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An exploration of the level of HIV risky behaviours and the sources of information on HIV for the youth in Johannesburg: Is loveLife one of their sources of information?

Lebohang V. Letsela

A thesis submitted in fulfilment of the requirements for the degree of Masters in Arts (Research Psychology) in the Faculty of Humanities, University of the Witwatersrand, Johannesburg.

November, 2009

DECLARATION

I declare that this thesis is my own, unaided work. It is being submitted for the degree of Masters in Arts at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at any other university.

_____

Lebohang V. Letsela (Ms.)

_____day of_____, 2009.

ABSTRACT

The aim of this research was to investigate the HIV knowledge and risk behaviours of students as well as to deteremine whether the youth are aware of and utilising loveLife services. This was demonstrated with the HIV knowledge and risky behaviours of respondents using loveLife as their source of HIV information.

Data was gathered by administering open-ended and close-ended questionnaires to 152 South African students aged 18—25 years old studying at Johannesburg, Braamfontein tertiary institutions. These questionnaires were structured to include the following information: the demography , condom attitude scale, the current and previous sexual behaviours, socio-sexual orientation index (SOI), self-efficacy for protective sexual behaviours scale, HIV and AIDS knowledge and understanding questionnaire,as well as the loveLife exposure, participation and response questionnaire. The data analysis techniques included statistical techniques of frequency counts, cross tabulations, Chi Square tests of associations, Point Biserial correlations, two independent t-test and Mann-Whitney U test, which were applied to all quantitative data; whereas thematic content analysis was applied to the open-ended questionnaire (qualitative data).

Results revealed that young people are aware of loveLife services but are not utilising them. Respondents generally had good but biased HIV knowledge and increased HIV sexual risk behaviours. However, insignificant associations were found between awareness and utilisation of loveLife services and HIV knowledge and understanding, and sexual risk behaviours. The implications of the current study and recommendations for future studies are discussed.

Key word:

HIV prevalence rates, HIV knowledge, HIV risky behaviours, tertiary level of education youth, loveLife exposure and participation, South Africa

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List of Abbreviations

AIDS Acquired Immuno-deficiency syndrome

HIV Human Immuno-deficiency virus

HSRC Human Sciences research Council

TAC Treatment Action Campaign

South African Provincial Abbreviations:

KZN: Kwa-Zulu Natal

EC: Eastern Cape

MP: Mpumalanga

FS: Free State

NW: North West

GP: Gauteng

NC: Northern Cape

WC: Western Cape

LP: Limpopo

CHAPTER 1

Orientation

1.1. HIV: A Global Issue

This chapter serves to provide an introduction to the research study that was conducted. This study reports on the level of HIV knowledge and the HIV related-risky behaviours amongst young South African students as well as their exposure and participation to loveLife services that are implemented to facilitate the early modification of HIV related risky behaviours and ultimately reduce high HIV prevalence in the youth. Researchers report on the importance of continuous evaluation of social programmes to establish their value and effectiveness in relation to stated aims and goals, especially given the amounts of money that are invested into the programmes (Potter, 2006; Shisana & Simbayi, 2002; Shisana et al., 2009; Weis, 1998).

Human Immune Virus (HIV) is a global problem for all countries (World Health Organisation [WHO], 2002). However, developing countries, including South Africa, seem to experience the pandemic growing at a faster rate (Barnett & Whiteside, 2006; Marais, 2000). Whiteside and Sunter (2000) endorsed this fact in their statement recognising that on average, 1 500 South African citizens are infected daily with the virus, and that 12% of the country's 40 million people are HIV positive. At this rate, UNAIDS (2007) reported that South Africa is the country with the largest number of HIV infections in the world.

Previous literature has consistently indicated that young South African women make up the majority of those infected with the virus in the country (Dickson-Tetteh, Ashton, Pleaner, Moleko & Mangochi, 2000). These researchers further reported that approximately 11 million episodes of Sexually Transmitted Infections (STIs) occur in this population group each year.

Andrew and Boyle (1995) point out that young people often seek and obtain advice from one another, despite their lack of thorough knowledge of the field of reproductive health. They are susceptible to peer pressure, have a tendency to engage in risk-taking behaviour, are less able to negotiate safer sex

practices and have difficulty accessing reproductive health information and services. Stadler, Morrison and McGregor (2000) show that high risk sexual behaviours remain normative in young people, despite public health education about HIV and AIDS (Acquired Immune Deficiency Syndrome) risk factors. Furthermore, 20% of young South Africans reported having their first sexual encounter before the age of 16 years, while 5% had had sex by the age of 19 years. Sekopane (2004) reported that early experiences of sexual activities often result in sexual health problems and pregnancy among young people (Andrew & Boyle, 1995; loveLife, 2002). Following from the above discussion, they are a sensitive population at focus for interventions of behavioural changes (loveLife, 2004).

South African governmental departments as well as private organisations have made attempts to make people aware of HIV and AIDS. Independent groups and organisations work hand- in- hand with health and education departments to increase community awareness and prevention of the spread of HIV and AIDS (Sekopane, 2004). These include among others Khomanani, Red ribbon, Soul City, Soul Buddyz', loveLife and Treatment Action Plan. These HIV prevention programmes have been designed and implemented in South Africa to reduce the prevalence of the HIV as well as rates of STIs in the general population (Department of Gauteng, 2005). However most of these various HIV prevention campaigns are mass communication programmes (Bertrand, O'Reilly, Denison, Anhang & Sweat, 2006). These interventions exist in the form of educational programmes implemented in different forms such as media and dramatic arts (live performances), and are targeted towards different age groups. For instance, loveLife has been designed and implemented to help reduce HIV related rates among the young population.

1.2 Problem Statement

This research study was interested in investigating the truthfulness of some writing that seem to suggest that HIV is becoming prevalent among the educated group, youth with tertiary level of education (Ross & Deverell, 2005). Thus it is focused on attending to and establishing some of the behavioural health concerns in young tertiary students. Furthermore, the author of this research noted paucity of studies that explored the use of HIV prevention services by higher learning youth. Thus the study also wished to establish whether these students utilise youth targeted HIV prevention services, in particular loveLife, and whether they felt such services were relevant in addressing their HIV risk related needs as students.

1.3. Rationale of the Study

HIV affects everyone but most especially the younger generation in South Africa (loveLife, 2004; Pettifor et al., 2004; Stadler & Hlongwa, 2002; UNAIDS, 2007). Studies like that of Howard (2006) have indicated that the tertiary level youth have high levels of knowledge about the HIV virus. Bertrand et al. (2006) highlighted that mass media and communication has played a huge role in creating awareness of the existence of the virus, the modes of transmission and the means of prevention.

The importance of conducting this particular research lies in the fact that HIV was reported to be increasing among the educated group and not much work has been done in this area in relation to strategic HIV prevention campaigns (Pettifor et al., 2005; Ross & Deverell, 2004; Shisana et al., 2009; Tshabalala-Msimang, 2008; UNAIDS, 2007). Also, they hold misconceptions and not very good knowledge of the virus in the midst of high risk behaviours. And lastly, young people are the tomorrows' leaders and need interventions that will closely focus on their specific underlying concerns relating to HIV risky behaviours. It does seem that tertiary level youth are a vulnerable population but are often pushed aside with the view that they are much more knowledgeable about the virus. It is also assumed that they participate in and carry out the knowledge received from HIV prevention campaigns given their intellectual capacity. Thus this study sought to establish the level of HIV knowledge together with the patterns of sexual behaviours displayed by the youth in Johannesburg. These are linked to the youth's sources of HIV related information, as well as their level of participation to a youth targeted HIV prevention campaign, including factors related to their participation or lack thereof.

Although there are various efforts aimed at controlling the spread of HIV in the country, there is currently only one HIV prevention campaign is targeted at the youth; it is called loveLife. Its mandate is to prevent HIV in the South African youth. Its programmes are aimed at making them aware and knowledgeable about the virus, and it teaches and motivates the youth to have a positive attitude towards their health and future. This contributes to the controlling of the spread of HIV, STIs as well as the reduction of teenage pregnancy rates (loveLife, 2004; Pettifor et al., 2004; Stadler & Hlongwa, 2002). This study investigated whether the educated youth are utilising this programme as they progress towards an endeveour that promises to better their quality of life. This would help ascertain that loveLife has success in altering HIV risky behaviours of all the South African youth. In its diminutive evaluation work, loveLife has not made explicit claims about the nature of behaviours and utility of their services by the educated youth (loveLife, 2004). This was of concern to the researcher, and thus a study focusing specifically on the educated group was conceptualised and formulated given the gap that existed in

literature relating to the group. Furthermore, this study hoped to provide insight into the level of usefulness of loveLife, the reasons why students participate or do not participate in the programme, their self-reported behavioural change in relation to being exposed to and participating in loveLife services. It is important to report such findings as programme designers get acquainted with the knowledge of the degree to which their services are being utilised by the youth as well as what their general ideas and attitudes towards the services are (Rossi & Freeman, 1982).

Lastly, this research was intended to enhance knowledge, to aid improvements of situation or phenomenon through providing thorough and accurate portrayal of specific phenomenon (Terre Blanche & Durrheim, 1999). In this case, the current research would contribute to the management of HIV risk behaviours of students through thoroughly understanding their level of HIV knowledge and risk behaviours, as well as experiences of loveLife as an HIV prevention campaigns targeted at youth.

1.4.Conceptual Framework

The conceptual framework informing this study was the second-generation HIV surveillance system — the behavioural surveillance in particular (WHO, 2000; 2001). This global surveillance of HIV and AIDS and STIs is a joint effort between the World Health Organisation and the Joint United Nations Programme on HIV and AIDS (UNAIDS), initiated in November 1996. It is based on surveys of knowledge-attitude-beliefs and practices related to sexual behaviours and HIV infection that have been carried out worldwide during the past 15 years (Shisana & Simbayi, 2002; Shisana et al., 2005). The system allows researchers to monitor the ways in which the virus is transmitted, the factors that facilitate it, new ways of transmission, new vulnerable population groups and new areas of the HIV spread (WHO, 2001). Based on the knowledge that HIV is prevalent in the young population, this study used this framework to generate data tracking changes in sexual behaviour, knowledge, attitudes and practices related to HIV and AIDS over-time in the South African young population of ages 18 to 25. Different sexual categories and racial groups of men and women students in the Gauteng Province (Greater Johannesburg) were used. This was for the purpose of examining the current risk factors for HIV and AIDS within the specified population. A brief historical background of the first decade of HIV surveillance systems with a context of the development of the second generation surveillance is discussed below.

The World Health Organisation (2002) reported that the first decade of surveillance for HIV systems was ill-equipped to capture diversity or to explain changes over time in mature epidemics. For instance, an assessment of women visiting antenatal clinics in South Africa provided a misrepresentation of what the HIV prevalence rates were as it did not encompass a true representation of the South African population. This system excluded men as well as the not sexually active women, or rather the non-pregnant sexually active women (WHO, 2000; 2002). Thus the current, second generation systems were developed as efforts to strengthen the explanatory power of the first decade of HIV surveillance as well as to enhance the use of the information generated from it (WHO, 2000).

The second generation surveillance systems aims to concentrate resources where they will yield the most useful information in reducing the spread of HIV and in providing care for those affected. This means, amongst other things, that data collection should be concentrated in populations most at risk of becoming newly infected with HIV and populations with high levels of risk behaviour such as young people at the start of their sexual lives (WHO, 2000). Furthermore, this suggests comparing information on the HIV prevalence and on the behaviours contributing to its spread, to build up on an informative picture of changes in the epidemic over-time. This also means making the best use of other sources of information such as bio-medical surveillance, communicable disease surveillance, reproductive health surveillance to increase understanding of the HIV epidemic and behaviours spreading it, and consequently increase understanding and plan prevention and care.

Shisana and Simbayi (2002) and Shisana et al. (2005) highlighted the importance of understanding the context in which HIV related risk behaviours occur. This helps with improving the HIV prevention programmes. Furthermore, national leaders, government and external donors constantly allocate resources and show commitment to HIV prevention programmes; this shows the efforts given to creating awareness and knowledge of the campaigns. Additionally, it not only signifies the levels of exposure, participation, perceptions and attitudes of the targeted audiences (group) towards the programme, but also the level of HIV knowledge and risky behaviours in the group given the HIV magnitude. A systematic analysis of the context is essential in identifying factors facilitating and prohibiting the utility of the programme by the audience, form their perspective, with a view of informing programme improvement.

1.5.Aims of the Study

The primary aim of this study was to examine the sources of HIV information the youth has with a special interest in the loveLife services, the call centre and the local youth community outreach through love trains, tours, games and workshops by community peer educators. In particular this research project examined the youth's level of exposure and participation to these loveLife services after soliciting them to identify their sources of HIV information. The youth's level of exposure and participation to loveLife services was a form of a minute evaluation. This examination was informed by the logic models or framework. However, the design only allowed the focus to be on the output and the outcomes. The link was on the two services in relation to loveLife's intended outcomes as experienced by the youth in the tertiay level of education. This minute evaluation plan enabled the researcher to identify factors contributing to the youths' participation or lack thereof in these loveLife services, the youth's level of response to these loveLife's services. Furthermore, this aim extended to a determination of the connection between the media creating an awareness of loveLife as an initiative to reduce HIV infection rates within the youth. The secondary aim was to examine the level of HIV knowledge and the patterns of HIV risky behaviours in the South African youth population, in the Gauteng Province, Johannesburg (JHB).

1.6. Research Questions

The study wished to answer the following research questions:

a) What is the youth's level of HIV knowledge as measured by HIV and AIDS knowledge and understanding questionnaire?

b) What HIV risky behaviours do young people engage in as measured by Condom attitude scale (CAS), Socio-sexual orientation index (SOI), Previous and current sexual behaviours and Self-efficacy for protective Sexual behaviours scale?

c) What are the youths' sources of HIV related information?

d) Did the media bring awareness of the loveLife's services as measured using the loveLife exposure, participation and response questionnaire (LEPRQ)?

e) What is the youths' level of exposure and participation to loveLife services as measured by LEPRQ?

f) What does the youth personally feel they learned from participating in loveLife services and how have they used the knowledge gained, as measured by the LEPRQ?

g) Are there differences between gender and race, in terms of the HIV knowledge and HIV risky behaviours, and also their level of exposure and participation to loveLife's services?

1.7. Conclusion

This chapter introduced the study and described the problem and purpose of the study. It also introduced the loveLife services and the importance of the study. Chapter 2, 3 and 4 discusses the literature reviewed underpinning the investigation with variables of interest. Chapter 2 describes HIV and AIDS, its modes of transmission as well as treatments. Chapter 3 contextualises HIV in the world as a global concern, as well as in South Africa, as a national concern mainly in women and the youth cluster, as well as focuses on HIV knowledge and risky behaviours, while Chapter 4 focuses on the HIV prevention campaigns implemented in the country. Chapter 5 covers the methods as well as the research design guiding the processes of the study. Chapter 6 provides the analysis applied to the data as well as the findings of the study. Chapter 7 discusses the findings and, Chapter 8 highlights the shortcomings and strengths of the current study. Chapter 9 focuses on implications and recommendations for future research, and ends off with a general conclusion of the study.

1.8. Glossary of Terms

This section provides abbreviations and definitions of concepts used in the research report.

1.8.1 [L]oveLife Terminology:

Franchise — refers to community level youth serving organisations that have endorsed the aims and approach of loveLife.

GroundBREAKER — refers to young person aged 18-25 years who implements loveLife's educational programmes for a period of one year.

Mpintshis' — refers to volunteers-peer educators aged 12-17 years who assist groundbreakers in the implementation of loveLife programmes.

National Adolescent Friendly Clinic Initiative (NAFCI) —
A comprehensive service performance and quality improvement accreditation programme designed for public sector primary health care clinics.

Outreach — refers to the implementation of loveLife initiatives and programmes in communities

S'camtoPRINT or thethaNathi —Youth magazine and newspaper supplement distributed through various loveLife initiatives and partnership venues.

Sexually experienced youth —Young people who are between ages 20-24year old.

S'camto groundBREAKERS —loveLife's social reality adventure television series.

The loveLife games —refer to national sport competition for schools.

[T]hethajunction — refers to loveLife's toll free helpline for the youth-0800121900
Y-Centres — refer to multipurpose recreational venues for young people throughwhich loveLife aims to promote the development of positive lifestyle and aspirational ideals amongst the South African youth.

1.8.2 General Terms

The definition of youth:
Young people —'youth' are described as people with ages up to 35 to 40 years (McKee, Bertrand & Becker-Benton, 2004). This is also the case in South Africa. The National Youth Act of 1996 defines a youth as persons aged from 14 to 35 years old (Sekwati & Hirschowitz, 2001). Soanes (2002) and Erikson (1968) defined a young person in their youth stage as being in the period between childhood and adulthood that is characterised by freshness, being energetic and immature. Shisana and Simbayi (2002) highlighted that persons aged 15-25 years are considered to be the youth.

The definition of a youth has different connotations in various countries, including youth wings of political parties. However, for the purpose of this study, a young person 'youth' will be that aged 18 to 25 years.

Antibodies — These are proteins that the body makes to attack foreign organisms and toxins (often called antigens) that circulate in the blood. Antibodies are usually effective in removing antigens from the body. Following infection by some organisms such as HIV, however, the antibodies do not get rid of the antigen. They only mark its presence. When found in the blood, these 'marker' antibodies indicate that HIV infection has occurred (UNESCO, 2006).

Virus — A virus is defined as a piece of nucleic acid surrounded by bad news. It is a genetic material (Deoxyribonuclei acid-DNA or ribonucleic acid-RNA) covered with a coat of protein molecules. They have no cell walls and can only replicate by entering host cells. They have few genes (Barnett & Whiteside, 2006).

HIV— It is an abbreviation that stands for Human Immuno-Deficiency Virus. It is also called HIV-1. It was discovered in 1983, another HIV (HIV-2) was discovered in 1985. The second virus is more difficult to transmit, slower acting and less virulent than HIV-1 (Barnett & Whiteside, 2006). HIV has less than 10 genes. HIV belongs to a family of viruses known as retroviruses, retroviridae. However, it is in a virus group called lentiviruses. Lentiviruses develop over a long period, producing many diseases affecting the immune system and brain (Barnett & Whiteside, 2006). These viruses have a unique enzyme called reverse transcriptase, consisting of two strands of RNA. Once they infect a cell they make DNA copies of their own RNA and reproduce such cells rapidly (UNESCO, 2006).

AIDS — It is also an abbreviation standing for Acquired Immuno-Deficiency Syndrome with each initial having its own meaning. AIDS was first discovered in 1979. Acquired implies that the virus is not spread through causal or inadvertent contact like flu or chickenpox but requires body fluids (Barnett & Whiteside, 2006). Immunodeficiency implies that the virus attacks a person's immune system, making it less able to fight against infections. Syndrome implies the disease to represent itself not as one disease but as many diseases building up as the immune system fails to work efficiently (Barnett & Whiteside, 2006; UNESCO, 2006).

Antiretroviral — Medication used to fight infection by retroviruses, such as HIV infection (UNESCO, 2006).

CHAPTER 2

What is HIV?

2.1 Description of HIV

HIV is very different from other viruses as it is a retrovirus that attaches and destroys the T-4 helper cells (Barnett & Whiteside, 2006; Brannon & Feist, 2000; Gurung, 2006). A retrovirus is the worst type of virus as it invades a host cell and takes over its genetic equipment by subverting it and adding its own genes to those of the host cell's chromosomes (Edelston, 1988). By so doing, the host's reproductive resources are sabotaged and redirected to mass production of viruses instead of performing their own tasks. This spread to multiple cells, eventually becomes virus factories as they do not perform their own tasks due to the infection (Balyagati & Schapink, 2000; Edelston, 1988; Stine, 2008).

