual behaviour are often common practices amoungst students.

In light of the above, this study honed in on examining the perceptions of students from the University of the Western Cape (UWC) relating to alcohol as a risk factor to HIV infection. Many studies in South Africa have focused on exhibited behaviour of participants in relation to alcohol consumption and risky sexual behaviour. This study focused on the perceptions of participants rather than their actual behaviour.

The research findings are intended to add to the developing literature in this field and aim to understand how students (particularly UWC students) perceive alcohol as a factor that increases the likelihood of engaging in risky sexual behaviour.

Furthermore, the research findings aspire to enhance future intervention strategies for HIV prevention in South Africa and more specifically on campus, given that this is currently the most effective and plausible approach in reducing new HIV infection rates.

# 1.3 RESEARCH QUESTION

The research question for this study revolved around how students perceive alcohol in relation to HIV risk. More directly stated: *Do students believe that alcohol contributes to HIV infection risk?* As defined by the literature, risky sexual behaviours include multiple sex partners; unprotected sex, casual sex and transactional sex (Simbayi, Mwaba & Kalichman, 2006).

#### 1.4 HYPOTHESES

In light of research findings that suggest a connection between alcohol use and risky sexual behaviour, the hypotheses for this study were:

- Most students believe that people who consume alcohol are more likely to engage in unprotected sex than those who abstain.
- 2. Most students believe that people who consume alcohol are more likely to engage in sex with multiple partners than those who abstain.

- 3. Most students believe that people who consume alcohol are more likely to engage in sex with casual partners than those who abstain.
- 4. Most students believe that people who consume alcohol are more likely to engage in transactional sex than those who abstain.

# 1.5 DEFINITIONS

For the purpose of this study, key terms of the study are defined below:

Risky sexual behaviour/

High-risk sex/ risky sex: Sexual behaviours that put people at risk for HIV infection

including: unprotected sex, multiple sexual partners, casual

sex and transactional sex.

UNIVERSITY of the

HIV Risk: The probability that a person may be infected with HIV.

Unprotected sex: Irregular or incorrect use of a condom.

Multiple sexual partners: More than one sexual partner.

Casual sex: Engaging in sexual activities with someone who is not your

long-term partner.

Transactional sex: Engaging in sexual activity with someone in exchange for

money, food, shelter, clothes, alcohol, promotion, good

grades etc.

HIV prevention strategies: For the purposes of this study the term "HIV prevention

strategies" will refer to any campaign/programme that is

aimed at preventing the spread of HIV.

Youth: For the purpose of this study and in order to understand

previous literature findings, youth will refer to those people

that are in the 15 to 24 year old age group.

Binge drinking: The consumption of more than 5 drinks in one sitting.

WESTERN CAPE

# 1.6 OVERVIEW OF THE STUDY

This chapter placed this research study within its relevant background and context in relation to the HIV/AIDS and alcohol issue in our country. The rationale, research question and hypotheses were highlighted.

The following chapter reviews the relevant literature pertaining to matters relating to HIV/AIDS and alcohol and locates this research within a theoretical framework. Chapter 3 examines the research methodology, providing an overview of the sample, sampling procedures, research design and data analyses. Chapter 4 presents the research results

together with the statistical analyses of the study. In chapter 5, the research results are integrated with the relevant literature discussed in chapter 2. Limitations of the study, implications of the findings and recommendations for future research are also considered.



# **CHAPTER 2**

# LITERATURE REVIEW

# 2.1 INTRODUCTION

This chapter outlines the relevant literature pertaining to the alcohol and HIV/AIDS field. The chapter is subdivided into the key concepts associated with the literature including: HIV/AIDS prevention strategies, youth risk behaviours, youth sexual behaviours, risky sexual behaviours, HIV risk factors, Alcohol use in South Africa, HIV/AIDS prevalence and the link between alcohol, risky sexual behaviour and HIV. Finally, the theoretical framework in which this research is located will be presented.

# 2.2. HIV/AIDS PREVENTION STRATEGIES

Given the detrimental effects of HIV/AIDS worldwide, it is vital to establish whether changes in the HIV epidemic are occurring and the extent to which the changes can be attributed to successful HIV prevention strategies (Rehle, Lazzari, Dallabetta & Asamoah-Odei, 2004).

Many models of health behaviour such as the Health Belief Model, AIDS Risk Reduction Model and Information Motivation Behavioural skills model posit that knowledge about the facts of HIV/AIDS transmission and prevention will lead to more preventative behaviours (Anderson & Beutel, 2007; Fisher & Fisher, 1992).

Many HIV/AIDS prevention and education campaigns in South Africa have strategised their campaigns according to this premise, in the hope that educating the youth and other high-risk groups with sufficient knowledge will translate into the adoption of preventative behaviours (Eaton, Flisher & Aaro, 2003). However, although there has been a substantial increase in the level of awareness about HIV prevention methods, this has not translated into the adoption of safer sexual behaviours (Zambuko & Mturi, 2005).

Although knowledge alone does not automatically lead to protective sexual behaviours (Simelane, 2005), UNAIDS (2004) noted that information is crucial in helping people gain an accurate understanding of HIV transmission and prevention which are the first steps towards reducing the risk of infection.

Since no cure for HIV/AIDS exists to date, an exorbitant amount of money, time and effort is being spent on trying to implement the most effective and efficient HIV prevention intervention strategies, in the hope of reducing HIV infection rates in our country. Over the years, researchers have endeavored to understand the dynamics associated with HIV risk behaviours, in order to tailor-make interventions that are in line with the current behaviours exhibited by South Africans. Prevention still remains the most plausible and most cost-effective way of dealing with HIV, hence comprehensive HIV prevention strategies must continue to be a key elements of our countries attempt to manage the disease. A lingering question that researchers continue to explore, which holds all future successful HIV prevention campaigns hostage was formally stated by Eaton et al. (2003, p. 150):

"Why is it that South African youth in the 1990's continued to practice unsafe sex (as evidenced in the spiralling rates of HIV infection), despite the concerned efforts of educational and HIV prevention campaigns to influence their behaviour?"

# 2.2.1 South African HIV/AIDS communication programmes

In South Africa, there are four main national-level HIV/AIDS communication programmes which use mass media and interactive components that have been conducted in South Africa for multiple years (Shisana et al., 2008).

The Khomanani Campaign aims at reaching all populations in South Africa, however results from the 2008 South African National HIV Survey reveal that this programme had low overall reach. Soul City improved its overall reach from 2005 to 2008, with the exception of males aged 50 and older (Shisana et al., 2008). Soul Buddyz is a programme oriented towards children, however results indicate that it has had wider reach and has managed to reach two thirds of females aged 20 to 34 years. LoveLife is a programme that targets youth and results reveal that overall it has increased its reach between 2005 and 2008 (Shisana et al., 2008).

An analysis of the effects of exposure to these programmes has indicated that they do have an impact on AIDS related knowledge as well as indirect effects on increased condom use, HIV testing and helping people living with HIV/AIDS. Overall results reveal that for all four of these national communication programmes, reach was low amoung people with disabilities and males aged 50 years and older. This poor reach is

correlated with the older age groups having a lower knowledge of HIV/AIDS and low adoption of prevention behaviours, hence future strategies need to address how this population can be reached (Shisana et al., 2008).

#### 2.3 RISK BEHAVIOUR

Many studies conducted on alcohol and sexual risk behaviours in South Africa have been conducted on high school learners. In order to fully understand how risk behaviours could lead to HIV/AIDS, relevant literature conducted with South African youth will be presented. Although the youth in these studies are not necessarily representative of the age of the participants in my study, I find it necessary to provide an overview because the participants in my study are first years, and I assume that the majority of them would have just finished Matric. Furthermore, in relation to alcohol use, it is cited that learners who start drinking at school would most likely develop entrenched drinking patterns at tertiary level (Rocha-Silva, de Miranda & Erasmus, 1995).

Worldwide trends indicate that drastic changes within a country's socio-economic and political spheres often result in increased risk taking behaviour (Visser, 2003). Given South Africa's past and present political and socio-economic situation, risk behaviour is a topic of great concern within our country.

Risk behaviour, in the light of the current HIV/AIDS pandemic, has been a major focal point for HIV/AIDS researchers. The complex concept of risk behaviour needs to be understood in terms of its interaction of factors on three levels, namely: cultural,

interpersonal and personal (Eaton et al., 2003). Risk behaviour is generally studied in relation to adolescent development as it usually arises during this stage of development (Visser, 2003). Risk behaviour can be described as "behaviour that is either physically or emotionally dangerous or contributes to developmental problems for young people involved" (Visser, 2003, p. 58).

Risk behaviours, such as alcohol and drug use and unprotected sex, are of major concern in South Africa in the present HIV/AIDS pandemic. The use of alcohol and drugs amoungst youth can contribute to alcohol related injuries, academic, behavioural and relational problems and the development of long-term health problems (Visser, 2003).

Young adults in South Africa experience a unique challenge as they are faced with the transition from adolescence to young adulthood. With this transition comes newfound independence and responsibility. The entrance into student life is frequently associated with alcohol and other substance use as well as sexual activity. Although student life provides one with the opportunity for self-growth and great opportunities, students are also challenged by the pressures exerted by drinking, drugging and sexual experiences, which could lead to negative health consequences, such as HIV/AIDS.

# 2.3.2 Perceptions of risk

Research has focused on the perceptions of risk as an important antecedent for adopting protective behaviour. Risk perception is regarded as an individual's belief in his

or her personal susceptibility to illness or disease (Macintyre, Rutenberg, Brown & Karim, 2004). In relation to HIV, risk perception is determined by the individual's perceived susceptibility to infection, one's understanding about the transmission of the virus as well as one's willingness to consider behavioural changes (Macintyre et al., 2004).

Despite high rates of HIV prevalence in Sub-Saharan Africa, several studies reveal that young people in South Africa and neighboring countries perceive themselves as being at low risk of HIV infection (Anderson, Beutel & Maughaun-Brown, 2007; Barden-O'Fallon et al., 2004; Macintyre et al., 2004; MacPhail & Campbell, 2001; Shisana et al., 2005), thus creating a point of concern for HIV risk behaviours.

A study conducted on HIV risk perceptions and sexual debut amoung youth in Cape Town identified a reciprocal relationship between risk perception and sexual experience amoungst females, in that perceiving a greater risk of HIV infection in 2002 was associated with a lower probability of becoming sexually active between 2002 and 2005 (Anderson et al., 2007).

