

THE ASSESSMENT OF THE UNIVERSITY OF NAMIBIA STUDENT RISKY BEHAVIOUR  
SUCH AS SEXUAL MULTIPLE AND CONCURRENT PARTNERSHIPS

A RESEARCH THESIS SUBMITTED IN PARTIAL FULFILMENT

OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF PUBLIC HEALTH

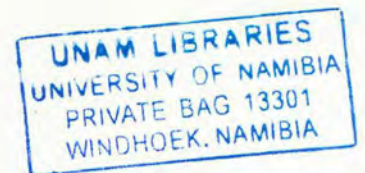
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## DEDICATION

This study is dedicated to my late parents, Ms Lahya Ntinda and Mr Kapewasha Nande Indongo.

Continue to **REST IN PEACE** aahona yandje!

## DECLARATION

I, **INDONGO INDONGO**, hereby declare that “The Assessment of the University of Namibia Student Risky Behaviours Such as Sexual Multiple And Concurrent Partnerships” is a true reflection of my own work, and that all the sources used have been acknowledged in-text and reference list. The version of this work is an original work, and has not been previously submitted or in part for a degree at any other university.

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- Lastly, my uncle, Tate Shivute Indongo, thank you for your encouraging bold words of **“Giving up is not an option”**, indeed is not an option. I salute you Commando!

## ABSTRACT

The risky behaviours such as concurrent sexual partnerships is increasingly recognised as important in the transmission of sexually transmitted infections (STIs), particularly of heterosexual Human Immunodeficiency Virus (HIV) transmission in Africa. Modelling and empirical evidence suggest that concurrent partnerships — compared to serial partnerships — can increase the size of an HIV epidemic, the speed at which it infects a population, and its persistence within a population. The purpose of this study was to assess the risky behaviours such as multiple and concurrent sexual partners among students. The study further determined the level of condom use and voluntary counselling and testing (VCT) as mitigating factors of risky behaviours. A descriptive quantitative approach was used while a structured questionnaire was deployed in collecting primary data from participants. The study used stratified simple random sampling and involved 580 students. Findings of the study revealed that most students - 440 (76%) - were sexually active. The average age at first sex was found to be 19 years. This is above the national average age at first sex which is 16.3 years. The study findings further revealed that out of the 440 sexually active respondents, 369 (84%) had sexual partners in the last six months prior to the study and only 71 (16%) did not have sexual partners. Out of 369 respondents, 154 (42%) were involved with more than one sexual partner in six months before the study while 215 (58%) respondents had one sexual partner. These 369 students had between one and three partners within six months, the study found. The study further revealed that 286 (76%) respondents were involved with regular partners while 87 (24%) were sexually involved with casual partners. Of the 286 respondents, 171 (61%) were females, indicating that more females had regular partners compared to males. On casual partners, more females (64%) were

involved sexually with casual partners compared to males. Condom use among regular and casual partners varied significantly, the study revealed. For regular partners, 202 (72%) “always” used condoms while 79 (28%) “sometimes” used condoms. Condom use among casual partners was high, with 82 (95%) “always” using condoms and 5 (5%) “sometimes” using condoms. The study further revealed that intergenerational sex was common among students, with 105 (28%) respondents out of 369 involved. Of the 105, more females (80%) were involved compared to males. Utilisation of voluntary counselling and testing services was found to be high with 431 (74%) ever tested. However, further analysis revealed that most of the tests were not recent. Those who were tested in the last six months were only 50 (12%) while 174 (40%) results were more than two years old. A majority of 179 (42%) of the respondents got tested at the New Start Centres, followed by 137 (32%) tested at public hospitals or clinics. Of the 149 respondents who said they were never tested, the highest number (23 (37%) females and 14 (16%) males) cited fear of knowing HIV status as the reason; while 16 (26%) females and 25 (29%) males indicated they were not interested in knowing their HIV status. The study concluded that students were involved in risky behaviours of multiple and concurrent sexual partnerships and that condom use was low and inconsistent. Utilisation of VCT was high but not recent, hence the study recommends that students should be encouraged to visit VCT services more frequently.

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## ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
CDC	Centers for Disease Control and Prevention
DHS	Demographic Health Survey
HEAIDS	Higher Education on Acquired Immune Deficiency Syndrome
HIV	Human Immunodeficiency Virus
MCP	Multiple Concurrent Partnership
MoHSS	Ministry of Health and Social Services
MSP	Multiple Sexual Partnership
PSI	Population Services International
SADC	Southern African Development Community
SFH	Society for Family Health
SPSS	Statistical Package for Social Science
SSA	Sub-Saharan Africa
STI	Sexually Transmitted Infections

UNAIDS Joint United Nations Programme on HIV/AIDS

UNAM University of Namibia

VCT Voluntary Counselling and Testing

WHO World Health Organisation

## **CHAPTER 1: INTRODUCTION AND BACKGROUND TO THE STUDY**

### **1.1. INTRODUCTION TO THE STUDY**

Sexual multiple and concurrent partnership has been identified as one of the sexual risky behaviours across the southern African region (Southern African Development Community (SADC), 2006). Sexual multiple and concurrent partnership is defined as a process where individuals have more than one sexual partner at the same time or within a short period of time usually two to six months (Population Services International (PSI), 2006, p. 19). At the individual level, each additional partner over one's lifetime increases the odds of acquiring HIV and other sexually transmitted infections (Macro International, 2008, p. 249).

Sexual multiple and concurrent partnership is one of the determinant factors of HIV. Though the global incidence of HIV infection has stabilised and begun to decline in many countries with generalised epidemics, the number of people receiving antiretroviral therapy continues to increase. At the end of 2010, 6.65 million people were getting treatment (UNAIDS, 2011, P.vii). In 2010, an estimated 2.7 million people were newly infected with HIV that is 15% less than the 3.1 million since 2001 and more than 21% less than the estimated 3.4 million in 1997; the year when the number of newly infected people with HIV peaked (UNAIDS, 2011).

Higher education institutions provide a special environment for risky behaviour because, among other things, they provide the stage for easy interaction among the sexually active age group of 19-24; thereby facilitating the spread of the diseases (Nghaamwa, 2013, p.15). Risky behaviour that may result in HIV or STIs affects every facet of the core business and operations of higher

education institutions. It is, therefore, important for the management of these institutions to establish a clear understanding of the challenges risky behaviour poses on management, teaching and learning, research and community engagement within their internal and external environments (Higher Education on Acquired Immune Deficiency Syndrome (HEAIDS), 2010).

Studies on sexual multiple and concurrent partnership, as a determinant of HIV and AIDS globally, have particularly focused on young people for a number of reasons. First, young people form a significant group of the entire population in many countries. In sub-Saharan Africa (SSA), for example, young people aged 15-24 years constitute 20% of the entire population (Mba, 2003). It then follows that any threat to young people implies a threat to the core of the society. Second, young people live in a transitional period characterised by increased sexual desire, expression and experimentation, peer pressure, and changing socio-cultural norms. This situation, coupled with lack of experience in negotiating the terms of relationships, increases young people's chances of engaging in unprotected sex hence placing them at the greatest risk of HIV infection (Harrison, 2005). Harrison (2005) further argues that a young woman also faces an increased risk of HIV infection, specifically as a result of her immature genital tract and cervix, which provide increased opportunities for the HIV virus to penetrate.

Namibia has one of the world's highest HIV prevalence rates. The 2013 Demographic and Health Survey (DHS) reported a national adult population prevalence of 14% and as high as 23.7% in one of the regions. There is a disproportionate distribution of prevalence between women (16.9%) and men (10.9%) aged 15-49. There are an estimated 217,000 people living with HIV in Namibia, and 166,000 (76%) of them are receiving antiretroviral therapy.

Namibia has a generalised matured epidemic with HIV primarily transmitted through heterosexual means. The epidemic is sustained through specific sexual practices, community norms and practices, alcohol abuse that affects the decisions on sexual behaviours in addition to low male circumcision and HIV risk perceptions. Other sources of new HIV infection are through mother-to-child transmission, which is the most common route of infection for HIV-positive children under the age of five years (Ministry of Health and Social Services (MoHSS), 2010a).

## **1.2. BACKGROUND OF THE STUDY**

Established in 1992 by an Act of Parliament, the University of Namibia (UNAM) is the largest higher learning institution in Namibia with over 20,000 registered students in any given year. The University of Namibia is one of the fastest growing higher learning institutions in Namibia. The mission of the university is “to provide quality higher education through teaching, research and advisory services to customers with the view to produce productive and competitive resources capable of driving public and private institutions towards a knowledge-based economy, economic growth and improve quality of life”. The university has 12 campuses across the country that offer academic training from first degrees to postgraduate doctoral degrees (PhD) as well as continuous professional development courses.

Following the national policy and legislative framework, UNAM developed policy guidelines on HIV, which were approved by Senate and Council in 1997 (UNAM, 2018). These guidelines put emphasis on the prevention of HIV transmission and other sexually transmitted infections that

are caused by risky behaviour. The institution provides primary healthcare and curative services to the students on campus. They give family planning and health education on STIs, such as HIV and Acquired Immune Deficiency Syndrome (AIDS). This is mainly done during the orientation to first year students or during the HIV awareness week, which is held every year. During these events, students are exposed to factual information related to HIV and where to access information related to HIV around the campus.

Higher education institutions educate and train the sexually active young adults, who are most vulnerable to contracting the HIV and other STIs due to their risky social and sexual behaviours. According to the HEAIDS (2010), institutions of higher learning have become increasingly aware of the impact of the HIV and AIDS pandemic on their core business areas of teaching and learning, research and community engagement, therefore, there is a need to respond forcefully and decisively.

### **1.3. PROBLEM STATEMENT**

Young people aged 20-34 years constitute one of the groups at the highest risk of contracting HIV and other STI infections in Namibia (UNAIDS, 2011). This age group forms about 25% of the Namibian population where the level of education in Namibia is high. According to the Demographic and Health Survey in 2006/2007, more than half of the 20 to 34 year olds attained the secondary education level and up to 10% reached higher education level. According to the Namibia Bi-annual Sentinel Surveys, HIV prevalence among young women aged 15-24 has declined from 14.2% in 2006 to 10.3% in 2010 and to 8.9% in 2012 (MoHSS, 2013, p. 1). This is

a true testimony that young people continue to be involved in risky behaviours that are making them more vulnerable to HIV and other STIs infections.

Lack of empirical data in Namibia on risky behaviour among the youth remains a challenge. This study is motivated by the information in literature studies on youth risky behaviours, particularly having multiple sexual partners that could make them vulnerable to HIV and other STI infections. There is a huge gap in research regarding risky behaviour among the youth, particularly in higher learning institutions in Namibia.

According to Kelly (2002), the higher education institutions have done little in terms of response to the pandemic. He further emphasizes the serious impact of the pandemic in terms of the fiscal situation and in terms of the negative social impacts on university communities. The majority of university students fall within ages 16-30 years (Raijmakers & Pretorius, 2006), which is the age group at the highest risk of contracting HIV and other STI infections (De la Torre, 2009; MoHSS 2010; 2012). There has never been a systematic attempt to establish the general HIV prevalence rates in Namibia's higher learning institutions. However, there is overwhelming evidence that multiple concurrent partnership (MCP) does exist among the youth and condom use is very inconsistent. For instance, a number of researchers have made projections among university student populations using small-scale HIV-prevalence surveys that have been conducted at a few university campuses in South Africa. Others use prevalence rates of comparable groups in the general population. Therefore, information collected from students in this study would provide valuable knowledge.

#### **1.4. PURPOSE OF THE STUDY**

The purpose of the study was to assess the risky behaviours of UNAM students such as sexual multiple and concurrent partners.

#### **1.5. OBJECTIVES OF THE STUDY**

The objectives of the study are to:

- Assess risky behaviours among the students;
- Assess factors contributing to risky behaviours among students.

#### **1.6. SIGNIFICANCE OF THE STUDY**

Information from the study could be used by UNAM to develop interventions aimed at assisting students make informed decisions regarding their health. Furthermore, the study can provide useful information for MoHSS to understand risky behaviours among the youth better, thereby enabling it to develop wider interventions to benefit other young Namibians. The study would also be of benefit to other students who wish to do further research on a similar topics by using it as a baseline or for benchmarking.

#### **1.7. LIMITATIONS**

The study largely depended on self-reported information from students and its known that self-reported information could be biased at times. The study was limited to students at the main UNAM campus, thereby, excluding the rest of the campuses. Another limitation is on the exclusion of other faculties, as the study sample was limited to only five faculties, namely:

Humanities and Social Sciences, Economics and Management Sciences, Health Sciences, Law and Science.

## **1.8. DELIMITATIONS**

This study focused on a few UNAM students' views and self-reported behaviours, therefore, the study cannot be generalised to the entire UNAM students and to that of the general population.

## **1.9. DEFINITION OF CONCEPTS**

The concepts defined were derived from the title "THE ASSESSMENT OF THE UNIVERSITY OF NAMIBIA STUDENT RISKY BEHAVIOUR SUCH AS SEXUAL MULTIPLE AND CONCURRENT PARTNERSHIPS".

### **1.9.1. Assessment**

Huitt, Hummel and Kaeck (2001) define assessment as the process of collection of data to describe or better understand an issue or a phenomenon. An assessment can constitute any method used to better understand the current knowledge that a student possesses. In this study, an assessment is carried out to understand the risky behaviours of the students.

### **1.9.2. Student**

According to the Cambridge Advanced Learner's Dictionary (1995), a student is a person who is learning at a college or university, or sometimes at a school. For the purpose of this study, a university student was a person enrolled in a programme at UNAM.

### **1.9.3. Risky Sexual Behaviour**

According to Centers for Disease Control and Prevention (CDC) (2016), risky sexual behaviour is defined by the increased risk of a negative outcome, such as transmitting disease or the occurrence of unwanted pregnancy. Risky sexual behaviour is further defined as the activity that increases the probability that a person engaging in sexual activity with another person infected with a sexually transmitted infection will be infected or become pregnant, or make a partner pregnant. Risky sexual behaviour includes unprotected intercourse, multiple sex partners, and illicit drug use. The use of alcohol and illicit drugs greatly increases the risk of gonorrhoea, chlamydia, trichomoniasis, hepatitis B, and HIV/AIDS. In this study, risky sexual behaviour is viewed in relationship to having multiple sexual partners, having intergenerational sex, having casual sexual partners, inconsistent use of condoms with both regular and casual partners and not knowing one's HIV status while sexually active. Risky sexual behaviour forms the core assessment of this study.

### **1.9.4. Multiple Sexual Partnership**

According to PSI (2008), multiple sexual partnership (MSP) is the measure and incidence of engaging in sexual activities with two or more people within a specific time period. The sexual activity can happen simultaneously or serially. MSP includes sexual activity between people of different gender or the same gender. CDC (2016) further describes MSP as a situation when one person may have a long-term relationship or relationships, and when the second relationship begins, the person can be said to have multiple sex partners. In this study, students were assessed if they had been involved in MSP in the last six months.