T-4 cells protect the body's immune system (Page, Louw & Pakkiri, 2006; Stine, 2008). They coordinate the immune system destroying foreign substances, such as viruses. If T-4 cells are destroyed, the immune system collapses and the body becomes ineffective in defending itself from all infections: viral, bacteria and fungi (Page et al., 2006). These infections are killer diseases in the case of a weak or deadly immune system that is unable to protect itself (Brannon & Feist, 1997; Ross & Deverell, 2004). HIVdestroys T-4 cells and progressively suppresses and then destroys the immune system (Gurung, 2006). HIV is very dangerous as the more the virus progresses, the surety of it leading to the development of AIDS. At this stage, it is impossible to alleviate the virus as the body is unable to fight against any diseases it is exposed to (Balyagati & Schapink, 2000; Brannon & Feist, 1997; Edelston, 1988).

HIV progresses through four stages, but this varies from person to person and can depend on many factors including persons' health status and behaviour (Brannon & Feist, 2002; Gurung, 2006; Holden, 2003). The first stage of HIV infection is characterised by symptoms (such as headache, fever, sore throat, skin rash) that are not easily distinguishable from those of other diseases. This is also known as the window period (Page et al., 2006; The loveLife generation, 2008). This stage takes a relatively short period of 1 to 8 week, it is followed by a latent period that may last as long as 10 years (or from 6

months to 10 years) (Page et al., 2006), during which infected people are asymptomatic and experience minimal symptoms. Patients often have a cluster of symptoms during the third stage, including weight loss, loss of appetite, swollen lymph nodes, and persistent diarrhoea (Balyagati & Schapink, 2000). Patients' CD4+ T-lymphocyte cell count drops to 200 or less per cubic millimetre (mm^3) of blood (a healthy person has a CD4+ count of 1000) (Brannon & Feist, 2002; Page et al., 2006). At this point, the immune system begins to lose its defensive capacities making the patient susceptible to opportunistic infections involving lungs, nervous system, gastrointestinal tract, liver, bones and brain (Holden, 2003). Symptoms include dry cough, greater weight loss, loss of appetite, general fatigue, purplish bumps on the skin and AIDS related dementia (Brannon & Feist, 2002). At this point, HIV becomes AIDS, from which people do not recover. People with AIDS are susceptible to a wide range of potentially life-threatening diseases and infections (UNESCO, 2006). Those diseases can often be treated, but there is no successful treatment for the underlying immune deficiency caused by the virus. AIDS is the last and most severe stage of the clinical spectrum of HIV-related disease (UNESCO, 2006).

This research project is primarily interested in HIV risky behaviours amongst young individuals. Thus one could say the study is concerned with HIV preventable or modifiable behaviours, as well as knowledge and attitudes as markers of the development of HIV. In essence the focus is on behavioural risk factors as measures of health. The next paragraph will briefly describe behavioural health and its importance.

Behavioural health emphasizes the "enhancement of health and the prevention of disease in healthy people" (Brannon & Feist, 2000, p.9), with the focus being on individual responsibility for health and wellness. This takes into consideration the individuals' behaviour and lifestyle as they are strongly implicated in the development of diseases and virus. Behavioural health is concerned with helping people cease health hazardous behaviours, while maintaining good health and preventing illnesses and dysfunction in healthy individuals through using educational inputs to change behaviours and lifestyle (Brannon & Feist, 2000, Ogden, 2004). This suggests that health professionals, including psychologists, through using the health behaviour component are committed to keeping people healthy rather than waiting to treat them after they become ill (Stine, 2008). Health professionals contribute with techniques for changing risky behaviours implicated in disease development such as teaching safe sexual relations in preventing STIs and HIV. The next sections focus on modes of acquiring the virus as well as its current forms of treatments.

2.2 Transmission of HIV

Transmission of the virus is by means of an interchange of body fluids, which permit access of HIV to the blood stream or lymphatic system of the next host (Aggleton & Rivers, 1999; Balyagati & Schapink, 2000; Brannon & Feist, 1997; Dayton & Merson, 2000; Edelston, 1988; Groopman, 1998). These body fluids are usually semen, cervical secretion(s), blood from transfusion and contaminated hypodermics, blood products needed by haemophiliacs and mother's milk (Holden, 2003; Knox, 2008).

The virus is carried by the blood stream and lymphatic system as it seeks CD4+ rich cells to invade (Edelston, 1988; Groopman, 1998). It spreads through direct interchange of body fluid (Loyce, 1998), mainly in five ways, namely, penetrative sexual intercourse whether vaginal, anal or oral, especially with semen flow at ejaculation (Baingana, Thomas & Comblain, 2003; Dayton & Merson, 2000; Fultz, 1989; Haverkos & Edelman, 1989; Knox, 2008; O' Grady, 2004; Page et al., 2006); by multiple shared use of unsterilised hypodermic needles such as intravenous drug abuse (DiClemente, 1992). It also spreads through blood transfusion with contaminated blood (and blood products); as well as through mother to child before birth (in the uterus), or after birth (through the mother's milk) (Holden, 2003; Page et al., 2006, Pembrey, 2008). Another mode of transmission is transmission of blood as a ritual scarring, cutting and traditional medicine in more primitive areas, ritual circumcision and blood brothers or initiation ceremonies, where one knife is used to cut many individuals (Aggleton & Rivers, 1999; Balyagati & Schapink, 2000; Brannon & Feist, 2000; Dayton & Merson, 2000; Groopman, 1998; Knox, 2008; Mwizarubi, Hamelmann & Nyamuryekung'e, 1997; Quinn & Mann, 1989). Buve et al. (2001); Page et al. (2006) and Simbayi, Kalichman, Jooste, Mfecane and Cain (2005) also highlighted that people with STIs and genital ulcer diseases have a high risk for sexual transmission of HIV. This suggests that the presence of an STI facilitates HIV transmission.

There are a number of ways in which some people think the virus is transmitted and yet it is not. The virus is not spread by coughs and sneezes; people cannot acquire it through drinking water (it does not come in water), by insects, by sharing cups, glasses or spoons, sharing bed linen, lavatory seats, by skin to skin contact such as handshaking, as well as by being in the same room as a person who is infected (Edelston, 1988; Fultz, 1989; Loyce, 1998). It is important to note that the spread of the virus is behaviourally driven. Health risk behaviours that people engage in make them susceptible to the virus. There is medical treatment for those who have contracted the virus. Early medication helps strengthen the immune system and fights against other related infections by slowing down the rate at which HIV infection weakens the system, and leads to AIDS (Gurung, 2006; UNAIDS, 1998).

2.3 Treatment for HIV

There is neither a cure nor a vaccine for HIV at present (Barnett & Whiteside, 2006; Smereck, 1998). The only form of cure is prevention from HIV in the form of reducing HIV risky behaviours as well as teaching healthy sexual relations (Brannon & Feist, 2000; Gurung, 2006; Holden, 2003; Stine, 2008). However, there are drugs that are able to prolong the lives of people infected with HIV. Some of these are designed to treat the opportunistic infections and illnesses that affect people with HIV and AIDS. There is strict treatment in the form of medication that can destroy or prevent the HIV virus if taken within 72 hours of contracting the virus (Queensland Health, 2009). In addition, several types of drugs seek to prevent HIV itself from reproducing and destroying the body's immune system. There are two types of drugs used. Reverse transcriptase inhibitors attack an HIV enzyme called reverse transcriptase (Reach 2010, 2009). They include abacavir, delavirdine, didanosine (ddI), efavirenz, lamivudine (3TC), nevirapine, stavudine (d4T), zalcitabine (ddC), and zidovudine (AZT). Protease inhibitors attack the HIV enzyme protease and include amprenavir, indinavir, nelfinavir, ritonavir, and saquinavir (Reach 2010, 2009).

The only effective form of treatment is destroying HIV antigens before they can enter a cell's nucleus and cause corruption. This also kills the infected cells to avoid their malignant multiplication. The current treatment is pharmaceutical drugs (Aggleton &Rivers, 1999; UNAIDS, 1998). Azidothymidine (AZT/ART, antiretroviral therapy) blocks the reverse antigens from entering the cells' nucleus. AZT is a chemotherapy that requires strict and regularity in consumption (Edelston, 1988; Groopman, 1998; Grubb, Perriëns & Schwartländer, 2003; O' Grady, 2004; Pembrey, 2009). Many HIV patients are taking several of these drugs in combination, a regimen known as highly active antiretroviral therapy (HAART). When successful, such combination therapy can reduce the level of HIV in the bloodstream to very low, even undetectable, levels and sometimes enables the body's CD4 immune cells to rebound to normal levels (Edelston, 1988; Groopman, 1998; loveLife, 2000; Reach 2010, 2009; UNAIDS, 1998; 2004). However, these therapies are costly and can have serious side effects such as bone marrow suppression and anaemia. Thus preventing HIV is always the best choice. Furthermore, researchers are working to develop new drugs known as fusion inhibitors and entry inhibitors that can prevent HIV from attaching to and infecting human immune cells (Reach 2010, 2009). Efforts are also underway to identify new targets for anti-HIV medications and to discover ways of restoring the capability of damaged immune systems to defend against HIV, and the many illnesses that affect HIV-infected individuals (Reach 2010, 2009).

As previously mentioned, this current research is only concerned with the HIV virus before reaching AIDS in young people in the form of their HIV risky behaviours, knowledge, attitudes and beliefs, and ways in which the health sector is addressing their HIV related behavioural risk factors. This chapter provided a detailed description of HIV. This was in terms of its definition, its modes of transmission, and lastly its cure, which currently only exists in the form of prevention. The following chapters contextualises HIV and risky behaviours within the young population, particularly in South Africa as well as preventive measures that have been established to reduce the prevalence of the pandemic within this age group.

CHAPTER 3

HIV in Context

3.1 **HIV in South Africa versus other Developing Countries**

HIV remains a global health problem of unprecedented dimensions (UNAIDS, 2008). HIV accounts for 75% of all AIDS deaths that occurred in 2007 (UNAIDS, 2008; Varga, 1999). HIV together with STIs is the number one leading pandemic in developing countries (Aggleton & Rivers, 1999; Mwizarubi et al., 1997). South Africa is also a developing country and, thus has a high prevalence of the virus (McKee et al., 2004; UNAIDS, 2002; 2007; Varga, 1999). Southern Africa continues to bear a disproportionate share of the global burden of HIV and AIDS (Buve, Bishikwabo-Nsarhaza & Mutangadura, 2002; McKee et al., 2004; Shisana & Simbayi, 2002; UNAIDS, 2002; 2007; 2008).

An estimated 1.9 million people were newly infected with HIV in sub-Saharan Africa in 2007, and 22 million people were living with HIV (UNAIDS, 2008). UNAIDS (2008) reported that the HIV prevalence appears to have stabilized at extraordinarily high levels in countries such as Lesotho, Namibia, South Africa and Swaziland, amongst other countries. The estimated rate of AIDS deaths has also declined, in part as a result of success in expanding access to antiretroviral drugs in resource-limited settings (UNAIDS, 2008). In 2007, young people aged 15–24 years accounted for an estimated 45% of new HIV infections worldwide (Loyce, 1998; UNAIDS 2008). Figure 1 overleaf depicts the sub-Saharan African HIV prevalence among women attending antenatal clinics from 1990 to 2007.

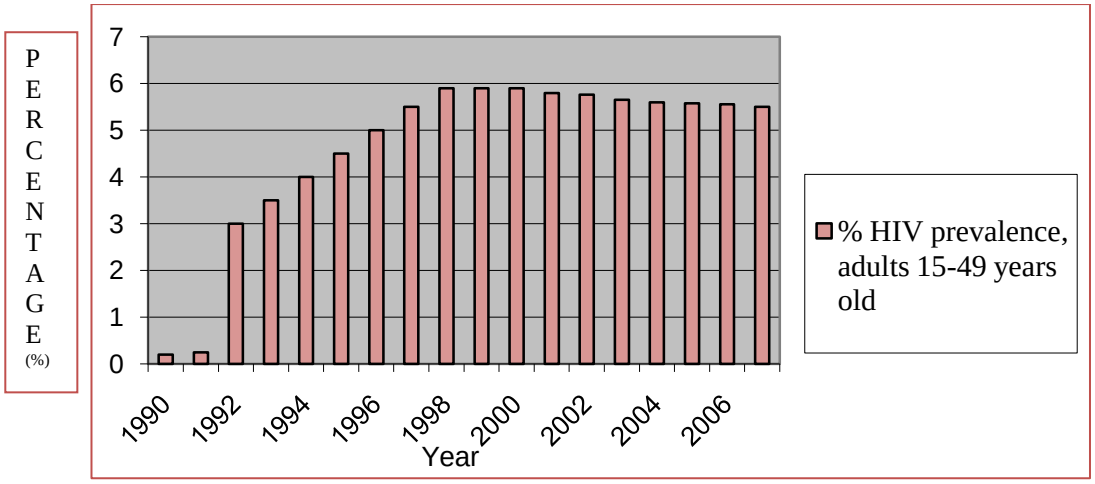

Figure 1: Estimated number of people living with HIV and adult HIV prevalence: HIV epidemic in Sub-Saharan Africa, 1990–2007 (UNAIDS, 2008, p.35)

Women account for half of all people living with HIV worldwide, and nearly for 60% of HIV infections in sub-Saharan Africa (Stine, 2008; UNAIDS, 2007; 2008). Shisana and Simbayi (2002) indicated a few issues related to data used to report the HIV prevalence rates. The primary means of monitoring the virus in the country over the past decade was through blood samples of women attending antenatal clinics. Therefore, Shisana and Simbayi (2002) provided critiques relating to antenatal survey as a basis of estimating the national HIV prevalence levels in the general population. These were that people who have adopted HIV prevention practices such as condom use are less likely to be represented in the antenatal sample (Shisana & Simbayi, 2002). Furthermore, there was rareness of male rates of the HIV virus in the reported HIV prevalence. The system also used a limited age group (15-49) of sexually active women who are pregnant. These surveys used a sexually active group as a sample, which made it impossible to draw conclusions concerning the population that is not sexually active, particularly the younger age group who have not engaged in sexual intercourse. South Africa also uses data from women attending antenatal clinics to estimate the national HIV prevalence data (Tshabalala-Msimang, 2008) (as discussed in section 1.4). Furthermore, recent research reports have indicated declines and stabilisation in the national HIV prevalence (Statistics South Africa, 2008; 2009; Tshabalala-Msimang, 2008). However, these are reported using women visiting antenatal clinics.

The World Health Organisation (2000) reported that HIV prevalence generally begins to decline in mature epidemics. This is often presented as good news, "prevalence is stabilizing", and the worst is over. The truth, however, may be far more complex. Stable prevalence implies that there is one new infection for every person who drops out of the group being tested for HIV (WHO, 2000). Thus stabilizing prevalence may reflect changes in the rate at which people drop out of tested groups, because

they have died or because they are too sick to come to a testing site (WHO, 2000). People may also drop out of testing because they are abstaining from sex or consistently using condoms (behavioural changes) and so are no longer at risk of pregnancy or STI that would bring them to the antenatal clinic (WHO, 2000). The World Health Organisation (2000) further contended that simply recording changes in HIV prevalence does not contribute to an understanding of which of these factors may be responsible for the change. Thus well-designed behavioural surveillance systems are needed to help explain changing trends in prevalence. Surveillance systems may need to also focus their attention on new infections, where many of the factors listed above do not come into play (WHO, 2000).

As a results of the shortfalls of this method of estimating national HIV rates, WHO (2002) suggested that a country's surveillance needs should vary according to its epidemic state. Although it is by no means predictable, an epidemic can shift rapidly between one state to another, and the surveillance system should be flexible enough to shift with it. For example, it does not make sense to report HIV and AIDS cases are in women attending antenatal clinics while the epidemic is thought to be concentrated in young people or men who have sex with men. Thus surveillance systems should begin to track risk behaviour and identify sources of infection in the at *risk groups* to have consistent and legitimate data on HIV and AIDS cases. The second generation surveillance systems are flexible and can allow countries' to focus on the shifting needs of the epidemic (WHO, 2000). The second generation surveillance system, combining behavioural risk and HIV prevalence surveys was endorsed by the South African Department of Health in 2002 as a better approach to understanding the virus (Shisana & Simbayi, 2002). This system was outlined in Chapter 1 and is contextualised as being applied by one of the leading HIV prevention strategy targeted at the South African youth in chapter 4. The next section focuses on HIV and STIs prevalence in the South African youth.

3.2 HIV and STI Prevalence in the South African Youth

3.2.1 HIV in the youth

South Africa has a population of 49 million people, 52% (25 million) of which are women (Statistics South Africa, 2008; 2009). People of African descent remain the largest number of the population, adding up to 38.6 million (79%), followed by Whites, Coloured and Indians (Statistics South Africa, 2008; 2009). In 2001, young people accounted for 40% of the population of the country (Sekwati & Hirschowitz, 2001). In 2008, there were 4.3 million 15-19 year old, and 3.96 (4) million 20-24 year olds

(Statistics South Africa, 2008). Seventy nine percent of these young people are Black Africans. Furthermore, Gauteng as a province has the largest share of the population of 10.5 million (21.5%) people (Statistics South Africa, 2008; 2009). Twenty percent of young South Africans also reside in Gauteng.

"South Africa is the country with the largest number of HIV infections in the world, with the prevalence among pregnant women at 30% in 2005 and 29% in 2006" (UNAIDS, 2007, p.16). Statistics South Africa (2008; 2009) estimated the overall HIV prevalence rate to be 11% and 10.6 in 2008 and 2009, respectively, while the HIV positive population was estimated approximately at 5.35 and 5.21 million in 2008 and 2009, respectively (Fassin & Schneider, 2003; Pembrey, 2008, Statistics South Africa, 2008; 2009). Almost 1000 AIDS deaths occur every day (Pembrey, 2008). Statistics South Africa does not provide the prevalence estimates by age group. Nonetheless, the highest prevalence (19.6%) was in women aged 15-49 years (Khumalo, 2008). The 5.35 million HIV estimate indicates an increase in the HIV estimation as compared to previous years. The number of HIV infected people increased from 4.7 to 5.35 million in the period of 2002 to 2007 (loveLife, 2000; Stadler and Hlongwa, 2002; Statistics South Africa, 2008).

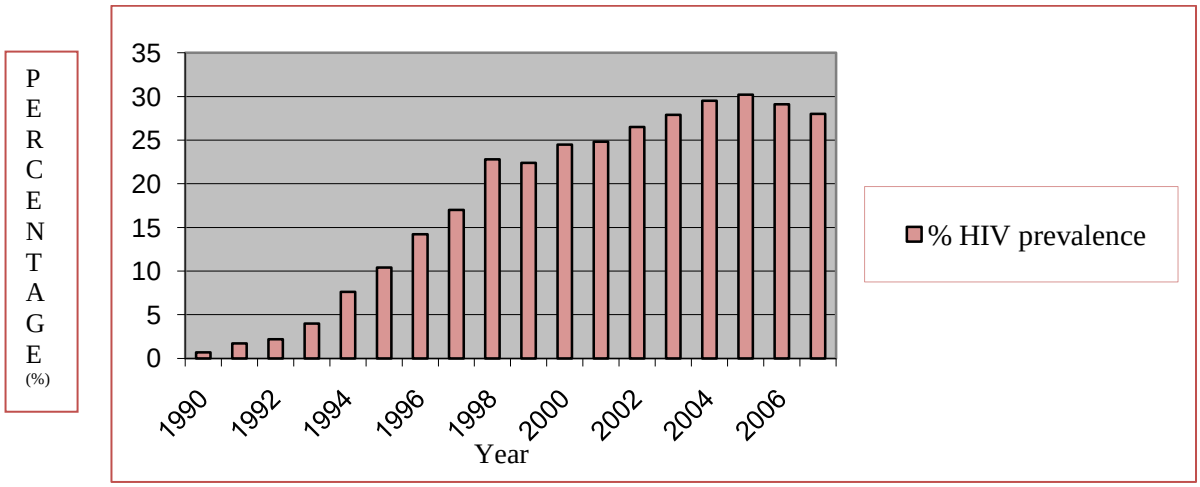

Figure 2: National HIV prevalence trends among antenatal clinic attendees, South Africa, 1990 to 2007 (Tshabalala-Msimang, 2008, p.9)

Although the HIV prevalence has in the past five years slowed down as represented in Figure 2, the country is still to experience reversal of the trends (Tshabalala-Msimang, 2008). There is evidence of the epidemic being on a decline. The national HIV prevalence rate for 2005, 2006 and 2007 was 30.2 (Confidence Interval: CI: 29.1 – 31.2%), 29.1 (CI: 28.3 – 3.0%), and 28% (CI: 26.9 – 29.1%), respectively. There was a 1% reduction in the prevalence from 2005 to 2007 (Tshabalala-Msimang,

2008). The HIV infection rate has been stable in that its increases and decreases are within the same range (4-5million), it fluctuates between 25 and 30% (Tshabalala-Msimang, 2008; UNAIDS, 2007). Figure 3 and Table 1 reveal gradual declines in the epidemic in the youth age cohorts 15-19 years and 20-24 years old, and an increase in the middle-adulthood age groups (30 – 34 years and 35 – 39 years) over the past 5 years (Tshabalala-Msimang, 2008). The HIV prevalence has decreased from 10.3 in 2005 to 8.6 in 2008 among youth aged 15-24 years (Shisana et al., 2005; 2009). This is said to be as a result of preventive campaigns (Khumalo, 2008).