HIV/AIDS knowledge and one's attitude towards HIV/AIDS is an important component of one's perception of risk. Many studies in South Africa have found fluctuating levels of HIV knowledge and although on the whole there has been a substantial increase in the level of awareness about HIV prevention methods, this has not translated into the adoption of safer sexual behaviours (Zambuko & Mturi, 2005).

Hence although increasing HIV knowledge is essential in managing the disease, it is not sufficient to prompt HIV/AIDS risk reduction behaviour (Hawa, Munro & Doherty-Poirier, 1998). Given the premise that knowledge alone is insufficient to automatically lead to protective sexual behaviour, many health behaviour change models suggest that one's attitude together with knowledge stands a greater chance of influencing behaviour change. Research has identified many factors being associated with shifts in attitude, the greatest factor being knowing someone with the disease (Macintyre, Brown & Sosler, 2001; Shisana et al., 2005; Simelane, 2005).

# 2.4 ALCOHOL USE IN SOUTH AFRICA

The use of alcohol by South Africans has been relatively well researched with a range of studies focusing on the extent, determinants and effects of alcohol use. Alcohol is the most prevalent substance used in South Africa with 5 billion liters being consumed each year (Parry, 1998). Survey research reveals that the Western Cape has the highest rate of high-risk drinkers (15.6%) compared to other cities in South Africa (Reddy et al., 2003; Shisana et al., 2005). The overall prevalence rate for heavy drinking episodes is lower for females although it increases with age for both genders. For the purposes of this study, alcohol use in South African youth and students will be the focal point of discussion.

# 2.4.1 Alcohol use in youth

Alcohol is frequently misused by South African adolescents (Parry, 1998). Four major studies conducted amoung youth in South Africa have highlighted high degrees of risk behaviour in relation to alcohol. The first South African National Youth Risk Behaviour Survey conducted in 2002 found that nationally, 49.1 % of learners had drunk alcohol,

with significantly more males (56.1 %) than females (42.2 %) reporting alcohol use (Reddy et al., 2003). Twenty three percent of these learners also reported binge drinking (more than 5 drinks in one sitting) within the past month (Reddy et al., 2003).

Flisher et al. (1993a) as cited in Visser (2003) revealed that 53 % of learners surveyed from Cape Peninsula schools reported previously consuming alcohol. Rocha-Silva et al. (1996) reported that 42 % of those black youths surveyed had had a drink of alcohol as some point in their lives, while 34 % reported current drinking patterns. A survey of 6000 (Grade 8 and 11) learners in 39 Cape Town schools found that 50 % of respondents reported current alcohol use, and 36% reported binge drinking (Flisher et al., 1998, as cited in Visser, 2003; Parry, 1998). Binge drinking amoung young people reportedly occurs in 25% of many communities (Parry, 1998) and has been found to be significantly linked to unsafe sexual practices (Trepka et al., 2008). Researchers have cautioned that it is a major contributor to youth mortality (Phillips & Steyl, 2008).

Alcohol abuse and binge drinking is a major concern on university campuses (Phillips & Steyl, 2008) and the age group of 18 – 24 years has a higher prevalence of drinking and binge drinking than people 25 years and older. A study conducted with university students in South Africa found that 22 to 80 % of students reported current alcohol use, between 6 to 43 % reported past month binge drinking and between 17 to 58 % reported hazardous drinking (Peltzer & Ramlagan, 2009).

A study conducted amoung students in a community with a high HIV/AIDS prevalence in Florida, USA, found a significant association between risky sexual behaviour and binge drinking in that almost half of the students who reported unprotected risky sex, were under the influence of alcohol (Trepka et al., 2008).

A study conducted at the University of the Free State looked at alcohol use amoung sixth year medical students and found that a substantial number of these students drank alcohol to socialize and to help them cope with the pressures of their studies (Marais, Calitz, Rataemane & Joubert, 2002).

Studies conducted with UWC students have found high levels of drinking amoungst students. Rich (2004) conducted a study on alcohol use and unsafe sex practices. Results indicated that 64 % of the students reported drinking alcohol with males reporting a higher frequency of drinking than females.

More recently, a study conducted at UWC with 2<sup>nd</sup> year health profession students found that 76.6 % of students reported a lifetime use of alcohol (Phillips & Steyl, 2008). Alcohol use varied significantly with age, gender and race, a finding consistent with several other studies. Male students (53.3%) were significantly more likely than female students (28.8%) to report binge drinking and white students (57.1%) were also more likely than coloured (39.1%) and black students (29.2%) to report binge drinking. Results also indicated that white students were significantly more likely than coloured students and black students to report both lifetime and current alcohol use.

The above mentioned study's results should be considered in light of potential methodological limitations relating to participant demographics, as of the two hundred and one participants who took part, more than 3 quarters of the students were female and only 14 white students took part in the study, thereby limiting the generalisability of these results.

### 2.5 SEXUAL BEHAVIOUR IN SOUTH AFRICA

The primary method of HIV/AIDS transmission in South Africa is through heterosexual intercourse (UNAIDS, 2007). Research has identified 15-24 year olds as a high risk group for HIV infection (Shisana et al., 2005). In the 2005 National HIV Survey, the majority of 15-24 year-olds were sexually active and engaged in sexual intercourse much earlier when compared to the findings of the 2002 National HIV Survey, as well as research conducted by Reproductive Health and Research Unit (RHRU) in 2003 (Parry, 1998).

In the LoveLife survey (2004) it was found that 67 % of all youth surveyed between the ages of 15 to 24 years old were sexually active. An interesting statistic revealed by the same survey found that those who reported not being sexually active within the preceding 12 months gave reasons alluding to a lack of opportunity to engage in sexual behaviour or a lack of a sexual partner, rather than a proactive choice of abstinence (LoveLife, 2004).

The South African National Youth Risk Behaviour Survey revealed that the national prevalence for learners who reported ever having had sex was 41.1 %, with significantly more males (50.1 %) than females (34.1 %) reporting ever having had sex (Reddy et al., 2003). Fifty four percent of the learners reported that they had had two or more sexual partners in their lifetime, significantly more males (66.4 %) than females (38.1 %). Learners in the Western Cape had the lowest prevalence of having had more than two sexual partners in their lifetime. Only 28.8 % of the learners reported to be consistent condom users (Reddy et al., 2003).

A review on unsafe sexual behaviour in South African youth indicates that at least 50 % of young people in South Africa are sexually active by age 16 and at least 80 % by age 20 (Eaton, Flisher & Aero, 2003). A concerning statistic is that under 20 % of young people use condoms at every sexual encounter and an estimate of 50-60 % of youth in these studies have never used a condom (Eaton et al., 2003).

In contrast, a study conducted by Simbayi, Chauveau and Shisana (2004) has revealed high levels of condom use during the last sexual encounter. Another study conducted with male and female South African university students indicates that 61.8 % of students used a condom the last time they had sexual intercourse (Peltzer & Pengid, 2008). Rich (2004) found similar results when she conducted a study at UWC on alcohol use and unsafe sex practices and revealed that more than 50 % of the students reported that they always wore a condom during sexual intercourse.

More recently, results from the 2008 South African National HIV Survey indicate that there has been a dramatic increase in the number of young people using condoms the last time they had sex, with the greatest improvement amoung youth aged 15 to 24 years. Out of all the provinces, the Western Cape has the lowest rate of condom use at last sex (49 %) (Shisana et al., 2008). The possibilities of increased condom use at last sex has been attributed to successful condom promotion and distribution and an increased ability of youth discussing sex and condoms, a finding which was supported by recent qualitative research conducted by the Human Sciences Research council (Shisana et al., 2008).

#### 2.6 HIGH RISK SEX

HIV Risk can be defined as the probability that a person may be infected with HIV (UNAIDS, 2007). In a review of high risk sexual behaviour, Eaton et al (2003) mention that the three types of sexual risk behaviours that have received most attention in South Africa include being sexually active as opposed to abstaining from sexual activity, having multiple sex partners (either serially or concurrently) and practicing unprotected sex (Eaton et al., 2003). Other research identifies sexual debut and intergenerational sex as important behavioural determinants to HIV risk (Shisana et al., 2008). These HIV risk behaviours are likely to create, increase and perpetuate the risk of contraction of the virus (UNAIDS, 2007).

#### 2.6.1 Sexual debut

Engaging in first sex has been identified as an entry point to subsequent HIV risk behaviour (Anderson et al., 2007). Shisana et al. (2008) discuss that sexual debut is a critical factor associated with the vulnerability of youth to HIV infection. The National HIV Survey found that a small proportion of young people were having sex before the age of 15, however more males aged 15-24 years reported having had sex before the age of 15 as compared to females (Shisana et al., 2008). A study on the sexual debut of young rural males in South Africa found that 13.1 % of males aged 15-24 years reported sexual debut before the age of 15 years, with an age range from 9 to 14 years (Harrison, Cleland, Gouws & Frohlich, 2005).

The HSRC have identified certain explanations of early sexual debut including: experimentation with alcohol and drugs which leads to sexual experimentation, pressure from mixing with older groups that have already had sex and peer pressure to "fit in" (Shisana et al., 2008).

Although overall rates of sexual debut before 15 years has declined since the 2002 National HIV Survey, the number of teenagers who are initiating sex at an early age are concerning, as sexual debut can be associated with higher HIV exposure as it is associated with more frequent sexual intercourse, more lifetime STI's (sexually transmitted infections), less contraceptive use and more sexual partners (Shisana et al, 2008).

# 2.6.2 Intergenerational sex and its association with transactional sex

The practice of engaging in sexual behaviours with older partners, particularly younger females with older males, is known as intergenerational sex, and has been identified as an important factor contributing to the spread of the HIV virus (Shisana et al., 2008). Adolescent relationships with older partners are considered risky because older partners often have a history of multiple relationships and sexual negotiation is diminished and an exchange of sex for money and gifts (transactional sex) often occurs (Frank, Esterhuizen, Jinabhai, Sullivan & Taylor, 2008).

A study conducted on risky sexual behaviours amoung high school students found that having a partner who was a few years older significantly increased the risk of HIV infection. Reasoning behind this finding suggested that older partners had higher earning power than same age partners, and the pupils in the study might have engaged in this intergenerational relationship because it was profitable as sex was exchanged for money and gifts (Frank et al., 2008). The same study identified that male pupils also sought relationships with older females, perhaps being motivated by physical pleasure and social standing as opposed to females being motivated by emotional or material support (Frank et al., 2008).