### **1.9.5. Concurrent Sexual Partnership**

Pebody (2009) describes concurrent sexual partnership as a situation in which an individual has overlapping sexual relationships with more than one person. They can be contrasted with serial monogamy, when an individual has a sexual relationship with only one partner, with no overlap in time with subsequent partners. In this study, concurrent partnerships among students are assessed over a period of six months with a particular focus on overlapping.

### **1.10. OUTLINE OF CHAPTERS**

The study report is composed of five chapters, as outlined below:

**Chapter 1:** This chapter focuses on the introduction and background to the study. It introduces the topic under investigation, provides background information on the topic as well as the problem statement.

**Chapter 2:** This chapter presents a review of literature to give an in-depth understanding of the topic under research. The literature further provides a conceptual framework under which the topic is to be researched. Literature review further identifies knowledge gaps thereby providing justification as to why the study is needed and how it will contribute to the knowledge gap.

**Chapter 3:** This chapter presents the research methodology used in carrying out the study. In this chapter, study design, target population and sampling approach are clearly defined.

**Chapter 4:** This chapter provides outcomes of the study. It presents the analysis of findings as per different thematic areas.

**Chapter 5:** This chapter presents the discussion of the findings, conclusion, limitations, recommendations and contribution to the body of knowledge. The findings are discussed in detail and how they are linked to the discussed literature. Recommendations are made so that the study can have a meaningful contribution and impact the lives of young people.

### **1.11. SUMMARY**

This chapter introduced the research topic that was studied. Background, problem statement, purpose of the study, objectives, significant of the study, limitations, definition of concepts and outline of chapters are both presented in this chapter. The chapter is concluded by summaries of each chapter to give readers easy reference on what they should expect under each chapter.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.1. INTRODUCTION**

This chapter reviews literature pertaining to risky behaviours among young people related to HIV and other STIs. According to Fulton and Krainovich-Miller (2010), a literature review is a compilation of resources that lay the foundation or groundwork for a study. Literature review directs the argument about the need for a new study, the research method and conceptual or theoretical framework (Polit & Beck, 2010). Literature in different formats, such as journals, articles, books, guidelines, reports, dissertations and various documentation on risk behaviours, HIV/AIDS and STIs was scrutinised and guided this study in filling the gap in understanding risky behaviours among students in the Namibian context.

### **2.2. CONCEPTUAL FRAMEWORK OF THE STUDY**

A conceptual framework is defined as the end result of bringing together a number of related concepts. It explains or predicts a given event by giving a broader understanding of the phenomenon under investigation (Brink, Van der Walt & Ransburg, 2016). The PSI has developed a behaviour change framework for the effective fight against risky behaviours such as MCP that may lead to HIV. PSI's Behaviour Change Framework is embedded in the third level of performance, in the behavioural constructs categories: opportunity, ability and motivation (PSI, 2006). PSI argues that all human decisions are influenced by the three constructs.

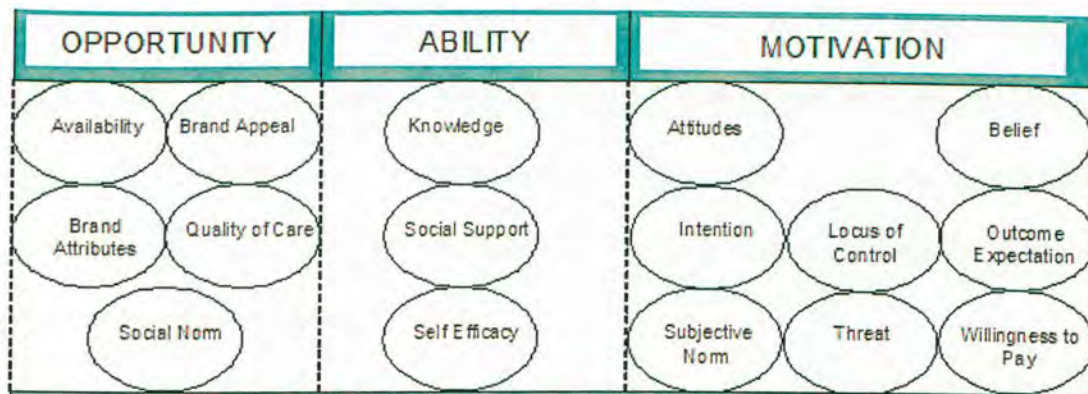


Figure 2.1: PSI's Behaviour Change Framework

Source: PSI (2004a, p. 4)

### 2.2.1. Opportunity

Opportunity is a summary construct that refers to objectively and subjectively defined community and service factors that promote or inhibit recommended behaviours. Opportunity constructs are derived from Diffusion of Innovation theory, health promotion and quality of care research and include measures of coverage and quality and perceived access to products, services and information, brand appeal, and quality of care as set out in figure above (PSI, 2004a).

In this study context, the opportunity construct played a bigger role as the study examined the existence of risky behaviour, the consistent use of condom and utilisation of VCT services. For example, constructs such as availability could be looked at in the context of whether condoms are always available to students for them to use condoms consistently.

Availability is the extent to which the promoted product or service is found in a pre-defined given area. For this study, availability objectively is the presence or absence of the promoted

product or service within a pre-defined area. For the purpose of this study, availability subjectively refers to perceptions about the frequency and accessibility of the condoms or service such as VCT within a pre-defined area (Rosero-Bixby, 2003). The application link is that as availability of a product or service increases, individuals are more likely to obtain and use the promoted product or service.

Quality of care is the extent to which the promoted service is of high value. For this study, quality of care objectively was compliance with standards that increase safety, effectiveness, and satisfaction of services (Eur-Assess Project Subgroup, 1997; Bruce, 1989). This could influence decision regarding whether a student can frequently go for VCT or not. Quality of care subjectively is the perception about services regarding the delivery point (i.e., waiting times, cleanliness, privacy, reliability, etc.) and provider (suitability - female provider for female patients, trustworthiness, etc.) (Bruce, 1989).

Perkins and Berkowitz first used the social norms theory in 1986 to address student alcohol use patterns. As a result, the theory, and subsequently the social norms approach, is best known for its effectiveness in reducing alcohol consumption and alcohol-related injury in college students (Perkins & Berkowitz, 1986). The approach has also been used to address a wide range of public health topics such as multiple and concurrent partnerships. This theory aims to understand the environment and interpersonal influences (such as peers) in order to change behaviour, which can be more effective than a focus on the individual to change behaviour. According to LaMorte (2018), peer influence, and the role it plays in individual decision-making around behaviours, is the primary focus of the social norms theory. Peer influences and normative beliefs are

especially important when addressing behaviours in youth. Peer influences are affected more by perceived norms (what we view as typical or standard in a group) rather than on the actual norm (the real beliefs and actions of the group). The gap between perceived and actual is a misperception, and this forms the foundation for the social norms approach.

In this study's context, social norms played a vital role as students influence each other in many ways. Students' behaviour is influenced by misperceptions of how their peers think and act. Overestimation of problem behaviour in peers will cause others to increase students' own problem behaviours; underestimation of problem behaviour in peers will discourage others from engaging in the problematic behaviour. Accordingly, the theory states that correcting misperceptions of perceived norms will most likely result in a decrease in the problem behaviour or an increase in the desired behaviour (LaMorte, 2018).

### **2.2.2. Ability**

The conceptual framework of ability refers to an individual's skill or proficiency at solving problems, given the setting and opportunity and motivation. Ability constructs can come from economics, such as measures of willingness to pay to access products, services or ideas, and social psychology, such as social cognitive and other theories that examine social norms and support, self-efficacy, and other interpersonal determinants of behaviour change (PSI, 2004a).

This study, explores three constructs under ability, namely, knowledge, social support and self-efficacy. Knowledge is true facts accumulated through learning about objects, actions and events (Clarke, 1992). For this study, knowledge objectively is the ability to provide correct information

about the risky behaviours such as key determinant of the spread of HIV. According to the PSI (2004a), the theory application link is that as knowledge increases, individuals are more likely to perform the promoted behaviour.

Social support is the assistance that an individual gives/receives. Emotional support refers to activities that an individual does to make others feel loved and cared. Instrumental support is tangible help that an individual receives/provides. Informational support is help that an individual gets/offers through information (Seeman & Berkman, 1988). Social support objectively is the number of times or length of time an individual gives or receives help. Social support subjectively is the perception about the quantity (i.e., number of times, length of time, etc.) and quality (i.e., content, depth, mode, type, etc.) of help that an individual gives or receives (PSI, 2004a). The theory application link is that as the amount of social support increases, individuals are more likely to perform the promoted behaviours.

Self-efficacy is the belief that an individual is able to perform a promoted behaviour effectively or successfully (Bandura, 1977). Self-efficacy subjectively is the perception about an individual's ability to perform a promoted behaviour effectively. The theoretical application link is that as self-efficacy increases, individuals are more likely to perform the promoted behaviours.

### **2.2.3. Motivation**

Motivation describes how a person has or develops self-interest in changing his or her behaviour, given the opportunity and ability. Motivational constructs that are most proximate to behaviour may include personal risk assessment and outcome expectations, or, for family planning, fertility

intentions. Those that are more distal from behaviour and that may influence these proximate constructs may relate, among other things, to trust and caution in sexual relations, awareness of the behaviour and its benefits and costs, or emotional reactions to related past events (PSI, 2004a).

Attitude is the evaluation or assessment of an object (Eagly & Chaiken, 1993). For this study, an attitude is considered as an individual's evaluation or assessment about the risky behaviour. The application theory link is that as more favourable attitudes that are related to the risky behaviour exist, students are more likely to make informed decisions and not be involved in risky behaviour.

Belief is a perception about an object, which may or may not be true. In this study, a belief is considered as a perception about the risky behaviour, which may or may not be true. Typically, beliefs are about myths and misconceptions related to risky behaviour. The application link is that as more favourable beliefs are developed within students that relate to risky behaviour, students are more likely to perform the less risky behaviour.

Locus of control is the external or internal site of control in an individual's life. An external locus of control suggests that an individual's health is under the control of powerful others or is determined by fate, luck, or chance. An internal locus of control suggests that an individual's health is directly controlled by him/herself (Rotter, 1966). For the purpose of this study, locus of control is the site of control in an individual's life in relation to the risky behaviour. The application link is that as an individual perceives their locus of control to be more internal than external, they are more likely to perform the less risky behaviour.

### **2.3. TRENDS OF MULTIPLE CONCURRENT PARTNERSHIP**

The role of MCP towards fuelling of HIV is well documented in most African countries. In Namibia, a study conducted among the military personnel in 2008 shows that almost a third (32%) of the sample indicated that they had MCP in the month preceding the survey. The study further shows that 92.7% of the sample interviewed had regular partners, 29.5% had casual partners and 6.4% had commercial partners over the year preceding the survey (Society for Family Health, 2008, pp. 67-80).

According to the Society for Family Health (2008), the average numbers of sexual partners among the sampled military personnel were 1.18, 3.29 and 3.02 for regular, casual and commercial partners, respectively. These characteristics of risky behaviours among the military personnel do not differ much from those of the general population.

While general knowledge on HIV in Namibia is quite high with over 80% in the general population (MoHSS, 2007), the percentage of people involved in high risk behaviour on a daily basis remains high. Inconsistency and low use of condoms remain a big challenge in the fight against HIV. A study by PSI (2004b) shows that partners use condoms for the first and second time and will eventually stop without being tested. This increases the chance of getting HIV from untested partners.

A similar study conducted in Swaziland among the youth aged 15-24 years shows that 45% had been involved in MCP in the previous month (Circo & Makadzange, 2014). The study further shows that 12% of the participating males had visited commercial sex workers while condom use at last sex was noted to be low at 47.3% (Circo & Makadzange, 2014).

A study in University of KwaZulu-Natal established that the majority of students engaged in sex and that most of them were currently sexually active. Through the questionnaire survey, it was established that the majority of the participants had previously engaged in sex; more than half of them said that they had already had sex by the age of 18. Therefore, programmes of abstinence will not be 100% effective as many students become sexually active at a younger stage (Mulwo, Tomaselli & Dalrymple, 2009, p. 8). This is consistent with the age of sexual debut in the general population, as reflected in the national survey conducted by Human Sciences Research Council/Nelson Mandela Foundation. This is also consistent with studies conducted in Namibia in the general population, such as “The Drivers of HIV Epidemic in Namibia”, which suggest that “young people in Namibia indicate that having multiple partners has become ‘fashionable’ and they behave in this way because their friends do” (MoHSS, 2010, p. 37).

In the KwaZulu-Natal study, a significantly high proportion (39.0%) of the 756 participants who indicated having had sex in the previous 12 months had more than one sexual partner in the same period. Only 309 of them indicated being sexually active at the moment, with close to half of them (48.5%) indicating that they currently had more than one sexual partner.

#### **2.4. EFFECT OF MULTIPLE CONCURRENT PARTNERSHIPS**

Concurrent partnerships —relationships that are closely spaced or overlapping in time — are more problematic than numerous sequential partnerships. In the case of sequential monogamy, a person who becomes infected must wait until the relationship ends, then find a new partner before subsequent infection can occur (PSI, 2006, p.20).

With concurrent partnerships, however, infection of other partners occurs almost immediately. Furthermore, because viral loads are highest in the first six to eight weeks of infection, persons with newly acquired HIV infections are more likely to pass the infection to additional sexual partners. In other words, concurrent sexual relationships raise the number of individuals who are infected over a short time period, thus accelerating the spread of the epidemic (MoHSS, 2008).

A significant study on MCP among students in Namibia is yet to be carried out and this presents a data gap around this phenomenon. It can be inferred with caution from studies carried out among university students that share similar characteristics in the neighbouring countries that MCPs do exist among Namibian students. However, it is expected that this problem will be unique to each country depending on the socio-economic situation. For instance, a study by Mulwo et al. (2009) in KwaZulu-Natal found that a significantly high proportion (39.0%) of the 756 participants who indicated having had sex in the previous 12 months had more than one sexual partner in the same period. Only 309 of them indicated being sexually active at the moment, with close to half of them (48.5%) indicating that they currently had more than one sexual partner (Mulwo et al., 2009, p. 8).

## **2.5. FACTORS CONTRIBUTING TO RISK BEHAVIOURS**

In 2007, Namibia's MoHSS published a document called "Drivers of HIV Epidemic in Namibia". The document identifies key factors that contribute to risky behaviours which result in HIV and other STIs. Among these factors are inter-generational sex, low consistent use of condoms, HIV low risk perceptions, low use of counselling and testing services, transactional sex, low male circumcision, alcohol abuse, mobility and migration patterns and norms regarding

sexual partners (MoHSS, 2007). This study only concentrated on two of the factors identified above, namely: use of condoms and counselling and testing services.