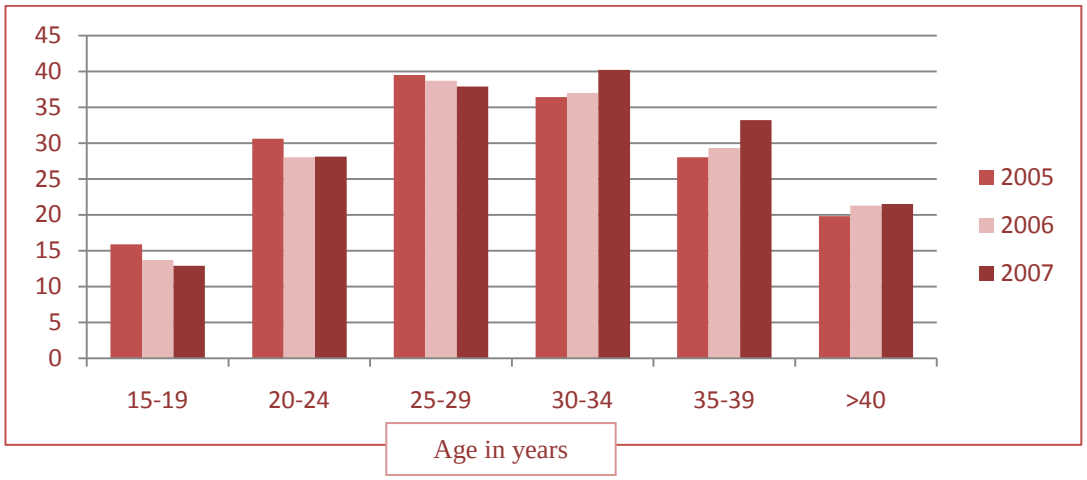

Figure 3: National HIV prevalence estimates by age group among antenatal clinic attendees, South Africa, 2005 – 2007, Tshabalala-Msimang, 2008, p.20)

Table 1:
National HIV prevalence estimates by age group among antenatal clinic attendees, South Africa, 2005 – 2007 (Tshabalala-Msimang, 2008, p.19)

Age Group (Years)	**2005 HIV prevalence (CI 95%)**	**2006 HIV prevalence (CI 95%)**	**2007 HIV prevalence (CI 95%)**
15-19	15.9 (14.6 - 17.2)	13.7 (12.8 - 14.6)	12.9 (12.1 – 13.8)
20 – 24	30.6 (29.0 - 32.2)	28 (26.9 - 29.1)	28.1 (27.3 – 29.0)
25 – 29	39.5 (37.7 - 41.3)	38.7 (37.3 - 40.2)	37.9 (36.8 – 39.0)
30 -34	36.4 (34.3 - 38.5)	*37* (35.5 - 38.5)	*40.2* (38.8 – 41.6)
35 -39	28 (25.2 - 30.8)	*29.3* (27.7 - 31.5)	*33.2* (31.4 – 35.0)
>40	19.8 (16.1 - 23.6)	21.3 (18.5 - 24.1)	21.5 (16.9 – 27.1)

N.B. *The 95% CI (Confidence Interval) was used because statistically the true estimated value falls within the two confidence limits and therefore assures us that there is 95% certainty that the estimated value is not by chance.*

The pattern of HIV prevalence was also observed at a provincial level. There were statistically

significant decreases in six provinces, Mpumalanga, Kwa-Zulu Natal, Eastern and Western Cape, Limpopo and Gauteng provinces as represented on Figure 4 overleaf. The HIV prevalence remained constant in North West. Northern Cape and Free State had increases in the HIV prevalence, although not statistically significant. No further research could b found to document the reasons for this.

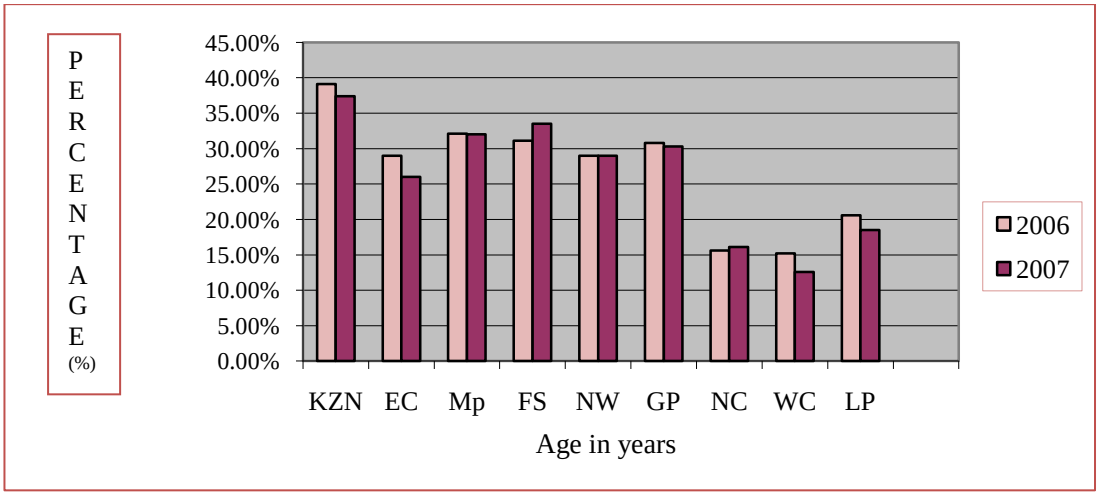

Figure 4: Provincial HIV infection prevalence rates for 2006-2007 (Tshabalala-Msimang, 2008, p.11).

Table 2:
*HIV prevalence estimates by district among antenatal clinic attendees, Gauteng, 2006 and 2007 (*Tshabalala-Msimang, 2008, p.15).

Gauteng	**N**	**2006 HIV prev (CI 95%)**	**N**	**2007 HIV prev (CI 95%)**
	6145	**30.8 (29.6 - 32.1)**	**7023**	**30.3 (29.1 - 32.8)**
City of Johannesburg	2 399	30.6 (28.8 - 32.5)	2 580	29.7 (27.9 – 31.5)
Ekurhuleni	1 765	32.3 (30.1 - 34.5)	1 795	33.4 (31.2 – 35.6)
Sedibeng	386	35.0 (30.2 - 39.7)	577	33.8 (30.0 – 37.8)
Tshwane	1 190	26.5 (24.0 - 29.0)	1 498	26.8 (24.6 – 29.1)
West Rand	405	34.6 (30.0 - 39.2)	503	32.4 (28.4 – 36.7)

There is strong evidence suggesting that the overall HIV prevalence in Gauteng has remained constant, where all districts show a decrease in 2006 and 2007 except Ekurhuleni, which showed a slight increase. See Table 2 for specific HIV prevalence rates in specific cities in Gauteng.

In terms of the demographics of the HIV prevalence, young people aged 18 years old have the highest incidence of HIV (Auvert et al., 2001; Gilgen et al., 2000; Kaufman, 2004; Shisana et al., 2005; 2009).

This raises concerns as 45% of the South African population is under the age of 20 years (Aggleton & Rivers, 1999; Stadler & Hlongwa, 2002). Thus a slow propagation of the rate of the pandemic among the youth would lead to a substantially low pace in the future (loveLife, 2000; Pettifor et al., 2004). Furthermore, a socio-economic shift of the course of the HIV preponderance has been observed. The virus is said to be progressing from the poor to rich South Africans (Ross & Deverell, 2004; Shisana & Simbayi, 2002). This indicated a negative relationship between respondents' socio economic status and the HIV prevalence. Ross and Deverell (2004) also found a relationship between HIV prevalence and increasing education levels (tertiary) among Black Africans. In terms of race, Simbayi and Shisana (2002) also found people of African descent to have the highest rates (10.2%) as compared to other races. This is within a context of the majority of the country's population being of African descent. Another main infection that is related to the spread of HIV is the sexually transmitted infections. Unprotected premarital sexual activity by young people might result in negative consequences such as contracting the HIV virus, STIs, unintended pregnancies as well as abortions (Parker, Makhubele, Ntlabati & Connolly, 2007; Thato, Hanna & Rodcumdee, 2005).

3.2.2 Sexually Transmitted Infections (STIs) in the Youth

Substantial amounts (4 million) of STIs occur each year among teenagers as well as sexually active higher learning students (Cecil & Pinkerton, 1998; Santelli & Kirby, 1992; Stadler & Hlongwa, 2002; Thato et al., 2005). Quinn and Mann (1989); UNAIDS (1998); Wylie and Jolly (2000) and Yarber and Parrillo (1992) highlighted that young women often have STIs such as Neisseria gonorrhea, chlamydia trachomatis and syphilis (See UNAIDS, 1998 for all types of STIs). STIs often exist without symptoms. Untreated STIs have serious health complication (UNAIDS, 1998). The main reason for the spread of the STIs is early sexual activity, which increases the likelihood of having multiple high-risk partners without consistent and accurate use of condoms (Brigham et al., 2002; Cromer & Brown, 1992; Eaton, Flisher & Aarø, 2003; Papalia, Olds & Feldman, 1998; Simbayi et al., 2005; Wylie & Jolly, 2000; Yarber & Parrillo, 1992). Furthermore, it was found that adolescents experimenting with alcohol and drugs are at risk of contracting STIs (Brigham et al., 2002; Eaton et al., 2003; Papalia et al., 1998; Simbayi et al., 2005; Stall, Coates, Mandel, Morale & Sorenson, 1989; Yarber & Parrillo, 1992). Homosexual men, young people engaging in prostitution and pregnant girls are also at high risk for STIs (Elford & Hart, 2003; Papalia et al., 1998; UNAIDS, 1998). Research on risk factors is consistently required to contextualise the state of the virus.

3.2.3 Pregnancy and Births in the Youth

Adolescents' pregnancy-birth rate makes one third of population (Cecil & Pinkerton, 1998; Sekwati & Hirschowitz, 2001; Stadler & Hlongwa, 2002). Cromer and Brown (1992) and Pettifor et al. (2004) highlighted that the highest pregnancy and STI rate is in young people aged 20-24 years. Forty percent of American women teenagers are impregnated before turning the age of 20 years (Cromer & Brown, 1992; Santelli & Kirby, 1992). Similarly, Pettifor et al. (2004) highlighted that most young South African womenhave their first pregnancy at the age of 18.5 years old. They further highlighted that these adolescents fall pregnant and also have STIs due to their failure to use condoms (Geffen & Gorton, 2008; Pettifor et al., 2004; Thato et al., 2005). Young women that become pregnant leave school, which could negatively affect their future (Santelli & Kirby, 1992).

3.3 Sexual Behaviour and Sexual Health in the Youth

3.3.1 Sexual Behaviour

Gurung (2006) defined healthy behaviours as "any specific behaviours that maintain and enhance health" (p. 173). Practising unsafe sexual relations with multiple partners has been indicated as one of the critical unhealthy behaviours and risk factors of HIV (Gurung, 2006; United Nations Population Fund (UNFPA), 2000). A brief overview of a description of sexual intercourse follows below. This clarifies the type of sexual activity referred to in this research as young people tend to describe it differently.

Sexual intercourse is defined by Soanes (2002) as "sexual contact in which a man puts his erect penis into a woman's vagina" (p.824). It has been found to result in health complications if not properly engaged in (Ogden, 2004). Human being sexual relations of anal intercourse with partners of unknown HIV status without protecting the self against body fluids have been found to be serious health risk factors (Elford & Hart, 2003; Peltzer, 2001a; Pettifor et al., 2005; Reddy, Meyer-Weitz, van den Borne & Kok, 1999; Shisana & Simbayi, 2002). Knowledge of HIV is an important step in the direction of protecting the self against the virus and its associated risk factors.

3.3.2 Levels of HIV Knowledge, Beliefs and Misconceptions in the South African youth

Condoms have been designed as a protective measure against bodily fluids that have the potential to

cause HIV. They do not guarantee 100% safety but provide some level of safety against sexually transmitted infections and viruses (Nyonyo & Schapink, 1997). However, Zimmerman (1998) indicated that encouraging condom use in teenage and young people increases promiscuity and consequently the HIV infection, because condoms are not reliable barriers against the infection. A vast majority of teenagers sleep around thinking that they are having safe sexual intercourse, whereas they are not 100% safe from contracting sexual infections (Zimmerman, 1998). On the contrary, some American research contended that increasing knowledge and the promotion of condom use in the youth would contribute to the reduction of the rate of HIV (Reddy et al., 1999; Wilson, Kastrinakis, D'Angelo & Getson, 1994).

In terms of HIV knowledge, Howard (2006); Shisana et al. (2005); Simbayi et al. (2005) and Simbayi (2008) highlighted that university attending youth as well as young women and men in townships have high levels of knowledge about the HIV virus. Varga (1999) highlighted that a large proportion of South African youth were equipped with facts to make safe and wise decisions to decrease their risks of HIV infection (Parker et al., 2007). Shisana et al. (2005; 2009) indicated that youth aged 15-24 years old (43% and 40%, men and women, respectively) had low levels in correct knowledge of HIV sexual transmission and prevention, and rejection of major misconceptions of HIV transmission. Shisana et al. (2005) reported some confusion in the youth concerning the virus. There was lack of clarity about whether AIDS is curable, and a lack of knowledge about whether HIV causes AIDS within the 15 to 49 year old age cohort. Furthermore, respondents were unsure about the HIV infection being reduced by having fewer sexual partners. Shisana et al. (2005; 2009) further highlighted that poor knowledge about the key HIV prevention strategy in the youth suggests insufficient attention on the area by HIV communication campaigns.

University students are reported to have thorough knowledge and understanding of condoms as protection against STIs and HIV and AIDS, and perceived themselves as safe from contracting the virus (Peltzer, 2000; 2001b). However, their behaviours do not reflect their basic understanding of the pandemic. Geffen and Gorton (2008) and Simbayi et al. (2005) also highlighted that the youth have high levels of HIV awareness and knowledge. Furthermore, the majority of the youth still engages in behaviours putting them at risk of being infected with the virus. Pembrey (2008) supported this statement and indicated that the prevailing high rates of HIV found across South Africa suggest that either the message portrayed by HIV prevention campaigns is not getting through to many people, or that people are receiving the information but not acting upon it.

A national study done by the South African Health Inequalities in 1994, on a sample of people aged 16-64 years revealed that there were high levels of awareness of the rapid spread of HIV including transmission through unprotected sexual intercourse. Furthermore, younger women were more likely to use condoms than any other women across age groups (Shisana & Simbayi, 2002). Varga (1999) also revealed that young respondents held quite a lot of misconceptions concerning the virus as well as condoms despite being the age group that uses condoms more than any other. The majority of the young women did not know that a healthy looking person could be infected with HIV (Reddy et al., 1999; Shisana & Simbayi, 2002). Moreover, Parker et al. (2007) reported strong agreement with faithfulness to one's sexual partner reducing the risk of HIV infection, but 50% of those respondents disagreed that by having fewer sexual partners one was less likely to be infected with HIV. This suggests that respondents were open to having multiple sexual partners even though they knew it was an HIV risk for them.

Shisana and Simbayi (2002) reported that some people, across all ages have incorrect knowledge concerning HIV, especially uncertainty with regards to the virgin myth (sleeping with a virgin will cure one of the HIV infection), HIV transmission through kissing and witchcraft. Ross and Deverell (2004); Van Dyk and Van Dyk (2003) highlighted misconceptions around sexual viruses (HIV) in a multicultural society such as South Africa. South Africans of African, Indian and White descent have different religions (Christianity, Hindii & Islam), ideas and misconceptions about sexual behaviours, its viruses and condom usage. Ideas range from the fear that condoms will remain in the vagina, as well as they tear during intercourse (Adih & Alexander, 1999). In addition, personal dislike of condoms because of the attitude that condoms decrease sexual pleasure depicted in the common phrase "you cannot eat a banana with its peel" (Francis, 2008). Furthermore, asking a partner to use a condom indicates suspicion of unfaithfulness (promiscuity), no open discussion of sexual matters between men and women (gender power relations) (Francis, 2008), and condoms use is an abrogation of the natural law (religious opposition) (Nyonyo & Schapink, 1997). People of African descent perceived condoms as a governmental means to control population growth, pre democracy (Spurgeon, 1992).

Previous literature on gender differences in condom attitudes suggests that more men (68%) than women (56%) had high HIV related risk behaviours (Simbayi et al., 2005). In particular, the majority of both men and women were under the impression that condoms get in the way of sex and that partners disliked condoms, and consequently did not use condoms. Moreover, young Xhosa and Zulu men aged younger than 35 years old held more negative beliefs and attitudes towards condoms than women (Reddy, 1999; Varga, 1999). Women who used condoms had more knowledge about modes of STI and

HIV transmission than men and women who never used condoms. These women also valued personal autonomy in sexual behaviour, and had a greater need for condoms and more positive outcome expectancies of refusing unsafe sex (Reddy et al., 1999). This shows that knowledge about infections enhances people's protective behaviours against those infections, while ignorance or lack of knowledge puts them at risk of the infections.

Mkhusane et al. (2008, p. 11) indicated the myths around condoms, namely, "the condoms are always painful when I use them"; "I am healthy so I don't need condom"; "condoms make sex feel unnatural"; "I ruin the moment if I stop to put on a condom. It's too much work"; "I can't get an erection when I wear a condom"; "condoms are not safe"; "condoms are not cool". These authors indicated that young people often report these myths in the TAC-Khayelitsha clinic (Mkhusane et al., 2008).

3.3.3 HIV Behavioural Risk Factors

Elford and Hart (2003), and Pettifor et al. (2005) mentioned further factors contributing to the increasing HIV epidemic in Sub-Saharan Africa (Buve, Bishikwabo-Nsarhaza & Mutangadura, 2002; Francis, 2008; Ross & Deverell, 2004). Namely, ignorance of the population, poor health care, social demographic and cultural conditions resulting in the predominance of one gender (men power and their sharing of women) (Holden, 2003; Varga, 1999). Furthermore, sexual violence of both men and women (Fassin & Schneider, 20003), and high prevalence rates of STIs and tuberculosis (Auvert et al., 2001; Buve et al., 2001), which increase the rate of transmission and replication of the viruses; and a lack of open communication about sexuality among the youth due to its mystification (Fassin & Schneider, 2003).