Recent findings from the South African National HIV Survey (2008) suggest that there has been an increase in younger females aged 15 to 19 years who have older sexual partners as compared to the 2005 survey (Shisana et al., 2008). This finding is concerning and is linked to the high rates of poverty that most people in South Africa experience.

Poverty remains a motivator for younger females to engage in sex with older partners, placing young females at even higher risk for HIV infection (Shisana et al., 2008).

# 2.6.3 Multiple sexual partners

Multiple sexual relationships can be understood as having more than one sexual partnership at a given time. Having many sexual partners has been recognised as a contributing factor to the spread of HIV in South Africa (Shisana et al., 2008). Risk of HIV infection increases as a consequence of having multiple sexual partners, and it is especially risky to have concurrent sexual partners as this creates multiple pathways for HIV transmission to occur (Shisana et al., 2008).

The South African National Youth Risk Survey reported that 54 % of the learners that took part in the study had two or more sexual partners (Reddy et al., 2003). A study with adolescent school girls in the Western Cape found that 45 % of the learners had more than one sexual partner (Phillips & Malcolm, 2006). The 2008 HIV Survey reported no changes in the levels of multiple partners over the three surveys (2002, 2005 & 2008), however it is evident that more males are likely to be engaged in this behaviour, a finding that concurs with many other studies (Eaton et al., 2003; Reddy et al., 2003; Shisana et al., 2008;). Peer pressure has been attributed to males having many sexual partners as this wins a young male status and admiration (Eaton et al., 2003). There is a notion in South Africa that masculinity requires one to have unprotected sex with many partners (MacPhail & Campbell, 2001), which has detrimental effects on the spread of HIV.

Some reasons for engaging in multiple sexual partnerships include: intergenerational sex and its link with transactional sex, sexual exploration, peer pressure, acquisition of status, seeking sexual pleasure and a de-emphasis on long-term relationships (Shisana et al., 2008). Furthermore, high-risk drinkers and recreational drug users reported the highest level of multiple sexual partnerships (Shisana et al., 2008).

# 2.6.4 Unprotected sex

Unprotected sex refers to sex which includes the irregular or incorrect use of condoms (Eaton et al., 2003). Given that the primary method of HIV/AIDS transmission in South Africa is through heterosexual intercourse (UNAIDS, 2007), vast efforts have been made to promote and distribute condoms throughout South Africa. Several studies have found low levels of condom use amongst youth (Eaton et al., 2003; Reddy et al., 2003) whilst other studies have found moderate levels of condom use (Peltzer & Pengid, 2008; Rich, 2004; Simbayi et al., 2004).

A key finding from the South African National HIV Survey is that there has been a dramatic increase in the number of people using condoms at last sex, especially within the 15 to 24 year age group. Increased condom use has been attributed to successful promotion and distribution of condoms and an increase in condom negotiation skills amoung youth (Shisana et al., 2008). The reduction in HIV incidence and HIV prevalence amoung youth in the 2008 Survey is further proof of the increased use of condoms (Shisana et al., 2008).

#### **2.6.5** Gender

The interplay between poverty, culture and gender and its effects on HIV risk has been an extensively researched area in South Africa. Gender-related vulnerability is described as a crucial factor contributing to increased susceptibility of women to HIV (Macleod-Downes, Albertyn & Mayers, 2008). It is well documented that the HIV prevalence amoungst females is higher than males, in fact, recent statistics show that one in three (32 %) females in the 25 to 29 year age group are likely to have HIV (Shisana et al., 2008).

Several studies have highlighted gender differences as being associated with risky sexual behaviour, including more females reporting forced sex and the association between intergenerational sex and transactional sex (Frank et al., 2008, Phillips & Malcolm, 2006). Piot (2001) as cited in Phillips and Malcolm (2006) advises that women's HIV vulnerability develops in a particular context in which women have little control over sex, which could be a consequence of existing power relations between men and women or a result of their low socio-economic status. Male dominance and unequal power distribution in sexual encounters include: men who control sexual encounters, women who are unable to influence how and when sex takes place, and sexual coercion with physical or emotional pressure or violence (Macleod-Downes et al., 2008).

The high HIV prevalence amoung females in South Africa was identified as the most concerning findings in the 2008 National HIV Survey, and urgent attention is required in enhancing effective prevention strategies amoung this identified high risk group (Shisana et al., 2008).

#### 2.7 THE INTERPLAY BETWEEN ALCOHOL, RISKY SEX AND HIV

Alcohol use has been identified as a potentially risky practice for the contraction and transmission of HIV (Visser, 2003) and is often associated with behaviours that place individuals at high risk of contracting STI's (sexually transmitted infections) including HIV (Simbayi et al., 2004). As many as 50 % of individuals living in areas of South Africa where HIV is most prevalent report current alcohol use (Shisana et al., 2005).

It has been well established that excessive consumption of alcohol poses considerable health risks to an individual and several researchers in South Africa have tried to understand the relationship between alcohol and sexual risk behaviours (Kalichman, Simbayi, Jooste & Cain, 2007; Simbayi et al., 2006; Simbayi et al., 2004). Alcohol use weakens judgement and impairs decision-making which leads users to engage in risky sexual behaviours such as having multiple sexual partners, having unprotected sex and engaging in transactional sex (Shisana et al., 2005; Shisana et al., 2008).

Several studies conducted in South Africa have found close associations between alcohol use and risky sexual behaviours. Much research has been conducted on STI clinic patients on the premise that these patients have most likely engaged in risky sexual behaviours which have predisposed them to STI's. Qualitative research at an STI clinic was conducted in order to obtain an in-depth understanding of alcohol as a sexual risk factor. Results revealed that patients believe that alcohol facilitates transactional sex, lowers sexual inhibitions and leads to inconsistent condom use (Simbayi et al., 2006).

A more recent study (Mwaba et al., 2008) used qualitative methods in order to ascertain how individuals attending an STI clinic in Cape Town perceived high-risk sexual behaviour. All the participants blamed alcohol use as a reason for engaging in high risk sex. A man attributed alcohol use with inconsistent condom use: "When you are drunk, you don't care. You just sleep with anyone and can't even think about protecting yourself with a condom." (Mwaba et al., 2008, p. 623).

However one study's findings suggest that some patients attending STI clinics do not associate their clinic attendance to substance use, even though study results indicate that detrimental levels of alcohol consumption are associated to STI clinic attendance. A study conducted in London indicated that although 71% of the patients admitted to drinking alcohol, only 6.6% of the sample attributed their clinic attendance to alcohol use (Patton, Keaney & Brady, 2008).

Research conducted on patients receiving treatment at an STI clinic in Cape Town reveal that alcohol was regularly used in sexual contexts by men (42 %) and less frequently by women (12%) in the last month. Alcohol use in sexual contexts were related to greater numbers of sexual partners and higher incidences of unprotected sex and a greater prevalence in failed condom use (Simbayi et al., 2004).

WESTERN CAPE

A similar study in 2006 also at a STI clinic in Cape Town revealed increased use in alcohol by the patients, with 78% of men and 30 % of women currently using alcohol, and 56 % of men and 25 % of women drinking in sexual contexts in the past three

months. Individuals who indicated problem drinking were more likely to have had multiple sex partners, engaged in transactional sex and practiced unprotected anal intercourse in the previous three months (Kalichman, Simbayi, Jooste, Cain & Cherry, 2006).

Another study at a STI clinic in Cape Town reported that patient's alcohol use was significantly related to HIV risk behaviours. This study highlighted that alcohol plays different roles in HIV risks for men and women. For men, the use of alcohol in sexual contexts was found to increase risky sexual behaviour and women who drink before sex were more likely to have more sexual partners (Kalichman et al., 2007). The 2008 National HIV Survey revealed that high risk drinkers reported the highest levels of multiple sexual partnerships in the previous year (Shisana et al., 2008).

# UNIVERSITY of the

The entrance to university marks a period where young people are granted more independence and this often results in an increase in alcohol consumption and the exploration of sexual relationships. Results from a study conducted on alcohol use and HIV on UWC students indicates that of the students who reported being sexually active, the majority of females (79%) and males (64%) classified themselves as less frequent drinkers (those who drink rarely and those who drink once or twice a month). Twenty percent of the sexually active participants believed that they were more likely to engage in unsafe sex whilst under the influence of alcohol and 29% of the students admitted to engaging in sexual behaviour that they would not have engaged in when sober (Rich, 2004).

Another local study on Rhodes University students conducted by Simpson (1996) reveals that although high use of alcohol was reported by the students, low risky sexual behaviours were reported. Results such as these need to be considered in terms of limitations associated with social desirability due to the data being based on self-reports.

A study conducted with university students in the USA found alcohol to be the most strongly associated factor to risky sexual behaviour. Furthermore, a significant relationship was found between binge drinking and risky sexual behaviour (Trepka et al., 2008).

# 2.8 HIV/AIDS IN SOUTH AFRICA

HIV/AIDS is ravaging the world with recent global statistics estimating that a total 33 million people are living with the disease world wide (UNAIDS, 2007). Sub-Saharan African countries remain the hardest hit by this pandemic, with a total of 22 million infected people, this constitutes to two thirds of all people world-wide (UNAIDS, 2007).

It was estimated that there are currently 5.6 million people living with HIV in South Africa, with an estimated 1500 new infections and 600 people dying of an AIDS-related illness per day (UNAIDS, 2007). The primary method of HIV/AIDS transmission in South Africa is through heterosexual intercourse (UNAIDS, 2007).

Data indicates that the age group of 15-24 years is a sub-population at tremendous risk of contracting the virus (Shisana et al., 2005), however recent survey research conducted in 2008 identified a slight decrease in HIV prevalence in this age group from 10.3 % in 2005 to 8.6 % in 2008 (Shisana et al., 2008). This decline has been attributed to a significant increase in the use of condoms amoung males and females within this age group. Furthermore, HIV/AIDS awareness campaigns have targeted this most at risk population (MARP), which could have played a significant role in more proactive sexual behaviours (Shisana et al., 2008).