According to a 2013 Namibia DHS, knowledge of condom use remains high with an overall score above 90%. However, consistent condom use remains low in the general population with an overall score of 60% among the sexually active population. The effective use of counselling and testing services remains a big challenge in Namibia. Participants who recently (six months) visited the counselling and testing services were less likely to be involved in risky behaviours compared to those who did not visit the counselling and testing services.

Other factors contributing to risky behaviour are those that are identified and discussed in the conceptual framework. For instance, if the condoms are not readily available to students then chances are high that they will not use condoms consistently. This is the same with attitudes, if students do not exhibit positive attitude towards condom use or utilisation of VCT services then they are likely not to use the services or not to use the condom, which results in risky behaviours.

## **2.6. WHY FOCUSING ON YOUTH?**

According to Harrison (2005), the World Health Organization (WHO) considers 'youth' as comprising people between the ages of 10 and 24 years. However, the term 'young people' is often widely used to refer to a broader category of both men and women between the ages of 10 and 30 years (Harrison, 2005). In SSA, for example, young people aged 15-24 years constitute 20% of the entire population (Mba, 2003). It then follows that any threat to young people implies

a threat to the core of the society. Secondly, young people live in a transitional period characterised by increased sexual desire, expression and experimentation, peer pressure, and changing socio-cultural norms. This situation, coupled with lack of experience in negotiating the terms of relationships, increases young people's chances of engaging in unprotected sex hence placing them at the greatest risk of HIV infection (Harrison, 2005).

HIV disproportionately affects young people globally. According to the WHO (2018), 25% of infected persons are aged between 10 and 24 years. Those aged 15-24 comprise 35% of new infections, resulting in 900,000 new infections annually. The greatest burden of HIV among young people is in SSA. Here, young women have almost eight times the HIV prevalence as same-age men and their annual HIV incidence is an estimated 8%. Clearly, adolescents are a heterogeneous population; risk factors for HIV depend both on individual characteristics and on social/environmental contexts. This diversity must be addressed in interventions.

Young people are at the centre of the global HIV epidemic. According to the United Nations Development Programme (UNDP, 2010), an estimated 5.4 million youth are living with HIV; 59% of them female. In 2007, about 40% of new infections among people aged 15 years and above were in youth 15-24 years of age (UNDP, 2010). SSA is home to almost two-thirds (61%) of all youth living with HIV (3.28 million), 76% of them female. Southeast Asia and the Pacific have the second highest prevalence with an estimated 1.27 million youth living with HIV, 70% of whom are male.

## **2.7. SUMMARY**

A number of studies, especially in the developing countries and in Namibia, have been reviewed to provide a detailed understanding of the research topic at hand. This chapter started off by justifying why there is a special focus on the youth when it comes to risk of infection by HIV and other STIs. The chapter went further and analysed the conceptual framework looking at a number of constructs/bubbles that can theoretically explain the behaviours of human beings. The chapter concluded by looking at the effects, trends and factors contributing to risk behaviours.

## **CHAPTER 3: RESEARCH DESIGN AND METHOD**

### **3.1. INTRODUCTION**

This chapter presents the research methodology deployed in conducting this study. The researcher takes in aspects of the research problem described in Chapter 1 and comes up with the appropriate methodology to unpack the issue of risky behaviours among young people. The chapter outlines the design used and methods followed in conducting the study in general. Both the study target population and sample sizes are described in this chapter. Sampling procedures and steps used in choosing respondents are also described in this chapter.

### **3.2. STUDY DESIGN**

According to De Vaus (2001), research design refers to the overall strategy that a researcher chooses to integrate the different components of the study in a coherent and logical way, thereby, ensuring that the research problem is effectively addressed. Research design constitutes the blueprint for the collection, measurement, and analysis of data. In social sciences research, obtaining information relevant to the research problem generally entails specifying the type of evidence needed to test a theory, to evaluate a programme, or to accurately describe and assess meaning related to an observable phenomenon (Trochim, 2006). This study employed a cross-sectional, descriptive quantitative approach.

### **3.2.1. Cross-Sectional Design**

As stated in the research design, this study used a cross-sectional, descriptive quantitative design to assess the risky behaviours of MCP among students. Lavrackas (2008) describes a cross-sectional study as observational in nature and is known as descriptive research, not causal or relational, meaning that one cannot use it to determine the cause of something, such as a disease. This type of research can be used to describe characteristics that exist in a community, but not to determine cause-and-effect relationships between different variables. This method is often used to make inferences about possible relationships or to gather preliminary data to support further research and experimentation.

According to Cherry (2014), a cross-sectional study involves looking at people who differ on one key characteristic at one specific point in time. The data is collected at the same time from people who are similar in other characteristics but different in a key factor of interest such as age, income levels, or geographic location. The explanation by Cherry and others fits well with the nature of this study, which is to assess the behaviours of students who are coming from different backgrounds, but possessing some similar characteristics.

### **3.2.2. Descriptive Design**

Burns and Grove (2009) argue that descriptive research design can be quantitative and qualitative in nature. It involves the collection of information that can be presented numerically or as individual interpretations. Descriptive research design allows the researcher to gather data that describe events and organises data in a form of visual aids such as graphs and charts to help readers understand the distribution. This approach enabled the researcher to assess the number of

sexual partners participants were involved with. The study approach further enabled the researcher to determine the accessibility and usage of both condoms and VCT services as mitigation measures to risky behaviours of MCP.

### **3.3. RESEARCH CONTEXT**

The study was conducted at UNAM main campus. The researcher moved around the campus randomly selecting those that met the selection criteria of the study samples. Participants were selected mainly at the participating faculties, lecture halls, library and cafeteria.

The following selection criteria were employed:

- Participant must be a registered student, academically (Year 1 – Year 4)
- Participant must be from the participating faculties (Humanities, Health, Economics, Law and Science)
- Participant must not be married

Data collection took three weeks to complete and data were collected between Monday and Friday. Peak days were mainly Friday morning as students were more relaxed and looking forward to the weekend.

### **3.4. POPULATION**

A population is the total number of individuals who have certain characteristics in common (Creswell, 2014). The target population for this study was all students registered for the University of Namibia 2018 calendar year, who were in the targeted faculties. The study population was divided into two categories, namely, faculties and academic year as indicated in Table 3.1.

**Table 3.1: Population of the Study**

Population 1	Population 2				TOTAL
FACULTY	ACADEMIC YEAR				
	FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR	
Economics and Management Sciences	2446	1683	989	823	5941
Health Sciences	627	374	399	307	1846
Humanities and Social Sciences	1037	763	422	395	2617
Law	218	259	258	113	848
Science	725	427	256	274	1682
<b>TOTAL</b>	<b>5053</b>	<b>3506</b>	<b>2324</b>	<b>1912</b>	<b>12795</b>

Source: Namibia Council for Higher Education, 2018

### 3.5. SAMPLE SIZE AND SAMPLING PROCEDURES

Using the online Sample Size Calculator, the sample size was calculated using the following statistical parameters: confidence level 95%, confidence interval 3.98, percentage 50%, and population 12,795.

The **confidence level** indicates how sure you can be. It is expressed as a percentage and represents how often the true percentage of the population who would pick an answer lies within the confidence interval. The 95% confidence level means you can be 95% certain; the 99% confidence level means you can be 99% certain. In this study, a 95% confidence level was used.

The **confidence interval** (also called margin of error) is the plus-or-minus figure usually reported in newspaper or television opinion poll results. In this study, a confidence interval of

3.98 was used, which brought the margin of error to be estimated between 46% (50-3.98) and 54% (4+3.98).

In the first stage, the required samples were calculated directly proportional to the overall population in the two strata. This implies that the sample size for each faculty and academic year was directly proportional to the population, as indicated in Table 3.1. In the secondary stage, the study used a non-probability approach of simple random sampling. This means that students were randomly approached within the campus at strategic locations already mentioned and the researcher administered the selection criteria, and if all criteria were met then the student could participate in the study.

The overall sample sizes are summarised in Table 3.2.

**Table 3.2: Total Sample Selected for the Study**

Sample 1 FACULTY	Sample 2 ACADEMIC YEAR				TOTAL
	FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR	
	Economics and Management Sciences	66	42	29	
Health Sciences	42	27	18	15	102
Humanities and Social Sciences	59	37	26	21	143
Law	21	13	9	8	51
Science	51	32	22	19	124
<b>TOTAL</b>	<b>238</b>	<b>151</b>	<b>104</b>	<b>87</b>	<b>580</b>

### **3.6. DATA COLLECTION**

Data were collected at the UNAM main campus over a period of three weeks using both the self-administered questionnaire and one-on-one interviews. The questionnaire was distributed to students around the campus and the researcher guided the students on how to fill in the questionnaire. A consent statement was read to the participants and only those who were willing to participate proceeded with the interview or the self-administering of the questionnaire.

#### **3.6.1. Research Instrument**

The study used a structured questionnaire to collect primary data from participants. Structured questionnaires are useful in collecting information that directly responds to the objectives of the study. Another consideration made was the sensitivity of the topic under research. The structured questionnaire allowed respondents to choose the pre-selected answers that fitted their situation without being sensitive to the topic under discussion. The questionnaire consisted of four sections as described below:

**Section 1: Demographic Information** – This section captured information such as age of participants, educational level of participants, economic status and ethnicity, which influence individual decisions. Demographic information is essential in providing basic information about the participants. This information plays an important role in descriptive statistics and cross-tabulation with other variables.

**Section 2: Sexual History: Number and Types of Partners** – Among the sexually active participants, the study assessed the existence of sexual multiple and concurrent partnerships.

Other variables determined were: age at first sex, inter-generational sex and the number of sexual partners.

**Section 3: Condom Use** – This section assessed the accessibility and usage of condoms among the participants. Information relating to the consistent use of condoms, types of condoms used and source of the condoms was gathered here.

**Section 4: Utilisation of VCT services** – This section assessed the accessibility and usage of VCT services. Information on the utilisation of VCT services and the experience at VCT centres was gathered in this section.

### 3.6.2. Procedures for Data Collection

The data collection procedures are explained in five steps in the diagram below. The diagram was developed by the researcher to clearly demonstrate how information would be collected from the participants.

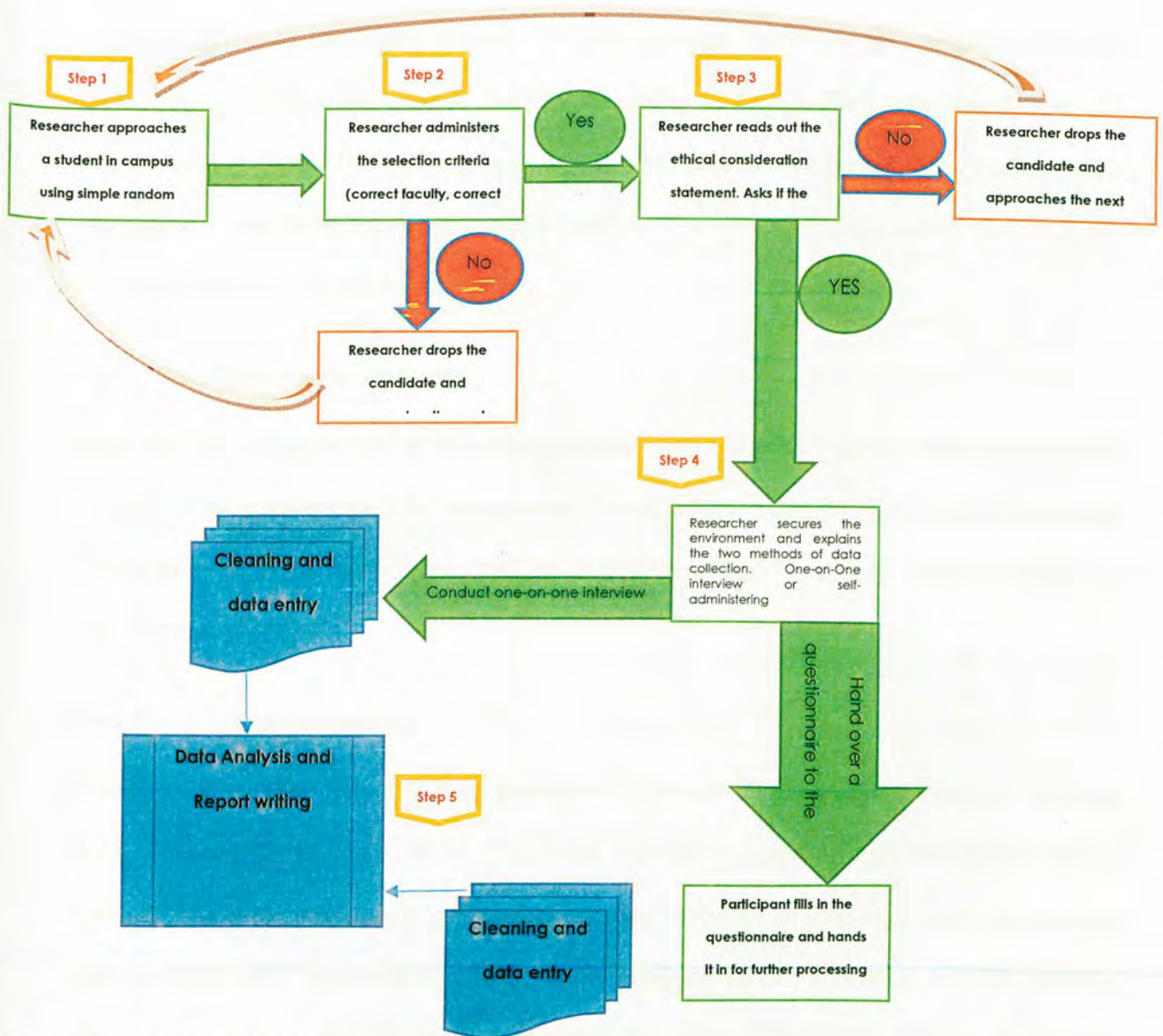


Figure 3.1: Data Collection Roadmap

### **3.6.3. Pilot Study**

A pilot study is a small-scale study conducted prior to a main study. It involves a limited number of participants from the population at hand (Brink et al., 2016). In this study, a pilot was conducted at UNAM among 10 students who were from the non-participating faculties. The main purpose of the pilot study was to pre-test the instrument, processes and how respondents were responding to the whole process. The pilot students found all the questions clear and appropriate. No challenges, gaps or flaws in answering all the questions were found. The only thing resulting from the piloting phase was the correct numbering of questions. The questionnaire was revised based on the few mistakes that were found. The results from the pilot were not included in the final data analysis.

### **3.6.4. Validity of the instrument**

According to Cooper, Seiford & Zhu (2011), validity is the extent to which a test measures what is meant to be measured. In order to ensure a series of informed decisions, the research questions and the purpose of the research, two validity tests were conducted, namely, content validity and face validity.

