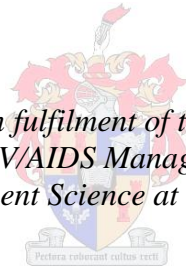


**The knowledge and perceptions of the risks of contracting  
HIV/AIDS and the sexual behavior of high school learners in  
Port St Johns Municipality, South Africa**

by

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*Assignment presented in fulfilment of the requirements for the degree of  
Master of Philosophy (HIV/AIDS Management) in the Faculty of Economic  
and Management Science at Stellenbosch University*



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## **DECLARATION**

By submitting this assignment electronically, I declare that the entirety of the work contained therein is my own, original work, that I'm sole author (save to the extent explicitly otherwise stated). I further declare that all the sources that I have used or quoted have been indicated and acknowledged by means of complete reference and that reproduction and publication therefore by Stellenbosch University will not infringe any third party's rights and that I have not previously in its entirety or in part submitted it for obtaining any qualification at any other institution.

February 2014

## ABSTRACT

This study attempts to identify HIV/AIDS knowledge gaps and the factors which influence the perceptions of the risks of contracting of HIV/AIDS, in relation to the sexual behavior of high school learners in Port St Johns Municipality.

In order to do this, a close ended questionnaire was administered to 116 learners from three senior secondary schools in Port St Johns Municipality.

Frequency table counts and percentages were used to describe HIV/AIDS knowledge, the perceptions of the risks of contracting of HIV/AIDS and the risky sexual behaviors by learners. The Pearson Product Moment Correlation was used in the inferential analysis.

From the data, it was clear that a significant proportion of learners had gaps in their knowledge of HIV/AIDS. Female senior secondary school learners were slightly more knowledgeable than their male counterparts, in that 60% of the female learners were correct in their knowledge of HIV/AIDS, compared to 57 % of males.

According to the data, 58 % of male high school learners correctly interpreted the perceptions of the risks of contracting HIV/AIDS, compared to 56% of their female counterparts. These low percentages suggest that the high school learners have inadequate skills in interpreting the perceptions of the risks of contracting of HIV/AIDS.

Another finding was that 74 % of female learners do not engage in risky sexual behaviors which might lead to a contraction of HIV/AIDS, compared to 67 % of male learners. Male learners, as well as the female learners, had a Pearson Product Moment Correlation coefficient:  $r=0.522$  for males and  $r= -0.268$  for females, in terms of perceptions of risks of contracting of HIV/AIDS and engaging in risky sexual behavior. In other words, the results indicate that if males perceive the risks more acutely, they will not take such risks, whereas females are not easily influenced by the perceptions of risks and the way in which they behave.

The study recommends that stakeholders of the schools craft HIV/AIDS programmes and policies that bridge the knowledge gaps and reduce or eliminate inaccurate perceptions of the risks of contracting HIV/AIDS, so as to enable learners to adopt safer sexual behaviors.

## OPSOMMING

Hierdie studie poog om gapings in MIV/Vigs kennis te identifiseer en die faktore wat die persepsies van die risiko's van die kontraktering van MIV, met betrekking tot die seksuele gedrag van hoërskoolleerders in Port St Johns Munisipaliteit beïnvloed.

Ten einde dit te doen, is 'n vraelys geadministreer onder 116 leerders van drie senior sekondêre skole in Port St Johns Munisipaliteit.

Frekwensietabel-tellings en persentasies is gebruik om MIV/Vigs kennis te beskryf, die persepsies van die risiko's van die kontraktering van MIV en die riskante seksuele gedrag deur leerders. Die Pearson Produk Oomblik korrelasie is gebruik in die inferensiële analise.

Die data toon dat 'n aansienlike persentasie van die leerders 'n tekort aan kennis het rakende MIV/Vigs. Vroulike senior sekondêre leerders toon effens meer kennis as hul manlike eweknieë, 60% van die vroulike leerders korrek was in hul kennis van MIV/Vigs, in vergelyking met 57% van die mans.

58% van die manlike hoërskoolleerders het die persepsies van die risiko's van MIV/Vigs korrek geïnterpreteer, in vergelyking met 56% van hul vroulike eweknieë. Hierdie lae persentasies dui daarop dat die hoërskoolleerders onvoldoende vaardighede het in die interpretasie van die persepsies van die risiko's van die kontraktering van MIV.

Nog 'n bevinding was dat 74% van vroulike leerders nie betrokke is in riskante seksuele gedrag wat kan lei tot MIV-infeksie nie, in vergelyking met 67% van die manlike leerders. Manlike leerders, sowel as die vroulike leerders, het 'n Pearson Produk korrelasiekoëffisiënt:  $r = 0,522$  vir mans en  $r = -0,268$  vir vroue, in terme van die persepsies van risiko's van kontraktering van MIV/Vigs en betrokke te raak in riskante seksuele gedrag.

Die studie beveel aan dat belanghebbendes van skole MIV/Vigs-programme en beleide ontwikkel wat die kennisgapings oorbrug en onakkurate persepsies verminder rakende die risiko van MIV-infeksie, met die doel dat leerder veiliger seksuele gerag sal toon.

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## LIST OF ABBREVIATIONS

A good number of abbreviations appear in the dissertation. In an attempt to help the readers, a list of them is provided below:

ABY = Abstinence and Be Faithful Among Youth

AIDS = Acquired Immunodeficiency Syndrome

HIV = Human Immunodeficiency Virus

STDs = Sexually Transmitted Diseases

STIs = Sexually Transmitted Infections

UNAIDS = Joint United Nations programme on HIV/AIDS

UNFPA = United Nations Population Fund

WHO = World Health Organization

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## CHAPTER 1

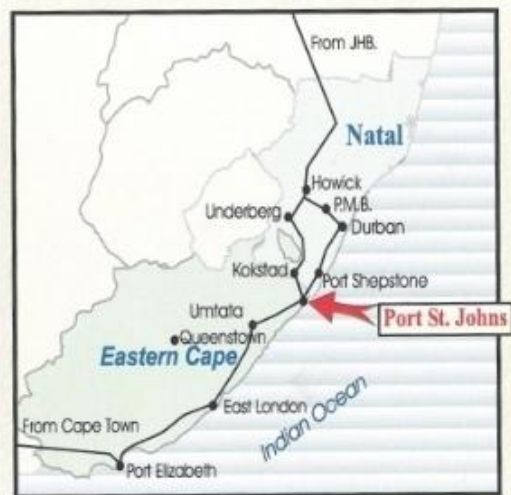
### INTRODUCTION

#### 1.1 Study location

Port St Johns Municipality is situated in Pondoland, a natural region on the South African shores of the Indian Ocean. It is located on the coastal belt of the Eastern Cape Province, popularly known as the “Wild Coast”. This is due to its natural vegetation of thorn veld, grassland, as well as sub-tropical forests in the humid coastal valleys.

Port St Johns is a small town, with a population that is largely rural based. Port St Johns Municipality has nine senior secondary schools, of which three were involved in the study. These schools are separated by distances ranging from twenty to thirty kilometers apart.

**Figure 1.1: Map and location of Port St Johns**



Source: Map/Accommodation South Africa: Port St Johns Transkei ([www.portstjohns.org.za/map.htm](http://www.portstjohns.org.za/map.htm), accessed 22/10/2013).