Research has also identified females as another MARP, who are at higher risk of being infected than males. The prevalence rate for females is 13.3% and for males is 8.2%. Amoung females, HIV prevalence is highest in those in the 25-29 year age group, while for males it is highest in the 30-39 year age group (Shisana et al, 2005). The latest HIV/AIDS prevalence data indicates that one in three (32.7%) females in the 25-29 year old age group were found to be HIV positive in 2008 (Shisana et al., 2008). These results indicate that this MARP requires urgent attention for more effective HIV prevention (Shisana et al., 2008).

#### 2.9 THEORETICAL FRAMEWORK

Thus far, most HIV prevention strategies in South Africa have focused on providing the community with large amounts of knowledge about HIV transmission, in the hope that this will lead to successful HIV prevention behaviour (Eaton et al., 2003). However, a large amount of research has concluded that no significant relationship exists between

sexual knowledge and safe sex behaviours and questions the ability and motivation of South African youth to use HIV knowledge to reduce HIV risk behaviours (MacPhail & Campbell, 2001). More recently, researchers have begun to investigate the stage that comes between knowledge and action, namely the motivation of the individual to use the proposed behaviour (Macintyre et al., 2004). Many Behaviour Change Models posit that attitudes towards HIV/AIDS and those persons with HIV/AIDS may help to predict behaviour change (Uwalaka & Matsou, 2004).

#### 2.9.1 Information Motivation Behavioural skills model (IMB)

The theoretical model that will guide this study is the Information Motivation Behavioural (IMB) Skills Model. The IMB model proposes that a trilogy of one's information about how to prevent HIV/AIDS, motivation to act on the information and the possession of the necessary behavioural skills, together lead to HIV/AIDS risk reduction behaviour (Hawa et al., 1998).

If a person is well-informed, motivated to act, and has the necessary skills and confidence to take action, they are more likely to initiate and maintain health-promoting behaviors that produce positive outcomes (Fisher, Fisher & Harman, 2008). The model further clarifies that the information must be directly related to understanding the means of HIV transmission and the specific measures, such as condom use, that an individual can use to prevent transmission (Hawa et al., 1998). The individual must be highly motivated to initiate and maintain AIDS preventative behaviour. People's attitudes to AIDS preventative behaviours and the social norms related to AIDS prevention that influence

them will both determine the levels of motivation that the individual has in order to perform the AIDS preventative behaviours (Hawa et al., 1998).

The third component of this model is the acquisition of certain behavioural skills which are crucial and indispensable components of AIDS preventative behaviour. In effect, the third component relies on the behavioural skills of the individual, such as the ability to communicate effectively with sexual partners about risk reduction (Fisher & Fisher, 2000).

Even if an individual is highly motivated and well informed, they will be much less likely to be able to reduce risks of infection if they do not have the ability to bring up, discuss and be assertive regarding risk reduction strategies (Hawa et al., 1998). Behavioural skills are mediated by information and motivation, predicting onset and sustainability of preventative behaviour. Thus if an individual improves prevention information then the individual will have sufficient knowledge of risk and preventative behaviours (Fisher & Fisher, 2000).

This increases the likelihood of the individual engaging in prevention behaviour and increases the individual's motivation by informing them about actual risks. This also increases one's behavioural skills by providing them with information about which behaviours are safer than others. These factors combined, result in HIV preventative behaviour, specifically a reduction in unprotected sex (Fisher & Fisher, 2000).

Thus, with regard to alcohol as a risk factor to HIV infection, individuals need to understand the effects that alcohol can have on their cognitive functioning and social behaviour, which could in turn lead to engaging in risky sex such as unprotected sex, casual sex, transactional sex and sex with multiple partners. This information component needs to be coupled with sufficient motivation from the individual to use the acquired information and to adopt the necessary protective behavioural skills, such as condom use and abstinence from sex, in order to protect themselves from HIV infection.

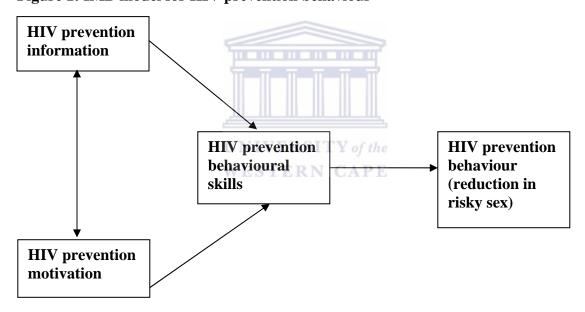


Figure 1: IMB model for HIV prevention behaviour

In light of the interplay between the components of the IMB model and their potential impact on sexual behaviour, Fisher et al. (2008) suggest that health interventions should focus on:

- 1) dispersing effective health information that is relevant to the target health behaviour and specific to a population,
- 2) increasing personal motivation and social support, and
- 3) skills training to increase self-efficacy for performing a health behaviour

#### 2.10 CONCLUSION

This chapter focused on the relevant literature that contextualizes the various facets associated with alcohol and its relation to HIV/AIDS risk. Firstly, HIV/AIDS intervention strategies were discussed, with particular focus on South Africa's attempt to reduce the spread of HIV with its major HIV/AIDS communication programmes. Risk behaviours that are frequently exhibited by youth were then explored and one's perception of risk as an important antecedent for adopting protective behaviour was discussed.

A review on alcohol use as well as sexual behaviour was then presented, with particular reference to studies conducted with youth and university students. Subsequently, the topic of high risk sex was introduced and the identified behavioural determinants of the epidemic were presented, which included sexual debut, intergenerational and transactional sex, multiple sexual partners, unprotected sex and gender.

An overview of literature pertaining to the interplay between alcohol, risky sex and HIV was then presented, with much of the literature revealing a strong relationship between

alcohol use and sexual risk behaviour. Finally, the IMB skills model was discussed as the chosen theoretical framework for this study and a clear explanation on how the IMB model can inform future HIV interventions was provided.

The following chapter explores the research methodology used in this study. The research design is discussed, followed by the exploration of the sample and sampling procedures that were used. A discussion on the research instrument, data analysis and ethical considerations are then presented.



### CHAPTER 3

### RESEARCH METHODOLOGY

### 3.1 INTRODUCTION

This chapter presents an outline of the research question and hypotheses of the study. The research design is then discussed, followed by an exploration of the sample and sampling procedure that was adopted for the study. An explanation of the research instrument, method of data analysis and ethical considerations will then be outlined.

# 3.2 RESEARCH QUESTION

The research question for this study revolved around how students perceive alcohol in relation to HIV risk. More directly stated: *Do students believe that alcohol contributes to HIV infection risk?* 

#### 3.3 HYPOTHESES

In light of research findings that suggest a connection between alcohol and risky sexual behaviour, the hypotheses for this study were:

# **Hypothesis 1:**

Most students believe that people who consume alcohol are more likely to engage in unprotected sex than those who abstain.

### **Hypothesis 2:**

Most students believe that people who consume alcohol are more likely to engage in sex with multiple partners than those who abstain.

### **Hypothesis 3:**

Most students believe that people who consume alcohol are more likely to engage in sex with casual partners than those who abstain.

# **Hypothesis 4:**

Most students believe that people who consume alcohol are more likely to engage in transactional sex than those who abstain.

#### 3.4 RESEARCH DESIGN

The primary aim of this study was to investigate the perceptions of UWC students with regard to alcohol as a risk factor to engaging in risky sexual behaviour, which in turn could pose a high risk of HIV infection. In accordance with the above mentioned aim of this study, this research located itself within an explanatory, positivist paradigm, using quantitative methodology. Although a qualitative design provides an in-depth subjective and holistic view of a topic, the nature of quantitative designs allow for the findings to be generalized to the population from which the sample was drawn (Durrheim, 2006).

More specifically, this research was carried out using surveys and used convenient sampling. Mouton (2001) explains that surveys are usually quantitative in nature and

provide a broad overview of a representative sample of a large population, hence survey designs was best suited to accurately achieve my research objectives.

#### 3.5 SAMPLE

# 3.5.1 Sample characteristics

The sample comprised 240 first year psychology students from the University of the Western Cape (UWC). Psychology 1 usually draws students from most faculties, the majority from Education, Arts and Community and Health Sciences and it is often a course which is taken as an elective. The demographic details of the final sample are shown in Table 1: 80 % of the sample consisted of females (n = 192) and 20 % of the sample were male (n = 48). The racial demographics of the sample included Black (n = 76), White (n = 9), Couloured (n = 143) and Indian (n = 9) participants, and 3 participants who classified themselves as belonging to "other" racial groups.

With regards to religion, 80.8 % of the sample were raised in the Christian faith (n = 194), 16.7 % were raised in the Islam faith (n = 40), 1.2 % were not raised in any religion (n = 3), 0.8 % classified themselves as being raised in other religions (n = 2) and 0.4 % were raised in the Jewish faith. Most participants (73.3 %) reported that their religion was very important to them, 24.1 % of the participants described their religion as moderately important and 2.5 % of participants reported that religion was not important to them.

The sample consisted of almost equal proportions of drinkers (n = 132, 55%) and non-drinkers (n = 108, 45%). Of the 55% of the participants who classified themselves as drinkers, 29.5% reported drinking once or twice a week, 33.3% reported drinking once or twice a month and 37.8% reported that they rarely drank.

# 3.5.2 Sampling procedure

Permission to conduct this research was obtained from the University's Senate Research Committee and the University Registrar. Following the approval, convenience sampling was employed as a method of selecting participants for the study, which involved taking participants on the basis of their availability (Terre Blanche & Durrheim, 2002). The completion of the surveys took place before a Psychology first year lecture. A brief explanation on the nature of the research was outlined to all of the students and they were informed that participation in the study was voluntary and anonymous. In total, each survey took approximately ten minutes for the student to complete.

**Table 1: Demographic information for the sample** 

Variable	N	n	%
Gender	240		
Male		48	20
Female		192	80
Race	240		
Black		76	31.6
White		9	3.8
Coloured		143	59.6
Indian		9	3.8
Other		3	1.3
Religion	240		
Christian		194	80.8
Islam	THE HEAD CONTRACTOR	40	16.7
Jewish		1	0.4
No religion		3	1.2
Other religions		2	0.8
Importance of religion	UNIVERSITY 240,e		
Very important		176	73.3
Moderately important	WESTERN CAPE	58	24.1
Not important		6	2.5
Alcohol use	240		
Drinkers		132	55
Non-drinkers		108	45
Frequency of drinking	240		
Once or twice a week		39	29.5
Once or twice a month		44	33.3
Rarely drink		50	37.8

#### 3.6 RESEARCH INSTRUMENT

This study used a survey in order to collect the data from the participants. A survey is the application of questionnaires to relatively large groups of people (Terre Blanche & Durrheim, 2002). The survey was structured and consisted of ten statements that focused on the perception of risk behaviours associated with alcohol use. More specifically, the survey tapped into the students' perceptions regarding alcohol use and its association with unprotected sex, casual sex, transactional sex and multiple sexual partners. A Likert Summative Scale was employed and the possible responses included "agree", "not sure" and "disagree". A pilot study was conducted with a small sample of students (n = 6) in order to identify possible problems with the survey. Some of the wording of the statements was revised to ensure a clear understanding of each statement by the students.