3.3.3.1 HIV Behavioural Risk Factors In the Youth

Factors affecting the likelihood of early sexual debut in the youth have been identified to be alcohol consumption, little parental supervision or support, poverty, lack of education and unemployment (Guttmacher Institute, 2005; McKee et al., 2004; Papalia et al., 1998; Reddy et al., 1999; Yarber & Parrillo, 1992). Substance use increases sexual health risk as drugged and or drunken people have a disoriented perception of reality (Fowler, 2008; UNFPA, 2000). Lack of condom use is also a result of substance use (Leigh & Stall, 1993; Solorio et et al., 2008). Alcohol abuse is a problem among the youth in South Africa. It puts them at a greater risk of contracting HIV because they are less likely to make

decisions that protect their health (Fowler, 2008; O'Grady, 2004; Ross & Deverell, 2004; The Gauteng Provincial government, 2005). The South African young men are at 20% risk of HIV contraction due to having sexual intercourse under the influence of alcohol and drugs (loveLife, 2009; Pettifor et al., 2004). "Alcohol can lead to sky high levels of teenage pregnancy, STIs and HIV and AIDS" (McCloy, 2008b, p.26). Shisana et al. (2009) reported that high-risk drinkers have a 13.9% HIV prevalence rate.

Sexual risk behavioural patterns among the youth are similar in the United States and South Africa. Young people generally have multiple partners and inconsistent or no intentions of condom use (DiClemente, 1992; Harrison & Steinberg, 2002; Parker et al., 2007; Pittman, Wilson, Adams-Taylor and Randolph, 1992; Shisana et al., 2005; Smereck, 1998; Stine, 2008; Thato et al., 2005). This was both in Black and White men and women (Cromer & Brown, 1992; London, 2005; Peltzer, 2000; Peltzer, 2001a; Peltzer, 2002; Quinn & Mann, 1989; Reddy et al., 1999; Shisana & Simbayi, 2002; Stall et al., 1989; Thato et al., 2005). These behaviours were also reported in university students by Peltzer (2000; 2001b). University students from the North West Province in South Africa indicated not being aware that a condom should be worn prior to any contact with a vagina (Peltzer, 2000; 2001b). Young people were ignorant of the knowledge of when to wear and or take off a condom. McKee et al. (2004) further highlighted that young people often reported not using condoms due to being faithful to their partners without the knowledge of whether the partner is also faithful or not. Most South Africans, particularly those of African descent also reported having poor access, and experiences of personal barriers such as shyness about buying condoms and difficulty discussing use with partners (McKee et al., 2004). Shisana et al. (2009) reported that the majority of young people aged 15 and above had one partner, were sexually active (Parker et al., 2007; Rehle et al., 2007), had more than one sexual partner, had used a condom at the last sexual encounter, even with a non regular partner (Rehle et al., 2007). Parker et al. (2007) indicated that HIV risk reduction requires sexual relation choices such as love, commitment to a single partner and to consistent condom use, and finding out one's HIV status, which however appears not to be supported by peers or broader social norms. As seen by a tolerance of multiple sexual partnerships in society. Social factors associated with health risk taking in the youth have been identified.

London (2005) and The Guttmacher Institute (2005) reported that educational, employment and recreational opportunities available to young 12 to 22 year old South Africans are associated with their sexual behaviour. Recreational opportunities can also be understood as social capital, people's membership to voluntary community organisations such as sports clubs, church, youth groups, stokvels, etc (Campbell et al., 2002). School attending young men participating in sports had reduced odds of

having sexual intercourse as compared to those not in schools. Furthermore young men and women belonging to sports clubs were much more likely to use condoms with casual partners and less likely to be HIV positive, as compared to older participants belonging to stokvels (voluntary savings clubs accompanied by social festivities) in South Africa, Carletonville (Campbell et al., 2002). Furthermore, condom use was increased with educated family members, in women, while it increased with employment and household education, in men. Condom use was reduced amongst women living in households made of traditional materials, as well as in urban and rural black men in school, working or participating in sports (Guttmacher Institute, 2005). This suggested that an environment with education and employment empower young people, through dialogue to make positive decisions about their future and sexual risk taking (London, 2005). These are factors that HIV prevention campaigns should consider.

Teenagers frequently recognise their risk of infection, but they are not always able to effectively prevent HIV infection or pregnancy as they do not always control their sexual relationship (Stadler & Hlongwa, 2002). Thomas (2005) reported that young women often report sexual coercion in intimate relationships. This lack of control and inability (fear) to negotiate condom use is related to their inconsistencies in condom use during sexual intercourse. Gender inequality, specifically unequal power relations between men and young women exposes the women to (The Gauteng Provincial government, 2005; O'Grady, 2004; Ross & Deverell, 2004). Pettifor et al. (2005) reported that young women with older partners "sugar daddies" were at increased risk of HIV infection due to their inability to negotiate condom use (McCloy, 2008; Shisana et al., 2005; 2009). Women reliant on their partner for money and food for survival often get sexually exploited (Ackerman & de Klerk, 2002; Aggleton & Rivers, 1999; Balyagati & Schapink, 2000; Eaton et al., 2003; Jackson & Highcrest, 1996; McKee et al., 2004; Nyonyo & Schapink, 1997; Parker et al., 2007; Simbayi et al., 2005). High-school teenagers were reported to engage in sex with older partners in exchange for gifts or money (McCloy, 2008). Aggleton and Rivers (1999); Fassin and Schneider (2003); and McKee et al. (2004) reported that young people living in poverty and on the streets are more likely to experience sexual coercion or rape and to engage in sexual activity for economic survival.

Baingana et al. (2003); Barnett and Whiteside (2002); Bhaskara Rao (2000); O'Grady (2004) and Pettifor et al. (2005) highlighted that 77% of girls and young women in their teens and early twenties are becoming infected with the virus than women in any other age group due to their biological makeup in addition to economic and survival needs (Brown, Jara & Braxton, 2005; Deverell & Ross, 2004; Elford & Hart, 2003; O' Grady, 2004; Papalia et al., 1998; The Gauteng Provincial government, 2005).

Research has highlighted that women have a 2-4% higher likelihood of HIV infection during unprotected sexual intercourse since a substantial portion of their genital tract is permeable to fluids (Dayton & Merson, 2003; Mwizarubi et al., 1997; O' Grady, 2004). Another explanation is that semen from infected men contains a higher concentration of HIV than women secretions (Aggleton & Rivers, 1999; Baingana et al., 2003; Shisana & Simbayi, 2002; UNAIDS, 1998).

Another issue of concern in the youth is their sexual debut. Young people often have early unprotected sexual activity (Auvert et al., 2001; Thato et al., 2005; Thomas, 2005). McKee, Bertrand and Becker-Benton (2004) highlighted that most young people in the world become sexually active between ages 10 and 20 years. Papalia et al. (1998); Pittman et al. (1992); Pollack (1992) and Wilson et al. (1994) reported that young American women engage in sexual activity at the ages between 12-19 years old. Cromer and Brown (1992); Harrison and Steinberg (2002); Pettifor et al. (2004) and Stadler and Hlongwa (2002) indicated that young South Africans start engaging in sexual intercourse, with 50-60% never using condom between the ages of 12-17 years (Knox, 2008; Parker et al., 2007; Shisana et al., 2005; 2009). McGrath, Nyirenda, Hosegood and Newell (2008) reported that youth in rural KwaZulu Natal have their first sexual intercourse at ages 18 and 19 years. Young people provide various justifications to their early sexual debut (see McGrath et al., 2008). Given all these sexual risk behavioural tendencies, it is of importance to understand the developmental processes, psychological and physical taking place during this stage. An understanding of their developmental stage and processes would assist with the identification of proper HIV prevention strategies that are relevant to their crises in context.

3.4 Erik Erickson's Theory of Psychosocial Development

3.4.1 Introduction

A developmental theory that was considered to explain the developmental processes occurring in the teenage years of maturation was Erik Erickson's theory of psychosocial development. This theory focuses on the psychological and social aspects of development as playing a vital role in the personality that results in later years (Erikson, 1963). This theory is relevant for this research since it allows for an understanding and contextualisation of the processes involved during the growth phase of the youth, particularly because the youth accounts for the highest HIV rates in South Africa. This understanding may inform current interventions implemented to reduce the HIV prevalence. This theory comprises of seven stages (Ewen, 2003). However, only stages five and six of identity formation and crises, and

intimacy and isolation were discussed as they are of relevance to the focus of this research.

3.4.2 Identity Formation

Identity is defined as "sameness, oneness or the distinguishing attribute of personality of an individual" (Liebert & Wicks-Nelson, 1981). According to Erikson (1963), identity formation occurs during the fifth stage of development, identity versus role confusion (also known as identity crisis), which is between the age of 12 and 21 years. Erikson (1963) highlighted that this stage is characterised by changes in the physical body and a re-surfacing of sexual urges. The growing and developing youth are faced with a physiological revolution within them and are primarily concerned with attempts of consolidating their social roles (Ewen, 2003).

In the search of a new sense of continuity and sameness, teenagers have to fight many crises that arise in their earlier years. Erikson argued that teenagers form their identity by modifying and synthesising earlier identification into a new psy-chological structure that is greater than the sum of its parts, and not by modelling themselves after other people (for instance role models celebrated in the media) (Erikson, 1963; Miller, 1993). This suggests that teenagers ascertain and organise their abilities, needs, interests and values to be expressed in a social context and not imitate those possessed by celebrities. Successful alignment of the individual's basic drives together with their endowment and opportunities is called ego synthesis (Erikson, 1960; Liebert & Wicks-Nelson, 1981). This is a sense of ego identity, which is the accrued confidence in one's ability to maintain inner sameness and continuity (Erikson, 1960; Liebert & Wicks-Nelson, 1981). It gains strength only from whole hearted and consistent recognition of accomplishments, achievements that have meaning in their culture.

The teenager continuously defends their own identity in early life, from or against any coercive pressure that could make them over identify with either one of their parents, and other social roles outside their family such as friends or television stars. The latter occurs when the teenager is exposed to people proximal to their family, and experiences conflicting with values taught in family versus those taught outside their family (Erikson, 1963). The teenager has to organise their experiences consistently with their interests in order to avoid identity confusion. The search for identity plays an important role during teenage years as it is the time at which teenagers make efforts to make sense of their self (Papalia et al., 1998). This healthy process builds up on the achievements from earlier developmental stages (trust, autonomy, initiation and industry) (Miller, 1993; Papalia et al., 1998). This suggests that the teenager would not have substantial trouble making sense of their self and coping with the crises of life in

general, if the previous stages were endured positively. However, identity confusion occurs if these were not positively (psychologically) endured and resolved.

3.4.3 Identity Confusion, Doubt and Risky Behaviours

Contrary to identity development, identity confusion or diffusion results from teenagers' failure to organise all this according to their own needs but model everything that they see in their environment (Engler, 2009; Erikson, 1960). Teenagers temporarily keep themselves together through over identifying with specific figures to the point of apparent complete loss of identity with heroes of cliques and crowds. At this stage, not even falling in love is entirely or primarily a sexual matter. Teenagers' love; to a considerable extent is an attempt to arrive at a definition of one's identity by projecting one's diffused self image on another and seeing it reflected and gradually clarified (Erikson, 1963).

All this is unavoidable as it is a time in life when the body changes its proportions radically, when genital maturity floods the body and imagination with all manner of drives, when intimacy with the opposite/same sex approaches and is, on occasion forced on the youngster, and when life lies before one with a variety of conflicting possibilities and choices (Erikson, 1963). Similarly, teenagers often feel vulnerable and succumb to peer pressure or exploitation (Engler, 2009; Santelli & Kirby, 1992). This is often linked to their questioning of their sexual attractiveness and sexual identity, thereby increasing seated doubts about themselves.

Furthermore, lack of participation and commitment in occupational or extracurricular activities such as sports, community work or volunteering puts them at risk of behaviour with negative consequences such as early pregnancy (Erikson, 1963). It is believed that such minor commitments help teenagers develop the 'virtue of fidelity' (sustained loyalty, faith or a sense of belonging to a loved one, friends and companions), they also feel important; and can most identify with a set of values, an ideology and religion, political movement and a creative pursuit (Erikson, 1963).

Erikson (1963) maintained that the opposite of ego-identity, role confusion, occurs when the teenager has confusion over their purpose, unclear feedback, ill-defined expectations and also conflict between roles with opposing value systems (Engler, 2009; Miller, 1993). Thus the importance of organising and integrating various role models into one consistent identity by the young person as role models have different values and attitudes that must be modified in accordance with ones' values and interests (Erikson, 1963). On the other hand, Erikson argued that some degree of identity confusion is normal as

it accounts for the chaotic nature of much teenage behaviour (Papalia et al., 1998).

This stage is a time of "moratorium", a time of experimentation with different ideologies, which ultimately has to be resolved with a form of identity (Baloyi, 2007; Erikson, 1960; 1963; Marcia, 1996; Miller, 1993). Furthermore, the teenager has "a mind of the moratorium, a psychosocial stage between childhood and adulthood, and between the moralities learned by the child and ethics to be developed by the adult" (Erikson, 1963, p.262-263). McKee et al. (2004) indicated that young people are vulnerable to the HIV virus due to their immaturity in social, emotional and physical developmental aspects.

This stage is characterised by confusion and crises, and risky behaviours including sexual activities (Ewen, 2003). These range from frequent unprotected sexual intercourse, multiple partners, drug use and alcohol consumption, which alter their perception of reality and reduce their likelihood of using condom if they were to have sexual intercourse as discussed in section 3.3.3.1 HIV behavioural risk factors in the youth (Eaton et al., 2003; Papalia et al., 1998; Pettifor et al., 2005; Schiff & Zeira, 2005; Simbayi et al., 2005; Wekerle & Wolfe, 1999). Hence the highest HIV and AIDS prevalence in their age group as discussed in section 3.2.1 HIV in the youth. Resnick (1992) indicated that teenagers and young people often make decisions and engage in sexual behaviour and report pregnancy as a result of their development and change in climate, social attitudes and the provision of services.

Erikson (1963) indicated that early adulthood is characterised by a crisis to establish intimate relationships with others that involves personal commitment. This stage is called intimacy versus isolation. Relationships formed at this stage include amongst others, special sexual relationships or bond (Liebert & Wicks-Nelson, 1981). This intimacy is far beyond an obsessive reduction of sexual tensions, but is a mutuality of sexual experiences that regulate the differences between the sexes and individuals. True intimacy suggests that one is willing to be partly defined by one's mate (Engler, 2009). Failure to develop intimacy results in isolation, which is characterised by settling for highly, stereotyped interpersonal relations (Erikson, 1963). Erikson (1963) indicated that a young adult will not be successful in developing intimacy unless the teenage identity crisis was thoroughly resolved. Thus success in this stage is dependent on the success of the previous stage; as such a young adult needs to be secure with themselves prior to fusing with another person (Ewen, 2003). In the same light establishing and settling on healthy and risk free behaviours and personality characteristics in teenagehood is crucial especially for one to protect self and partner from deadly infectious diseases. Stage of Erikson's theory is important in that they are inter-relational; the next stage is dependent on the previous. For one to develop a healthy identity, one needs to endure and successfully resolve crises of each stage, particularly

the teenage identity.

3.4.4 Critique of Erickson's Theory of Psychosocial Development

Erikson provides a comprehensive theory explaining the experience of young people as they develop into maturity. His theory accounts for both continuity and transition in personality development. The continuity is accounted for by drawing connections between early childhood experiences and aspects of adult personality. However, certain shortfalls of his explanation have been pointed to. Engler (2009) indicated that Erikson's research depends heavily on illustrative case studies that are open to varied interpretations. Furthermore, the theory provides an idealized description of typical development patterns. Thus it is not well suited for explaining the colossal personality differences existing among people (Engler, 2009). Erikson's theory attempted to capture each stage with a single concept, sometimes leaving out other important development tasks. For instance, Erikson said that the main task for young adults is to resolve the conflict between intimacy and isolation; however, another important developmental task in early adulthood is career and work (Engler, 2009; Ewen, 2003).

There have been many critiques of Erikson's identity development theory, particularly with regard to sex and culture. A recent study concluded that Erikson's theory is based on the Northern European values of independence, self direction and autonomy, as opposed to the values, of family life and harmony with other countries in the universe (Rotheram-Borus, Dopkins, Sabate & Lightfoot, 1996). Furthermore, Erikson's focus on his own identity crisis may have led to the formation of his psychosocial theory; it is reasonable that his culture would inspire the goals and struggles that he includes in his theory. Peer pressure is influential in teenagehood, thus Erikson's theory would only be helpful if the teenager was from a Northern European culture. However, Engler (2009) indicated that one of the strengths of Erikson's theory is that it considers the society or context at which the teenagers is developing, and as a result Eriskson studied effect of various cultures on people's personality and values.

Erikson's theory has been cited as more applicable to boys than girls (Engler, 2009). Identity development has been hypothesized to be different for boys than girls. For girls identity development focuses on interpersonal relationships and letting their inner identity unfold, whereas for boys, identity development is more about actively seeking individuality (Rotheram-Borus et al., 1996). Thus if girls and boys develop their identities differently, and hold alternate goals as more important, then the struggles of teenagehood cannot be generalized between the two sexes. As a result an alternate theory or

model would be required to make such generalisations, or exclusively focus on either gender. An alternate model was Marcia's identity status of psychological identity development, which is based purely on the idea that one's sense of identity is determined largely by the choices and commitments made regarding certain personal and social traits (Marcia, 1966; 1980). Another theory was that of Brigham and Stryker, which focused on the identity development of girls called *Stages of Socio-emotional Development for girls* (Bingham & Stryker, 1995).

A further criticism of Erikson's models is that not everyone has an identity crisis. For the teenager that is struggling amongst their peers who hasn't had a crisis of identity, there are no models by which to facilitate their journey. Erikson's stages claim that one who hasn't earned *ego identity* will be *confused* and under *despair*, which is a bleak view. In his static model there is no hope for these individuals. Marcia's statuses do outline an individual who hasn't had an identity crisis, but this individual is apparently not under any struggle amidst peer pressures (Rotheram-Borus et al., 1996).

In conclusion, the alleged struggle of teenagers seeking to become their own young man or woman, when the pressure to succumb to peer influences has become so intense is a struggle which is dependent upon the individual's specific sex, cultural values, peer influences, distractions, family life and innate workings. By learning the model of teenage development presented by Erikson, one may be able to better understand teenagers. Modelling teenage development is however, within itself a struggle. The synthesis of mental, social, and physiological variables for each individual is so unique and complex, that an encompassing model is almost not feasible. In order to be best prepared to analyze teenagers' development, the downfalls of Erikson's and Marcia's theories, the alternative theories proposed such as that of Brigham and Stryker, and the possibility of a distraction from an identity crisis, or a lack of an identity crisis should also be considered (Johansson, 2006).

The next chapter focuses on South African HIV prevention campaigns and the sources of HIV and AIDS information for the youth. It also discusses the evaluation outcomes or impact of some of the campaigns. Programmes and interventions are often evaluated to assess their effectiveness and their worth (Weiss, 1998). These help with making recommendations for improvement for an even greater impact and are of value for funders.

CHAPTER 4

Stop “them” from Contracting HIV

4.1 HIV Prevention Campaigns/Services Implemented in South Africa: Young People’s Source of HIV Information

South Africa has a challenge to reduce the HIV incidence rates and improve the sexual health of the population, particularly youth. This could create a healthier cohort and result in reductions of the HIV rate for the population in general; it will also create a shift in the norms and practices that support healthy lifestyles (Stadler & Hlongwa, 2002).

Bertrand et al. (2006) claim that mass media and communication (radio, television and print media) have played a role in creating awareness of the virus, the modes of transmission and the means of prevention. South Africa has a highly developed mass media communications infrastructure. There are four open broadcast commercial television stations, SABC (South African Broadcasting Corporation) 1, 2, and 3, and E-TV, as well as two subscription-based services, M-Net and DSTV (Digital Satellite Television) (SABC, 2008). There are 38 commercial radio stations and 70 community radio stations registered with the National Community Radio Forum (NCRF). There are also 16 daily commercial newspapers, one bi-weekly, 25 weekly newspapers and a number of smaller circulation titles (Shisana & Simbayi, 2002). Broadcast media provides for communication in all South African languages, although English dominates broadcasting. It is evident from the above that mass media widely reaches many South Africans. It is estimated that 99% of people have access to radio, 75% to television and 7% readership of newspaper (Shisana & Simbayi, 2002). Harrison and Steinberg (2002) indicated that 82% of young people watch television (Coulson, 2002).