## 1.2 Background of the study

Acquired immunodeficiency syndrome (AIDS) is an infectious disease that is caused by the human immunodeficiency virus (HIV). The virus affects and destroys the immune system and causes infected people to become vulnerable to opportunistic infections (Lindsay, 2001).

AIDS remains one of the world's most serious health challenges. Globally, 34 million (31.4 million-35.9 million) people were living with HIV at the end of 2011. An estimated 0.8% of adults aged 15-49 years worldwide are living with HIV, although the burden of the epidemic continues to vary considerably between countries and regions (UNAIDS Global Report, 2012).

Sub Saharan Africa remains the most severely affected region, with nearly 1 in every 20 adults (4.9 %) living with HIV, accounting for 69 % of all people living with HIV worldwide. In Sub Saharan Africa, adults and children living with HIV number 23.5 million; and the adults and children who are newly infected with HIV are estimated at 1.8 million (UNAIDS Global Report, 2012).

South Africa is one of the countries in Sub Saharan Africa to be hit hardest with the HIV/AIDS epidemic, with 5.6 million people infected (UNAIDS 2012). The number of South Africans infected with HIV increased by one million from 5.4 million in 2008 to 6.4 million in 2012 (approximately 4 million being women and just over 2 million being men), according to the latest report from Human Science Research Council (IOL Newsletters, 2013). The 2012 National HIV Survey, which was released at the 6th South African AIDS Conference in Durban, South Africa (IOL Newsletters, 2013), showed that there were an estimated 6.4 million people living with HIV/AIDS in 2012 in the country and over two million people were on antiretroviral treatment. Also the estimated HIV/AIDS prevalence rate rose from 10.6 % in 2008 to 12.3 % in 2012. It further demonstrated a significant decline in condom usage in the 15-24 age group.

It is known that HIV/AIDS in South Africa is transmitted mainly through heterosexual intercourse (Department of Health, 2010; Shisana et al., 2009).

Intervention programmes have been devised to fight against HIV transmission. For school-going children, the Department of Education in South Africa introduced a comprehensive educational programme known as Life Skills or Life Orientation to assist learners to acquire skills so as to enable them to take responsibility for their lives (Maluleke, 2003).

In addition to Life Orientation, there are many HIV/AIDS awareness campaigns through television, radio, newspapers and other forms of media, to the people of South Africa. For example, the Love-Life campaign, which has run since 1999, uses a wide range of media directed mainly towards teenagers.

In spite of the many interventions undertaken by the Departments of Health and Education however, people are still being infected and affected by HIV/AIDS every day.

It is hypothesized that many learners in Port St Johns do not believe that unprotected sex will result in the contraction of HIV/AIDS. There is loose talk that “You cannot eat a banana with its cover”, which is translated to mean that you cannot enjoy sexual intercourse while using a condom. The contraction of HIV/AIDS is something that is perceived to happen to others and the learners don’t think of themselves as potential candidates for contracting HIV infections. And because of that kind of thinking, learners get involved in risky sexual behaviors, for instance having concurrent sexual partners.

### **1.3 Knowledge gaps**

The study seeks to elicit the relationship between the risk perceptions in relation to HIV/AIDS and its influence on sexual behavior of high school learners in Port St Johns Municipality, particularly in the age bracket of 15-20 years.

### **1.4 Research question**

Is there a relationship between risk perceptions of contracting HIV/AIDS and the sexual behavior of high school learners in Port St Johns Municipality?

### **1.5 Significance of the study**

The study will be of benefit to teachers and learners. The teachers will have a better understanding of the factors that influence sexual behaviors in relation to perceptions of risks of contracting HIV/AIDS and will thereby be enabled to address them in their schools. The study will also be of benefit to learners. By highlighting the risks of HIV/AIDS, it will allow them to engage in strategies to avoid risky sexual behaviors which lead to contraction of the disease.

Also the policy makers in the Departments of Education and Health will be helped by the findings of the study, as they will be in better position to design policies and programmes to counteract the perceptions of learners, where these happen to be mistaken or wrong.

## **1.6 Aim**

To investigate the knowledge and risk perceptions of HIV/AIDS in relation to sexual behavior of high school learners.

## **Objectives**

- To identify perceptions of risks of learners in terms of HIV/AIDS
- To identify knowledge gaps related to HIV/AIDS
- To identify sexual behaviors of learners
- To establish the relationship between risk perceptions and sexual behaviors
- To make recommendations to policy makers so that they are able to introduce effective interventions

## **1.7 Research outline**

The research paper will consist of five chapters. The first chapter, as seen above, is an introduction, in which the study location, background of the study, knowledge gaps, research question, significance of the study and its aims and objectives have been outlined. The second chapter discusses the literature relevant to the HIV/AIDS knowledge, perceptions of risks and sexual behavior inside as well as outside South Africa. The third chapter outlines the research methodology used in the study. The fourth chapter presents the data analysis and the discussions that follow. The last and final chapter provides the conclusion, recommendations and the limitations based on the results of the research study.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Introduction

A literature review involves the systematic identification, location, scrutiny and summary of written material that contains information on a specific research problem (Polit & Hungler, 1999:645). The purpose of the literature review is to determine the extent to which theory and research have been developed about the studied topic, identify the definitions of concepts and variables already established, examine elements of research used by others, such as designs, methods, instruments and techniques of data analysis that may prove useful to the research assignment.

The study was conducted in a rural environment, and it differs from a study conducted in Dar es Salam, Tanzania by Maswanya et al (1999). The study that is proposed will involve only senior secondary school learners in its sample, whereas that of Maswanya et al (1999) used senior secondary school learners, as well as college students. Furthermore, the objective of Maswanya et al's study (1999) was to evaluate the relationship between HIV-risky behavior and anti-condom bias, as well as AIDS related information, knowledge, perceptions and attitudes. In the study that I am proposing, it is my intention to establish whether there is a relationship between risk perceptions of HIV/AIDS and sexual behavior, as well as related information of HIV/AIDS knowledge.

The proposed study will also differ from that undertaken by Akwara et al (2003) whose sample had participants in ages ranging from 15-49 years and it was both rural and urban based. This study will involve participants with ages ranging from 15-20 years and they are rural based.

The proposed study further differs from that conducted by Ndebele (2013) because it looked the risky sexual behaviors of South African adolescent learners of grade 11 learners in Alexandria, Johannesburg (South Africa).

This literature review is presented along the following spheres namely: knowledge of HIV/AIDS, then perceptions of risks of contracting of HIV/AIDS and finally, risky sexual behaviors.

## 2.2 Knowledge of HIV/AIDS

HIV/AIDS knowledge is an important component of HIV/AIDS risk prevention strategies that may help to avert engagement in high risk behavior (Kermyt & Beutel, 2007). In the absence of knowledge, people are unable to make informed decisions and choices with regards to their lives.

In order to have a meaningful fight against HIV infections, people must be educated about it, especially the youth. According to Kaiser Family Foundation (2005), teenagers and young adults are at the centre of epidemic because young people in the 15-24 year age bracket account for approximately half of new adult HIV infections and 28% of the global total number of adults living with HIV/AIDS.