# UNIVERSITY of the WESTERN CAPE

# 3.7 DATA ANALYSIS

The analysis of the data was carried out using the Statistical Package for the Social Sciences (SPSS). The statistical analyses that were employed included descriptive statistics, cross-tabulation and chi-square test. A statistical significance level of 0.05 with a 95% Confidence Interval was used.

Descriptive statistics were performed on variables including: gender, alcohol use and frequency of alcohol use in order to determine the frequency and occurrence of responses within each variable. Participants' responses to each statement were categorized and coded in the form of frequencies of occurrences and percentages. Cross-tabulations and

chi-square were performed on each of the statements in relation to gender and alcohol use.

#### 3.8 ETHICAL CONSIDERATIONS

This study was approved by the Senate Ethics Committee of the University of the Western Cape. The strictest ethical standards were adhered to throughout the research process. Consent to take part in this study was voluntary and informed. All potential participants received a consent letter before they filled in the survey, which explained the nature, potential risks of and benefits of the study. This ensured that the participant could make an informed choice to participate voluntarily in the research. Participants were informed that they reserved the right to withdraw from the study at any point.

Confidentiality was also reassured to participants, as they were not required to fill in their name on the survey.

Results from the study will be made available to the participants on request. There were no known risks associated with participation in this study. Potential benefits for participants in this study include exposure to a scientific study. Most students within the Community and Health Sciences, Education and Arts faculties will be required to conduct or at least be required to draw on scientific studies as part of their learning processes, therefore exposure to this study would be of benefit to them.

Participants were also given a booklet on the UWC HIV & AIDS programme which aims to "prevent, manage and mitigate the impact of the pandemic on the university", with the

aim of providing the participants with HIV awareness information. Students were also offered counseling at the campus Student Support Services, if they felt the need to discuss any issues that may have arisen during the research process.

### 3.9 CONCLUSION

This chapter presented the methodology on which the study was based. The research question and hypotheses were outlined and the research design was explained. The characteristics of the sample and sampling procedures were discussed. The research instrument, data analysis, ethical considerations and potential limitations of the study were also clarified. The following chapter communicates the results of the statistical analyses.

WESTERN CAPE

# **CHAPTER 4**

### **RESULTS**

### **4.1 INTRODUCTION**

This chapter reflects the results of the statistical analyses that were conducted. It begins be providing an overview of the descriptive statistics from variables of alcohol use and frequency of alcohol use. Descriptive statistics for each of the statements asked in the survey are also provided.

The results for each relevant variable and question are presented separately and are expressed in terms of percentages and frequencies to provide a clear picture of numbers and proportion. Cross-tabulations and chi-square tests were performed in order to analyze the relationship between variables (gender and drinkers and non-drinkers) and perceptions of risk behaviours (unprotected sex, multiple sexual partners, casual partners, transactional sex) in relation to alcohol use. A statistical significance level of p < 0.05 was used to interpret significance.

#### 4.2 ALCOHOL USE

#### 4.2.1 Alcohol drinkers and non-drinkers

Contrary to expectations regarding the prevalence of alcohol use amoungst student populations, the sample consisted of almost equal proportions of drinkers (55 %, n =

132) and non-drinkers (45 %, n = 108). The results showed a greater proportion of men (62.5 %) who drink alcohol when compared to females who drink (53.1 %).

# 4.2.2 Frequency of drinking

Of the 55 % of the participants who classified themselves as drinkers, 29.5 % reported drinking once or twice a week (n = 39), 33.3 % reported drinking once or twice a month (n = 44) and 37.8 % reported that they rarely drink (n = 50). More males (46.6 %) reported drinking once or twice a week compared to females (24.5 %).

#### 4.3 RESPONSES TO SURVEY STATEMENTS

The following section highlights the results of the students' perceptions of each of the statements asked in the survey, hence the statement below corresponds with the statements regarding perceptions of alcohol as a risk factor to HIV infection as they occur in the survey.

# 4.3.1 STATEMENT 1: In terms of having multiple sexual partners, there is no difference between drinkers and non-drinkers.

Results indicated that 40 % of the students believed that a person who drinks is more likely to engage in sex with multiple sexual partners. Thirty one percent believed that no difference exists between drinkers and non-drinkers in terms of multiple sexual partners and 29 % of the students were not sure whether a difference existed.

More males (43.8 %) than females (39.1 %) believed that there is a difference between drinkers and non-drinkers in terms of having multiple sexual partners. However, Chi square analyses indicated that this difference was not significant (p >.05). There was a higher amount of non-drinkers (42.6 %) than drinkers (37.8 %) who believed that there is a difference between drinkers and non-drinkers in terms of having multiple sexual partners, however this difference was not significant (p>.05).

# 4.3.2 STATEMENT 2: A person who drinks alcohol is more likely to pay or accept money for sex.

Thirty six percent of the students did not believe that a person who drinks alcohol would be more likely to pay or accept money for sex. However, 34.2 % of the students agreed with this statement and 29.6 % of the students were not sure if a person who drinks would be more likely to pay or accept money for sex. There was no significant difference between the perceptions of males (37.5 %) and females (33.3 %). However, significantly more non-drinkers (48.1 %) than drinkers (22.7 %) believed that a person who drinks alcohol is more likely to pay or accept money for sex (p<.05).

# 4.3.3 STATEMENT 3: In terms of consistent condom use, there is no difference between drinkers and non-drinkers.

Forty four percent of the students believed that there is a difference between drinkers and non-drinkers in terms of consistent condom use. Thirty percent of students believed that there is no difference and 25 % are not sure whether a difference exists.

In relation to consistent condom use, Chi square tests showed no significant difference between males (54.2 %) and females (41.7 %) perceptions nor between drinkers (42.4 %) and non-drinkers (46.3 %) perceptions (p>.05).

# 4.3.4 STATEMENT 4: A person who drinks alcohol is more likely to have one night stands.

The majority of the students (75 %) agreed that a person who drinks alcohol would be more likely to have a one night stand. Only 16.6 % of the students disagreed and 8.8 % were not sure.

Chi square analysis found no significant difference between males (77.1 %) and females (74.5 %) perceptions on this statement (p>.05). However, significantly more non-drinkers (80.5%) compared to drinkers (70.4 %) perceived that those who drink alcohol are more likely to have a one night stand (p<.05).

# 4.3.5 STATEMENT 5: A person who drinks alcohol is more likely to engage in unprotected sex.

The majority (82.1 %) of the students agreed that a person who consumes alcohol is more likely to have unprotected sex, whilst 10 % disagreed and 7.9 % were unsure whether one who drinks would engage in unprotected sex.

Chi square analyses showed no significant difference between males (85.4 %) and females' (81.25 %) perceptions in relation to a person who drinks alcohol being more

likely to engage in unprotected sex (p>.05). However, significantly more non-drinkers (89.8 %) compared to drinkers (75.8 %) believed that one who drinks will be more likely to engage in unprotected sex (p<.05).

# 4.3.6 STATEMENT 6: There is no difference in sexual behaviour between drinkers and non-drinkers.

The majority (61.7 %) of the students disagreed with this statement and believed that there is a difference in sexual behaviour between those who drink and do not drink alcohol. Twenty one percent of the students agreed that no difference existed in sexual behaviour between drinkers and non-drinkers and 17.5 % were unsure.

More males (70.8 %) believed there was a difference in sexual behaviour between drinkers and non-drinkers compared to females (59.3 %), however this difference was not significant (p>.05). Significantly more non-drinkers (65.7 %) than drinkers (58.3 %) believed that there is a difference in sexual behaviour between drinkers and non-drinkers (p<.05).

# 4.3.7 STATEMENT 7: A person who drinks alcohol is more likely to experience failed condom use.

Most of the students (60 %) believed that a person who drinks alcohol would be more likely to experience failed condom use. Fifteen percent of students disagreed and 25 % were not sure whether drinking alcohol would lead to failed condom use.

Males (56.2 %) and females (60.9 %) have similar perceptions on the use of alcohol leading to failed condom use, whilst significantly more non-drinkers (61.1 %) than drinkers (58.3 %) believed that alcohol use is likely to lead to failed condom use (p<.05).

# 4.3.8 STATEMENT 8: In terms of cheating on a partner, there is no difference between drinkers and non-drinkers.

Forty two percent of the students believed that those who consume alcohol are not more likely to cheat on a partner compared to those who abstain from drinking. Thirty nine percent of the students believed that one who drinks would be more likely to cheat on a partner and 18.3 % were unsure whether a difference existed.

More males (47.9 %) than females (37 %) and more non-drinkers (41.6 %) than drinkers (37.1 %) believed that a person who drinks is likely to cheat on a partner, however these differences were not statistically significant (p>.05).

# 4.3.9 STATEMENT 9: A person who drinks alcohol finds it easier to socialize with sexual partners after drinking.

Sixty five percent of the students believed that a person who drinks alcohol finds it easier to socialize with sexual partners after drinking. Only a small proportion (13.8 %) of students disagreed with this statement and 21.7 % of the students were unsure.

More males (70.8 %) than females (63 %) and more drinkers (67.4 %) than non-drinkers (61.1 %) believed that those who drink find it easier to socialize with sexual partners, however no significant difference was found (p>.05).

# 4.3.10 STATEMENT 10: A person who drinks alcohol is more likely to wake up with a partner and not remember details from the previous night.

The majority (81.2 %) of the students believed that a person who drinks is more likely to wake up with a partner and not remember details from the previous night. Only 9.6 % of students did not agree with this statement and 9.2 % were unsure.