#### **3.6.4.1. Content validity**

Content validity refers to how well an instrument represents all the components of the variables to be measured (Brink et al., 2016). This study focused on assessing risky behaviours among students. The study specifically analysed the number and type of sexual partners the students were involved with, the consistency in the use of condoms and the utilisation of VCT services. The content of the questionnaire is freely available online with full referencing as the only

requirement from PSI. The content of the questionnaire (see Annexure C) is extracted from the Population Service International toolkit as part of the Behaviours Change Framework explained in the literature review. Similar questions were also found in the recent Namibia Demographic Health Survey (2013). The supervisors and UNAM, therefore, approved the questionnaire as part of the proposal.

#### **3.6.4.2. Face Validity**

According to Healy and Perry (2000), face validity refers to how a research design offers a process that will facilitate data acquisition within a research agenda. This study ensured that there was alignment between the research objectives and the questionnaire. The research methodology, design and methods were all linked to the questions in the research instrument in order to address the problem statement. The research instrument contained questions which were consistent and coherent to provide precise data that addressed the objectives.

#### **3.6.4.3. Reliability of the instrument**

Reliability of an instrument refers to the degree to which a measurement technique can be depended upon to secure consistent results upon repeated application (Weiner, 1985). In studies in Tanzania (2008) and Namibia (2009), PSI used the same instrument to conduct a reliability analysis and Cronbach's Alphas for both studies were above the acceptable threshold, which is 0.7. This study, therefore, relied on the already established reliability test as summarised in the table below, Table 3.3.

**Table 3.3: Reliability Analysis**

Behaviour Change Determinants	Cronbach's Alpha	
	Tanzania (2008)	Namibia (2009)
Attitude, abstinence, beliefs, condom use, transmission and treatment, locus of control	0.89	0.87
Availability, social norms, pressure to have sex, cross-generational sex, transactional sex,	0.90	0.88
Self-efficacy, social support	0.85	0.89

*Sources: PSI, Tanzania TRaC Study (2008) and Namibia TRaC Study (2009)*

### **3.7. DATA MANAGEMENT**

Data management principles were adhered to throughout the research to ensure integrity and confidentiality of the information. Data management included construction of research questions, the approach to the research process, the methodology deployed, the resources reviewed both were clearly documented by the researcher. The researcher guided the process of data collection, data processing including cleaning and coding, data entry and data analysis closely. Raw data were achieved in such a way that they could be retrieved at a minimum expense in terms of effort and time.

### **3.8. DATA ANALYSIS**

According to Gayet, Paffen, and van der Stigchel (2013), data analysis refers to the process of ordering and organising raw data to extract useful information. Before data analysis began, all questionnaires were inspected for any data errors.

Data were entered into Cspiro, a data-capturing interface for Statistical Package for Social Science (SPSS). Data were then transferred to SPSS for further cleaning and analysis. Descriptive statistics and cross-tabulation were performed, as they formed the core of the data analysis. Frequency distributions of all variables were analysed to determine the distinct values and numbers that occur in the dataset.

Graphs and charts of different variables were produced and interpreted accordingly. Cross-tabulations between variables were analysed in order to examine relationships between independent variables such as gender, age, economic status and academic and dependent variables.

### **3.9. ETHICS CONSIDERATIONS**

Ethics is a branch of philosophy that deals with one's conduct and serves as guide to one's behaviour throughout the research process (Bogonko & Kathure, 2015). All ethical considerations pertaining to permission to conduct the study, principles of respect of persons, principle of beneficence and fair treatment/justice were considered during this study.

#### **3.9.1. Permission to conduct the study**

The researcher obtained a letter of permission (see Annexure A) to conduct the study from the University of Namibia.

### **3.9.2. Principle of respect of persons**

The study obtained consent from participants. Participants who could not consent were excluded from the study. Furthermore, participants were informed of their right to withdraw from the study if they felt like doing so.

### **3.9.3. Principle of beneficence**

The researcher collected sensitive information from the participants, therefore, no third party had access to the information collected. No personal information was collected. Participants were informed that there may be no direct benefits for participating in the study, however, the study was important in that intervention emanating from this study would benefit all students at the university.

### **3.9.4. Fair treatment/justice**

The study ensured the principle of fair treatment and justice by making sure that participants were treated equally and provided with all information. All participants meeting selection criteria who happened to be around the campus had an equal chance of selection.

## **3.10. SUMMARY**

This chapter presented the research design and methodology deployed in this study. A detailed explanation of the design and methodology used in collecting data was explained in this chapter. The chapter further summarised the process of analysing data and how ethical aspects were employed in this study.

## **CHAPTER 4: DATA ANALYSIS AND PRESENTATION OF FINDINGS**

### **4.1. INTRODUCTION**

This chapter presents statistical analysis of the data collected in the assessment of risky behaviours among students. Demographic variables are analysed first to give an understanding into the demographic characteristics of the respondents. Other variables related to risky behaviours, condom use and utilisation of VCT services are then cross-tabulated with demographic variables to determine patterns and the most significant variables contributing to risky behaviours.

### **4.2. OVERVIEW OF THE DATA COLLECTION AND ANALYSIS PROCESS**

Primary raw data were collected using a semi-structured questionnaire. Using UNAM's student population for the academic year 2018, a sample size was calculated using a direct proportional sampling method to the entire population. A minimum of 400 respondents was initially calculated as the required sample, however, 580 students were included as the final sample size.

Because of the strong linkages between demographic characteristics and the dependent variable, which is the risky behaviours, analysis of the demographic data was done in order to give better views and understanding of the population the study was examining. The second part of the analysis looked into the number of sexual partners and the types of sexual partners. In this section, risky behaviours were identified through the spacing of sexual partners, regular and

casual partners, and consistent and correct use of condoms. These variables were cross-tabulated with demographic information to determine the most significant and high risk population.

The third and fourth part of the analysis looked at the factors associated with risky behaviours among the participants, namely; condom use and utilisation of VCT services. Among the participants who were sexually active, analysis of frequency, consistency, sources and types of condom used was done. The final analysis was done to assess the level of utilisation of VCT services and reasons surrounding those that were not utilising the VCT services.

### 4.3. RESPONSE RATE

The Table 4.1 provides the response rate to different variables.

**Table 4.1: Response Rate Distribution**

Variable	Response rate	Justification
Demographic Characteristics	n = 580	The entire sample
Risky Behaviours	n = 440	Only sexually active participants. 140 never had sex before
Condom Use	n = 369	Only those that had ever used a condom. 71 never used a condom before
VCT services	n = 580	The entire sample

#### 4.4. SOCIO-DEMOGRAPHIC DATA

Figure 4.1 below shows the age distribution of students who participated in the study. According to the figure below, 192 (33%) of the participants were below the age of 20. This was followed by participants aged between 20 and 23 years, and 24 and 26 with 150 (26%) and 125 (22%), respectively. The least participants were aged above 30 years with 50 (9%).

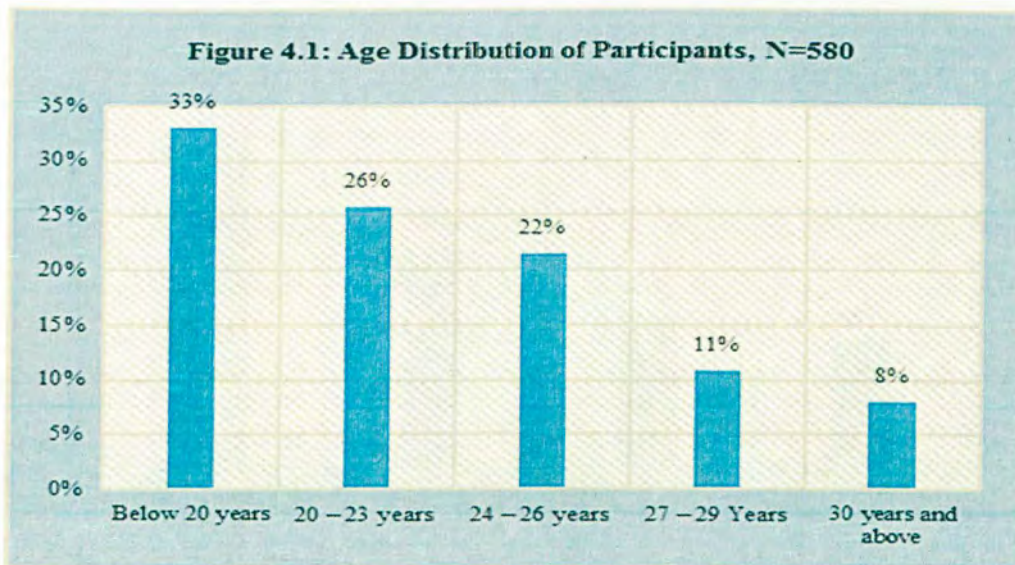


Figure 4.1: Age distribution of participants

Figure 4.2 below shows the distribution of participants by their academic year. A majority of 238 (41%) of the participants were first year students. The distribution is similar and related to Figure 4.1 whereby less and less participants were observed as they progressed within the academic year.

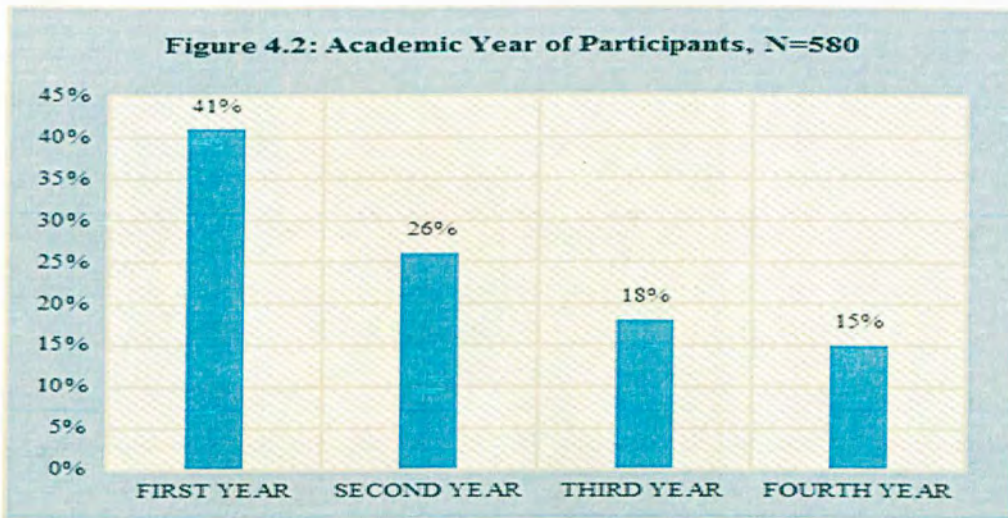


Figure 4.2: Academic year of participants

Figure 4.3 and Figure 4.4 below show the gender distribution and faculty of the participants. More females, 349 (60%), participated in the study compared to their male, 232 (40%), counterparts. Comparisons among faculties show that there were more, 148 (28%), participants from the Humanities and Social Sciences; followed by Economics and Management Sciences with 160 (24%). The least 51 (8%) participants came from the Faculty of Law

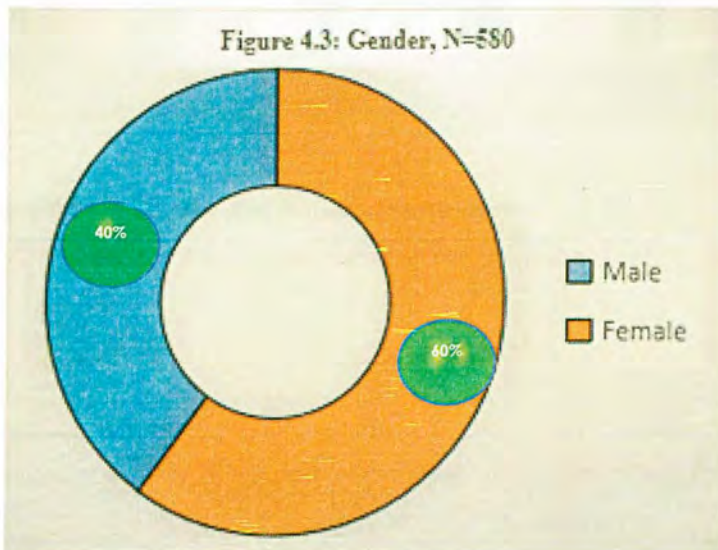


Figure 4.3: Gender distribution of participants

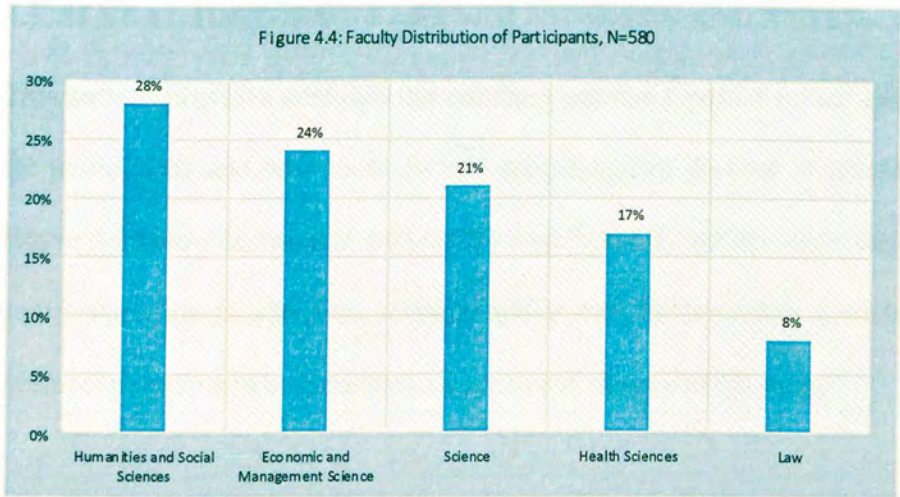


Figure 4.4: Faculty distribution of participants

#### 4.5. SEXUAL HISTORY – PARTNER NUMBERS AND TYPES

This section provides analyses the numbers and the types of sexual partners that existed among the participants and how these factors contributed to the risk of HIV infection and other STIs. Figure 4.5 below shows that 440 (76%) were sexually active while 140 (24%) were not sexually active. Participants who were sexually active were further asked at what age they started sex. On average, participants became sexually active at the age of 19 years.