Moreover, the United Nations Population Fund (2007) confirms that young people are at the centre of the HIV epidemic in terms of rates of infection and vulnerability. Of the 1.5 billion young people worldwide, 11.8 million are estimated to be living with HIV. Furthermore, it is reported that every day, between 5 000-6 000 young people (aged 15-24 years) contract HIV infections and that many of them still lack comprehensive and correct knowledge about how to prevent the infections (United Nations Population Fund, 2007).

According to Ode & Akanle (2008), knowledge is very important in HIV education. In order to empower an individual with adequate knowledge of HIV/AIDS, that individual must have the facts concerning causes, transmission, and prevention of HIV /AIDS. It is suggested that if an individual has HIV/AIDS knowledge, his/her accompanying sexual behavior would be sensible and logical. The acquisition of adequate and correct HIV/AIDS knowledge is a motivating factor to help overcome fear, denial and helps to clear some misconceptions.

According to Ode & Akanle (2008:82), “The power of increased knowledge to motivate logical sexual behavior to reduce HIV infection and modify sexual behavior change constitutes the crux of most HIV/AIDS education campaigns.

The process of provision of information and education is based on the assumption that the youth would practice safe sex”. This seems to suggest that where there is better knowledge of HIV/AIDS, it will result in a change of sexual behavior of many youths. The same study found that many youths are sexually active and are engaged in high risk sexual behaviors such as casual, multiple and same sex relationships, as well as sex in exchange for money or favor.

In a study carried out by the South African Broadcasting Corporation (SABC) and the Kaizer Family Foundation (KFF), involving nearly 4000 South African youth, in the age range of 15-24, in 2006, showed that an overwhelming number of respondents (96 %), commended the efforts of television and radio for empowering them with HIV/AIDS knowledge. The respondents went on to say that television and radio had a powerful and positive impact on their understanding of HIV/AIDS and other sexual sexually transmitted diseases. Nearly half of the respondents said that they had discussed matters concerning safer sex with their partners and more than 40% of the respondents reported having changed their sexual behavior, as a result of the interaction of the HIV/AIDS knowledge from the media (Kaizer Family Foundation, 2007).

The member countries at a United Nations General Assembly Special Session (UNGASS) on HIV/AIDS in June 2001 set up two ambitious goals specifically targeting young people (youth). The first of the goals was to reduce HIV prevalence among young people with ages ranging from 15-24, by 25 % in the most affected countries, by 2005, and by 25 % globally, by 2010. The second of the goals was to make sure that ninety percent of the young people aged between 15 and 24 years have the knowledge, education, life skills and services to protect themselves from HIV/AIDS by 2005 and ninety five percent of them by 2010 (UNGASS, 2001).

In response to the UNGASS goals, the Abstinence and Be Faithful Among Youth (ABY) initiative was launched by the Olive Leaf Foundation in South Africa. It sought to enhance local responses among the youth to prevent HIV infection, through encouraging abstinence, faithfulness and the avoidance of unhealthy sexual behavior (Tshabalala, 2005).

### **2.3 Perception of risks of contracting of HIV/AIDS**

The association between perception of risk of HIV infection and sexual behavior is poorly understood, although perception of risk is a major step towards behavior change, from risk-taking to safer behavior (Akwara et al, 2003)

Risk-taking behavior in Sub Saharan Africa is associated with a number of factors that include: gender inequalities that place women in subordinate positions, the belief that men have stronger sexual drives than women and the notion that men cannot do without sex (Cohn & Trussel, 1996).



The lack of power to negotiate safer sex among women may be a central obstacle to AIDS prevention in Africa (Akware et al, 2003).

An examination of people's perception of HIV risk is important in understanding how people relate their sexual experiences to the risk of disease infection. Perceived risks of contracting AIDS may have important implications for health, if the perceptions are rational and lead to a willingness to avoid risky sexual behavior. In addition, an understanding of association between perception of risk and sexual behavior may facilitate the design of AIDS preventative measures necessary to check the spread of the disease among different population subgroups. HIV is predominantly transmitted through heterosexual contact accounting for at least 80% of adults HIV infections (UNAIDS, 2000).

The link between perception of risk of HIV/AIDS and sexual behavior can work both ways. Thus the reasons/factors of perception of risk may influence sexual behavior and at the same time, the factors of sexual behavior may influence those of perception of risk.

A study conducted in Kenya, by Adele-Akware (2002), found what might be seen as factors/reasons for perceiving or not perceiving risks of HIV/AIDS. The reasons/factors for making one perceive risk of HIV/AIDS are:

1. Behavioral factors: prevalence of risky sexual behaviors, for example premarital, casual, and extramarital and multiple sex partners or non-use of condoms, condom failure, and rape.
2. Economic factors: sex for exchange for monetary and material favors due poverty-stricken family backgrounds. The other factors include cost of HIV testing and labour migration.
3. Social-cultural factors: these include widow inheritance, marriage patterns and reproductive goals, denial and fatalism, a belief in witchcraft; a belief that AIDS does not exist.
4. Environmental factors: these include an increase in AIDS orphans and widows (considered as a high risk group in the community, as they may employ sex for survival strategy); the difficulty in knowing who is infected or those who are infected and who

have deliberate intention to transmit HIV to other people; stigma related to HIV testing; and alcoholism and idleness among young people.

5. Bio-medical factors: blood-related mechanisms, contaminated cutting instruments, such as circumcision knives, and intravenous needles for drugs.

Then there are those factors/reasons which are not perceived as risk factors or regarded as having low risk factors.

- a. Behavioral factors: young/virgin partners; trustworthiness and fidelity; familiarity/proximity with partners; use of condoms; no casual and multiple partners; abstaining from sex.
- b. Bio-medical factor: having an HIV test, so that you know your status.

## **2.4 Risky sexual behaviors**

The physical, emotional and financial consequences of engaging in risky behavior can be considerable (Miller et al, 2004). Risky behaviors, such as unprotected vaginal, oral or anal intercourse, sex with multiple partners, and sex with high risk partners (for example inject drug users) can result in contraction of sexually transmitted infections, including HIV/AIDS. The cost of such behaviors, to both the individual and society, can be considerable. Individuals who engage in risky sexual behaviors also run the risk of becoming pregnant or getting someone else pregnant and having an unplanned child or an abortion. An unplanned child can make academic success, school completion and employment opportunities extremely difficult, if not impossible, for the teenage mother (Hayes, 1987).

Unintended teenage pregnancies, HIV, and other sexually transmitted diseases (STDs) are significant public health problems for those who engage in risky behaviors. Teenage mothers are less likely to complete high school and tertiary education, more likely to live in poverty and require public assistance, and less likely to get married than others of the same age, who are not parents (Ndebele, 2013). In addition, teenage mothers increase the chances of giving birth to children prematurely, due to a lack of prenatal care and other physical and psychological deficits (Aber et al, 1995). Additionally, the babies born to teenage mothers face a number of challenges,

which may include low birth weight, costly medical interventions, sudden infant death syndrome, child abuse and educational and behavioral problems later in life (Ndebele, 2013).

Also engaging in risky sexual behavior increases the chances of contracting HIV infections or even other sexually transmitted diseases (STDs). It was reported in the study conducted by Miller et al (2003), that an estimated 15 million cases of STDs are documented every year in the United States of America. This is a huge number of STDs cases, which makes one curious as to why people are contracting STDs in the face of HIV/AIDS epidemic.