The emphasis of South African HIV prevention campaigns has been on identifying and promoting safer-sex practices as sexual transmission is pivotal in the HIV epidemic. The ‘ABC’ strategy of HIV prevention is implemented in the country (Pembrey, 2008; Stall et al., 1989; UNAIDS, 1998; Yarber & Parrillo, 1992). ABC strategy prevention interventions can be adapted and combined in a balanced

approach that will vary according to the cultural context, the population being addressed, and the phase of the epidemic (UNAIDS, 2004; UNESCO, 2006). It includes various safe sex strategies that inform individuals who are in a position to decide for themselves to choose to reduce their risk of exposure to HIV (UNAIDS, 2004, 2007a; UNESCO, 2006).

'*A' is for Abstinence*, that is, not engaging in sexual intercourse or delaying sexual debut. This can be in the form of delaying sexual debut or adopting a period of abstinence at a later stage, access to information and education about alternative safer sexual practices to avoid HIV infection when sexual activity begins or is resumed (UNAIDS, 2004; 2007a).

'B' is for Being faithful, to one's partner or reducing the number of sexual partners provides safety against the virus. The lifetime number of sexual partners is a very important predictor of HIV infection. Thus, having fewer sexual partners reduces the risk of HIV exposure. However, strategies to promote faithfulness among couples only lead to lower incidence of HIV when neither partner has HIV infection and both are consistently faithful to one another (UNAIDS, 2004; 2007a).

*'C' is for Correct and Consistent Condom use***,** to reduce the risk of HIV transmission for sexually active people, couples in which one person is HIV-positive, sex workers and their clients (Reddy et al., 1999; Wilson et al., 1994). Research has found that if people do not have access to condoms, other prevention strategies lose much of their potential effectiveness (UNAIDS, 2004; 2007a).

The majority of the behaviour strategies in the country have been implemented through the media programmes (Bertrand et al., 2006). This include Beyond Awareness campaigns, multimedia edutainment programme such as Soul City and Soul Buddy'z, community AIDS awareness forums, peer educators-including condom demonstrations and distribution, social care programmes for people living with HIV and youth, loveLife (Bertrand et al., 2006; Coulson, 2001). These services are rendered through television, radio and print media. In addition to these mass media strategies is the distribution of condoms, voluntary counselling and testing, primary and secondary school life skills programmes and STI treatment (Bertrand et al., 2006; Coulson, 2002; Gauteng Provincial Government Pamphlet, 2005).

The promotion of condom use in South Africa has achieved limited success, as evident in the widespread and increases in the number of young people infected with STIs and HIV (Reddy et al., 1999; UNAIDS, 2008). This is despite recently reported declines in the HIV prevalence rates. There has not been total eradication (or even major declines) of the virus; thus, more work still needs to be done to

achieve this. However, condom use had increased among young people and in men who have more than one sexual partner, as well as in women aged 15–24 years old (Kaljee et al., 2005; Parker et al., 2007; Simbayi, 2008; UNAIDS, 2008; Wilson et al., 1994).

Furthermore, the media has also been identified as a powerful 'influencer' of premarital sexual attitudes and behaviour in the youth. This is due to its presentation of sexual intercourse as a fun and exciting activity while seldom showing the risks of not protecting the 'self' against sexual infection (Papalia et al., 1998). McKee et al. (2004) maintain that young people are heavily influenced by advertising and media images that typically idealise sex, often without protection. This is in relation to their development stage as described by Erikson (1963). Thus media interventions need to emphasise messages contrary to unsafe sexuality. McKee et al. (2004) indicated that young people are vulnerable to the HIV virus due to their immaturity in social, emotional and physical developmental aspects. This may link to their developmental stage, identity confused, as the youth experiment with different ideologies at this time (Erikson, 1963). HIV prevention campaigns should take such factors into consideration in their efforts to combat risky behaviour in the youth.

Shisana and Simbayi (2002) argued that mass media had a few limitations, inasmuch as it had been identified as a good communication platform for HIV and AIDS related issues. Limitations include mass media communication as constrained by a unidirectional approach to messaging as there is little opportunity for audience feedback. There are different types of communication approaches, that are driven by mass media (broadcast, print, outdoor), small media (posters, leaflets, booklets, utility items such as caps, T-shirts, badges or pins), folk media (songs, drama, events), dialogue-oriented approaches (helplines, health services, participatory theatre) and social networking (dialogue at peer and community level) (Shisana & Simbayi, 2002). Haverkos and Edelman (1989) also suggested the need and importance of using a wide variety of advertisement in HIV prevention campaigns. Most campaigns, such as loveLife encompass a combination of different media approaches.

Howard (2006) asserts that 40% of the South African university undergraduate youth made use of written media (magazines and newspapers) to gain access to information regarding HIV and AIDS, 29% used Television, 11% spoke to their health care providers and a further 11% received HIV and AIDS information as provided by their secondary (schools) and tertiary educators or services provided in educational institutions. Clinics and hospitals were also places that people could use to gain information concerning HIV and AIDS (Gauteng Provincial Government Pamphlet, 2005). None of the university undergraduate youth relied on their siblings for information regarding HIV and AIDS, less that 5%

spoke to their parents and relatives, and less than 1% received such information from Church (Howard, 2006). However, Brown, Jara and Braxton (2005), and Francis (2008) reported that communication with teachers, parents, friends, peers as well as newspapers, television and magazines were identified to be other sources of HIV and AIDS information by South African respondents. McKee et al. (2004) highlight the adverse difficulty adults have to influence young people who are exploring their own independence. The opinions and actions of peers carry more influence than parents or elders in the community. Friends often become the important source of acceptance and self-esteem and propel them into risk-taking behaviours including unprotected sex (McKee et al., 2004).

There are often similarities as well as differences in information disseminated by HIV prevention campaigns. Simbayi and Shisana (2002) maintained that respondents recalled messages emphasised by HIV prevention campaigns, namely condom use, AIDS skills, faithfulness, abstinence and limiting number of partners (Shisana & Simbayi, 2002). These were ranked as the most emphasised messages. Whereas messages around religious and cultural values, caring for people living with HIV and AIDS and the rights of people with HIV and AIDS were ranked as having the least emphasis (Shisana & Simbayi, 2002).

4.2 What Should HIV Prevention Campaigns Teach Young People?

Programmes that will *teach* sexually active youth both men and women consistent condom use, resistance of peer pressure, and *promote* treatment for sexually transmitted infections and partner reduction, sexual negotiation skill (women in particular) are essential for the eradication of high HIV rates (Reddy et al., 1999; Thato et al., 2005). Aggleton and Rivers (1999) emphasised the need for the maximization of men opportunities to be sexually healthy as this would also have indirect effects on women's positive sexual health. Preventive programmes should further consider the social context (contextual factors) such as culture and poverty making women submissive to promiscuous partners, negatively affecting risky behaviour change in the youth and putting them at HIV risk (Kirby, 1992; Loyce, 1998; Resnick, 1992; Yarber & Parrillo, 1992).

Raj, Mukherjee and Leviton (1999) and Yarber and Parrillo (1992) emphasised that effective interventions for the youth as judged by self-reports of behaviour change have many programme components in common, including the use of a cognitive-behaviour theoretical framework to guide interventions, a narrow focus on HIV prevention, skills building, cultural and developmental tailoring, personalization of risk, and the enhancement of self-efficacy (Kirby, 1992). Furthermore, they

highlighted that these interventions involve small groups, multiple sessions with adequate time per sessions, and trained professionals or peer educators to facilitate programmes. These interventions used combined educational strategies, such as lecture discussions, role plays, videos, modelling and practical skills such as decision making, resistance to unhealthy sexual practices, coping with triggers of high-risk sexual behaviour, values clarifying, safer sex communication or negotiation, and condom use (Raj et al., 1999). These cognitive-behavioural interventions may produce behavioural change among socially, sexually, and ethically diverse youngsters regardless of their place of implementation (schools, rehabilitation centres or through community-based organisations for the youth) (Raj et al., 1999).

McKee et al. (2004) also made suggestions in relation to prevention campaigns. They argued that a strategic communication approach should be used to target young people. Strategic communication "is a promising response to the HIV and AIDS epidemic that has been vastly underutilised to date. It combines a series of elements, extensive use of data, careful planning, stakeholders' participation, creativity, high quality programme elements and levels, among other things, that stimulate positive and measurable behaviour change among the intended audience" (McKee et al., 2004, p.26). Such strategies are to include entertainment education, hotlines and computer counselling, life skills approaches in and out of school, parent-child communication, adolescent-friendly services, youth clubs and centres and adolescent friendly clinics. This approach would specifically comprise of music, music videos, sports, TV and radio programmes, educational videos, prevention programmes through drama usage, public service announcements, variety, quiz, and game shows as young people are the largest consumers of entertainment. In addition to these, newspapers, magazines and radio messages on safe sex, reproduction health issues and life skills could also be integrated into such an approach (Francis, 2008; McKee et al., 2004). Furthermore, there is a suggestion that telephone counselling on sex and reproductive health topics or computerised counselling systems allowing the youth to explore issues while using a completely anonymous question and answer system could also be included. Peer educators could also facilitate talks and discussion with their peers about safe sex using their home language (McKee et al., 2004; Mkhusane et al., 2008). South African telephone lines offering diverse counselling on health and social issues are Khomanani, Childline, thethajunction, Lifeline and the Rape crisis (Shisana & Simbayi, 2002).

Furthermore, there could also be educational programmes during or after school or through school clubs as extracurricular or community based activities from an early age throughout the young age. Gilad (2008) highlighted that young people who have sex education in their schools were significantly more likely to use condoms consistently than those who did not. Furthermore, programmes working with

parents to encourage them to take the responsibility of educating their children about sex and reproductive health issues, as well as adolescent friendly services, youth clubs and centres that would be easily and comfortably accessible to the youth could be established (McKee et al., 2004).
The HIV National Strategic Plan (NSP) (2008) aimed to improve and expand HIV education, prevention and treatment services for the youth; and also to implement life skills, HIV and sex education and prevention programmes in 98% of all primary and secondary schools by 2011. The sole reason for doing this is because young people are important to the South African future. Their goals for achieving this plan are, through increasing media messages about HIV, gender and sexuality for the youth; encourage HIV testing among youth people; implement interventions to reduce HIV infections in young people, particularly in young women; increase access to youth-friendly clinics; develop programmes to reduce drug abuse in young people; and encourage discussion about HIV and sexuality between parents and children (NSP, 2008). This strategy deemed one of the best ways that could be used to involve the youth in HIV prevention efforts whilst educating them. NSP (2008) contended that a joint effort and commitment from the youth themselves, government, civil society, business, religious associations, sports' clubs, educators unions and the entertainment industry is essential for effective behaviour change in the youth.

The next section discusses detailed descriptions of specific South African HIV preventive campaigns aimed at increasing the youth's awareness, knowledge and consequent HIV related attitude and behaviour change. These campaigns are government as well as non-government initiatives to fight against the spread of HIV. These are Soul City and Soul Buddy'z, Lifeline and Khomanani (telephone help lines); loveLife; stepping stones as well as services ran *in institutions*, such as Career and Counselling, and Health and Wellness Centre and Treatment Action Campaign, among others ran *at a community level*.

4.3 Various South African HIV Prevention Campaigns

There have been some notable national efforts combating the HIV and AIDS pandemic in the country. These are briefly described and critiqued below.

4.3.1 Soul City and Soul Buddyz

The Soul City Institute is a multi-media health promotion and social change project. Soul City is guided by the theory of social and behavioural change (Social Learning Theory) (Bertrand et al., 2006;

Pembrey, 2008). The programme examines a wide range of health and development issues, imparts information and impacts on social norms, attitudes and practice such as domestic violence and HIV and AIDS in South Africa (Bertrand et al., 2006; McKee et al., 2004). It is primarily targeted at adults, Black and Coloured South Africans between the ages of 16-65 years old (Coulson, 2001; Soul City Institute of Health and Development Communication, 2009). Its impact is aimed at the level of the individual, the community and the socio-political environment as evident on Figure 5.

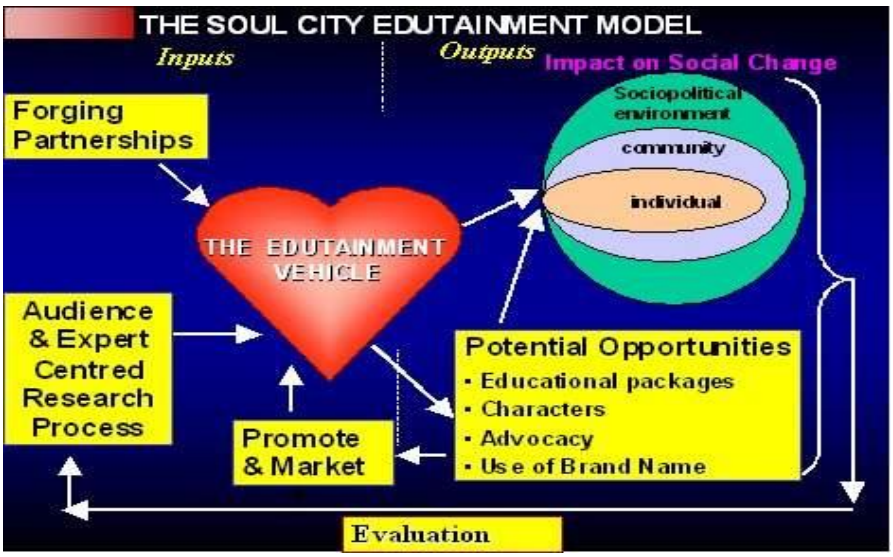

Figure 5: Edutainment model of soul city (Soul City Institute of Health and Development Communication, 2009)

Soul City reaches more than 16 million South Africans, through drama and entertainment (Soul City, 2007). At present it has had a reach of 75.3% of youth aged 15-24 years in 2009 (Shisana et al., 2009). Furthermore, 87% of the adult population was estimated to have been reached by one or more of the Soul City programming components in 2006. This was consistently high across both rural and urban areas and across all education levels (Soul City, 2007).

Soul City Series are sponsored by Old Mutual, BP and donor funding from the Department of Health, Department for International Development, European Union, Ireland Aid and the Royal Netherlands Embassy. It has produced 8 series and premiered its 9th series on SABC 1 on 19 January 2009 at 20h30. See Figure 6 overleaf for a logo of the latest, 9th series.



Figure 6: A logo or poster for the Soul City Series 9 (Soul City Institute of Health and Development Communication, 2009)

Issues that have been dealt with in each series over a period of 9 years include, mother and child health, HIV and AIDS, housing & land, TB and smoking, household energy, violence, alcohol misuse, personal finance, hypertension, violence against women, small business development, rape, disability, depression, asthma, adult education and literacy. Each Soul City series is made up of, a prime time television series of 13, 1 hour episodes; 45 daily radio drama episodes for 15 minute; 3 full colour booklets per series, an advertising/publicity campaign; and an advocacy campaign around one of the major topics (Soul City Institute of Health and Development Communication [IHDC], 2009).

An evaluation of Soul City tested the theoretical model, and demonstrated that the greater the amount of exposure to Soul City the more they are to adopt health-seeking behaviours (Coulson, 2001). Soul City has consistently achieved top audience ratings and has won numerous prestigious awards for excellence in television drama. In South Africa most rural audiences are best reached by radio, while urban audiences are best reached by television. The television and radio series are powerful vehicles to shift social norms and impact on knowledge, attitude and practices (IHDC, 2009). The radio series is broadcast on all nine SABC regional radio stations (in nine of the eleven South Africa's official languages) and on many community radio stations. Furthermore, booklets, which deal with series topics in detail are serialised, and inserted in newspapers throughout South Africa in synergy with the electronic media (IHDC, 2009). These booklets are also distributed through clinics and other government distribution channels, non-governmental and community based organisations, business and educational facilities. At least 3 million booklets, in totality, are distributed per series (IHDC, 2009).

Health and development professionals are often suppose to know what is best for audiences, which they get wrong. Experts are often out of touch with the very people they hope to communicate with (IHDC, 2009). All Soul City series are developed through a rigorous formative research process, which involves consulting both audiences and experts to ensure that the materials are effective. Thus the lived health and social experiences and voices of the communities are captured, through formative research, giving the materials resonance and credibility (IHDC, 2009). This formative research process is central to the Soul City IHDC's methodology.

The approach has nine steps, which in summary entails a wide **c**onsultation with experts and key stakeholders on the topic issues, i.e. government as well as civil society and (non-governmental and community based organisations, activists and academics). The audience members are also consulted about what they know, their concerns, their attitudes to the issue and the barriers that exist to positive change. The media, in the form of role players and the creative team (producers, directors and scriptwriters) discuss the topic, the issues to be included in the edutainment product and the way in which these issues will be dealt with, and a blueprint is produced to work off in developing the TV and radio dramas. A draft is produced and tested with the experts, role players and audience members. Full scripts are produced and go through writing and testing processes until the issues have been well integrated while ensuring that the product maintains its entertainment value (IHDC, 2009). The material is produced, broadcast, printed and distributed. Lastly, the materials are evaluated; the lessons learned are integrated into future productions.

Evaluation is an essential part of the Soul City's IHDC strategy. It helps determine impact and is important for accountability to the public and funders. All Soul City projects are independently evaluated (IHDC, 2009). Soul City has evaluated their programmes or series from one to seven. The latest series to be evaluated, seven was conducted through a national household survey using quantitative methods. Approximately 1 566 adults aged 16 - 65 across all provinces and language groups, in South Africa were interviewed (Soul City, 2007).

Series seven had a high impact and succeeded in achieving many of its intended outcomes. Firstly, exposure to Soul City TV was associated with a 16% increase in people willing to help those on ARV treatment and a 19% increase in people willing to care for someone ill with AIDS. Soul City radio was responsible for an additional 35% of people helping care for a child as a result of AIDS illness or death in the family. Radio, print and multi-media interventions were responsible for 5 - 8% increases in people testing for HIV in the preceding year. Furthermore, Soul City print materials had content specifically

focusing on reducing behaviours putting people at high risk for HIV and thus showed impacts across all dimensions of condom use. Importantly, Soul City print was responsible for a 21% increase in condom use with a regular partner as well as increases in self-efficacy to prevent HIV infection. In particular, young people (16-24 years) exposed to Soul City reported consistent condoms use, significant increases in inter-personal communication, positive perceptions of subjective social norms, decreased negative peer pressure, intention to change behaviour and maintain positive behaviour (Coulson, 2001). Lastly, Soul City was highly successful in increasing the sense of community empowerment around addressing HIV prevention (Soul City, 2007).

Soul Buddyz targets 8-14 year olds (Soul Buddyz, 2008). Components of the intervention include a television drama, Soul Buddyz Television, a radio intervention-consisting of drama, and interactive talks between children and adults, and a Lifeskills Booklet for Grade 7. Moreover, there is a face-to-face intervention called Soul Buddyz Clubs, implemented in primary schools in collaboration with the Department of Education (Soul Buddyz, 2008). A brief summary will be provided given that the focus of this study was particularly on young adults and not children.

An evaluation of the Soul Buddyz series was conducted through interviews with a sample of 1 500 children aged 8-15 across the country, with a nationally representative sample (Soul Buddyz, 2008). The Soul Buddyz series dealt with issues of HIV and AIDS and how it affects children, amongst other topics. Findings indicated that children exposed to Soul buddyz had good knowledge, attitudes and behaviours of HIV (Soul Buddyz, 2008).

Eighty two percent of children across all races in the age cohort of 8-15 years old reported having watched Soul Buddyz TV. The establishment of a series that appeals across race groups was a significant achievement in South Africa (Shisana et al., 2009; Soul Buddyz, 2008). In terms of impact, Soul Buddyz was highly successful in achieving positive attitudes towards people living with HIV and AIDS. Furthermore, despite the fact that many children already knew some of the basic facts about how HIV is transmitted and how to protect oneself from infection, Soul Buddyz was successful in achieving measurable increases in knowledge of HIV (Soul Buddyz, 2008). Furthermore, the Soul Buddyz interventions were successful in increasing knowledge of ARV treatment amongst children as well as the incurable nature of HIV and AIDS (Soul Buddyz, 2008).