An equal proportion of males (81.2 %) and females (81.2 %) agreed that a person who drinks alcohol is more likely to wake up with a partner and not remember details from the night before. Chi square analyses revealed that there were significantly more non-drinkers (84.2 %) than drinkers (78.8 %) who believed that a person who drinks alcohol would be more likely to wake up with a partner and not remember details from the previous night (p<.05).

 Table 2: Chi Square tests and percentages: Perceptions between males and females

	Percentage	Percentage	p
	males	females	
Statement 1	43.8 %	39.1 %	.760
Statement 2	37.5 %	33.3 %	.169
Statement 3	54.2 %	41.7 %	.262
Statement 4	77.1 %	74.5 %	.791
Statement 5	85.4 %	81.25 %	.273
Statement 6	70.8 %	59.3 %	.264
Statement 7	56.2 %	60.9 %	.754
Statement 8	47.9 %	37 %	.307
Statement 9	70.8 %	63 %	.239
Statement 10	81.2 %	81.2 %	.905 SITY of th

WESTERN CAPE

<sup>\*</sup> *p* < .05.

Table 3: Chi Square tests and percentages: Perception between drinkers and non-drinkers

	Percentage	Percentage	p
	Drinkers	Non-drinkers	
Statement 1	37.8 %	42.6 %	.756
Statement 2	37.8 %	42.6 %	.000*
Statement 3	42.4 %	46.3 %	.835
Statement 4	70.4 %	80.5 %	.000*
Statement 5	75.8 %	89.8 %	.018*
Statement 6	58.3 %	65.7 %	.018*
Statement 7	58.3 %	61.1 %	.016*
Statement 8	37.1 %	41.6 %	.722
Statement 9	67.4 %	61.1 %	.568
Statement 10	78.8 %	84.2 %	.011*

<sup>\*</sup> *p* < .05.

#### 4.4 CONCLUSION

This chapter presented the results of alcohol use patterns in terms of frequency of alcohol use amoungst students. The data indicated that only 55 % of the student sample consumed alcohol. Some gender differences were found with regards to alcohol use and frequency of alcohol use, in that more males were drinkers and more males engaged in more frequent alcohol use.

Cross tabulations and chi square tests identified several differences between males and females perceptions about alcohol as a risk factor to HIV infection, however none of the statements yielded a statistically significant difference between males and females perceptions. Reasoning behind the lack of significance could be due to there being significantly more females (n = 192) than males (n = 48) in the sample. Several statistically significant differences were found between the perceptions of drinkers and non-drinkers in relation to sexual behaviour, casual sex, unprotected sex, failed condom use and socialising after drinking.

The following chapter integrates and discusses the above mentioned results in light of the relevant literature and past research that has been conducted.

### **CHAPTER 5**

### **DISCUSSION**

#### **5.1 INTRODUCTION**

This chapter discusses the significance of the findings of the study. Firstly, findings of the students' overall perceptions of alcohol as a risk factor to HIV infection will be discussed. This will be followed by a discussion and potential explanations about the difference in perceptions between drinkers and non-drinkers. Implications of the findings in terms of future prevention and intervention strategies are then highlighted and possible limitations of the research are then provided. Finally, recommendations for future research are proposed.

# WESTERN CAPE

#### 5.2 ALCOHOL USE AMOUNG STUDENTS

Contrary to expectations that most students drink alcohol, this study found that there were almost equal amounts of students who were drinkers (55 %) and non-drinkers (45 %). This finding was similar to previous research conducted at UWC on alcohol use and sexual behaviour (Rich, 2004) where 65 % of the sexually active participants reported drinking alcohol. Similar findings to Rich's (2004) study were found in relation to the frequency of drinking in that most students (71 %) do not drink frequently (only drink rarely or once or twice per month).

Consistent with previous findings from research conducted with UWC students, there were more male (62.5 %) drinkers than females (53.1 %) (Phillips & Steyl, 2008; Rich, 2004).

#### 5.3 OVERVIEW OF STUDENTS' PERCEPTIONS

In general, the majority of the students perceived alcohol to be related to risky sexual behaviours, a finding that is consistent with several other studies on perceptions of high risk sex (Mwaba et al., 2008; Simbayi et al., 2006). In relation to the hypotheses of this study, the following high-risk sexual behaviours were identified by the students as being influenced by alcohol use:

HYPOTHESIS 1: Most students believe that people who consume alcohol are more likely to engage in unprotected sex than those who abstain.

WESTERN CAPE

As hypothesized, the results of the present study revealed that the majority of the students (82 %) believed that a person who drinks alcohol is more likely to engage in unprotected sex, thereby increasing the risk of HIV infection. The perception that alcohol use often leads to sex without a condom is one that has been found in qualitative research conducted with STI clinic patients, who all blamed alcohol use as one of the reasons for engaging in unprotected sex (Mwaba et al., 2008, p. 623). Another study conducted with STI clinic patients identified that the patients described how alcohol affected their judgement which led to unprotected sex (Simbayi et al., 2006).

Other results relating to condom use in the current study highlight that most of the students (44 %) believed that there is a difference between drinkers and non-drinkers in relation to consistent condom use, a finding consistent with other studies in the field that demonstrated that alcohol use in sexual contexts was found to be associated with higher rates of inconsistent condom use (Simbayi et al., 2006; Simbayi et al., 2004).

In relation to failed condom use, 60 % of the students in this study believed that a person who consumes alcohol would be more likely to experience failed condom use. This result has been identified by several studies as contributing to HIV infection as intoxication impairs one's judgement and abilities leading to condom failure and the improper use of oil-based lubricants with condoms (Simbayi et al., 2004; Mwaba et al., 2008).

Therefore, on the whole, the majority of students in this sample affirm previous literature findings that alcohol use is likely to lead to unprotected sex, which could ultimately increase one's chances of HIV infection. This is a positive finding which could be attributed to these students being exposed to more awareness campaigns which will hopefully be translated into safer sexual practices.

5.3.2 HYPOTHESES 2: Most students believe that people who consume alcohol are more likely to engage in sex with multiple partners than those who abstain.

Most students (40 %) in this study believed that alcohol use is likely to lead to sex with multiple partners. This result therefore supports previous literature that has identified alcohol use to be associated with multiple sexual partners (Phillips & Malcolm, 2006; Reddy et al., 2003; Rich, 2004; Shisana et al., 2008).

In the present study, although no significant difference was found, more males (43 %) than females (39 %) believed that a difference exists between drinkers and non-drinkers in terms of multiple sexual partners. Perhaps this can be attributed to the fact that most studies have found that more males engage in sex with multiple partners, which has been attributed to peer pressure, status, admiration and masculinity (Eaton, et al., 2003; Reddy et al., 2003; Shisana et al., 2008;).

5.3.3 HYPOTHESES 3: Most students believe that people who consume alcohol are more likely to engage in sex with casual partners than those who abstain.

This hypothesis was supported by the majority of the students (75 %) who believed that a person who drinks alcohol would be more likely to have a one night stand, thus implying casual sex. This finding is consistent with previous literature that has demonstrated that alcohol use often leads to sex with casual partners (Simbayi et al., 2006; Mwaba et al., 2008).

Another finding from this study further supports this hypothesis in that 81 % of the students believed that a person who drinks is more likely to wake up with a partner and not remember details from the previous night, thus implying the possibility of casual sex.

5.3.4 HYPOTHESES 4: Most students believe that people who consume alcohol are more likely to engage in transactional sex than those who abstain.

This hypothesis was not supported by the findings of this study. More students (36 %) believed that a person who drinks is not more likely to engage in transactional sex. This finding is therefore inconsistent with previous research that has revealed the perceptions of STI clinic patients being that alcohol serves as a means to secure sex; in that buying a women alcohol will ensure casual sex (Simbayi et al., 2006). Poverty has been attributed as a factor that encourages the exchange of money and gifts for sex (Frank et al., 2008; Shisana et al., 2008).

One of the possible explanations for the current finding is that perhaps most students are in a financial position where they do not have to exchange sex for basic commodities in order for survival, hence they cannot conceive of the idea of transactional sex. Many of the studies that have identified alcohol as a catalyst for transactional sex have spoken about the occurrence of transactional sex in informal drinking locations (shebeens), therefore indicating that the participants are living in a poorer environment (Mwaba et al., 2008; Simbayi et al., 2006). Another possible explanation for the students' perceptions is that perhaps the students associate transactional sex with prostitution, which they would

not engage in, given the negative stigma associated with it; hence they did not support this hypothesis.

# 5.4 PERCEPTIONS BETWEEN DRINKERS AND NON-DRINKERS

The results from this study indicated that half of the statements in the survey yielded significant differences in perception between drinkers and non-drinkers. Furthermore, it is noteworthy that for each statistically significant difference, more non-drinkers perceive alcohol as more of a risk factor to engage in risky sexual behaviours when compared to drinkers. Although those who drink identify alcohol is a risk factor, they tend to minimise the extent of alcohol as a risk factor to engaging in unsafe sexual behaviour, when compared to non-drinkers. Significantly fewer drinkers than non-drinkers believed that a person who uses alcohol is more likely to have a one night stand, engage in unprotected sex, experience failed condom use and wake up with a partner and not remember details from the previous evening.

Research on the perception of risk has identified that one's perception of susceptibility to illness or disease is an important antecedent for adopting protective behaviours (Macintyre et al., 2004). Therefore, from these findings one could assume that the students in the study who drink underestimate the effects that alcohol might have on their behaviour, which could lead to unsafe sex due to the lack of using protective behaviours.

Although the current study focuses on the perceptions of students rather than their actual behaviours, it is assumed that in providing their perceptions, they would look to their own

behaviour and past experiences. Hence, the students who drink might have based their perceptions on personal past experiences, and perhaps these were "safe sexual practices" rather than risky sexual behaviours.

On the other hand, non-drinkers might have overestimated the unsafe sexual behaviours of those who drink, given they have not experienced this first hand. Previous research conducted at UWC on alcohol and sexual behaviour revealed that 68 % of the student sample claimed to have attempted to decrease the risk of HIV infection during the past months by using a condom, having fewer partners or abstaining from sex (Rich, 2004). Results such as these are encouraging in terms of HIV prevention and indicate that perhaps students have begun to shift their mindset when it comes to protecting themselves from HIV infection, which says much for South Africa's prevention strategies in an attempt at curbing the spread of the disease.