The male condom is effective in protecting against HIV infection and other sexually transmitted infections (STIs), when used consistently and correctly (Stone et al, 1999). The HIV/AIDS National Survey (2009) conducted in South Africa, showed that condom use provides one of the most effective ways of protection against contraction of HIV/AIDS and other sexually transmitted infections (STIs). Most South African youth know that condoms prevent HIV, STIs and unwanted pregnancies and that it is important to use.

The high incidence of sexual abuse among young children in South Africa indicates that the experience of early sexual initiation is from coercion and occurs more among females than males (Frank et al, 2008). Also lack of parental supervision encourages risky sexual behavior (Frank, & et al, 2008).

According to Hartell (2005), the sexual debut of poor young people is at an even younger age than more affluent young people, and they lack knowledge and skills to protect themselves from the dangers of unsafe sex. Also poor socio-economic conditions and lack of opportunities, along with a poor school environment, can increase high risk sexual behavior (Brook et al, 2006; Simbayi et al, 2004). The majority of poor parents are less nurturing and involved in their children's (adolescents') lives (Govender & Moodley, 2004; Paruk et al., 2005).

## **2.5 Conclusion**

In this chapter the researcher has reviewed the relevant literature. Key concepts and issues relating to HIV/AIDS knowledge; perception of risks of contracting HIV/AIDS and risky sexual behaviors were discussed.

The researcher now moves to consider, in Chapter 3, the research methodology used to examine the research question, namely the knowledge and perceptions of the risks of contracting HIV/AIDS and the risky sexual behavior of high school learners in Port St Johns Municipality, South Africa.

## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1 Introduction

The researcher embarked on this project in order to assess HIV/AIDS knowledge and perception of risks of contracting of HIV/AIDS, in relation to the sexual behaviors of learners in participating schools in Port St Johns Municipality. This chapter looks at the research methodology adopted for the research project. A research methodology describes a section of the research paper to the reader, explaining how the research was conducted (Twumasi, 2012). It gives a detailed account of the target population, the selection of the representative sample, research design and the research instrument used in the collection of data.

#### 3.2 Target population and sampling

The participants of the study were high school learners in three randomly selected high schools located in Port St Johns Municipality. The participating schools were selected by writing each of the names of the nine high schools in the municipality on separate pieces of paper. All the pieces of paper were then folded and placed in an empty box from which three pieces were drawn, resulting in the selection of three schools. Each participating school was to contribute 40 learners ranging from grades 10 to grade 12, in the age bracket of 15-20 years. The total number of the sample was planned to be 120 participants, but in fact, only 116 returned the questionnaires, duly completed.

The participants were selected by using simple random sampling method (Christensen et al, 2011). Each participant had an equal chance of being selected from each grade and on the basis of one-one ratio, in terms of gender. This was undertaken with the help of the administration of each school providing a class list of each grade, from which possible participants were randomly selected. The researcher requested each of the three School Administrations to give the researcher time alone with the learners to interact with them (and to explain the research, its purpose, as well as to address issues of confidentiality etc), during the sampling exercise.

Those who fell outside of the age bracket of 15-20 years did not form part of the sample that participated in the research project.

### **3.3 Research Design and Methods**

The study was undertaken through a quantitative approach. Under this approach, a questionnaire survey was utilized through a cross-sectional study. A cross-sectional study is a survey conducted at a single time period, whereby data are collected from multiple groups; during a brief time period, which is long enough to collect data from all the participants in the sample (Christensen et al, 2011).

### **3.4 Data Collection**

The data was collected from research participants through a questionnaire method. Some of the items in the questionnaire were adopted from research studies conducted by Cornelissen (2005), Frank et al (2008) and Fana (2010), and the other remaining items were developed from the relevant concepts, as outlined in Chapter 2 of this research project. The questionnaire consisted of 36 questions and 4 sections. The first section dealt with demographic questions, the second section consisted of knowledge-based questions, the third section concentrated on perception questions and the last section comprised risky sexual behavior questions. The questions were posed in closed-ended format, based on a four-point Likert scale: strongly agree, agree, disagree and strongly disagree.

The questionnaire was self-administered and anonymous. The researcher arranged with the three schools as to when they were required to be delivered and the time for administering them. The researcher provided a box, accessible to learners, where completed questionnaires were placed. The researcher went thereafter physically to collect the boxes of completed questionnaires.

Before the questionnaire was administered to the participants, a pilot study was conducted in order to test the clarity of the questions, estimate the time allocated for completing the questionnaire and identify cases of ambiguity, if any. The pilot study was conducted in a nearby high school with 5 participants.

### **3.5 Data Analysis**

The collected data was analyzed with the help of descriptive statistics. Descriptive statistics is a type of statistical analysis focused on describing, summarizing, or explaining a set of data. If the correct answer during the analysis is strongly disagree, also disagree was considered in this

category and on the other two options, agree and strongly agree, were considered incorrect. Alternatively, if strongly agree was the correct answer, also agree was considered in this category and the other two options - strongly disagree and disagree - were considered incorrect (Cornelissen, 2005).

All the seven statements in the category of “Risky sexual behaviors” were soliciting opinions from the respondents; hence there was no correct or wrong opinion. However, if the majority of the respondents strongly agreed or agreed with a certain statement, then those opinions were treated as correct and the minorities of the opinions, who strongly disagreed or disagreed with the statement, were treated as incorrect. Also, if the majority of the respondents strongly disagreed or disagreed with a certain statement, their opinions were treated as correct and the minorities whose opinions, strongly agreed or agreed with the statement, were treated as incorrect.

Under the analysis of data, consideration was given to account for the differences in the behaviors of the participants in terms of their age differences.

### **3.6 Ethical Aspects**

Prior to conducting the study, matters such as confidentiality, anonymity and informed consent needed to be addressed (Cohen et al, 2005). Therefore permission in writing was obtained from the district educational authority as well as the authorities of the three high schools. The consent of the participants, as well as their parents and guardians, were sought as soon as the sample was drawn. The researcher continually assured learners that their confidentiality and anonymity would be maintained in the study: learners were also assured that any information obtained in connection with the study and that could be identified with them, would remain confidential and would be disclosed only with their permission, or as required by law.

Confidentiality was maintained by means of the following:

- All data was captured on my personal computer which is password protected.
- The questionnaire that was used did not capture the details of the participants.
- All the information that was required in the section relating to demographical questions was summarized and correlated in the conclusions of the study.

- The results of the questionnaire were processed by the use of the computer.
- A summary of the results was available to participants, on an individual request basis.
- Participants were reassured that their participation was confidential and that there were no right or wrong answers.

### **3.7 Conclusion**

In this chapter a comprehensive review of the research methodology that was used in this research was presented to the reader. This chapter paves the way for the fourth chapter which deals with the statistical analysis and interpretation of the data that was collected.



## CHAPTER 4

### ANALYSIS AND INTERPRETATION OF THE EMPIRICAL DATA

#### 4.1 Introduction

The main purpose of this chapter is to interpret and understand the collected data, in relation to the empirical study that was carried out.

The analysis is undertaken utilizing the structure of the questionnaire, as reflected below:

Section A: Biographical information

Section B: HIV/AIDS knowledge gaps

Section C: Perceptions of the risks of contracting HIV/AIDS

Section D: Risky sexual behaviors

The responses of the respondents of the survey are summarized and presented in a tabular manner.