4.3.2 Lifeline

LifeLine Southern Africa is a Southern African Development Community (SADC) based Non-Profit Organisation, first established in Cape Town in 1968 (LifeLine, 2005). It has 19 affiliated Community Centres spread throughout South Africa, Botswana and Namibia, governed by an Executive Board and administered by a Secretariat. LifeLine Johannesburg was established in 1969 by the South African Department of Health and has been promoted as part of national and regional advertising and small media campaigns (McKee et al., 2004). It is affiliated to LifeLine Southern Africa and LifeLine International (LifeLine, 2005). Some of the reasons for the initiation of LifeLine were high levels of crime and violence, (including domestic violence) and the HIV and AIDS pandemic, which compounded the impact of stress and pressure of people living in South Africa. This has led to a marked increase in the number of people who are in need of support and counselling in order to manage their lives and relationships, and to contribute fully to the community (LifeLine, 2005).

Thus, it specialises in telephone counselling, and manages the service on behalf of the Department of Health. The South African Department of Health had an agreement with Telkom, the national telecommunication company, for Lifeline to utilise a system of regional loops that allowed the hotline to be shared by 18 Lifeline regional centres (McKee et al., 2004). In Southern Africa there are 18 LifeLine centres, along with 13 outreach centres, co-ordinated nationally to extend help to each other and to the individuals in need throughout the country. LifeLine is used as a referral by many other community based organisations throughout the country (LifeLine, 2005).

LifeLine offers a 24 hour confidential crisis intervention service available at no cost, to all sectors of the community; it regards itself as an emotional first aid station. Furthermore, a wide range of counselling services are offered throughout the greater Johannesburg area. It uses a staff of one thousand volunteer counsellors. It had a low call volume during its early phases. These included, a high number of callers failing to connect due to the line being busy, training curricular and standards of counsellors were inconsistent in different regions, counsellors had difficulties in ensuring rapid, appropriate responses to myths and rumours related to the disease (McKee et al., 2004). Furthermore, promotion and advertisement of the line resulted in more problems emerging that compromised the quality of the service.

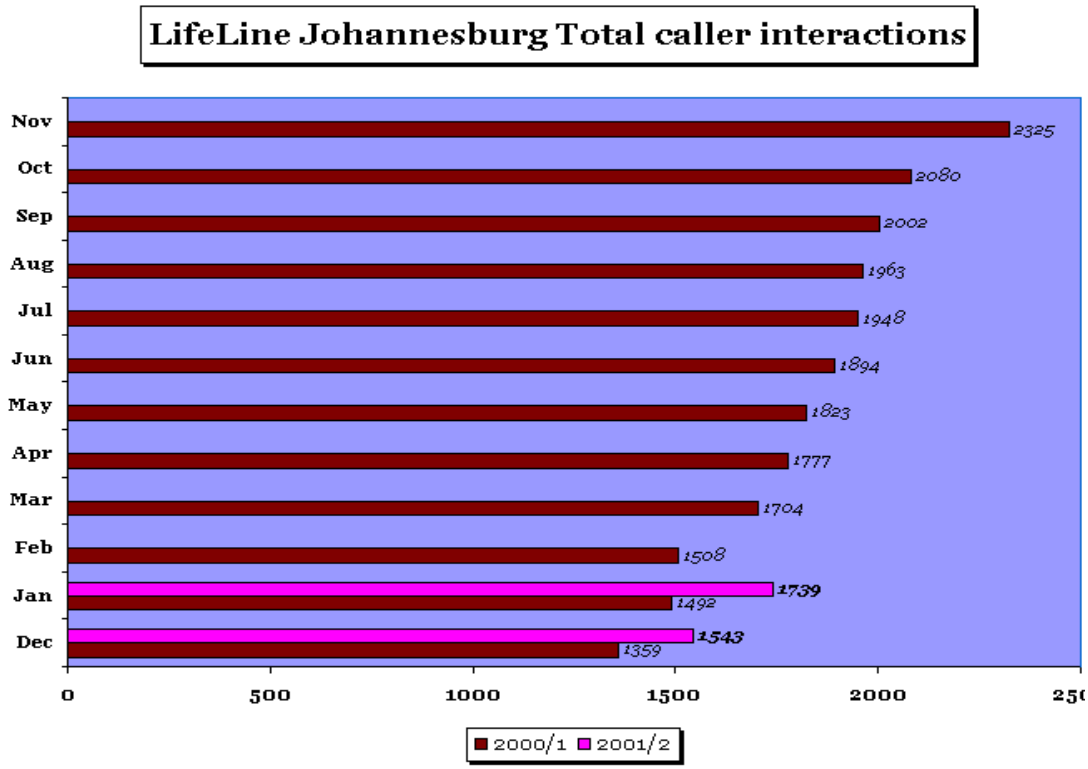

Figure 7: Caller rate to LifeLine Johannesburg (LifeLine, 2005)

The Department of Health revamped the hotline in 1998 by adding sufficient incoming lines and an appropriate technical service to attend to the rising call rates. See Figure 7 for 2000 and 2001 callers' rates to lifeline. The author could not find the latest lifeline caller rates. It has been reported that an evaluation of the lifeline would be difficult to follow. However, the increasing volume of calls to approximately 30.000 in a month is an attest to its importance as a source of HIV and AIDS information throughout South Africa. Furthermore, usage of multiple languages spoken by counsellors has greatly enhanced the number of sub-groups within the population that the hotline reaches (McKee et al., 2004). The Beyond Awareness Campaign was introduced by the Department of Health in 1997 as part of the improvement and promotion of lifeline and, include the number as part of the national red ribbon AIDS logo (McKee et al., 2004).

4.3.3 Khomanani (Beyond awareness)

Beyond Awareness campaigns (I and II) were commissioned by the Department of Health in 1995 and 1997 respectively. Under the umbrella term of "The Beyond Awareness Campaign —Tools for AIDS Action" or Khomanani ("caring together") I and II (Coulson, 2001; Khomanani, 2006). The terms Beyond Awareness and Khomanani are used interchangeably to refer to the same campaigns. The

Khomanani Campaign has two major focus areas. These are prevention; and treatment, care and support of HIV and AIDS (Pembrey, 2008).

For this study, information on Khomanani I was unavailable. Khomanani II is a South African government mass media and communication campaign which aims to reduce HIV and its impact by raising awareness of HIV and AIDS, TB and STIs (Khomanani, 2006). It is a dynamic campaign involving extensive use of the mass media, public relations and social mobilization (Pembrey, 2008). It includes traditional advertising on television, radio, print and outdoor communication. In addition, awareness is further raised through below-the-line communication in the form of pamphlets, leaflets and posters distributed through the Red Ribbon Resource Centre (RRRC), 1 300 community ambassadors in 27 sites around the country (Khomanani, 2006).

It had a much stronger strategy that extended beyond the traditional boundaries of the mass media and involved working partnerships between government and civil society. Beyond Awareness II was a two year campaign that ended in October 2000 (Coulson, 2001). The 'Beyond Awareness' campaign, which ran between 1998 and 2000 and concentrated on informing young people about AIDS through the media (Pembrey, 2008). It was criticised a year after the end of their campaign for failing to have any assessment of their impact. Although they had evaluated many of their component parts, they had no evidence of the impact of their mass media campaign or the campaign as a whole (Coulson, 2001). As a result, the AIDS Communication Team (ACT) was set up by the government in 2001 to manage the 'Khomanani' campaign. This group used the mass media and celebrity endorsement to bring across HIV prevention messages, with a particular emphasis on encouraging HIV testing (Pembrey, 2006). Moreover, an impact assessment of the Khomanani II campaign was conducted between 2004 and 2006 (Khomanani, 2008). The research focused on three campaigns, namely, HIV Prevention, Care and Support and the Khomanani brand. The findings revealed high level of recognition of the Khomanani brand, and also awareness of what Khomanani does. Five million South Africans had heard about Khomanani day, while 9% watched it on TV. Watching Khomanani on TV was strongly associated with HIV testing (Khomanani, 2006). Khomanani programme has reached approximately 65.3% youth as an audience. The youth aged 15–24 years had a reach of 44.9 and 65.3% in 2005 and 2009 respectively (Shisana et al., 2005; 2009).

The Youth Prevention Campaigns revealed a great success. Exposure to both the Choice series and the prevention adverts was associated with much lower sexual risk behaviour within the 15 to 19 year old age group. Over 2 million young people watched the Choice TV series. Watching Choice was associated

with increased condom use with non-regular partners, regular use of condoms with the main partner, and abstinence as a way of practicing safe sex. Thirty percent of the youth who watched Choice had been for an HIV test with their partners (couples testing). Furthermore, half of the youth had discussed HIV testing with their partners. Sixty six percent of young people who had contact with or visitation from a Khomanani Ambassador had gone for HIIV testing and were more likely to embrace a range of positive behaviours and increase their knowledge (Khomanani, 2006). This showed the impact of one-on-one interactions with young people.

People exposed to Khomanani also knew about HIV treatment, ART and its incurable nature. Furthermore, the community action through 27 sites in the country, 3 in each province had increased the reach of the other Khomanani media (Khomanani, 2006). One-on-one interactions between Khomanani ambassadors and the youth had a significant impact on their knowledge, attitudes and behaviours, such as increased VCT uptake, individual HIV testing, as well as couples discussions and actual HIV testing; increased knowledge about ART (Khomanani, 2006).

4.3.4 The Treatment Action Campaign (TAC)

TAC was established on 10 December 1998 in Cape Town, South Africa. It is situated in Braamfontein, Johannesburg, South Africa. As an organisation, TAC works to ensure that all people living with HIV are treated with dignity and have access to effective treatment through the public health system (Equal treatment, 2008). It also runs a large treatment literacy programme to provide scientifically accurate information to people with or at risk of HIV, their family, friends and supporters on the prevention and treatment of HIV (TAC, 2008). TAC is driven by the aim to regulate and reduce new HIV infections. It encourages the youth to delay sex until they are adults and to promotes responsible behaviour in sexually active youth. The organisation also offers counselling and support groups to the youth, to provide them with information on HIV, sex, condoms, pregnancy, contraception and relationships. Furthermore, it also serves as a site for HIV testing (Equal treatment, 2008). The author did not find any evaluation or assessment of impact of the campaign. However, TAC's efforts as an organisation have resulted in many life-saving interventions. These include the implementation of country-wide mother-to-child transmission prevention and antiretroviral treatment programmes, and also increasing levels of awareness and knowledge of the virus within the youth (TAC, 2008). TAC is currently in existence and reaches out to the South African population.

4.3.5 Stepping Stones

Stepping stones is a 50 hours HIV prevention programme. It is a behavioural intervention that was recently implemented in the Eastern Cape Province of South Africa (Jewkes et al., 2008). As an intervention it aims to improve sexual health as well as stimulate critical reflection on participants (Jewkes et al., 2008). It does this through utilising knowledge, risk awareness, and communication skills.

Behavioural interventions such as this one have been widely used in developing countries (Kamali et al., 2003; Welbourn, 1995). However, there has been a major concern of a lack of evaluation of such interventions, including stepping stones. Its effectiveness was initially assessed in 2006; prior to implementing it by the same authors, Jewkes and colleagues. The intervention was found to primarily measure the HIV incidence including changes in knowledge, attitude and sexual behaviour (Jewkes et al., 2006).

Jewkes et al. (2008) sought to understand the impact stepping stones had on HIV and HSV-2 (Herpes simplex type 2 virus), an STI. They found the programme to not have evidence of reducing or positively impacting the incidence of HIV. However, it had a 33% reduction of HSV-2. However, stepping stones yielded significant improvements in numerous HIV risk behaviours. Particularly with men, there was a low proportion of men reporting perpetration of intimate partner violence, transactional sex as well as problematic drinking (Jewkes et al., 2008). Women only had significant changes in transactional sex.

4.3.6 Campaigns Established in University of the Witwatersrand

The University of the Witwatersrand runs health services for its students. These are Counselling and Careers Development Unit (CCDU) and Campus Health Wellness Centre (CHWC), with qualified nurse at CHWC and psychologist at CCDU, Personal Communication, March 19, 2009). These two centres are utilised by students at their convenience. Furthermore, some colleges' institutions in the Johannesburg Braamfontein area have established HIV prevention campaigns, or often invite HIV prevention campaigns such as loveLife to render workshops to teach or increase students' HIV knowledge.

Campus Health Wellness and CCDU Centre are services that the students at the University of the Witwatersrand can access to gain HIV and AIDS education and support services (Campus Health & Wellness Centre, 2008; Counselling and Careers Development Unit, 2008). CCDU aims to facilitate the career development and general well-being of students. It is the first line of support if students require assistance in making career decisions, developing job search skills, acquiring information on study opportunities or requires personal counselling in addition to HIV and AIDS related issues.

Campus Health Wellness Centre is a clinic located in the university. It offers a wide range of services including HIV testing (voluntary testing and counselling-VCT), there are also doctors and nurses to assist student with health issues. HIV Pre- and post-test counselling aims to empower the client to make productive use of the test results (WHO, 2006). In the case of an HIV- positive diagnosis, the aim and role of counselling is to minimize emotional distress, medical and social impact of diagnosis on the student as well as their family. Counselling also hopes to encourage individuals to remain uninfected in the case of a negative diagnosis (Page et al., 2006; Pembrey, 2008; Shisana et al., 2005; Van Wyk, 2007).

The VCT system as well as the peer education system that are established in the university were initiated and are funded with the help of Higher Education HIV and AIDS Programme (HEAIDS) (HEAIDS, 2004). HEAIDS is a partnership between the South African Universities Vice-Chancellors (SAUVCA), the Committee of Technikon Principals (CTP) and the national Department of Education (DoE) (2004). It was launched in 2001 with the aim of improving the capacity of Higher education institution in South Africa in the prevention, management and mitigation of the impact of HIV and AIDS. Thirty five South African University and Technikon institutions, including the University of the Witwatersrand are associated with the programme (HEAIDS, 2004).

Literature on VCT services indicate that the number of VCT sites in South Africa has increased significantly in recent years, with 4 172 operational by November 2006 (Pembrey, 2008). Despite this progress, there are concerns with the quality of VCT services in some areas as well as who accesses and utilises the VCT services. Research suggests that counsellors are not always adequately trained, may lack medical knowledge about HIV, and are often overworked (Goldberg, 2008). It seems women are accessing testing more readily than men in South Africa. Researchers think that this is due to fears amongst men that their HIV-positive status will be disclosed through testing, and that stigmatisation will follow. Surveys suggest that some men see no value in knowing their HIV status, viewing such knowledge as a burden (Pembrey, 2008).

Some researchers have made recommendations pertaining to HIV prevention, in particular, to policy of HIV testing. Smith (1998) suggested that the best way to monitor the spread of the HIV epidemic is through routine HIV testing, tracking the disease and warning those at risk (Shisana et al., 2005; WHO, 2006). Smith (1998) further highlighted that the current method of tracking the epidemic- voluntary testing and counselling has not controlled the spread of the disease. The researcher contended that the need to save lives and control the epidemic should take precedence over the right to privacy (Smith, 1998). Smereck (1998) on the other hand highlighted that attempts to controlling the spreading the HIV and AIDS should not only focus on individualistic solutions such as abstinence and safe sex, but rather partner notification of the HIV status. This was deemed the best solution given that a vast number of people are sexually active with the majority making up the high risk group. On the contrary, Senak (1998) highlighted that partner notification of the HIV status would not reduce the spread of the epidemic. This opposition related to the protection of the patients or clients through the confidentiality laws and anonymous testing. Disclosure of the HIV status could create discrimination and harassment of the client (Pembrey, 2008). However, clients should be encouraged to inform partners of their HIV status. In South Africa, HIV positive people are encouraged to share their status with partners (Shisana et al., 2005; 2009; Van Wyk, 2007).

MacPhail, Pettifor, Coates and Rees (2008) conducted a study on South African youth attitude towards HIV voluntary counselling and testing. Focus group discussions were held with teenagers and parents in South African townships to establish the perceptions of and needs for VCT among young people. They found that there was reduced HIV risk behaviour and increased use of care and support services among adults accessing HIV voluntary counselling and testing. Adolescents had limited experience of VCT, were afraid of knowing their HIV status, and felt that testing was only for symptomatic individuals. The youth indicated that they would likely disclose their HIV status to family members deemed to be most supportive. They particularly, reported fear of stigma and discrimination; and rarely referred to the community as a source of support.

4.3.7 Other Campaigns Implemented in Communities

HIV and AIDS information is available in other formats such as interactive approaches such as AIDS plays and community meetings, health facilities-clinics and hospitals, schools, parents, faith based organisations (including churches), youth groups, AIDS organisations, initiation schools and sports clubs (Shisana & Simbayi, 2002). Affiliation to such extracurriculars was related with a growing sense of agency and control over their situations and protected themselves against contacting the virus

(Francis, 2008). In Johannesburg there are also HIV and AIDS clinics. For instance in Hillbrow, a high rise buildings area near Braamfontein, has an HIV clinic where the community, including young people can access HIV information and preventive measures.

4.3.8 [L]oveLife

[L]oveLife is a HIV prevention campaign for young South Africans (loveLife 2009; Pettifor et al., 2005). It aims to effect behaviour change through promoting themes of positive sexuality, shared responsibility, healthy and positive lifestyle and a HIV free South African young generation (Pembrey, 2008; Stadler & Hlongwa, 2002; The loveLife generation, 2008). Put in other words, it aims to achieve significant behaviour change for the purpose of reducing HIV, sexually transmitted infections and unwanted pregnancy among the South African youth (Coulson, 2001; loveLife, 2004; Parker, 2003; Pembrey, 2008; Pettifor et al., 2004). It was launched in September 1999 (Coulson, 2001; Harrison & Steinberg, 2002; Parker, 2003).

Its target group (audience) is the youth aged 12-17 years old (Coulson, 2001; Harrison & Steinberg, 2002). The age range often goes up to 24 year olds when loveLife conducts research surveys. This was evident in a study by Pettifor et al. (2004), which used young adults aged 19-24 years old in their investigation of loveLife's effectiveness in HIV prevention amongst the youth. The researchers observed that teenagers below 16 years had low HIV incidence rates (<5%). As a result loveLife concluded that ages below 16 years old created grounds for a fairly rapid behaviour change. McKee, Bertrand and Becker-Benton (2004) contended that in order for young people to develop healthy behaviours that protect them against HIV and AIDS, programmes need to address adolescent and teenage groups. Hence the focus of loveLife on 12 to 17 year olds to reduce the total prevalence of the virus through sustained behaviour change.

[L]oveLife uses a broad based motivational youth development approach designed to alter young people's existing high risk sexual behaviour. It also promotes healthy sexual behaviours such as abstinence and delayed initiation of sexual activity among teenagers, reduction in the number of sexual partners, secondary abstinence among already sexually active teens, and consistent condom usage (loveLife, 2004; Pembrey, 2008). Its fundamental premise is that more open communication about sex, sexuality and gender relations is necessary for sexual behaviour change. This is mainly due to the fact that sexual behaviour drives the HIV epidemic; therefore, changes in established sexual behaviour

patterns are essential to reducing HIV infection rates (Harrison & Steinberg, 2002).

Stadler and Hlongwa (2002) claim that a challenge for loveLife is transforming patterns of communication within communities. Open communication in communities is still a challenge as many rural areas prefer not to talk openly about sexual issues lest they propel the youth into premature sexual activity or relationships (Aggleton & Rivers, 1999). However this has began changing as young people are making efforts to talk about sexuality in the community (Harrison & Steinberg, 2002). One of the many ways that loveLife is bridging the lack of communication between the youth and community, is through encouraging the establishment of youth representative teams. McCloy (2008b) highlighted that this could be a solution to address the alcohol and drug problem faced by young people in communities. The "booze buster task team" could enable young people to stand up and fight together, against usage of these substances by the youth. One of the solutions they could implement could be approaching tavern and shebeen (illegal taverns or bars in the townships) owners to not sell alcohol to under-aged youngsters. This is given that alcohol facilitates the spread of the virus in the youth as discussed in section 3.3.3.1 HIV behavioural risk factors in the youth.