#### WESTERN CAPE

On a more pessimistic stance, one could also hypothesize that the students who drink tend to rationalize about the risk of alcohol on their sexual behaviour, in an attempt to minimise or deny the possibility that alcohol could be the cause of risky sex and possible HIV infection. This viewpoint again accentuates the perception of risk as an integral component of an individual's attempt to adopt protective behaviours (Macintyre et al., 2004).

In relation to the IMB model, this rationalization as an attempt to deny the negative implications of alcohol on sexual behaviour, could serve as an effort to maintain existing

beliefs about alcohol, which could have a negative impact on the motivation component of the model. The alcohol expectancy theory can further elaborate on this point. This theory proposes that an individual's behaviour after drinking is driven by pre-existing beliefs about alcohol's effect on behaviour which forms a "self-fulfilling prophecy" (Morris & Albery, 2001).

Thus, by accepting alcohol as a risk factor, this could entail that one either stops drinking all together or one reduces the frequency and intensity of drinking, in the hope of maintaining competence to engage in protective sexual behaviours. Although only half of the students indicated that they are drinkers, perhaps they are not willing to accept that they might need to cut back on drinking, given the environment that encapsulates a student life.

#### 5.5 PERCEPTIONS BETWEEN MALES AND FEMALES

On the whole, no significant difference was found between males and females in terms of the perceptions of alcohol as a risk factor to risky sexual behaviours. This finding is concurrent with previous research that revealed that both men and women expressed the belief that alcohol serves as contributing factor to engaging is risky sex (Mwaba et al., 2008; Simbayi et al., 2006).

Therefore despite the fact that several studies have highlighted the role of gender differences in terms of risky sexual behaviour, the present study reveals that the perception of alcohol as a risk factor to HIV infection is held by both males and females.

This is a positive finding which could be attributed to effective prevention strategies reaching both sexes or that for this sample, there is minimal gender inequalities which research has shown often renders the female sex more vulnerable (Frank et al., 2008, Phillips & Malcolm, 2006).

The lack of significance between males and females perceptions needs to be analysed in relation to the possibility of a methodological flaw, being that only 20 % of the sample consisted of males and 80 % of the sample consisted of females.

#### **5.6 LIMITATIONS**

It is important to understand the findings of this study in the context of its possible methodological limitations. Firstly, this study used convenient sampling, which brought about the possibility of students participating who were more interested in the research topic, rather than a completely representative sample. Furthermore, this study could not include all of the targeted students because some students may have been absent from class or may have attended a different lecture time; hence the results may have been affected. This requires caution when applying the findings of this study to other populations of university students. Furthermore, although this survey sample was sizeable (n = 240), it is not large enough to make claims as to the general population of university students in South Africa.

Secondly, the perceptions were self-reported. Although the surveys were anonymous, due to the sensitive nature of the research topic, it is possible that participants could have

given socially desirable answers, which could also have impacted on the results of the study.

A third possible limitation of this study is that the sample consisted mostly of females (80 %). Although this might be a true representation in that there are generally more females studying psychology than males, it still brings into question the influence of gender on the research findings, which could be a reason for the lack of significant differences in the perception between males and females regarding the survey statements.

Finally, the research instrument is not a standardized measure which creates the opportunity for possible methodological flaws associated with the survey questionnaire. The survey used a likert scale which included 3 set responses (agree, disagree, not sure). This suggests the possibility that the students may have been directed to choose a single response to particular statements, where in reality the responses may have been more complex than a single response category.

### 5.7 RECOMMENDATIONS FOR FUTURE RESEARCH

Although this quantitative study revealed interesting findings in relation to understanding that students recognise alcohol as a risk factor to high risk sex, perhaps a qualitative study would better aid in understanding the motivational component of the proposed IMB model.

The findings highlighted the possibility that drinkers tend to underestimate the negative implications of alcohol on HIV risk; hence perhaps in-depth interviews would dissect the factors that play a role in influencing one's motivation, such as the tendency to rationalise one's behaviour in order to maintain individual belief systems. By comprehending this motivational component more fully, researchers could begin to tackle individuals' motivation in the form of prevention strategies, as it is this component that acts as a catalyst for individuals to use the appropriate information and translate this into the adoption of protective behaviours, which could be the key to future effective prevention strategies (Fisher & Fisher, 2000).

Much research has identified informal drinking establishments as a location where high risk sex might initiate and take place (Mwaba et al., 2008; Simbayi et al., 2006), hence the suggestion of "free" condom dispensers at all of these informal drinking locations. Although research is indicating that the areas where these shebeens are situated are high risk areas for HIV infection, research has also suggested that HIV/AIDS knows no boundaries between race, class and gender. Therefore, future research could focus on formal drinking establishments in middle class areas as a possible location for free condom dispensers, in order to prevent the possibility of HIV infection.

### 5.8 CONCLUSION

This study aimed at understanding a sample of UWC students' perceptions of alcohol as a risk factor to HIV infection, given that research is depicting this age group as a high-risk group for HIV infection as well as the finding that alcohol is highly associated with risky

sexual behaviours. The results of the study revealed that most students believed that alcohol use leads to unprotected sex, sex with multiple partners, and casual sex. Contrary to my expectations, most of the students did not believe that alcohol use leads to transactional sex, which was explained by the possibility of the students associating the accepting or paying money for sex with prostitution or the possibility that they have a higher financial status than other participants from studies that have demonstrated this finding, hence they cannot conceive of the idea that they would engage in transactional sex.

The acknowledgement of alcohol as a risk factor to HIV infection is a positive step towards effective prevention strategies. The crucial task is to translate this acknowledgement into safer sexual practices by reiterating the effect that alcohol might have on one's sexual behaviour and in turn on one's HIV status. An overall awareness of alcohol and its effect on sexual behaviour should be made visible in most drinking establishments.

Furthermore, prevention campaigns should target schools and universities in an attempt to create awareness about the dangers of alcohol in relation to HIV. Behavioural skills training should also be considered in order to complete the trilogy of information, motivation and behaviour in protecting oneself from the risk of HIV/AIDS.

### REFERENCES

- Anderson, K.G., & Beutel, A.M. (2007). HIV/AIDS prevention knowledge among youth in Cape Town, South Africa. *Journal of the Social Sciences*, *33*, 143-149.
- Anderson, K.G., Beutel, A.M., & Maughaun-Brown, B. (2007). HIV risk perceptions and first sexual intercourse among youth in Cape Town, South Africa.

  International Family Planning Perspectives, 33, 98-105.
- Barden-O'Fallon, J.L. deGraft-Johnson, J. Bisika, T., Sulzbach, S, Benson, A., & Tsui, A.O. (2004). Factors associated with HIV/AIDS knowledge and risk perception in rural Malawi. *Aids and Behavior*, 8, 131-140.
- Durrheim, K. (2006). Research Design. In Terre Blanche, M., Durrheim, K., & Painter, D (Eds.), *Research in practice. Applied methods for the social sciences* (pp. 33-59). Cape Town, South Africa: University of Cape Town Press.
- Eaton, L., Flisher, A.J., & Aaro, L.E. (2003). Unsafe sexual behavior in South African youth. *Social Science and Medicine*, *56*, 149-165.
- Fisher, J.D. & Fisher, W.A. (1992). Changing AIDS risk behaviour. *Psychological Bulletin*, 111: 455-474.
- Fisher, J.D. & Fisher, W.A. (2000). Theoretical approaches to an individual level change in HIV-risk behaviour. In J. Peterson 7 R. DiClemente (Eds.), *Handbook of HIV prevention*. New York: Plenum.
- Fisher, J.D., Fisher, W.A., Harman, J., & Amico, K. (2008). The IMB skills model of antiretroviral adherence ad its applications. *Current HIV/AIDS Reports*, *5*, 193-203.

- Frank, S., Esterhuizen, T., Jinabhai, C.C., Sullivan, K., & Taylor, M. (2008). Risky sexual behaviours of high-school pupils in an era of HIV and AIDS. *South African Medical Journal*, 98, 394-398.
- Harrison, A., Cleland, J., Gouws, E., & Frolich, J. (2005). Early sexual debut amoung young men in rural South Africa: Heightened vulnerability to sexual risk?

  Sexually Transmitted Infections, 81, 259-261.
- Hawa, R., Munro, B.E., & Doherty-Poirier, M. (1998). Information, motivation and behaviour as predictors of AIDS risk reduction among Canadian first year university students. *The Canadian Journal of Human Sexuality*, 7, 9-19.
- Kalichman, S.C., Simbayi, L., Jooste, S., & Cain, D. (2007). Frequency, quantity and contextual use of alcohol among sexually transmitted infection clinic patients in Cape Town, South Africa. *The American Journal of Drug and Alcohol Abuse*, 33, 687-698.
- Kalichman, S.C., Simbayi, L., Jooste, S., Cain, D., & Cherry, C. (2006). Sensation seeking, alcohol use and sexual behaviors amoung sexually transmitted infection clinic patients in Cape Town, South Africa. *Psychology of Addictive Behaviors*, 20, 298-304.
- LoveLife annual report. (2004). HIV and sexual behaviour amoung youth South

  Africans: A national survey of 15-24 year olds. Retrieved 10 June, 2009 from 

  http://www.lovelife.org.za.
- Macintyre, K., Brown, L., & Sosler, S. (2001). It's not what you know but who you knew: AIDS mortality and behaviour change in Africa. *AIDS Prevention and Education*, 13, 160-174.

- MacIntyre, K., Rutenberg, N., Brown, L., & Karim, A. (2004). Understanding perceptions of HIV risk amoung adolescents in KwaZulu-Natal. *Aids and Behaviour*, 83, 237-250.
- Macleod-Downes, L., Albertyn, R.M., & Mayer, P. (2008). Factors determining the vulnerability of women to sexually transmitted HIV: A literature review. *Health South Africa*, *13*, 69-82.
- MacPhail, C., & Campbell, C. (2001). "I think condoms are good, but, aai I hate those things": condom use amoung adolescents and young people in a Southern African township. *Social Science and Medicine*, 52, 1613-1627.
- Morris, A.b., & Albery, I.P. (2001). Alcohol consumption and HIV risk behaviours:

  Integrating the theories of alcohol myopia and outcome-expectancies. *Addiction Research and Theory*, 9, 73-86.
- Mouton, J. (2001). *How to succeed in your masters and doctoral studies*. Pretoria: Van Schaik Publishers.
- Mwaba, K., Simbayi, L.C., & Kalichman, S.C. (2008). Perceptions of high-risk sex amoung men and women attending and STI clinic in Cape Town, South Africa. *Journal of Psychology in Africa, 18*, 621-624.
- Parry, C.D., Bhana, A., Myers, B., Pluddemann, A., Flisher, A.J., Peden, M.M., & Morojele, N.K. (2002). Alcohol use in South Africa: findings from the South African Community Epidemiology Network on Drug Use (SACENDU) project.