#### 4.2 Analysis and interpretation of the biographical information

This section looks at the gender, age, grade/class as well as religion and ethnicity of the respondents.

**Table 4.2.1: Distribution of respondents according to their gender**

Gender	Frequency	Percentage (%)
Male	56	48.28
Female	60	51.72
Total	116	100

Data in the above table portrays the distribution of the respondents by gender. The distribution shows that the proportions of male to female are almost equal to each other although the percentage for females is slightly higher than for the males (51.72 %, as opposed to 48.28 % for male participants).

**Table 4.2.2: Distribution of respondents according to their ages**

Age (years)	Male		Female	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Under 15	-	-	-	-
15-16	9	16.07	5	8.33
17- 18	17	30.36	25	41.67
19-20	30	53.57	30	50.00
Over 20	-	-	-	-
Total	56	100	60	100

Data in the above table displays the distribution of the participants according to their age ranges. The topmost and the bottommost age ranges don't have respondents because they are outside the area of study. The biggest numbers of the respondents are found in the age ranges of 17-18 and 19-20 years with males being 83.93 %  $((17+30)/56)$  and females being 91.67 %  $((25+30)/60)$  respectively.

**Table 4.2.3: Distribution of respondents according to their grades/ classes**

Grade	Male		Female		Total	
	frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)
10	12	48.00	13	52.00	25	100
11	24	48.98	25	51.02	49	100
12	20	47.62	22	52.38	42	100

Data in the above table shows the distribution of the respondents in terms of their grades. The grade 10 high school learners provided the smallest number of respondents overall (25/116=21.55 %) due to the fact that when they were given the consent forms to be taken to their parents/guardians for their approval, they did not bring them back, hence the questionnaires were not issued to them. The grade that contributed the biggest number of respondents was grade 11, with a percentage of 42.24 % respondents (49/116)

**Table 4.2.4: Distribution of respondents according to their religion**

Religion	Male		Female		total	
	frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)
Christianity	44	53.01	39	46.99	83	71.55
Islam	3	21.43	11	78.57	14	12.07
African Traditional Religion	9	47.37	10	52.63	19	16.38

Data in the above table shows the distribution of the respondents according to their religious affiliations. The data reveals that the majority of the respondents are Christians (71.55 % or 83/116), followed by African Traditional Religion (16.38 %) and then Islam with 12.07 % respondents. There are other religions besides Christianity<sup>1</sup>; Islam<sup>2</sup> and African Traditional Religion<sup>3</sup>. These may include Hinduism and others, which were not represented in the study, probably because learners belonging to other religious faith traditions are not attending at these particular participating schools.

**Table 4.2.5: Distribution of respondents according to their race (ethnicity)**

Race (ethnicity)	Male		Female		Total	
	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)
Black	56	50.90	54	49.10	110	94.83
Colored	-	-	6	100	6	5.17
Indian	-		-		-	
White	-		-		-	

Data in the Table 4.2.5 shows the race profiles of the respondents. The table reveals that the black population constitutes the largest proportion of the respondents (95 %), followed by the colored population group (5 %). This suggests that the participating schools are located in black communities in Port St Johns Municipality and other races who reside in the municipality are not attending these schools.

<sup>1</sup> A belief in Christ

<sup>2</sup> A belief in Allah

<sup>3</sup> A belief in God and the spirit of ancestors

### 4.3 Analysis and interpretation of knowledge gaps

**Table 4.3: Distribution of respondents according to HIV/AIDS knowledge gaps**

Statement relating to HIV/AIDS knowledge gaps	Correct	Correct	Incorrect	Incorrect
	Male	Female	Male	Female
1. HIV was carried over from chimpanzees to the human race	23	24	33	36
	41.07 %	40.00 %	58.93 %	60.00 %
2. The first HIV case was diagnosed in the United States of America	37	38	19	22
	66.07 %	63.33 %	33.33 %	36.67 %
3. The majority of HIV infected people live in Sub-Saharan Africa	27	31	29	29
	48.21 %	51.67 %	51.79 %	48.33 %
4. Men are more likely to get HIV than women	37	32	19	28
	66.07 %	53.33 %	33.93 %	46.67 %
5. More women in South Africa are infected with HIV than men	39	48	17	12
	69.64 %	80.00 %	30.36 %	20.00 %
6 HIV can be cured by use of antiretroviral drugs	30	41	26	19
	53.57 %	68.33 %	46.43 %	31.67 %
7. HIV can only be transmitted through unprotected sex	24	28	32	32

	42.86 %	46.67 %	57.14 %	53.33 %
8 You and your partner should be tested for HIV before practicing unprotected sex	46	54	10	6
	82.14 %	90.00 %	17.86 %	10.00 %
9. You can only get information about HIV/AIDS through the Department of Health	14	20	42	40
	25.00 %	33.33 %	75.00 %	66.67 %
10. Before an HIV test is done one should go for counseling	43	42	13	18
	76.79 %	70.00 %	23.21 %	30.00 %
11. You can get HIV from a mosquito bite	29	39	27	21
	51.79 %	65.00 %	48.21 %	35.00 %
12. Grand total	623.21	661.66	476.74	438.35
13. Average	56.66 %	60.15 %	43.34 %	39.85 %

Data in Table 4.3 attempts to identify the factual knowledge gaps level for the respondents in the three participating schools. On average, it can be said that the female learners were more knowledgeable about HIV/AIDS, compared to their male counterparts, in that the female learners scored 60 % of the questions correctly, while the male learners scored only 57 % of the questions correctly.

Based on the data in Table 4.3, it can be said that female learners are more factually knowledgeable on HIV/AIDS issues, compared to male learners in the participating schools.

The results from the above table concur with the findings from the study undertaken by Cornelissen (2005:11) that female undergraduates at Stellenbosch University were more factually knowledgeable about HIV/AIDS than their male counterparts. At the same time, these findings contrast with those of Fana (2010:27), which stated that male learners in Walmer Secondary School were more factually knowledgeable about HIV/AIDS than the female learners. Even if the overall averages are above 50 %, there are serious concerns about some of the responses given by the respondents. Questions 1, 3, 6, 7, 9 and 11 were poorly answered. In statement 1, many respondents (59 % of males and 60 % of females) didn't know the origins of HIV. It was hypothesized that HIV might have been transmitted to the human race from chimpanzees (Sharp & Hahn, 2011).

Statement number 3 was also responded to incorrectly by the majority of the respondents: 48% of the males and 52 % of the females knew that the majority of the seropositive HIV infected people live in the Sub Saharan Africa. Sub Saharan Africa has in fact, the largest HIV positive population in the world and it is regarded as the epicenter of HIV (UNAIDS, 2004; UNAIDS & WHO, 2005)

Although 54 % male and 68 % female respondents answered statement number 6 correctly, those who did not answer it correctly constitute a large proportion (46 % of males and 32 % of females). Hence it can be concluded that a large proportion of learners do not know that anti-retroviral drugs are not a cure for HIV/AIDS.

Statement number 7 was answered incorrectly by the majority of the respondents (57 % of males and 53 % of females). HIV is not only transmitted through an unprotected sex, there are other modes of transmission such as blood transfusion with HIV infected blood, use of contaminated syringes, and vertical transmission from mother to child (WHO, 2004:5). It would be interesting to know whether the schools had sex education or health classes.