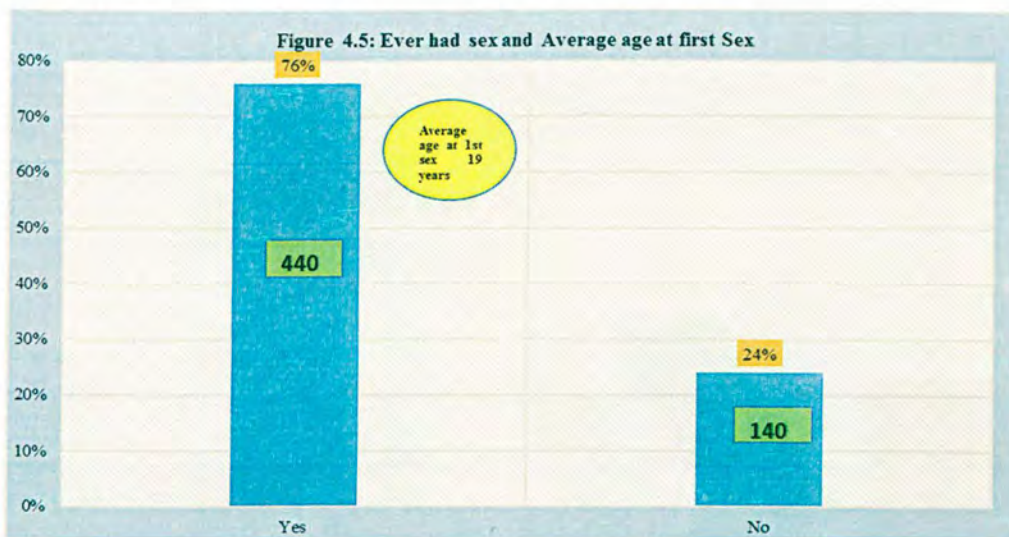
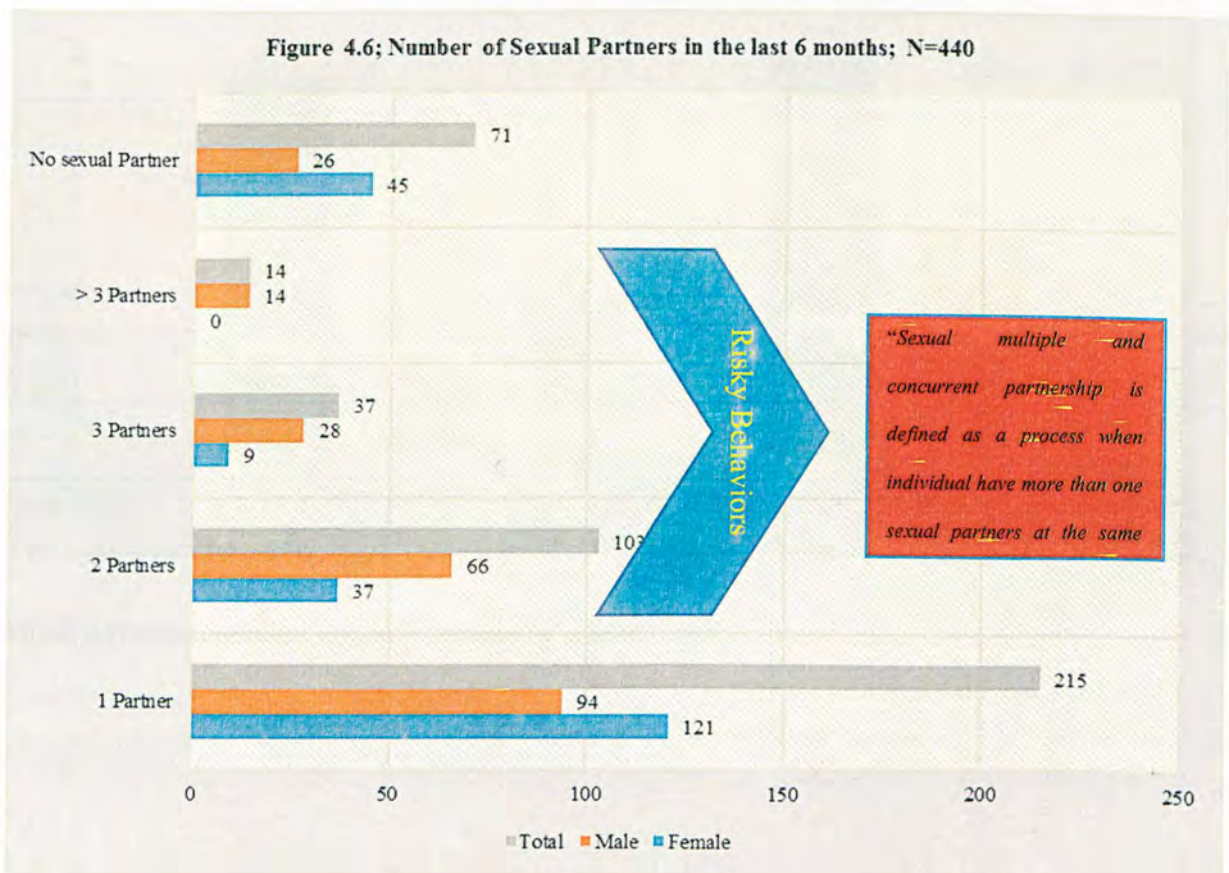


Figure 4.5: Ever had sex and average age at first sex

Sexually active participants were further assessed in terms of the number of sexual partners they had encountered in the six months prior to the study. Figure 4.6 provides information on the number of sexual partners the participants were involved in the last six months. Out of 440 sexually active participants, 71 (16%) did not have a sexual partner (no sex). A total of 215 (58%) participants had one sexual partner in the last six months. A total of 154 (42%) were involved in more than one sexual partner within the last six months, which is considered to be risky behaviour.



**Figure 4.6: Number of sexual partners in the last six months**

Figure 4.7 below shows the regular and casual sexual partner distribution of participants by gender. Out of 369 participants, 282 (76%) were involved with regular partners, while only 87 (24%) were involved with casual sexual partners. Statistically, females were more involved with regular partners, 171 (61%), compared to their male, 111 (39%), counterparts. Under casual partners, females were found to be more involved with 56 (64%) compared to males with 31 (36%).

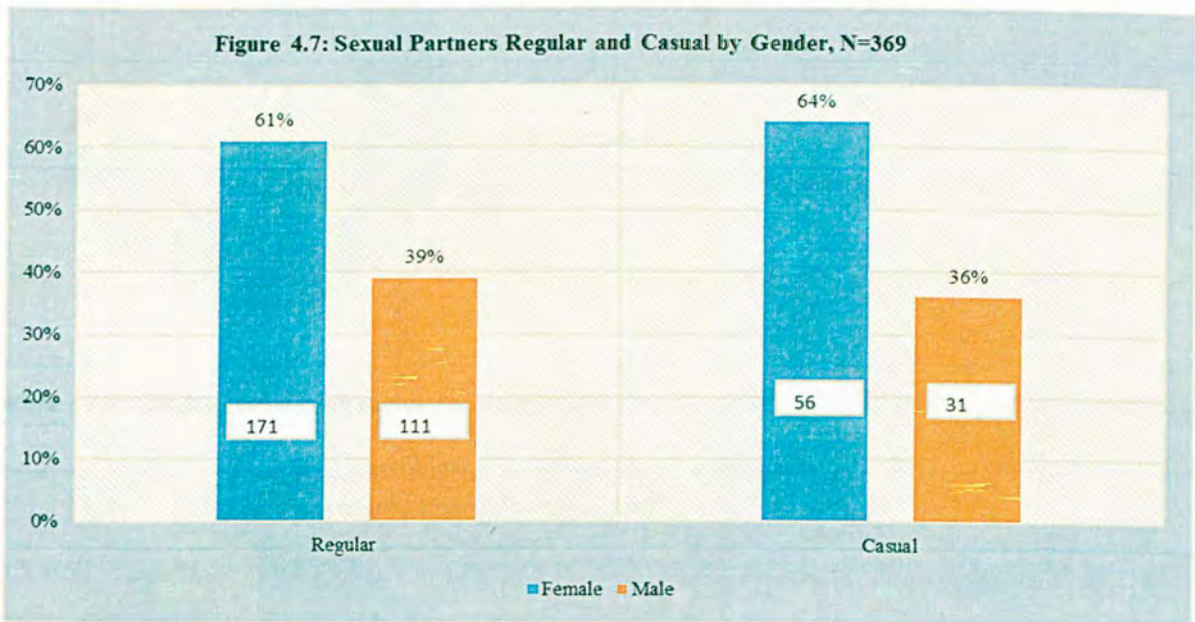


Figure 4.7: Sexual partners regular and casual by gender

Figure 4.8 below assessed condom usage between regular and casual partners. The response “always” use condom was found to be very high 82 (95%) among casual partners compared to regular 20 (72%). The response “sometimes” use condom was significant among regular partners with 79 (28%) while not so significant among the casual partners, 5 (5%).

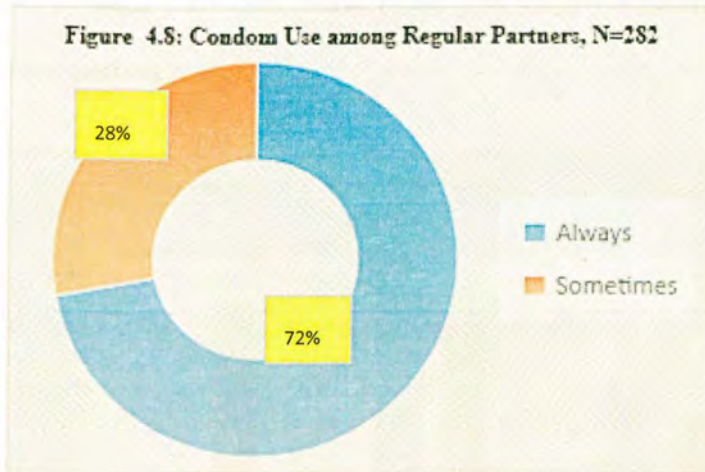


Figure 4.8: Condom use among regular partners

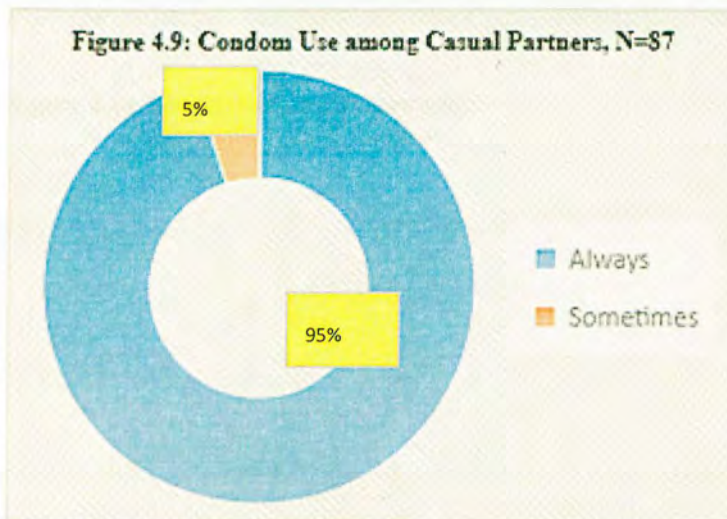


Figure 4.9: Condom use among casual partners

Figure 4.10 and Figure 4.11 provide information related to intergeneration sex. A total of 105 (28%) participants were found to be involved with sexual partners who were 10 years older than them. More females, 84 (80%), were more likely to have older sexual partners compared to males. In addition, only 11 males were found to be involved in sexual relationships with partners 10 younger than they were. There was a significant number of participants who did not know their partner's ages.

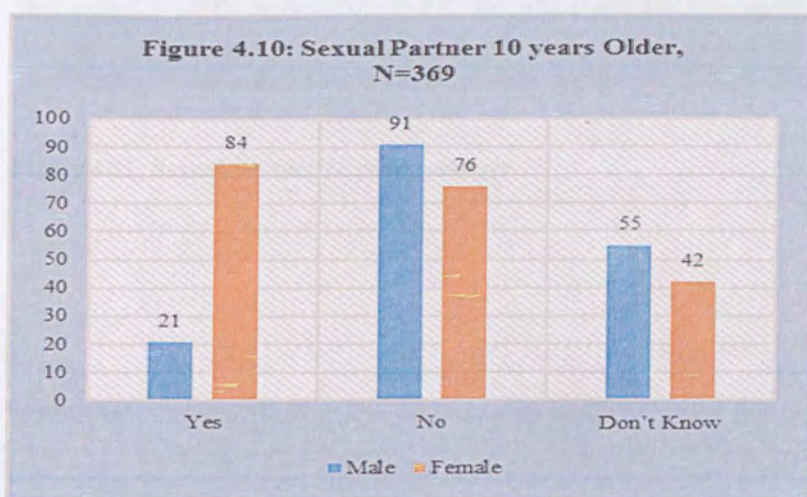


Figure 4.10: Sexual partner 10 years older

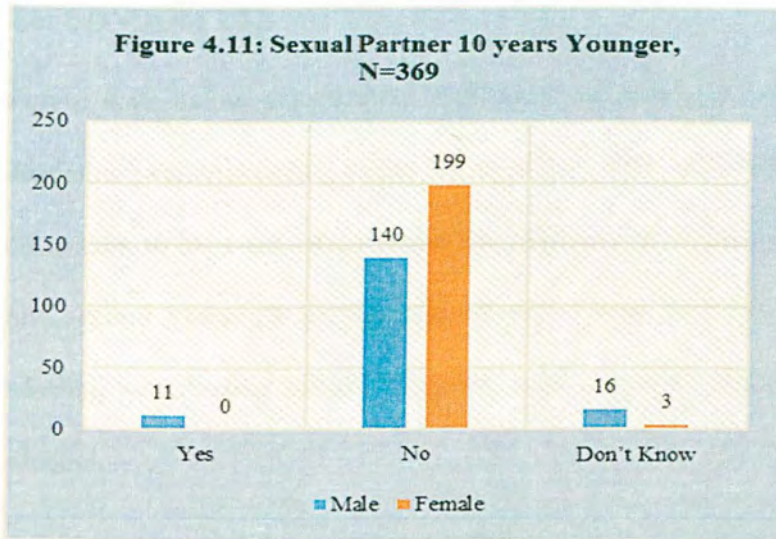


Figure 4.11: Sexual partner 10 years younger

#### 4.6. CONDOM USE

Figure 4.12 below shows the distribution of having sex under the influence of alcohol by academic year. According to the figure below, first year students were found to be more likely, 54 (43%), to have sex while under the influence of alcohol, followed by third years, 32 (25%), and second years, 26 (21%), respectively. Those who had sex while under the influence of alcohol, were further asked if they had used a condom during sex while under the influence of alcohol.