[L]oveLife's premise is operationalized through a national multi-media awareness, and information and education programmes to drive a social response that mobilises social networks as part of a nation-wide programme of education outreach and support to the youth (Harrison & Steinberg, 2002). It also prioritises access to good quality reproductive health services for adolescents (Pembrey, 2008; Parker, 2003). It has five intervention components, namely the media, the loveLife call centres, loveLife's support and capacity building efforts in communities through its National adolescent friendly Clinic Initiative (NAFCI) and the loveLife franchise, and face-to-face interaction with the youth through the implementation of loveLife-style programmes and loveLife community events (loveLife, 2009).

[L]oveLife is driven by their model of behaviour change, as per its five intervention components (Stadler & Hlongwa, 2002). This model is depicted below on Figure 8 overleaf. It shows that awareness is driven by the advertising campaign. This supports the clinical and youth services, outreach, motivational and educational activities, which may independently or in a combination lead to behaviour change (Stadler & Hlongwa, 2002). Furthermore, it is believed that communication that exists independent of loveLife, which may occur due to increased awareness of the epidemic through other channels, may also lead to behaviour change.

4.3.8.1 [L]oveLife's Model of Behaviour Change

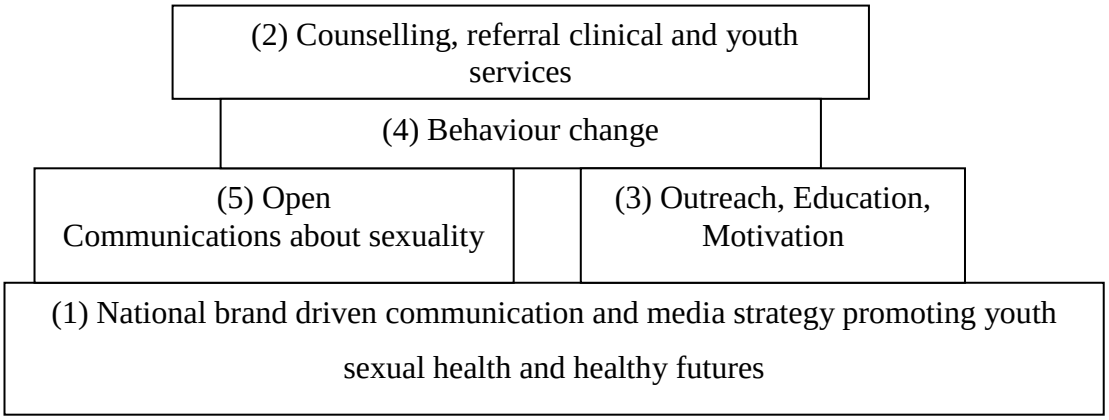

Figure 8: [L]oveLife's model of behaviour change (loveLife, 2004, p.4)

The organogram represented in Figure 9 supports the model of change as it explains the theoretical constructs of the intervention. Pettifor et al. (2004) claim that loveLife hopes to instil behavioural determinants such as HIV knowledge and perceived risk, together with attitudes, norms, a sense of future and self-efficacy through exposure to their programme. Behavioural determinants will lead to behavioural outcomes such as changes in levels and characteristics of sexual activity amongst the youth. The impact of which is shown by the biological indicators (reductions in the prevalence of HIV, STIs, and pregnancy) (Pettifor et al., 2004).

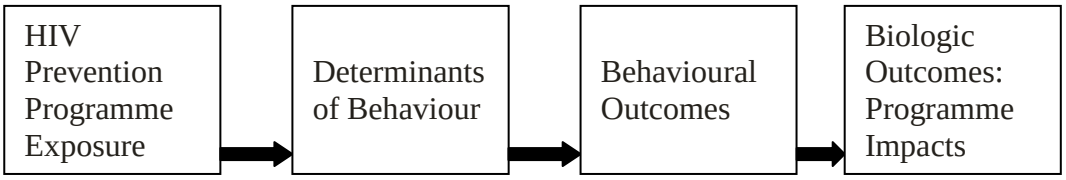

Figure 9: Theoretical Construct for Intervention (Pettifor et al., 2004, p.14)

4.3.8.2 The Role of the Media

The mass media programmes through radio, television, print and billboard provide access to knowledge with the hope that it will influence attitudes toward sexuality (Parker, 2003). There are two national advice and counselling service telephone call centres (thethajunction and Parentline). Furthermore, there are local community outreach programmes in the form of love Tours, love Trains, loveLife games and these are often directed to schools by the community peer educators. There is also the community youth 'Y' centres, within the community outreach. It provides a venue in the community where teenagers can be involved in positive recreational activities, vocational training, and access to peer education

programmes to promote healthier lifestyles. Y centres also provide clinical and preventive services related to reproductive health needs of teenagers including counselling and HIV testing, access to contraceptive services, and diagnosis and treatment of STIs. Lastly, adolescent friendly services are provided at clinics that are accredited by loveLife's NAFCI programme to increase utilisation of clinical services and promote health seeking behaviour in the youth (loveLife, 2009; Stadler & Hlongwa, 2002). This shows that all of the loveLife components work hand in hand; there is an interrelationship between each of them that reinforces the other (loveLife, 2009; Pettifor et al., 2004). Loyce (1998) emphasised repetition of the basic information about the virus as essential in educating at high risk individuals. Reinforcing of other components comes through the emphasis that young people need to experience loveLife in order to enhance internalisation of its messages. For instance thethajunction and outreach programmes are advertised in loveLife magazines (UNCUT), television and radio. This enables young people to experience loveLife programmes through interactive educational intervention that are implemented by young people themselves (groundbreakers and Mpintshis) (Harrison & Steinberg, 2002). Seventy eight percent of young people indicated that they had heard about loveLife as a general programme from television, followed by 70% who had heard about it from school, 59% heard of it from radio, 50% had seen it on a billboard. While hearing from friends, family member or Y-Center were all below 40% (Harrison & Steinberg, 2002). This research project focused primarily on the loveLife's media, youth helpline call centre (thethajunction) and the youth community outreach programmes to gather information on whether or not the youth at higher learning education institutions in braamfontein are utilising loveLife services.

The human science research council (HSRC) also indicated in their national surveys that 67% of the respondents indicated that advertisement relating to HIV and AIDS made them think about and change their risky behaviours; and that 44% used condoms because of the virus (Shisana & Simbayi, 2002). The Gauteng province had 60% and 45% rates of advertisements and condom use due to the virus, respectively. This suggested that media was a driving force behind people changing their HIV risky behaviours and take protective measures.

4.3.8.3 The lovelife Call Centres: thethajunction and parentline

[L]oveLife has two national toll free help lines, namely, the youth line called thethajunction and the parent-line (loveLife, 2004). This research only focused on thethajunction as a youth line. [T]hethajunction or "place to talk" is a popular resource for sexual health information, counselling, and referrals to support services and clinical care (loveLife, 2009). It provides an immediate interface with

the loveLife campaign for young people (Stadler & Hlongwa, 2002). Its toll free numbers are advertised on billboards, electronic and print media. The response has been fairly large indicating the level of demand existing for a confidential counselling and information centre for the youth (loveLife, 2009).

4.3.8.3.1 Description of the Centre

Eighty three percent of the operators of the call centre are social workers and qualified counsellors (loveLife, 2004). The counsellors are trained on basic and advanced sexual and reproductive health, HIV and AIDS, communication, abuse, parent counselling services, stress management and teambuilding. The remaining operators (17%) are groundBREAKERS and ex-groundBREAKERS, who mainly responsible for dealing with telephonic requests for loveLife publications and providing basic information about loveLife and sexual and reproductive health. These groundBREAKERS have participated in a formal 'learnership', NQF level 2 qualifications. This qualification enhances allows them future employment as call centre agent (loveLife, 2009). As a form of ensuring good counselling skills, telephone conversations are recorded and five calls per counsellor are reviewed on a monthly basis by call centre management in order to monitor the quality of counselling services delivered (loveLife, 2004).

The latest accessed statistics of thethajunction indicated that it received the majority of the calls (84%) as compared to 17% directed to the Parentline (lovelife, 2004). More than 250 000 calls were placed to the thethajunction line monthly with counsellors being able to assist 75 000 calls on average.

In terms of the reasons for calling thethajunction, callers indicated that they sought counselling on relationship issues (33%) and information about loveLife as well as to request publications (Pettifor et al., 2004). See Figure 10 overleaf. Calls about relationship issues were specifically around wanting to know about dating and expectations in a relationship (45%), breaking up with a partner (12%), coerced or forced sex (11%) and also family relations (11%). Callers specifically requesting counselling on HIV and AIDS and sexual issues increased slightly from 2003 to 2004 (loveLife, 2004; Stadler & Hlongwa, 2002).

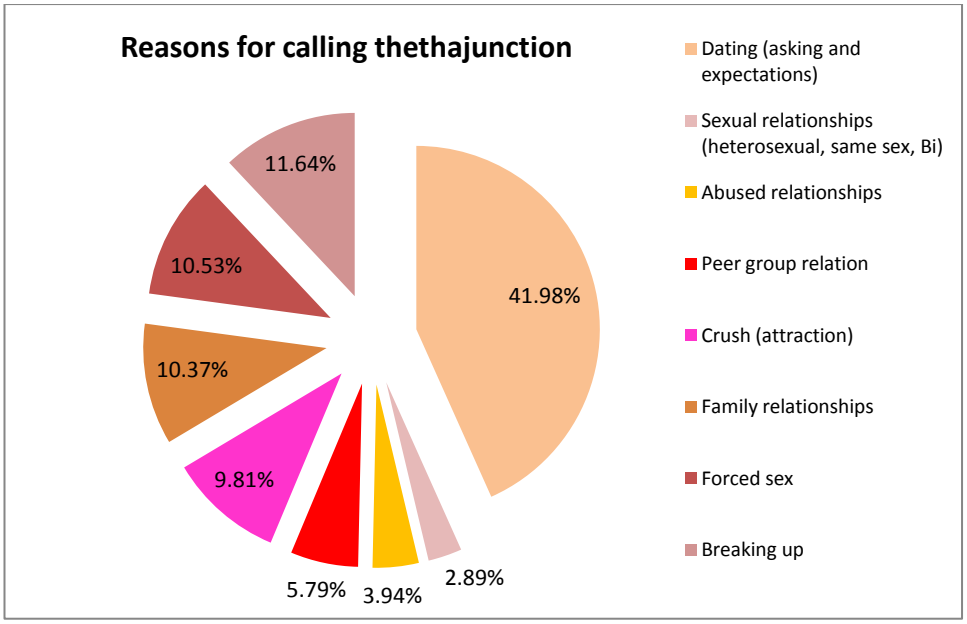

Figure 10: Reasons for calling thethajunction and calls about relationships in 2004 (loveLife, 2004, p.58)

Friends (30%) were reported to be the primary source of information about thethajunction. This trend was reported from 2002 to 2004, and was highlighted to imply a confidence in the service, and high levels of brand awareness as friends were telling each other about loveLife's services. See Figure 11 for all the other sources of information. The secondary source of information was the media, particularly television (12%) followed by radio (11%) (loveLife, 2004). The least source of thethajunction was parents (1%). In summary, there were declines in the percentage of where people had heard about thethajunction from.

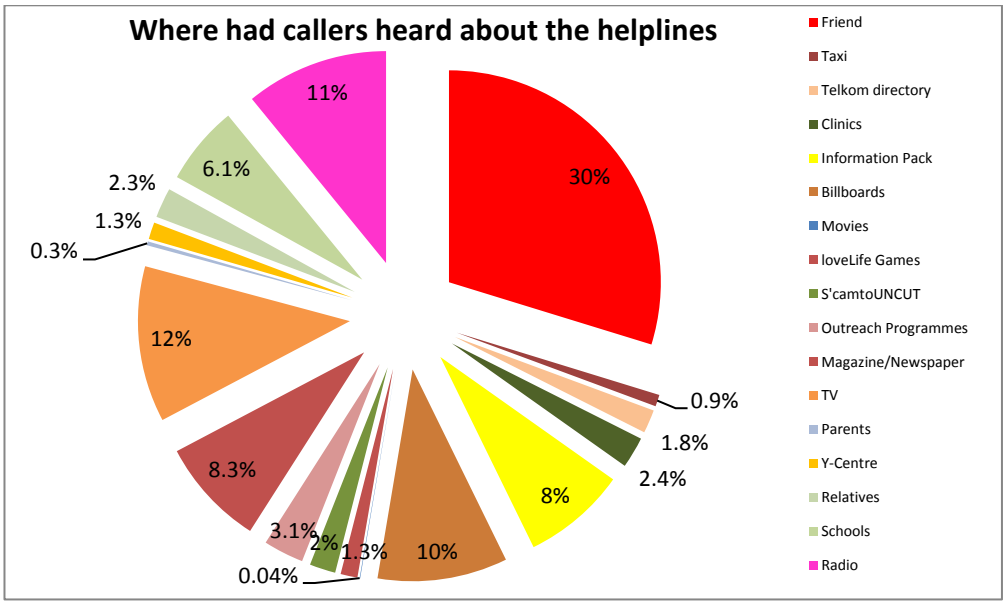

Figure 11: Statistics of where callers heard about the help lines in 2004 (loveLife, 2004, p.57)

In terms of the demographics of callers, an average of 504 697 callers provided their demographic information (loveLife, 2004). This was in the form of gender, language and location (loveLife, 2004). The most preferred medium of communication or counselling was English or Afrikaans (42%); Xhosa or Zulu (27%); or Sotho or Tswana (19%) (loveLife, 2004). See Figure 12 for graphical schemata of the caller language preference. However, the operators noted that the selection of languages did not necessarily mean that it was the caller's home language. The callers' home language was Zulu and South Sotho and Xhosa.

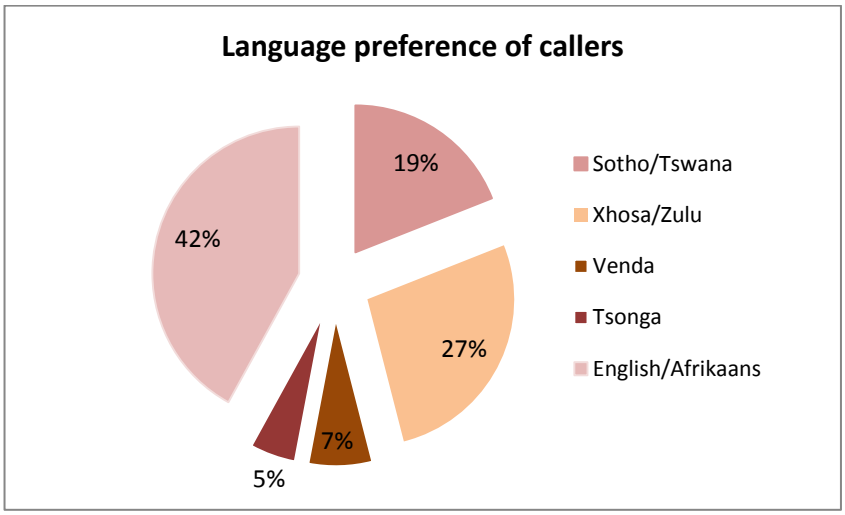

Figure 12: language preference of callers (loveLife, 2004, p.55)

In terms of the gender distribution of callers, more calls were made by women (58%) than men 42% (Stadler & Hlongwa, 2002). The majority of callers were identified to between ages 15 to 20 years old (loveLife, 2004). Most calls were received from Gauteng (19%); followed by Limpopo (18%), the Free State (16%), the Eastern Cape (14%) and KwaZulu-Natal (13%). Fewer calls were received from Mpumalanga, North West Province, Western and Northern Cape (loveLife, 2004). The helpline had become a particularly important resource for youth in isolated villages and rural areas. Sixty five percent of calls to thethajunction are from young people who live outside a major city (loveLife, 2009).

4.3.8.4 Lovelife's Community Outreach Programmes

Pivotal in the community outreach efforts are loveLife Y-centres (provincial youth centres, Gauteng-Orange Farm), franchises (youth-serving community organisations affiliated with the loveLife brand) and adolescent friendly clinics (NAFCI) (loveLife, 2004). Community outreach efforts are enhanced through the loveLife Games, designed to promote loveLife-style through a national sport competition

for schools. Y-Centre offers sports and game programmes (Nkosi & Molekwa, 2008). The efforts to promote loveLife-style are also enhanced through loveTrain and loveTours that reach out to young people in rural areas in South Africa that are not close to loveLife facilities (Harrison & Steinberg, 2002). [L]oveLife-style is about a positive lifestyle amidst high risk behaviour; a lifestyle of education, recreation and entertainment, whilst also learning about sexual health, legal rights and choices (loveLife, 2004). Furthermore, the loveLife-style emphasises informed choice, shared responsibility, positive sexuality, and the awareness and ability to fight against coercion, peer pressure, transactional sex, pessimism and low self-esteem in the youth (loveLife, 2009).

NAFCI aims to improve the quality and accessibility of sexual and reproductive health services at public clinics. Furthermore, loveLife aims to build the capacity of local community organisations (NGOs or CBOs) to respond to the needs of young people with regards to sexual and reproductive health through its franchises (loveLife, 2004; 2009). Franchises provide the youth with programmes such as Cyber-Ys that enhance their literacy in computers. Further activities such as debating facilitate their increase in assertiveness, creative thinking skills and ability to communicate. Another programme is Body-Ys, a healthy lifestyle programme designed to empower young people to value, evaluate and manage their health though sports and recreational activities (loveLife, 2000). [L]oveLife argues through its community outreach programmes that when individuals engage with loveLife's messaging on a personal level they are able to understand the message, internalise the message and change their behaviour (loveLife, 2009).

In Johannesburg, there are a few franchises and no Y centre or NAFCI. The national headquarter of loveLife is in Sandton city and there is a new franchise in Hillbrow. It had been in the area for approximately 18 months around the time this research was conducted. However, not many young people are aware of its existence as not much marketing or advertising of their presence in the area had been done.

The community outreach services are rendered and facilitated by volunteers called groundBREAKERS and Mpintshis. Volunteering is beneficial to these youth in that it strengthens their self confidence and leadership ability to not ebgage in risky behaviours (Molekwa, 2008). Mpintshis and groundbreaker are often given time by schools to implement their services, particularly during life orientation classes that teach pupils about life skills. Otherwise they often make arrangements to work with the youth after school within the school facilities. [L]oveLife presumes that increasing the youth's ability to debate, communicate and being confident in themselves may result in decreased risky sexual behaviours

(Bandura, 1990; loveLife, 2009). Pessimism and low confidence is often related to the external circumstances the youth often find themselves in such as unemployment and poverty (Deverell & Ross, 2004; loveLife, 2004; O' Grady, 2004).

The success of loveLife depends on the need to change the pervasive values and attitudes among young people concerning sex, sexuality and gender relations. This is supported by the fact that behaviour change requires an internalisation of the desired changes by the targeted group, and also personal motivation, peer pressure, family and broader cultural and societal influences (Bandura, 1992; loveLife, 2004; Shisana et al., 2005). See Bandura's theoretical explanation in section 4.4. There is also a need for consistent and sustained efforts over many years for successes in behaviour change. Its values are personal and directed to the youth themselves as crucial factors for effective behaviour change. However, a challenge faced by loveLife is keeping young people sufficiently engaged for long enough to make a difference (loveLife, 2009). Gibney (1999) reported that implementing HIV prevention interventions before teenagers become sexually active may have a greater long term impact on sexual behaviour and the HIV prevalence than interventions implemented after the onset of sexual activity. There is difficulty in achieving and sustaining a particular behaviour change after *habitual* behaviours such as preferred sexual practices, have been established (loveLife, 2004; Pettifor et al., 2004).