Statement number 9 was also answered poorly. Those who answered the statement correctly were only 25 % of male and 33 % of female respondents. This implies that 75 % of males and 67

% of females don't know that there are more sources of accessing HIV information, other than the Department of Health.

The last statement, number 11, which relates to the misconception that one can contract HIV through a mosquito bite (Webb & et al, 1989), was answered correctly by 52 % of the male and 65 % of the female respondents. There is a proportion of respondents (48 % of males and 35% of females) who answered incorrectly and therefore don't know that you can't contract HIV through mosquito bite. One wonders how these respondents would respond to other misconceptions such as "having sexual intercourse with a virgin cures HIV/AIDS"

On the other hand, statements 2, 4, 5, 8 and 10 were answered reasonably correctly with 60 % of the respondents knowing the right answer.

On the whole, for the eleven statements, the respondents scored on average 60 % for the females and 57 % for the males as the correct answers. This suggests that the respondents have big knowledge gaps relating to HIV/AIDS matters.

#### 4.4 Analysis and interpretation of perception of risks of contracting HIV/AIDS

"Perception of risk" is explained in the following manner: it is the subjective judgment that people make about the severity of a risk. In other words" perception of risk" refers to how we anticipate the outcomes of choices made by ourselves or others. It is believed that the choices (or decisions) we make, if any, depend on the severity of the risk.

**Table 4.4: Distribution of respondents according to perceptions of risks of contracting HIV/AIDS**

Statement relating to risk perceptions of contracting HIV/AIDS gaps	Correct	Correct	Incorrect	Incorrect
	Male	Female	Male	Female
1. HIV/AIDS is more commonly found amongst black people	24	23	32	37
	42.86 %	38.33 %	57.14 %	61.67 %



2. HIV/AIDS is more commonly found among homosexual men	41	38	15	22
	73.21 %	63.33 %	26.79 %	36.67 %
3. HIV positive people can continue to live a productive life	32	46	24	14
	57.14 %	76.67 %	42.86 %	23.33 %
4. Contracting HIV is like a death sentence	41	40	15	20
	73.21 %	66.67 %	26.79 %	33.33 %
5. The right use of antiretroviral drugs, in combination with a healthy balanced diet can cure HIV	37	31	19	29
	66.07 %	51.67 %	33.93 %	48.33 %
6. HIV positive people cannot continue to live a productive life as they have to use a lot of medicine with side-effects	22	31	34	29
	39.29 %	51.67 %	60.71 %	48.33 %
7. Poverty is the main reason for the spread of HIV	29	34	27	26
	51.79 %	56.67 %	48.21 %	43.33 %
8. HIV does not lead to AIDS	45	51	11	9
	80.00 %	85.00 %	19.64 %	15.00 %
9. You must first get TB to become HIV positive	47	29	9	31
	83.93 %	48.33 %	16.07 %	51.67 %

10. A healthy looking person may not be HIV positive	10	10	46	50
	17.86 %	16.67 %	82.14 %	83.33 %
11. AIDS cannot be cured even if detected early	30	31	26	29
	53.57 %	51.67 %	46.43 %	48.33 %
12. Do you think you are at high risk of getting HIV infection?	32	39	24	21
	57.14 %	65.00 %	42.86 %	35.00 %
13. Do you think the chances are high for your friends to get HIV infection?	35	33	21	27
	62.50 %	55.00 %	37.50 %	45.00 %
14 .Grand total	758.93	726.68	541.07	573.32
15. Average	58.38 %	55.90 %	41.62 %	44.10 %

Data in Table 4.4 attempts to identify the perception levels of the respondents with regards to matters of HIV/AIDS. The overall percentages of correct answers for both the male and female respondents were 58 % and 56 % respectively. The percentages show that the male respondents have slightly higher perception levels than their female counterparts. The overall low percentages however suggest that the respondents have low perception levels of HIV/AIDS.

Even if the perception level for the respondents were above 50 %, the following statements 1, 6 and 10 have lower percentages of correct answers for both male and female respondents. Statement number 1 states that “HIV/AIDS is more commonly found amongst black people”, which is incorrect. Those who answered the above statement correctly were only 43 % male and 38 % female respondents, implying that 57 % of males and 62 % of females don’t know that

HIV/AIDS goes beyond boundaries of race, colour or ethnicity. On the other hand, their answers could be accounted for because they thought the study was referring to a South African context.

For statement number 6, which talks about HIV positive people not being productive and leading a normal life due the medicines they take and their side-effects is false. The respondents who answered the statement correctly were 39 % males and 52 % females. The female respondents were more accurate than their male counterparts. The majority of the respondents don't know that HIV positive people can lead a normal life if they are on antiretroviral medication.

Statement number 10 was answered shockingly poorly. Those who answered correctly were as few as 18 % male and 17 % female respondents. This statement "A healthy looking person may not be HIV positive" is a correct one. That is, there are many people who are unhealthy looking and are not HIV positive.

The following statements: 2, 3, 4, 5, 7, 8 and 9 were answered relatively better than the others. The respondents achieved scores ranging from 60 % to 85 %. For example statement number 8: "HIV does not lead to AIDS" is an incorrect statement. Both male and female respondents achieved high scores of 80 % and 85 % respectively.

The statements: 12 and 13 were soliciting opinions from the respondents. The majority of the opinions were taken as the correct answers. Statement 12 that states "Do you think you are at high risk of getting HIV infection?", the majority of the respondents agreed with it, resulting in scores of 57 % for males and 65 % for females. The scores suggest that the majority of respondents were at high risk of contracting HIV infection and this could be a reflection of their behaviors.

For statement 13 that states "Do you think the chances are high for your friends to get HIV infection?", the majority of the male respondents disagreed with it, hence their score was 63 % and the female counterparts agreed with the statement, earning them a score of 55 %. The male respondents perceive that their friends do not have high chances of contracting HIV infection, perhaps due to the fact that they do not perceive or observe them engaging in behaviors that put them at risk from contracting HIV. However, interestingly, female respondents perceive their friends as having high chances of contracting HIV infection, perhaps because they observe them engaging in sexual behaviors that may put them at risk. If you look at the overall picture of the

statements from 1-13, scores achieved for correct answers were on average just below 60 % for both male and female respondents.

This leads the researcher to deduce that the respondents in this study have low perception levels with regards to risks of contracting HIV/AIDS.

#### 4.5 Analysis and interpretation of risky sexual behavior

All the seven items in the categories below were aimed at soliciting opinions from the respondents; hence there was no correct or wrong answer. However, if the majority of the respondents strongly agreed or agreed with a certain statement, then those opinions were treated as correct and the minorities of the opinions who strongly disagreed or disagreed with the statement were treated as incorrect.

On the other hand, if the majority of the respondents strongly disagreed or disagreed with a certain statement, their opinions were treated as correct and the minorities who strongly agreed or agreed with the statement their opinions were treated as incorrect.