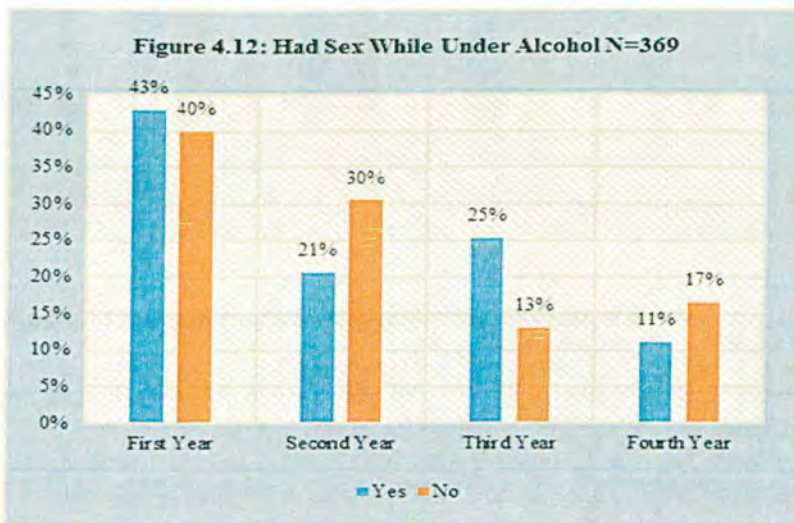


Figure 4.12: Had sex while under the influence of alcohol

Figure 4.13 provides the analysis of the usage of condoms while under the influence of alcohol. Results indicated that first year students were more likely not to use a condom with 43 (49%), followed by third year students and second year both with 20 (23%) and 17 (19%), respectively.

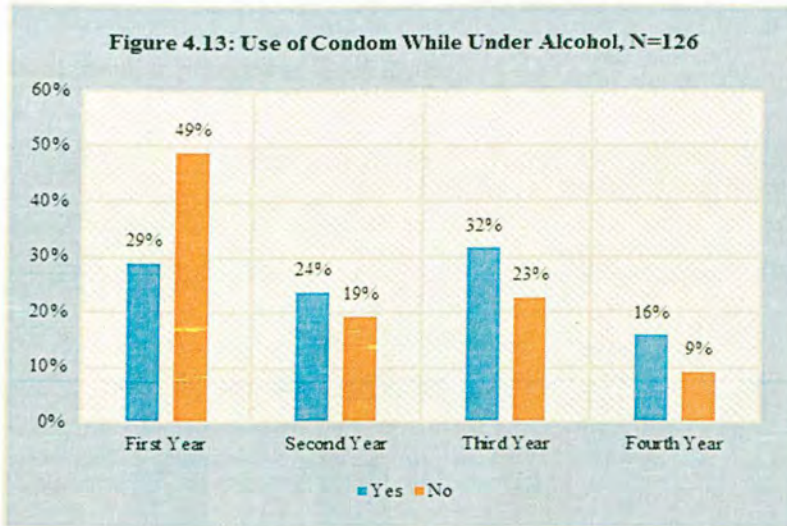
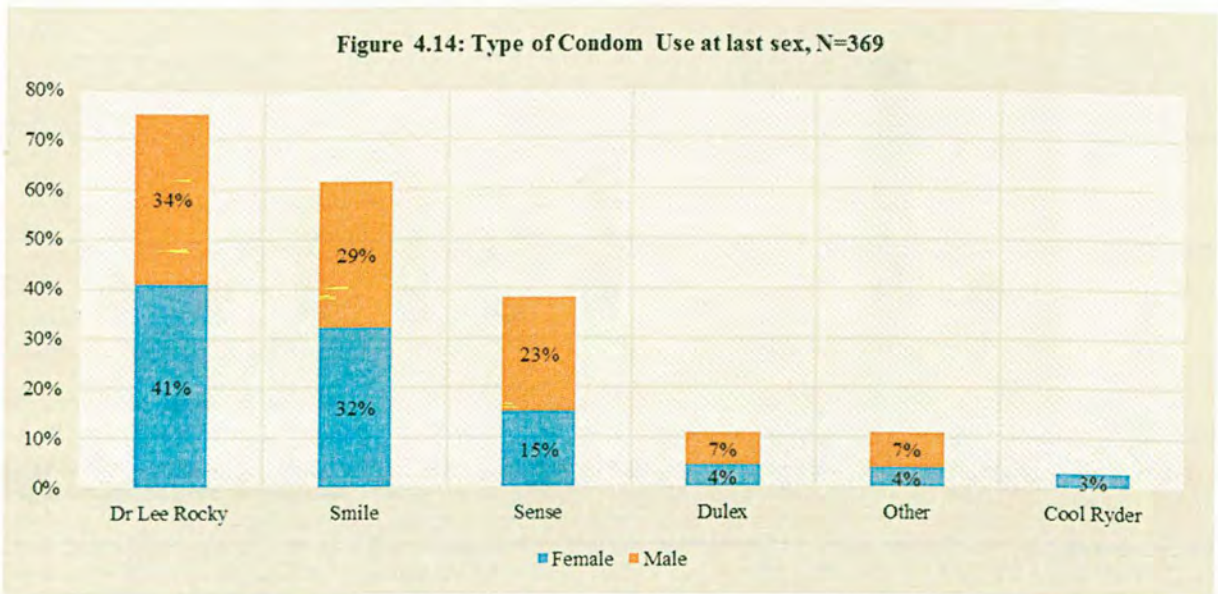


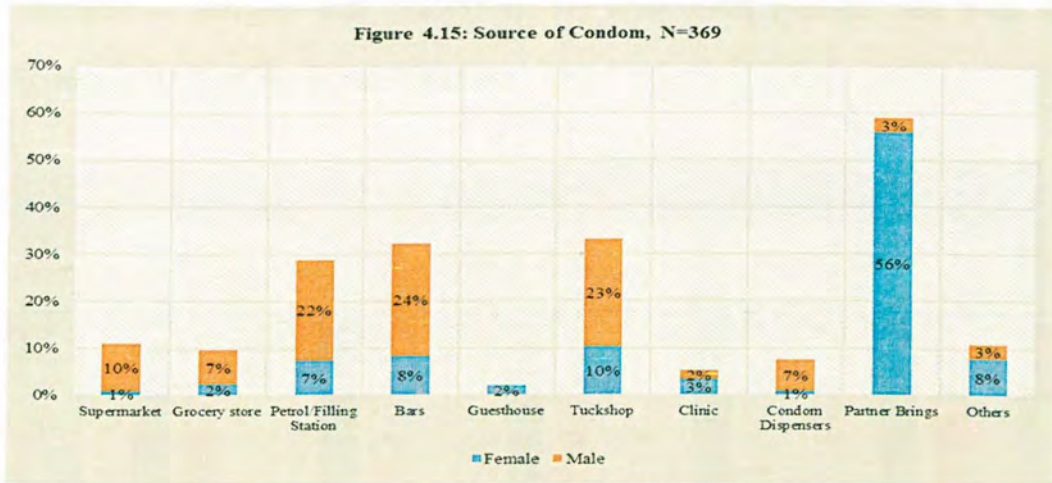
Figure 4.13: Use of condom while under the influence of alcohol

Figure 4.14 below shows the distribution of types of condoms frequently used by both female and male participants. According to the figure below, Dr Lee Rocky was the popular brand used by the participants with 83 (41%) and 57 (34%) among females and males, respectively. This was followed by Smiles with 65 (32%) and 49 (29%) for females and males, respectively. The least popular brand was Cool Ryder.



**Figure 4.14: Typed of condom used at last sex**

Figure 4.15 shows the sources where participants normally obtained the condoms. It is evident from Figure 4.15 that males had a wider range of sources of condoms ranging from tuckshop, bars, petrol/filling stations and supermarkets. However, female participants relied heavily on their partners to provide condoms, 113 (56%).



**Figure 4.15: Source of condoms**

#### 4.7. UTILISATION OF VCT SERVICES

Figure 4.16 below shows the percentage of VCT of participants by faculty. According to the figure, more than 98 (96%) students from the Faculty of Health Sciences went through VCT. The second faculty with the highest testing percentage was the Faculty of Economics and Management Sciences with 132 (83%). The least tested students were from the Faculty of Science with 53 (43%) untested students.

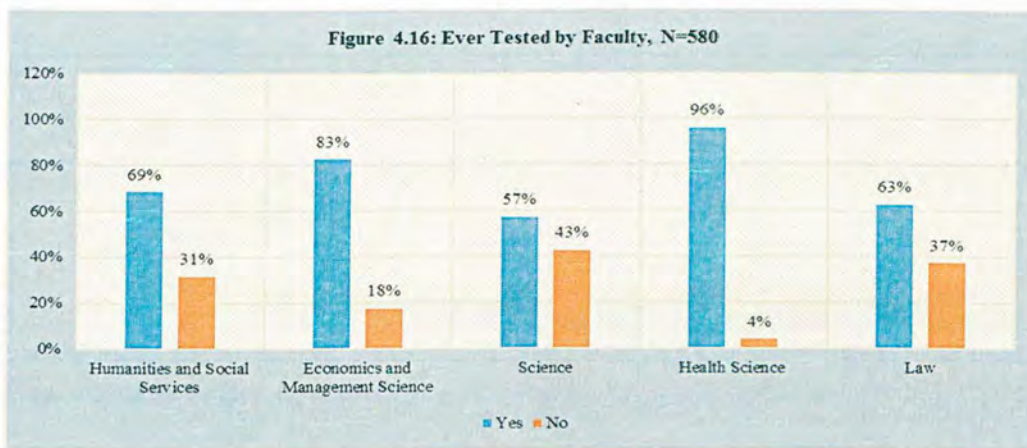
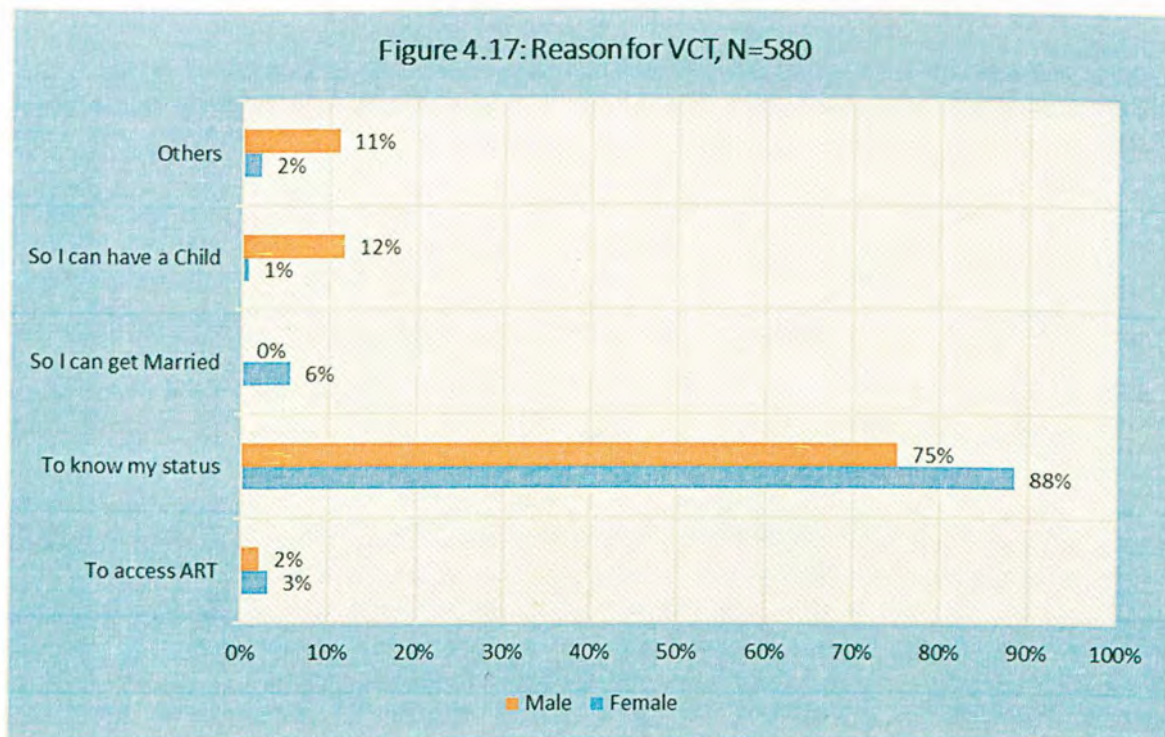


Figure 4.16: Ever tested by faculty

Participants who went for VCT were further asked to provide main reasons why they went for VCT. Majority of both females and males, 253 (88%) and 109 (75%) respectively, went for VCT to know their HIV status, as indicated in Figure 4.17 below. Other notable reasons given for testing were getting married for female participants and getting a child for male participants.



**Figure 4.17: Reason for VCT**

In addition to reasons for going for testing, participants were asked to indicate the last time they went for the VCT. There was clear evidence that the results of most of the participants were not recent, with only 50 (12%) tested in the last six months, as shown in Figure 4.18 below. About 174 (40%) of the participants' results were more than two years old.

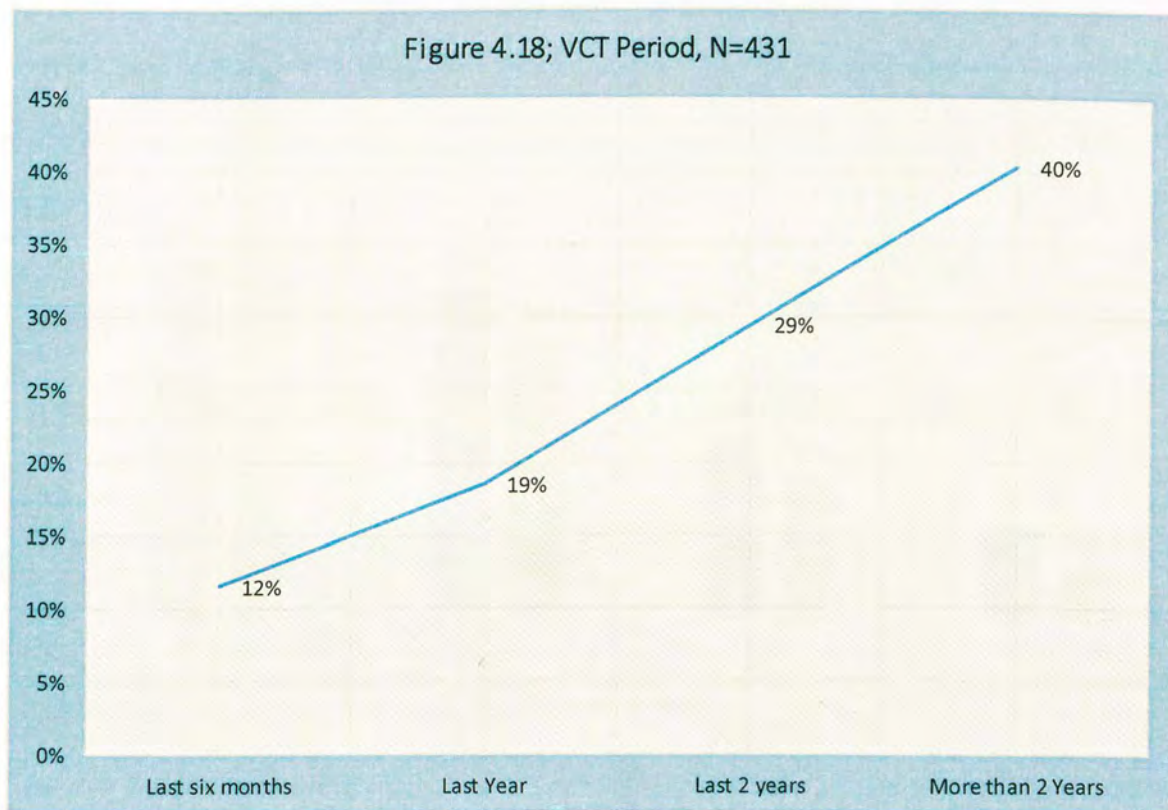


Figure 4.18: VCT period

Figure 4.19 below indicates the places where participants went for VCT by gender. Most of the participants went to the VCT centres for testing followed by those who went to public hospitals or clinics. A few participants were tested at mobile VCT events.