  \*\*Journal of Studies on Alcohol, 63, 430-435.\*\*

- Parry, C. (1998). Substance abuse in South Africa: Country report focusing on young persons. Mental Health and substance Abuse, Medical Research Council,

  Tygerberg, South Africa.
- Patton, R., Keaney, F. & Brady, M. (2008). Drugs, alcohol and sexual health: opportunities to influence risk behaviour. BioMed Central Research Notes: www.biomedcentral.com.
- Peltzer, k., & Pengid, S. (2008). Dual protection, contraceptive use and HIV risk among a sample of South African male and female students. *Gender and behavior*, 6, 1856-1869.
- Peltzer, K., & Ramlagan, S. (2009). Alcohol use trends in South Africa. *Journal of the Social Sciences*, 18, 1-12.
- Pluddemann, A., Parry, C., Cerff, P., Bhana, A., Harher, N., Potgieter, H., et al. (2006).

  Monotoring alcohol and drug abuse trends in South Africa (July 1996 June 2006). SACENDU Research Brief, 9,1-12.
- Phillips, S., & Steyl, T. (2008). Drinking, binge drinking and substance use among health profession students. *African Journal for Physical, Health Education, Recreation and Dance, 14*, 463-472.
- Phillips, J.S. & Malcom, C. (2006). Sexual risk behaviour among adolescent school girls in a local community in the Western Cape, South Africa. *African Journal for Physical, Health Education, Recreation and Dance, 12*, 426-437.

- Reddy, S.P., Panday, S., Swart, D., Jinabhai, C.C., Amosun, S.L., James, S., et al. (2003). *Umthente uhlaba usamila. The first South African national youth risk behaviour survey*, 2002. Cape Town: South African Medical Research Council.
- Rehele, T., Lazzari, S., Dallabetta, G., & Asamoah-Odei, E. (2004). Second generation HIV surveillance: Better data for decision making. *Bulletin of the World Health Organization*, 82, 121-127.
- Rich, E.G. (2004). Alcohol use and unsafe sex practices among students (17-25 year olds) at the University of the Western Cape. Unpublished Masters Thesis. Cape Town: University of the Western Cape.
- Rocha-Silva, L., de Miranda, S., & Erasmus, R. (1995). Alcohol/drug use and related matters: Young black South Africans (10-21 years). Pretoria: HSRC.
- Shisana, O., Rehele, T., Simbayi L.C., Parker, W., Zuma, K., Bhana, A., Connolly C., Jooste, S., & Pillay, V. (2005). South African National HIV Prevalence HIV Incidence, Behaviour and Communication Survey 2005. HSRC Press: Cape Town, South Africa.
- Shisana, O., Rehele, T., Simbayi L.C., Zuma, K., Jooste, S., Pillay-van-Wyk, V., Mbelle, N., Van Zyl, J., Parker, W., Zunga, N.P., & Pezi, S. (2008). South African

  National HIV Prevalence, Incidence, Behaviour and Communication Survey

  2008: A turning tide among teenagers? HSRC Press: Cape Town, South Africa.
- Simbayi, L.C., Chauveau, J., & Shisana, O. (2004). Behavioural responses of South African youth to the HIV/AIDS epidemic: a nationwide survey. *AIDS Care*, *16*, 605-618.

- Simbayi, L.C., Kalichman, S.C., Jooste, S., Mathiti, V, Cain, D., & Cherry, C. (2004).

  Alcohol use and sexual risks for HIV infection amoung men and women receiving sexually transmitted infection clinic services in Cape Town, South Africa. *Journal of Alcohol Studies*, 65, 434-442.
- Simbayi, L.C., Mwaba, K., & Kalichman, S.C. (2006). Perceptions of the combination of HIV/AIDS and alcohol as a risk factor amoung STI clinic attenders in South Africa: implications for HIV prevention. *Social Behavior and Personality*, *35*, 535-544.
- Simelane, M.B. (2005). HIV/AIDS knowledge, attitudes and risky sexual behaviours of college students at Nazarene Teacher Training College in Swaziland: A descriptive study. Unpublished Masters Thesis. Cape Town: University of the Western Cape.
- Simpson, M.R. (1996). Knowledge of safe sex practices and HIV transmission, propensity for risk taking, and alcohol/drug use in the aetiology of unprotected sex. Unpublished Masters Thesis. Grahamstown: Rhodes University.
- Terre Blanche, M, & Durrheim, K. (2002). Research in practice: applied methods for the social sciences. Cape Town: University of Cape Town Press.
- Trepka, M.J., Kim, S., Pekovic, V., Zamor, P. Velez, E., & Gabaroni, M.V. (2008).

  High-risk sexual behavior amoung students of a minority-serving university in a community with a high HIV/AIDS prevalence. *Journal of American College Health*, 57, 77-84.
- UNAIDS. (2004). 2004 Report on the Global AIDS Epidemic. Retrieved May 10, 2009, from http://www.unaids.com.

- UNAIDS. (2007). AIDS Epidemic Update. Geneva: World Health organization.

  Retrieved April 8, 2009, from http://www.unaids.com.
- Uwalaka, & E. Matsuo, H. (2002). Impact of knowledge, attitudes, and beliefs about AIDS on sexual behavioral change among college students in Nigeria. Retrieved 15 June, 2009, from http://www.westafricareview.com/war/vol13.2/uwalaka-matsou.html.
- Visser, M. (2003). Risk behaviour of primary school learners in a disadvantaged community- a situational analysis. *South African Journal of Education*, 23, 58-64.
- Zambuko, O., & Mturi, A. (2005). Sexual risk behaviour among the youth in the era of HIV/AIDS in South Africa. *Journal of Bio-Social Science*, *37*, 569-584

UNIVERSITY of the WESTERN CAPE





# APPENDIX 1: LETTER INVITING STUDENTS TO PARTICIPATE IN STUDY

LETTER INVITING YOU TO PARTICIPATE IN A STUDY BEING
CONDUCTED AT THE UNIVERSITY OF THE WESTERN CAPE
AROUND THE PERCEPTIONS OF ALCOHOL AS A RISK FACTOR TO
HIV INFECTION

UNIVERSITY of the WESTERN CAPE

**Researcher:** Tarryn Kelly - Psychology Masters Programme

**Department:** Psychology

Dear Student.

I am currently doing my clinical psychology masters degree at UWC and am conducting research around the perceptions of alcohol as a risk factor to HIV infection. As you are aware, there is currently no cure for HIV therefore the only way forward is through effective prevention strategies. These strategies entail a vast understanding about the possible factors which influence one's decision to engage in risky sexual behaviour, which puts one at risk for HIV infection. Your participation in this study will be of great value to effective intervention prevention strategies in our country and on campus.

Participation in this study is voluntary and involves the completion of one questionnaire which asks you about your perceptions around this matter and should take you about ten minutes to complete. You will not be required to put your names on the questionnaire, thus your anonymity will be ensured. You are entitled to remove yourself from the process at any point without any negative repercussions. You will also have access to the findings once the study is complete.

Your assistance with this research will be greatly appreciated

Regards

Tarryn Kelly



## **APPENDIX 2: SURVEY QUESTIONNAIRE**

DO NOT write your name on this questionnaire as we wish to retain your anonymity. Please note that participation is voluntary.

Circle the opti	on below tha	t is relevant to yo	ourself	3
1. Your Sex:	<b>1.</b> M	UNIVE WESTE	<b>2.</b> Female	
2. Your Race	:			
1: Black	2: White	<b>3:</b> Coloured	4: Indian	<b>5:</b> Other
3. In what Re	•		4.33	- 0.1
1: Christian	2: Jewish	3: Islam	<b>4:</b> None	<b>5:</b> Other
<b>4.</b> How impor	tant is religio	on to you?		
1: Very impor	rtant 2: N	Moderately impo	rtant 3: N	ot important
• D 1:	1 . 1 . 1 . 10			
5. Do you drii	nk <b>aiconol</b> ?			
$1 \cdot \mathbf{V_{ec}}$	2. N	In		

If yes, please answer question 6 and 7.								
6. If you do drink alco	hol, <b>how often</b> d	lo you drink?						
•		or twice a month	3: rarely dr	3: rarely drink				
7. How often do you b	oinge drink (mo	re than 5 drinks in	one sitting)					
1: once or twice a wee	k <b>2:</b> once o	or twice a month	3: rarely	4: never				
For the following and	ationa ploga e	imalo vour oppren	viata vagnang	o to oogh				
For the following que			oriate respons	e to eacn				
question. Please read	_	carefully.	2					
1. In terms of having multiple sexual partners, there is no difference between drinkers and non-drinkers.								
Agree	Not sure	VERSITY Disa	agree					
		TERN CAPI						
2. A person who drink	s alcohol is more	e likely to pay or a	ccept money for	or sex.				
Agree	Not sure	Disa	agree					
3. In terms of consister	nt condom use, t	here is no differen	ce between dri	nkers and non-				
drinkers.								
Agree	Not sure	Disa	agree					
4. A person who drink	s alcohol is more	e likely to have on	e night stands.					
Agree	Not sure	Disa	agree					

Agree Not sure Disagree

(sex without male or female condom).

5. A person who drinks alcohol is more likely to engage in unprotected sex

o. There is no	difference in sexual denavio	our between armkers and non-armkers.				
Agree	Not sure	Not sure Disagree				
7. A person w	ho drinks alcohol is more lik	xely to experience failed condom use.				
Agree	Not sure	Disagree				
8. In terms of	cheating on a partner (havin	g sex with someone that is not your partne	r)			
there is no dif	ference between drinkers ar	d non-drinkers				
Agree	Not sure	Disagree				
9. A person w	ho drinks alcohol finds it ea	sier to socialize with sexual partners after				
drinking.						
Agree	Not sure	<b>Disagree</b>				
10. A person v	who drinks alcohol is more l	ikely to wake up with a partner and not				
remember deta	ails from the previous night.	RSITY of the				
Agree		ERN CADisagree				

### THANK YOU FOR YOUR PARTICIPATION IN THIS STUDY