**Table 4.5: Distribution of respondents according to risky sexual behavior**

Statement relating to risky sexual behavior	Correct	Correct	Incorrect	Incorrect
	Male	Female	Male	Female
1. You had your first sexual intercourse by or before age 14 years	32	42	24	18
	57.14 %	70.00 %	42.86 %	30.00 %
2. In the past three months, you have had a sexual intercourse with anyone other than your main partner	36	45	20	15
	64.29 %	75.00 %	35.71 %	25.00 %
3. You have given birth or fathered a child during high school	39	42	17	18

years	69.64 %	70.00 %	30.36 %	30.00 %
4. There are a number of occasions I have had sexual intercourse without a condom in the past 3 months	38	42	18	18
	67.86 %	70.00 %	32.14 %	30.00 %
5. In the past 3 months, I drank alcohol or use marijuana or “dagga” before or during sex	44	51	12	9
	78.57 %	85.00 %	21.43 %	15.00 %
6. Did you have more than one boyfriend or partner in the past 3 months?	34	46	22	14
	60.71 %	76.67 %	39.29 %	23.33 %
7. Having multiple sexual partners does not increase the risk of getting HIV infection	39	44	17	16
	69.64 %	73.33 %	30.36 %	26.67 %
8. Grand total	467.85	520.00	232.12	180.00
9. Average	66.84 %	74.29 %	33.16 %	25.71 %

Data in Table 4.5 attempts to identify the risky sexual behaviors level for the respondents in the three participating schools. On average, it can be said that female learners scored 74 %, whereas male learners scored 67 %.

On statement 1, which states “You had your first sexual intercourse by or before age 14 years”, the majority of the respondents disagreed with it (32 out of 56 (or 57 %) males and 42 out of 60 (or 70 %) females). This implies that the majority of the respondents had their sexual debut when

they were older than 14 years. The delay of sexual debut should be encouraged and those who are already sexually active should be encouraged to abstain or adopt safer sex.

On statement 2, which states “In the past three months, you have had a sexual intercourse with anyone other than your main partner”, the majority of the respondents disagreed with it (36 out of 56 male respondents (or 64 %) and 45 out of 60 (or 75 %) female respondents. The majority of the respondents didn’t have a casual sexual relationship with anyone other than the usual partner in the past three months

On statement 3, which states “You have given birth or fathered a child during high school years”, the majority of the respondents disagreed with it (39 out of 56 (or 70 %) of males and 42 out of 60 (or 70 %) of females. The majority of the respondents have yet to become parents during their high school years. This suggests that those who became parents during this period of education ran the risk of contracting HIV and other sexually transmitted infections, as a result of not using contraceptives or using them incorrectly.

On statement 4, which states “There are a number of occasions I have had sexual intercourse without a condom in the past 3 months”, the majority of the respondents disagreed with it (38 out of 56 (or 68 %) of males and 42 out of 60 (or 70 %) of females. This infers that the majority of the respondents who had sexual intercourse used a condom. With the data collected however, it is not possible to say whether the use of the condom was to prevent the contraction of HIV or other STIs, or to prevent pregnancies.

On statement 5, which states “In the past 3 months, I drank alcohol or used marijuana or “dagga” before or during sex”, the majority of the respondents disagreed with it (44 out of 56 (or 79 %) of males and 51 out of 60 (or 85 %) of females. The majority of the respondents did not drink alcohol or use drugs before or during sex in the past three months. It is surmised therefore the non-use of alcohol and/or dagga, enabled better decisions to be taken in relation to safer sex/abstaining from sex.

On statement 6, which states “Did you have more than one boyfriend or partner in the past 3 months”? The majority of the respondents disagreed with it (34 out of 56 (or 61 %) of males and 46 out of 60 (or 77 %) females. The majority of the respondents did not have multiple and/or

concurrent relationships in the past three months. This helped them to minimize the chances of contracting HIV and other STIs and spreading these infections

The last statement, number 7, states that “Having multiple sexual partners does not increase the risk of getting HIV infection”. The preceding statement is incorrect and the majority of the respondents disagreed with it (39 out of 56 (or 70 %) of males and 44 out of 60 (or 73 %) of females). It could therefore be that the majority of the respondents know that having multiple sexual partners is one of the factors encouraging the spread of HIV and other sexually transmitted infections. That is, the more multiple sexual partners you have, the higher the likelihood of contracting HIV and other STIs.

#### **4.6 Discussion**

One of the objectives of the study was to establish if a relationship exists between perception of risks of contracting of HIV/AIDS and risky sexual behavior among school learners in Port St Johns Municipality. This is discussed below. The perception of risks of contracting of HIV/AIDS and the risky sexual behavior were correlated using Pearson Product Moment Correlation<sup>4</sup> to determine the relationship between the perception of risks of contracting HIV/AIDS and risky behavior ( $r=0.522$ ) for male respondents and ( $r= -0.268$ ) for female counterparts).

Since  $r = 0.522$  for male respondents, there is a significant relationship between the perception of risks of contracting of HIV/AIDS and their risky behavior. Whatever perception of risks male learners have towards HIV/AIDS, would be expected to influence how they behave sexually. This implies that there is a significant positive relationship between the perception of risks of contracting of HIV/AIDS and the risky sexual behavior of the male respondents.

Also, since  $r = -0.268$  for the female respondents, there is less significant relationship between the perception of risks of contracting of HIV/AIDS and their risky sexual behavior. Whatever perception of risks female learners have towards HIV/AIDS would influence negatively how they behave sexually. This implies that there is a less significant negative relationship between the perception of risks of contracting of HIV/AIDS and the risky sexual behavior of the female respondents. In other words, the results indicate that if males perceive the risks more acutely,

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<sup>4</sup> It is a statistic ( $r$ ) representing how closely two variables co-vary; It can vary from -1 (perfect negative correlation) through 0 (no correlation) to +1 (perfect positive correlation).

they will not take such risks, whereas females are not easily influenced by the perceptions of risks and the way in which they behave.

#### **4.7 Conclusion**

This chapter serves to provide a platform for analyzing and interpreting the data that was obtained from the empirical study. It paves the way for the next chapter, which summarizes the main findings of the research project to the reader and makes some recommendations.



## CHAPTER 5

### CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

In this chapter, I propose to summarize the main findings of the research. The challenges and limitations that were encountered with the research project will be outlined and finally, some recommendations will be put forward, in the hope that the educational authorities as well teachers and learners will adopt some of them, with a view to make the fight against HIV/AIDS more effective.

#### 5.2 Overall findings

##### *5.2.1 HIV/AIDS knowledge gaps*

The empirical results provide strong evidence to show that there are HIV/AIDS knowledge gaps among the high school learners in the three participating schools in Port St Johns Municipality that formed part of this study. Female respondents are more knowledgeable than their male counterparts. The reason for that could be that female respondents would appear to be more willing to discuss and respond to questions and issues related to sexuality. Furthermore, it would appear that the knowledge gaps have nothing to do with the grades of learners or their ages or ethnicity. The research would suggest that it is a problem across the board.

##### *5.2.2 Perceptions of risk of contracting HIV/AIDS*

The research findings that emerged from the analysis of the perception of risks of contracting HIV/AIDS are that the respondents in this study have low perception levels with regards to risks of contracting HIV/AIDS. The scores from the 13 statements that were put to the respondents indicate just below 60 % of both male and female respondents answered correctly. This therefore is clearly an issue that needs to be addressed.

### ***5.2.3 Risky sexual behavior***

The research findings with regarding risky sexual behaviors are that female learners are less involved in risky sexual behaviors, compared to their male counterparts. The findings however also suggest that the majority of the respondents had their sexual debut at an age older than 14 years. It was also found that they were less involved with casual sex, multiple partners, mixing sex with drugs, engaging in sex without a condom and having unprotected sex.