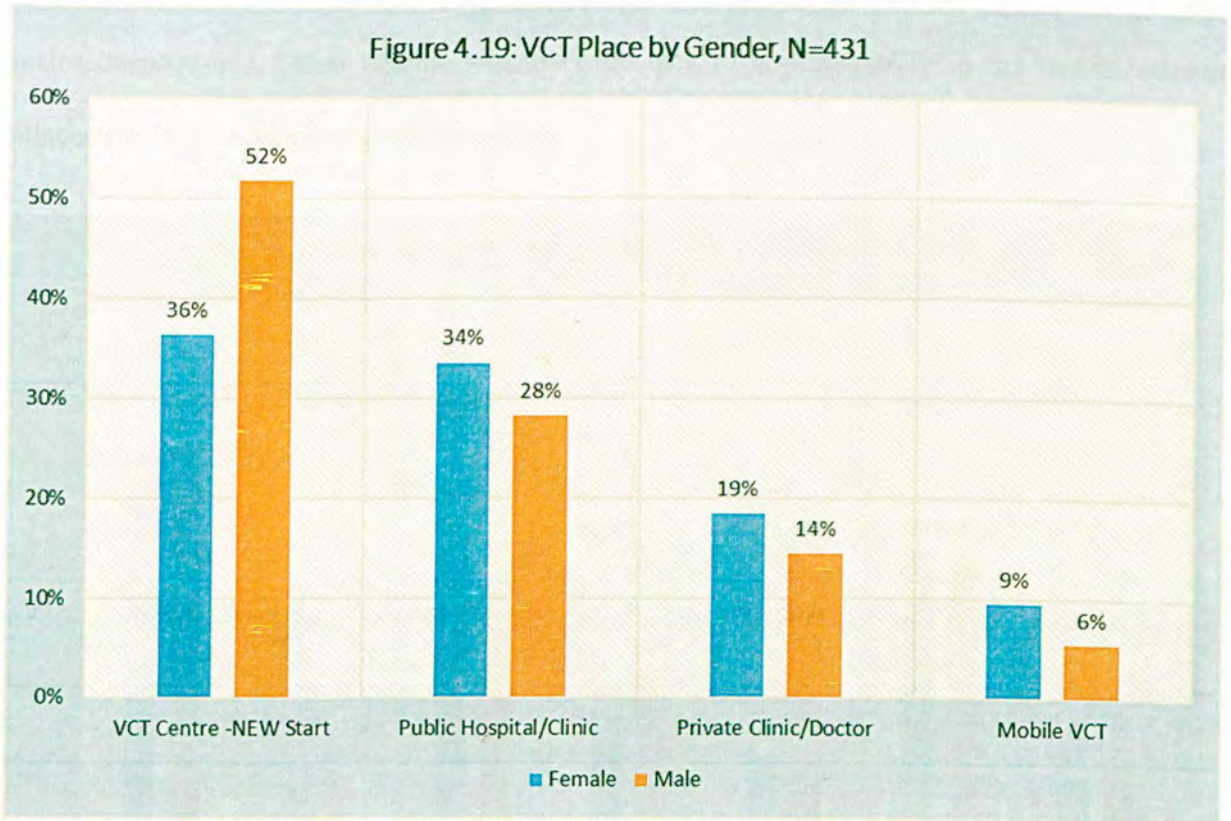
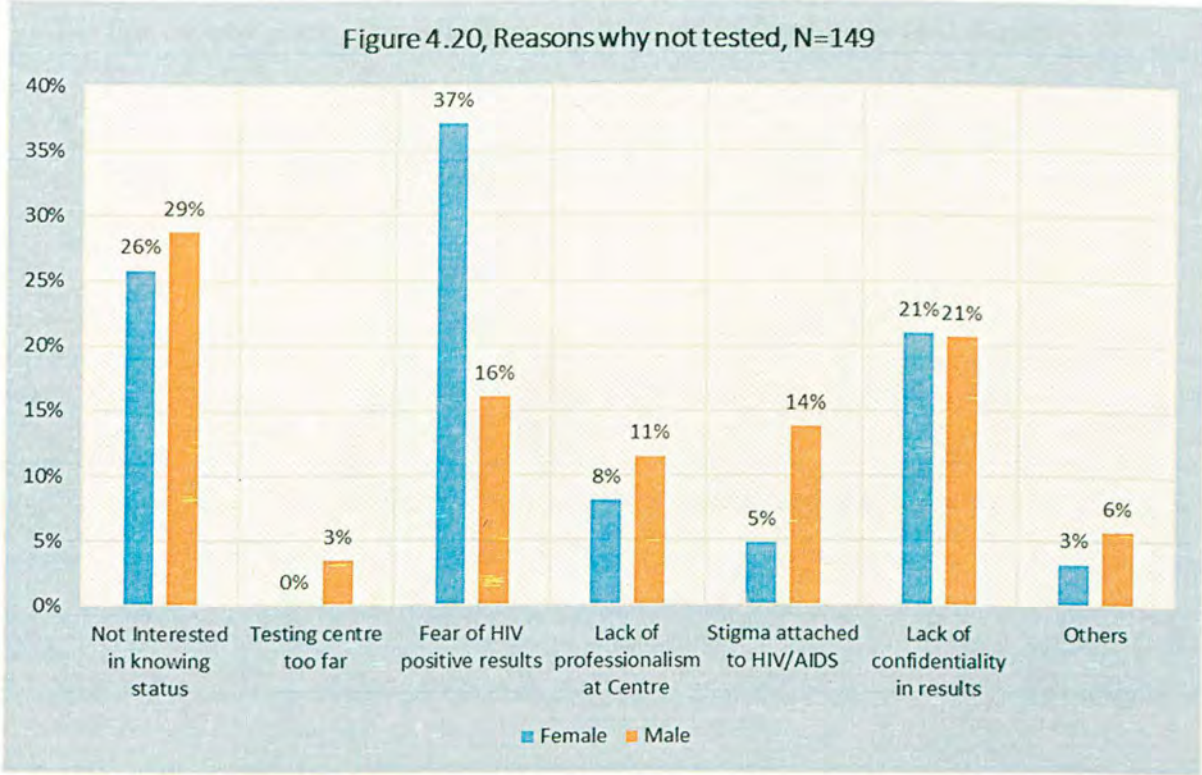


Figure 4.19: VCT place by gender

Participants who said they were never tested (149) were asked to provide reasons why they never tested and the reasons are given in Figure 4.20 below. Fear of knowing HIV status was the most common reason with 23 (37%) and 14 (16%) among female and male participants, respectively. Not interested in knowing HIV was also high with 16 (26%) and 25 (29%) for females and males, respectively. Other notable reasons were lack of confidentiality in the results, stigma attached to HIV and lack of professionalism.



**Figure 4.20: Reasons why not tested**

#### **4.8. SUMMARY**

This chapter presented the findings of the study that was carried out using a descriptive quantitative approach in the assessment of risky behaviours among UNAM students such as multiple and concurrent partnership. The study reveals that a large number of students are indeed involved in risky sexual behaviours including multiple and concurrent sex partners, low and inconsistent use of condoms, intergeneration sex, particularly among female participants and VCT is low for new status. These findings are discussed in detail in the next chapter.

## **CHAPTER 5: DISCUSSIONS, CONCLUSIONS, LIMITATIONS, RECCOMENDATIONS AND CONTRIBUTIONS OF THE STUDY**

### **5.1. INTRODUCTION**

In this chapter, results presented in Chapter 4 are put in context for a better understanding and integrated with literature in order to gain a clear picture of multiple and sexual concurrent partnerships among the students and youth in general. The integration with literature is essential in order to justify and explain variations in the findings.

### **5.2. DISCUSSIONS**

The discussions are largely based on the study objectives, which was to assess and determine the level of risky behaviour among students at the University of Namibia with a special focus on multiple and concurrent sexual partnerships. The discussions, therefore, were centred on demographic information of participants, risky behaviours of multiple and concurrent sexual partnerships (number and type), condom use and utilisation of VCT services.

#### **5.2.1. Demographic Information**

The demographic information used was age, gender, the academic year, field of study, marital status and language. Findings of the study revealed that the majority of the participants were females. This was in line with the overall population of the university as there are more females compared to males on a ratio of 3:2 (UNAM, 2018).

The majority, 192 (33%), of the respondents were below 20 years of age. This is in line with the factor that many of the respondents were first year students, 238 (41%). Respondents in age

group 20-23 made up 150 (26%) while 24-26 made up 125 (22%). The trend was similar with each academic year with less and less participants as the years progressed.

The majority, 148 (24%), of the respondents were from the Faculty of Humanities and Social Sciences, followed by the Faculty of Economics and Management Sciences with 160 (24%). Faculty of Science and Health Sciences contributed 21% and 17% of respondents, respectively.

It is important to note that sample size was chosen using the direct proportional sampling methodology, hence, the number and percentage of respondents mirror that of the entire student population of the university.

### **5.2.2. Sexual Partner – Number and Type**

Out of the 580 students who participated in the study, 440 (76%) were sexually active. This section, therefore, is only for the sexually active respondents. The study findings revealed that the average age at first sex was 19 years. According to Namibia Demographic and Health Survey, the national medium age at first sex is 16.3 years (MoHSS, 2016). The study finding is above the general population average age at first sex and this can be attributed to delay in sex due to study, as this study was conducted among students. It is also important to note that the legal age to consent for sex in Namibia is 18 years, therefore, the study can conclude that respondents did have consensual sex.

The study findings further revealed that out of the 440 sexual active participants, 369 (84%) had sexual partners in the six months prior to the study and only 71 (16%) did not have sexual partners. Out of 369 respondents, 154 (42%) were involved with more than one sexual partner in

the last six months. A total of 215 (58%) respondents had one sexual partner. According to Barnett and Whiteside (2006), relationships that are closely spaced or overlapped in time are more problematic than numerous sequential partnerships. In the case of sequential monogamy, a person who becomes infected must wait until the relationship ends, then find a new partner before subsequent infection can occur. With concurrent partnerships, however, infection of other partners occurs almost immediately. Furthermore, because viral loads are highest in the first six to eight weeks of infection, persons with newly acquired HIV infections are more likely to pass the infection to additional sexual partners. In other words, concurrent sexual relationships increase the number of individuals who are infected over a short period, thus accelerating the spread of the epidemic.

In Namibia, high levels of concurrent relationships and rapid turnover of partners among certain subgroups of the population have been documented, and are most likely significant contributors to the epidemic. In the context of Namibia, where condom use is inconsistent, circumcision rare, STIs are under-diagnosed and undertreated, and approximately 1-in-5 adults is already infected with HIV, these concurrent partnerships become devastating (MoHSS, 2009).

The study further revealed that 286 (76%) respondents are involved with regular partners while 87 (24%) are sexually involved with casual partners. Females, 171 (61%), were more involved with regular partners compared to males, 111 (39%). On casual partners, females, 56 (64%), were involved sexually with casual partners compare to 31 (36%) males, who were involved with casual partners.

The majority of the studies from Namibia ask more broadly about the number of partners reported in the previous year; a definition that includes concurrent relationships, but also captures relationships that could be several months apart. These studies have produced widely divergent estimates of the frequency of multiple partnerships, but all indicate a rapid rate of partner turnover among sexually active Namibians, especially male youths MoHSS (2016)

The results of this study are consistent with other studies conducted in the general population which found that over 40% of male respondents in several communities reported multiple partners in the previous 12 months, including Walvis Bay, Keetmanshoop, Oshakati, Onandjokwe and Rehoboth (Macro, 2008). Even according to the more conservative NDHS estimates, the levels of multiple partnerships are high (MoHSS, 2008).

This study further revealed that the number of multiple and concurrent sexual partnerships ranged between two and more than three partners within a period of six months. According to the 2008 NDHS (MoHSS, 2008), the only demographic factors significantly associated with having multiple partners in the previous 12 months among Namibian men were age, being employed, and among older men, not being in a marital/cohabiting union.

In Namibia, as in the rest of the SSA region, multiple and concurrent partnerships are fundamentally linked to high levels of population mobility. The 2008 Namibia DHS found that individuals who travelled away from home in the previous 12 months were significantly more likely to report multiple partners during those 12 months. It is, therefore, important to note that students at UNAM are also migrants who travel from different parts of Namibia in search of better education.

Intergenerational sex is among the key drivers of HIV in Namibia. This study revealed that 105 (28%) participants were involved with a sexual partner who is 10 years older or younger. More females, 84 (80%), were involved with older sexual partners compared to males, 21 (20%). A significant number of respondents (97) also did not know the actual age of their sexual partners who could be potentially intergenerational sex. Generally, the prevalence of HIV rises with age because of the increased exposure to different sexual partners over one's lifetime. Having intercourse with an older partner rather than a peer poses an increased risk of infection. Intergenerational sex transfers the epidemic to the younger generation where it rapidly spreads through a large group of susceptible individuals, impelled by multiple and concurrent partnerships.

### **5.2.3. Condom Use**

The consistent and correct use of condoms plays a significant role in the reduction of HIV and other STIs in Namibia. With both regular and casual partners, respondents were asked to indicate if they have used a condom "always" or "sometimes" with their partners. "Always" use of a condom was found to be very high, 82 (95%), among casual compared to regular, 20 (72%), partners. The "sometimes" use of condom was significant among regular partners with 79 (28%) while not so significant among the casual partner with 5 (5%). These results are in line with general findings of the 2008 DHS, which found that condom use varies considerably by type of partner. Married and cohabiting individuals report remarkably low levels of condom use, with less than 1-in-5 married individuals using a condom at last sex with their spouse (MoHSS, 2008). As few as 26% of cohabiting women, and 39% of cohabiting men, used a condom at last sex

with their live-in partner. Among non-cohabiting individuals, condom use is approximately twice as high (MoHSS, 2008).

This study further revealed that first year students were more likely, 54 (43%), to have sex while under the influence of alcohol, followed by third years with 32 (25%), and second years with 26 (21%), respectively. Those participants who had indicated they had sex while under the influence of alcohol, were further asked if they had used a condom during sex while under the influence of alcohol. Analysis of the use of condoms while under the influence of alcohol revealed that first year students were more likely not to use a condom with 43 (49%), followed by third year and second year students both with 20 (23%) and 17 (19%), respectively. The study revealed that Dr Lee Rocky (a socially marketed condom) is the popular brand among both females (41%) and males (34%). Other significant brands are “Smile” (free condom) and “Sense” (a socially marketed condom). On the sources of condoms, this study revealed that females relied heavily on their partners to bring along condoms during sexual intercourse. The main sources of condoms were tuckshops, bars and fuel stations.

#### **5.2.4. Utilisation of VCT Services**

The study revealed that overall testing percentage among the respondents was at 74% for ever tested in their life. The Faculty of Health Science had more tested participants (96%). Faculty of Economics and Management Sciences had 83% of the tested respondents. Both faculties of Humanities and Law had above 60% of the ever tested respondents. Faculty of Science had the lowest tested participants with only ever tested at 57%. Participants who went for VCT were further asked to provide main reasons why they went for VCT. The majority of both females and

males, 253 (88%) and 109 (75%) respectively, went for VCT to know their HIV status. Other notable reasons for testing were getting married for female participants and getting a child for male participants.

The study further revealed that most of tested participants' results were not recent. Only 50 (12%) were tested in the last six months while about 174 (40%) results were more than two years old. The majority, 179 (42%), of the participants got tested at the New Start Centres, followed by public hospitals or clinics with 137 (32%). Participants who said they were never tested (149) were asked to give reasons why they never tested. Fear of knowing HIV status was the most common reason with 23 (37%) and 14 (16%) among females and males participants, respectively. Not interested in knowing HIV was also high with 16 (26%) and 25 (29%) for females and males, respectively. Other notable reasons were lack of confidentiality in the results, stigma attached to HIV and lack of professionalism.

### **5.3. CONCLUSIONS**

The purpose of this study was to assess the risky behaviours such as multiple and concurrent sexual partnership among UNAM students. The conclusions are, therefore, being made based on the analysis of the findings as presented in Chapter 4 and the discussions in the earlier section of this chapter.

The study revealed that a large number of students who participated in the study are involved in risky behaviours with a number of them having multiple and concurrent sexual partnerships. These risky behaviours, as discussed above, put the students' lives at risk of contracting HIV and

other STIs. Demographic data are good predictive factors in explaining the variations in the data. They also indicate who is at higher risk and this will be more helpful in the formulation of targeted interventions. With the existence of multiple and concurrent sexual partnership among students, the study further revealed the types and the numbers of these sexual partnerships. The results of the study confirmed that students are involved with both casual and regular partners in a short period of time (six months). Intergenerational sex was also found to be common among students with a high prevalence of female students having sexual partners 10 years older.

Inconsistent and moderate use of condoms is also among the risky behaviours students are engaged in. The study revealed that condom use among regular partners is low compared to casual partners. Condom use was further found to be high among first year students as well as among female participants. The study also revealed that a large percentage of participants was ever tested for HIV and received their results. The majority of the participants were tested at the New Start centre while public hospitals and clinics have also served a large share of participants.

The study in its limitation, concludes that respondents who are involved in risky behaviours had a high chance of contracting HIV and other STIs. It is, therefore, the conclusion of this study to call for immediate investigation on why students are involved in risky sexual behaviours and, at the same time, intervention in the form of educating students on the dangers of risky sexual behaviours.

#### **5.4. LIMITATIONS**

All research studies have limitations and this study is no exception. Since this study was discussing sensitive student information, the issue of honesty in self-reporting risky behaviours is

questionable. There were a number of female participants who were shy at the beginning of the study to discuss sensitive information related to them but these were managed well.

Another limitation of the study was that there were no bio information taken to confirm the relationship between risky behaviours and HIV or other STIs. The study largely relied on literature to conclude that those students who were involved in risky behaviours had a high chance of contracting HIV and other STIs.

## **5.5. RECOMMENDATIONS**

The recommendations are based on the findings of this study and are a call for urgent action.

### **5.5.1. Further Researches**

The presence of high risky behaviours among the students is above the general population as discussed and compared with 2008, 2013 DHS outcomes. Therefore, there is a need to further investigate reasons surrounding the presence of high-risk behaviours among students. Hence, this study recommends qualitative studies to further investigate and gain a better understanding into this phenomenon.

### **5.5.2. University of Namibia**

There is a need to develop an intervention that is aimed at educating students on the danger of risky behaviours. Behaviour change communication messages are known to work well among the younger population, therefore, this study recommends that UNAM develop and implement this intervention. In addition, this study recommends to the University to establish the level of

HIV and other STIs prevalence among the students so that provision of services are made available to students who will be needed them including ARV provision.

### **5.5.3. Implementation of policy on access to universal health care**

This study recommends that condoms be made freely available to students throughout the campus and that the provision of VCT services should be prioritised so that students can make informed decisions on their lives.

## **5.6. CONTRIBUTION OF THE STUDY**

Based on the findings of the study, this study would contribute to the body of knowledge and interventions of the University of Namibia

### **5.6.1. Body of knowledge**

According to the literature search, no study of this nature was ever conducted among the students in Namibia, specifically at UNAM. The study, therefore, fills a gap in the knowledge of risky behaviours among students and youth in general.

### **5.6.2. Intervention for the University of Namibia**

As the custodian of students, UNAM has an obligation to provide a secure and safe learning environment for its students. The study is, therefore, an eye opener for the university to ensure that proper interventions are put in place in ensuring a conducive learning environment.

## **5.7. SUMMARY**

This chapter represents the last part of this study. The study findings were presented and discussed in this chapter. Conclusions based on the discussed findings were also made. The chapter also highlighted some of the limitations. Finally, recommendations were made based on the findings of the study.

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## ANNEXURES

### ANNEXURE A: Permission Letter from University of Namibia

#### CENTRE FOR POSTGRADUATE STUDIES

University of Namibia, Private Bag 13301, Windhoek, Namibia  
340 Mandume Ndemufayo Avenue, Pioneers Park  
☎ +264 61 206 3275/4662; Fax +264 61 206 3290; URL: <http://www.unam.edu.na>



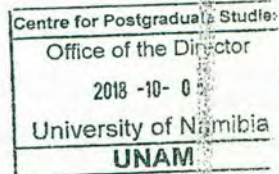
#### RESEARCH PERMISSION LETTER

**Date:** 30/09/2018

**Student Name:** Indongo Indongo

**Student number:** 200413708,

**Programme:** Master in Public Health



**Approved research title:** The assessment of the University of Namibia student risky behaviour such as sexual multiple and concurrent partnerships

#### TO WHOM IT MAY CONCERN

I hereby confirm that the above mentioned student is registered at the University of Namibia for the programme indicated. The proposed study met all the requirements as stipulated in the University guidelines and has been approved by the relevant committees.

The proposal adheres to ethical principles as per attached Ethical Clearance Certificate. Permission is hereby granted to carry out the research as described in the approved proposal.

Best Regards


  
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**Prof Marius Hedimbi**

**Director: Centre for Postgraduate Studies**

**Tel:** +264 61 2063275

**E-mail:** [directorpgs@unam.na](mailto:directorpgs@unam.na)

  
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**Date**

**ANNEXURE B: Informed consent for the study**

**THE ASSESSMENT OF THE UNIVERSITY OF NAMIBIA STUDENT RISKY BEHAVIOUR SUCH AS SEXUAL MULTIPLE AND CONCURRENT PARTNERSHIPS**

Dear Fellow Student,

My name is Indongo Indongo a final year student in the Faculty of Health Science, School of Public Health. I am conducting a research for my thesis on “the assessment of the University of Namibia students on the risky behaviour such as sexual multiple and concurrent partnerships” as required by the university.

You have been randomly selected to participate in this important study. The information collected through this exercise is **Confidential** and will not be reveal to any third parties. Some of the questions are **sensitive** in nature and students who feels uncomfortable answering them should feel free to skip them. No names or personal information will be collected. The interview will take approximately 10 minutes.

Are you willing to participate in the study? YES  NO

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## CONSENT

I have read and I understand the provided information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I understand that I will be given a copy of this consent form. I voluntarily agree to take part in this study.

Participant's signature \_\_\_\_\_ Date \_\_\_\_\_

Investigator's signature \_\_\_\_\_ Date \_\_\_\_\_

**ANNEXURE C: Interview questionnaire for the study on “The assessment of the University of Namibia students risky behaviour such as sexual multiple and concurrent partnerships”**

SECTION I – DEMOGRAPHIC INFORMATION		
1 How old are you? <i>Please chose your age category</i>	1. Below 20 years	1-1
	2. 20 – 23 years	-2
	3. 24 – 26 years	-3
	4. 27 – 29 Years	-4
	5. 30 years and above	-5
0.2 What is your current marital status?	1. Never married	2-1
	2. Currently married	-2
	3. Separated	-3
	4. Divorced	-4
	5. Widowed	-5
3 Please indicate your gender.	1. Male	3-1
	2. Female	-2
4 Which faculty do you belong to?	1 Economic and Management Science	4-1
	2 Health Sciences	2
	3 Humanities and Social Sciences	3
	79	

	4	Law	4
	5	Science	5
5 What is your academic year?	1.	1 <sup>st</sup> Year Student	5-1
	2.	2 <sup>nd</sup> Year Student	-2
	3.	3 <sup>rd</sup> Year Student	-3
	4.	4 <sup>th</sup> Year Student	-4
6 What is your preferred language (i.e. the language that you mostly used/ grew up with)?	1.	Lozi	6-1
	2.	Rukuangali	-2
	3.	English	-3
	4.	Afrikaans	-4
	5.	Otjiherero	-5
	6.	Nama/Damara	-6
	7.	German	-7
	8.	Tswana	-8
	9.	Oshiwambo	-9



16	You say you have had sex <b>READ ANSWER FROM Q13</b> times with your casual partner(s) during the past 6 months. How many times did you use a condom with your casual partner(s)?	Number	.....
17	During the last 12 months, did you have any sexual partner that is more than 10 years older than you?	1. Yes	17-1
		2. No	-2
		3. Don't know	-98
18	During the last 12 months, did you have any sexual partner that is more than 10 years younger than you?	1. Yes	18-1
		2. No	-2
		3. Don't know	-98

**SECTION III FACTORS OF RISKY BEHAVIORS – A. CONDOM USE**

*I WOULD NOW LIKE TO ASK YOU A FEW QUESTIONS ABOUT YOUR EXPERIENCES WITH CONDOMS.*

19	Have you ever used a condom with a sexual partner?	1. Yes	19-1
		2. No	-2
		3. Can't recall/ Don't know	-98
20	How old were you when you first used a condom with a	1. Age	

	sexual partner?	2.	Can't recall/Don't know	-98
21	In the past 6 months, has there been any occasion when you had sex while you were under the influence of alcohol?	1.	Yes	21-1
		2.	No	-2
		3.	Can't recall/ Don't know	-98
22	Did you use a condom during the last occasion that you had sex while under the influence of alcohol?	1.	Yes	22-1
		2.	No	-2
		3.	Can't recall/ Don't know	-98
23	Did you use a condom the last time you had sex?	1.	Yes	23-1
		2.	No	-2
		3.	Can't recall/ Don't know	-98
24	Thinking carefully about all the times you have had sex over the last 3 months, how often would you say you used a condom? <b>READ OUT SCALE.</b>	1.	Always	25-1
		2.	Sometimes	-2
		3.	Never	-3
25	What condom did you use the last time you had sex?	1.	Smile	25-1
		2.	Cool ryder	-2

		3.	Sense	-3
		4.	Femidom	-4
		5.	No particular brand	-5
		6.	Other (specify)_____	-6
		7.	Don't know	-7
26	What condom do you normally use? <b>READ OUT.</b>	1.	Public sector (govt)	26-1
		2.	Commercial	-2
		3.	Socially Marketed	-3
		4.	Don't know	-4
		5.	No one brand in particular	-5
		6.	NONE (never use condoms)	-6
		7.	Others (specify)_____	-7
27	Where do you mainly get your condoms? <b>READ OUT.</b>	1.	Supermarket	78-1
		2.	Grocery store	-2
		3.	Petrol/Filling station	-3

	4.	Bar	-4
	5.	Guest house	-5
	6.	Tuck shop	-6
	7.	Clinic	-7
	8.	None in particular	-8
	9.	Condom dispensers	-9
	10.	Public Clinic	-10
	11.	Shebeen/Bottle store	-11
	12.	Other (specify) _____	-12
	13.	(Don't know) Partner brings	-13

**SECTION III- FACTORS OF RISKY BEHAVIORS – B. UTILISATION OF VCT SERVICES**

28	Do you know of any place where you could go for VCT for HIV?	1.	Yes	28-1
		2.	No	-2

		3. Can't recall/ Don't know	-98
		4. No response/ refused	-99
29	What specific things would/have motivated you to seek out VCT services?	1. To access ART if I am positive	29-1
		2. To know my status	-2
		3. So that I can get married	-3
		4. So that I can have a child	-4
		5. Other specify _____	-5
30	How many times have you been for an HIV test?	Number	.....
31	When last did you go for a HIV test?	1. Last six months	31-1
		2. Last year	-2
		3. Last 2 years	-3
		4. More than 2 years ago	-4
		5. Never	-5
		6. Don't Know/No response	-98
32	Was pre and/or post test counseling offered?	1. Yes	32-1
		2. No	-2

		3. Can't recall/ Don't know	-98
		4. No response/ refused	-99
33	Were you told your results?	1. Yes	33-1
		2. No	-2
		3. Can't recall/ Don't know	-98
		4. No response/ refused	-99
34	The last time you were tested, where did you go for the HIV test?	1. Public hospital	34-1
		2. Public clinic	-2
		3. Private clinic/doctor	-3
		4. Private hospital	-4
		5. Private laboratory	-5
		7. VCT centre – New Start	-7
		8. Mobile VCT	-8
		9. University health clinic	-9
		10. Other specify _____	-10

35	If never tested for HIV, why not tested?	1.	Not interested in knowing status	35-1
		2.	Testing centre is too far	-2
		3.	Fear of HIV positive results	-3
		4.	Lack of professionalism Center	-4
		5.	Stigma attached to HIV/AIDS	-5
		6.	Lack of confidentiality in results	-6
		7.	Other Specify _____	-7
		8.	No response	-98
36	Do you intend to go for HIV testing and counseling in the next 12 months?	1.	Yes	36-1
		2.	No	-2
		3.	Don't know	-98
		4.	No response/ refused	-99
37	Would you go with someone or alone?	1.	Alone	37-1
		2.	Someone else	-2
		3.	Don't know	-98

		4. No response/ refused	-99
38	If you went with someone, who did you go with?	1. Friend	38-1
		2. Family member	-2
		3. Spouse	-3
		4. Boyfriend/Girlfriend	-4
		5. My senior	-5
		6. Doctor/nurse	-6
		7. Outreach worker/peer educator	-7
		8. Other specify _____	-8

We have come to the end of the interview, thank you very much for your time and assistance in answering my question!!!!