Male as well as female learners had a Pearson Product Moment Correlation coefficient ( $r=0.522$ , males) and ( $r= -0.268$ , females) in terms of perceptions of risks of contracting of HIV/AIDS and risky sexual behavior. For the males, there is a significant positive correlation between the perceptions of risks of contracting HIV/AIDS and the risky sexual behavior. On the other hand, females have a weak negative correlation between the perceptions of risks of contracting HIV/AIDS. The researcher recommends that female learners need to have a greater awareness of the risks of contracting HIV if they choose to engage in risky sexual behaviors.

### **5.3 Problems and limitations**

There were no major challenges encountered during the process of completing the theoretical part of the study. The only challenge encountered was the late approval of the research project, which coincided with a time that learners were writing their end of year examinations. This could account for the fact that there was lack of focus and co-operation from some of the learners, especially grade 10 students, who had finished some of their examinations.

One of the limitations of this research is that the study relied on self-reported questions; participants might have consciously or unconsciously misreported their behaviors in a way that they considered to be socially acceptable. However, to reduce the potential inaccuracy of the self-reported questions, respondents were asked to recall their behaviors over a relatively short period of three months.

Another limiting factor is that the study was confined to a group of high school learners in one local area namely; Port St Johns in South Africa, hence caution should be exercised when generalizing the results of the study to the population of the country.

## 5.4 Recommendations

In order to reach a logical conclusion for a research project, recommendations for its application are offered. The researcher also offers suggestions as to where further study would be appropriate. Bearing in mind of the research results, the researcher puts forward the following:

- It is recommended that HIV/AIDS educational programmes emphasize more strongly the factual aspects of the disease, so that learners have a better understanding to enable them to bridge the knowledge gaps.
- It is recommended that as schools are the primary socializing influence for the learners, they are encouraged to constantly empower and equip them with relevant factual information in order to fight the disease.
- It is also recommended that stakeholders of the schools craft HIV/AIDS programmes that modify the perceptions of the risks of contracting HIV/AIDS, so that learners have a better understanding of sexual behaviors that may put them at risk of contraction of the disease.
- It is recommended that comparative studies be conducted in other municipalities, districts, provinces and countries especially in urban areas, where the environment is different.
- Future studies should involve learners from lower grades so as to see whether similar results are obtained and whether therefore HIV/AIDS educational programmes should be modified accordingly.

## 5.5 Conclusion

This is a useful study because it demonstrates a shortfall in the current HIV/AIDS education programme in Port St Johns Municipality. The Department of Education and schools need to pay heed to the fact that perhaps the resources and time that are being spent on HIV/AIDS education are not effective and that there is considerable room for improvement. After all, it is the lives of young people that are being put at risk because their knowledge and perceptions are poor.

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## **ADDENDUM: QUESTIONNAIRE**

### Preamble to the Questionnaire

Dear Participant,

You are invited to participate in a 60 minutes survey aimed at establishing the link between knowledge, perceptions of risk of contracting HIV/AIDS and sexual behavior of high school learners. Your participation in this study is by answering the questionnaire provided to you below. You may answer all the questions by putting a tick or cross in the appropriate circle for each question.

This questionnaire is anonymous, hence any of your names and ID number or even your signature must not be written on the questionnaire. All other personal information that is required is only required to summarize and correlate the conclusions of the study in a proper manner. Your participation is confidential. There are no right and wrong answers. A computer will be used to process the questionnaire results.

Thank you very much for your contribution.

By agreeing to complete this anonymous questionnaire and putting it in the clearly marked drop box is going to be considered as having consented to participate in the study.

### **DEMOGRAPHIC QUESTIONS**

1. Gender

Male       Female

2. Age

Under 15 years  15—16 years  17—18 years  19-20 years  over 20 years

3. Class

Grade 10     Grade 11     Grade 12

4. Religion

- Christianity  Islam  African Tradition

5. Race

- Black  Colored  Indian  White

**Knowledge based questions**

6. HIV was carried over from Chimpanzees to the human race

- strongly agree  agree  disagree  strongly disagree

7. The first HIV case was diagnosed in the United States of America

- strongly agree  agree  disagree  strongly disagree

8. The majority of HIV infected people live in Sub-Saharan Africa

- strongly agree  agree  disagree  strongly disagree

9. Men are more likely to get HIV than women

- strongly agree  agree  disagree  strongly disagree

10. More women in South Africa are infected with HIV than Men

- strongly agree  agree  disagree  strongly disagree

11. HIV can be cured by use of antiretroviral drugs

- strongly agree  agree  disagree  strongly disagree

12. HIV can only be transmitted through unprotected sex

- strongly agree  agree  disagree  strongly disagree

13. You and your partner should be tested for HIV before practicing unprotected sex

- strongly agree  agree  disagree  strongly disagree

14. You can only get information about HIV/AIDS through the Department of Health

strongly agree  agree  disagree  strongly disagree

15. Before an HIV test is done one should go for counseling

strongly agree  agree  disagree  strongly disagree

16. You can get HIV from a mosquito bite

strongly agree  agree  disagree  strongly disagree

**Perception questions**

17. HIV/AIDS is more commonly found amongst black people

strongly agree  agree  disagree  strongly disagree

18. HIV/AIDS is more commonly found among homosexual men

strongly agree  agree  disagree  strongly disagree

19. HIV positive people can continue to live a productive life

strongly agree  agree  disagree  strongly disagree

20. Contracting HIV is like a death sentence

strongly agree  agree  disagree  strongly disagree

21. The right use of antiretroviral drugs in combination with a healthy balanced diet can cure HIV.

strongly agree  agree  disagree  strongly disagree

22. HIV positive people cannot continue to live a productive life as they have to use a lot of medicine with side-effects

strongly agree  agree  disagree  strongly disagree

23. Poverty is the main reason for the spread of HIV

strongly agree  agree  disagree  strongly disagree

24. HIV does not lead to AIDS

strongly agree  agree  disagree  strongly disagree

25. You must first get TB to become HIV positive

strongly agree  agree  disagree  strongly disagree

26. A healthy looking person may not be HIV positive

strongly agree  agree  disagree  strongly disagree

27. AIDS cannot be cured even if detected early

strongly agree  agree  disagree  strongly disagree

28. Do you think you are at high risk of getting HIV infection?

strongly agree  agree  disagree  strongly disagree

29. Do you think the chances are high for your friends to get HIV infection?

strongly agree  agree  disagree  strongly disagree

**Risky sexual behaviors**

30. You had your first sexual intercourse by or before age 14 years

strongly agree  agree  disagree  strongly disagree

31. In the past three months, you have had a sexual intercourse with anyone other than your main partner

strongly agree  agree  disagree  strongly disagree

32. You have given birth or fathered a child during high school years

strongly agree  agree  disagree  strongly disagree

33. There are a number of occasions I have had sexual intercourse without a condom in the past 3 months

strongly agree  agree  disagree  strongly disagree

34. In the past 3 months, I drank alcohol or use marijuana or “dagga” before or during sex

strongly agree  agree  disagree  strongly disagree

35. Did you have more than one boyfriend or partner in the past 3 months?

strongly agree  agree  disagree  strongly disagree

36. Having multiple sexual partners does not increase the risk of getting HIV infection

strongly agree  agree  disagree  strongly disagree