In terms of the awareness of the programme, more than 70% of young South Africans can spontaneously identify the loveLife brand and accurately describe its purpose (Harrison, 2001). Thousands of young South Africans are participating in loveLife's community-level outreach and support programmes and loveLife is increasing access to adolescent friendly services in government clinics countrywide. Ninety seven percent of the youth aged 15–24 years who had heard about loveLife reported it being a good youth programme (loveLife, 2004; Pettifor et al., 2004; Shisana et al., 2005; 2009). Awareness of the programme was mainly through the billboards and television (Stadler & Hlongwa, 2002). See Figure 13 overleaf for the statistical graph of the awareness of the programmes by province.

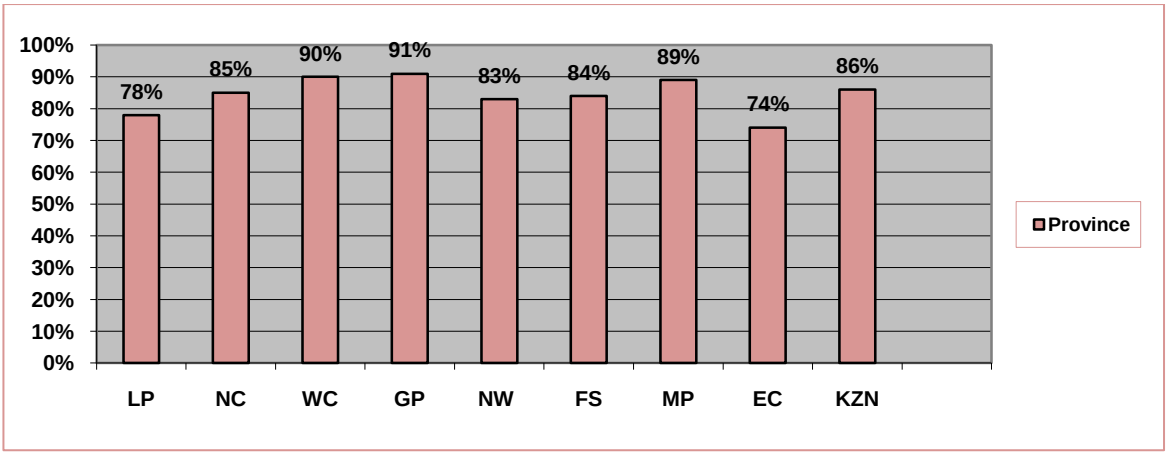

Figure 13: Awareness of loveLife by province area (Pettifor et al., 2004, p.64)

More than one third of the eighty five percent had participated in the loveLife programmes. Most interaction was through reading S'camtoPRINT and the loveFacts booklet. Participation was lowest for the loveTour and loveTrain (2% and 1% respectively). Sixteen percent of Black youth reported higher awareness of 10-16 programmes or products than the youth of any other race (Pettifor et al., 2004; Stadler & Hlongwa, 2002). Pettifor et al. (2004) further highlighted that this was encouraging as the loveLife programmes were targeted at previously disadvantaged areas. Furthermore, young Black people could be more familiar with loveLife due to the language used as they can identify more with it than any other races (e.g. Zulu-S'camto, thethajunction, etc.). Pettifor et al. (2005) indicated that more young people had not participated (4. 8% men and 15.9% women) in loveLife programmes as compared to those who had participated (6.5% men and 23.5% women). Twenty four percent of the youth reported having sought out information on sex and relationships as a result of hearing or seeing loveLife (loveLife, 2004; Stadler & Hlongwa, 2002). [L]oveLife exposure was also associated with talking about sex, sexuality and relationships between men and women, issues with their family, friends or other people (loveLife, 2004; Stadler & Hlongwa, 2002). Participating in loveLife including calling thethajunction was associated with decreased odds of the virus for men and women (women aged 15-19 years only, and both men and women aged 20-24 years old) (Pettifor et al., 2005), as well as reductions in the multiple partners for men (Harrison & Steinberg, 2002). Furthermore, young people were faithful to one partner (monogamous), abstaining from sex, and were always using a condom (Shisana & Simbayi, 2002). Couples had also been for an HIV test before having sexual intercourse.

Young people who had not participated in loveLife services reported having changed their behaviours irrespective of their participation in its programmes. Perhaps they were using other HIV prevention campaigns and not loveLife. Fifteen percent of young people took the initiative of calling another

helpline besides thethajunction (Standler & Hlongwa, 2002). An account of why they did not call thethajunction was not given. This indicated a gap in the reasons why or why not young people utilise the helpline services.

[L]oveLife reported that they knew what young people were all about and the risk behaviours they engage in (Africa, 2008). They indicated that day-to-day concerns are of great importance to the youth than the possibility of contracting the HIV virus (Africa, 2008). Thus "Make YOUR Move" seeks to mobilize young South Africans to take control of their future, by identifying and seizing opportunities. Young people are encouraged to think outside the limits of their immediate environment; promoting personal initiative, motivation and responsibility; building their ability to navigate day-to-day pressures and expectations; and linking them to information about new prospects for further education, personal development, careers and jobs (Africa, 2008). This strategy goes beyond helping young people internalise the risk factors and HIV by focusing attention on changing the social contexts they live in such as poverty. [L]oveLife had teamed up with the South African Institute of Entrepreneurship and JumpStart in the development of this expedition (Africa, 2008). This initiative was conceptualised around March, 2008 and implemented from early 2009. Thus is could not be included in this study. Moreover, the author of this research only came to knowledge of it after data had been gathered. Thus young students' perceptions and thoughts about it could not be explored. This could be a topic for a study at another point in time.

In terms of evaluating its impact, loveLife has three components of monitoring and evaluation. The evaluation focuses on young people's response to loveLife, trends in self-reported behaviour and direct determinants, and the prevalence of HIV and STI (loveLife, 2009). The three components are:

- **National Surveillance:** a series of nationally-representative household surveys of young people aged 15-24 years that track HIV prevalence and the impact of loveLife's programmes on youth behaviour. Results from the first national surveillance survey were released in 2004. The survey included anonymous HIV tests and interviews to assess young people's sexual history, health knowledge and attitudes, and sources of information about sex and HIV and AIDS.
- **Sentinel Sites:** an in-depth assessment of the impact of Y-Centres and adolescent-friendly clinics in 33 communities with these loveLife programmes. Data on sexual risk behaviours, HIV and STI prevalence, and pregnancy rates among young people in these communities are compared to data from young people in the general population.

- **Monitoring and Quality Assurance:** all of loveLife's programme components, including Y-Centres, adolescent-friendly clinics and the national youth helpline, closely monitor demographics of participants and the quality of services provided and seek regular feedback from young people.

Research conducted by the loveLife team has mainly been reported in terms of summaries of findings and trends from routine monitoring of data. The monitoring of data has been reported as insufficient to provide information on the impact of loveLife (loveLife, 2004; Pettifor et al., 2004). For instance, the aim of the 2004 report was to describe the progress of the implementation and roll-out of loveLife's various campaign elements (loveLife, 2004; Stadler & Hlongwa, 2002).

Some of the findings indicated that the youth were optimistic about the future and having control over it. Fifty five percent acknowledged that the most serious issue facing South Africa was HIV. Young people also reported high levels of self-efficacy in terms of being able to can discuss condom usage with partners and refusing sex when they did not want it (loveLife, 2004; Stadler & Hlongwa, 2002). Harrison and Steinberg (2002) indicated that young people exposed to loveLife were reporting significant behaviour change. Furthermore, Harrison and Steinberg (2002) predicted that if the gains that were demonstrated in 2002 of decreased risky behaviours within the youth were real and could be sustained over the next few years, the HIV incidence among 15-24 year olds would be reduced by 2007 (Tshabalala-Msimang, 2008). This was the case as discussed in section 3.2.1 titled HIV in the youth.

[L]oveLife as an organisation had a major set back in 2005 as one of its main sponsor, the Global Fund to fight HIV and AIDS, Tuberculosis and Malaria ceased its funding. The Global Fund board reported that loveLife did not conduct an assessment of its impact, in addition to being deemed to not have sufficiently addressed weaknesses in its implementation (Plus News, 2005; Pembrey, 2008). Furthermore, they mentioned that the campaign as aimed at 12 to 17 year-olds, is characterised by slick and stylish messaging, which the concern was that it is not appealing to the majority of young South Africans (Plus News, 2005). It had become difficult to measure how the prevention campaign was contributing to the reduction of HIV and AIDS among young people. However, loveLife improved their work, through research, for instance see Figure 14 for an older (A) and newer (B) version of loveLife billboards. These are deemed to be much clearer than before.



A



B

Figure14: loveLife billboards (loveLife, 2009)

Given the aims of loveLife, a socio-behavioural change theory is integrated in considering the development, structure, and implementation of the loveLife prevention programme. The following section will briefly focus on a theory of behaviour change called Social cognitive (learning) theory (SCT). This theory is important to this research in that it particularly focuses on changing socially driven or learned behaviours in a given environment or context.

4.4 Theory of Behaviour Change: Social Learning Theory

4.4.1 Introduction

Bandura's social learning theory assumes that a person's behaviour is determined by prior learning, this means that behaviours exhibited by people are a result of learning through modelling and reinforcement (Bandura, 1977; Sears, Peplau, Freedman & Taylor, 1988). It was developed by Bandura around 1977. Brown, Jara and Branton (2005) indicated that "Bandura's theory of self-efficacy focuses on the individuals' and refers to general social influence, such as peer influences, media, social norms and support" (p. 179). Bandura (1992) and Wingood and DiClemente (1999) claimed that the fundamental assumption of the SCT is that behaviour is dynamic and depends on the simultaneous relationship between the environmental and personal constructs. The relationship between the person, behaviour exhibited by that person, and the environment is called *triadic reciprocal determinism.* This relationship is represented overleaf — Figure 15.

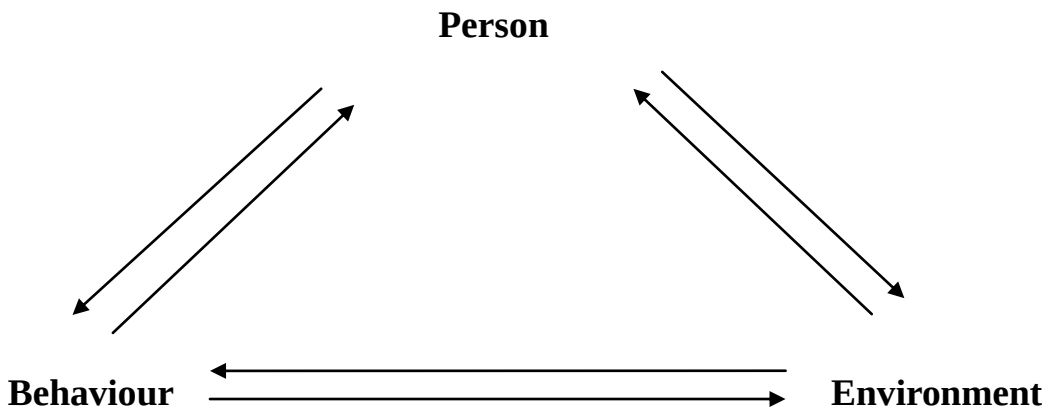

Figure 15: A schematic presentation of triadic reciprocal determinism (Bandura, 1992, p.96)

Modelling (observational learning) is defined as learning certain behaviours and attitudes through observing and imitating models or figures. Erikson (1963) also indicated and this research supports that young people need to modify and synthesise earlier identification into a new psychological structure that is greater than the sum of its parts, and not just model themselves role models seen on the media, as part of their identity formation (Miller, 1993). Reinforcement refers to internal or external reward received in response to exhibiting certain behaviours. Reinforcement such as pleasure, need-satisfaction of gratification, compliments from people tend to reaffirm people of and encourage them to exhibit the behaviours timeously (Bandura, 1977; Barlow & Durand, 2005; Sears et al., 1988).

Environment refers to factors that can affect a person's behaviour that are physically external to that person; it encompasses both social and physical environments. Social environment such as family, friendship networks, and peers while the physical environment refers to the availability, accessibility, and affordability of facilities and services such as condoms, neighbour-hood STI clinics, and HIV testing facilities (Wingood & DiClemente, 1999).

The *triadic reciprocal determinism* suggests that behaviour and personal determinants in the form of cognitive, affective, and biological factors and environmental influences all operate as interactive determinants of each other (Bandura, 1992). All three factors are equally important in determining behaviour and self-directed behaviour change. Bandura (1990; 1992) highlighted that an effective programme of change in detrimental lifestyle practices includes four major components, namely, enhancing knowledge of risk and prevention; promoting acquisition and proficiency in HIV preventive skills; enhancing self-efficacy; and fostering protective peer norms (Bandura, 1990; 1992; Fisher & Fisher, 2000; Wingood & DiClemente, 1999). These are devised to alter each of the three classes of interacting determinants.

The SCT theory is relevant to this research study as it focuses on self efficacy and the circumstances (environment) in which people at risk of the virus are exposed to. This research focuses on sexual behaviours and the model suggests that sexual behaviours in the youth are a result of prior social learning. [L]oveLife as a youth HIV prevention programme aims to challenge young people's sexuality in terms of their lifestyle, attitudes towards sex and relationships, as well as create an environment that will enhance their protective sexual behaviours or lifestyle (loveLife, 2004). It targets 12-17 year olds to establish and sustain behaviour change through modifying and delaying sexual debut and consequently reduce HIV rates the age group. It is supposed that by the time they reach adulthood, they might have stable healthy sexual behaviours as a result of having been encouraged to live accordingly from early years (Aggleton & Rivers, 1999; loveLife, 2004; Stadler & Hlongwa, 2002).

Social Cognitive Theory has proven to be effective in changing HIV risk behaviours. It has been successfully applied to a variety of health domains (Fisher & Fisher, 2000). In South Africa, those domains are Soul City as described on pages 48-51 (Bertrand et al., 2006). Its main emphasis lies in the assumption that prevention of HIV requires people to exercise influence over their own motivation and behaviour (Bandura, 1992). In addition, Bandura (1992) argued against social efforts designed to control the spread of the virus that have tended to only focus on informing the public about the virus as information alone is not sufficient to influence refractory health impairing habits.

Bandura believed that people need to be given not only reasons to alter risky habits but also means, resources and social supports to do so in order to achieve self-directed change. Central to the argument was the notion of self-efficacy, which is described as a person's beliefs in their ability to exert control over their motivation, behaviour, and social environment (Bandura, 1990; 1992). It affects what they choose to do, how much effort they mobilise, how long they persevere in the face of difficulties, and whether they engage in self-debilitating or self-encouraging thought patterns (Bandura, 1992). Erikson (1963) and Miller (1993) contended that young people have ego identity when they have internal stability and continuity. This provides them with the confidence in their behaviour and is attained through well defined role models and a positive feedback from their environment, amongst other things. The subsequent paragraphs will provide a description of the four constructs as well as its empirical evidence in practice and a critique of the theory.

4.4.2 Enhancing Knowledge of Risk and Prevention

The information component aims to increase awareness and knowledge of health risks and convince people that they possess the ability to change their behaviour. In particular, detailed information about HIV and AIDS, the types of behaviour that can cause one to contract HIV are imparted to the targeted group using understandable language, instructions on how to be safe and foster self-efficacy regarding HIV prevention (Bandura, 1990; 1992; Fisher & Fisher, 2000). Health communications instil in people the belief that they have the capability to alter their health habits and instruct them on how to do it. "Such communications increase people's determination to modify habits detrimental to their health (Bandura, 1992, p.97). Furthermore, consequences of not using protective measures are highlighted and the target group is encouraged to persevere in order to have successful change (Bandura, 1990; Fisher & Fisher, 2000; Wingood & DiClemente, 1999). Bandura (1992) claimed that such messages should appeal to fear by depicting the ravages of the disease and serve as a motivator.

Bandura (1990; 1992) also argued that informative health messages cannot have much social impact without effective means of dissemination regardless of how well designed. Therefore mass media, particularly television and radio can serve as major vehicles of social diffusion of HIV and health related information, due to the fact that the majority of people are exposed to it (Shisana & Simbayi, 2002). However, inasmuch as knowledge is necessary, it is often not sufficient to bring about behaviour change or to encourage the adoption or maintenance of HIV preventive behaviours (Bandura, 1990; 1992; Fisher & Fisher, 2000; Wingood &DiClemente, 1999). A survey study by Edgar, Freimuth and Hammond (1998) found that most of the sexually active college students who knew about HIV and AIDS did not adopt safer sex practices to prevent STIs and they avoided talking about the matter with their sexual partners. This highlights the need for the second components that develops and maintains self regulatory skills.

4.4.3 Promoting Acquisition and Proficiency in HIV Preventive Skills

This component focuses on the development of self-regulatory and risk reduction skills required in translating risk knowledge into preventive behaviour. It also focuses on guiding people on how to translate their concerns into efficacious actions (Bandura, 1990; 1992). The target group is taught how to bring the performance of health behaviours under their control (Bandura, 1990; 1992; Fisher & Fisher, 2000; Wingood & DiClemente, 1999). Social competency skills include knowing one's risk

triggers; such as which behaviours lead to risk, being able to remind oneself of the importance of healthy behaviour through developing internal standards and encouraging self to practice them through cognitive rehearsal such as practicing how to tell one's partner that risky behaviours should be avoided (Fisher & Fisher, 2000).

These skills enable a person to motivate and guide his/her own actions and avoid being lured into risky sexual behaviours. Risk reduction (or social competency) skills can either be technical or social such as learning how to use a condom and how to negotiate condom use or how to exit unsafe situations (Bandura, 1990; 1992; Fisher & Fisher, 2000; Wingood & DiClemente, 1999). This can be achieved through observational or participatory learning such as exposure to videos of at risk people with actors or role models that effectively display self-regulatory skill and reduction skills, or have individuals role-play the skill behaviours themselves (Bandura, 1990; 1992; Fisher & Fisher, 2000; Wingood & DiClemente, 1999). Bandura also highlight that people generally learn best and develop a greater sense of self-efficacy from exposure to role models similar to themselves-gender, racial/ethnic status, age or type of HIV risk behaviour (Bandura, 1990; 1992; Fisher & Fisher, 2000). Erikson (1963) argued that young people imitate role models that they have seen in the media (Miller, 1993). Wingood and DiClemente (1999) pointed out that it is necessary to positively reinforce an individual's performance and to provide corrective feedback to enhance proficiency. Practice is continued until the skills are performed proficiently and spontaneously (Bandura, 1990; 1992; Fisher & Fisher, 2000).

4.4.4 Enhancing Self-efficacy

This component focuses on increasing the level of skills and individual's level of self efficacy. Self-efficacy is an important pre-requisite for successful behaviour change (Brown et al., 2005). Self-efficacy requires repetition of specific skills or activities in order to be proficient, and in turn affect task persistence, initiation, and endurance, which all promote behaviour change (Bandura, 1990; Beck & Lund, 1981; Cecil & Pinkerton, 1998; Wingood & DiClemente, 1999). Self-efficacy can be developed and enhanced through practicing the behaviour at focus i.e. negotiating safe sex, progressively from situations where participants do not fear making mistakes/appearing inadequate to more difficult situations imaginable (Bandura, 1990; 1992; Fisher & Fisher, 2000; Thato et al., 2005). Empirical studies have been conducted in the area of self efficacy. A study by Wulfert and Wan (1993) evidenced the relationship between feelings of self efficacy with the skills necessary for safer sex and actual performance of safer sex behaviours in university students. Adih and Alexander (1999) as well as Mahoney, Thombs and Ford (1995) indicated in their study involving 15-24 year old Ghanaian men

that, perceived self efficacy was one of the significant predictors of condom use. They further reported that men who perceived a high level of self-efficacy to use condoms as well as a low level of barriers to condoms use, in the form of misconceptions around condoms, were nearly three times more likely to have used condoms in their last sexual intercourse.

This was also evidenced by Gilchrist and Schinke (1983) who taught teenagers how to exercise self-protective control over sexual situations using a self-regulative programme. Modelling, role plays and practicing of skills such as communicating with partner about contraceptives and sexual matters in simulated situations and receiving instructive feedback resulted in enhanced perceived self-efficacy and skills in managing sexuality. This is indicative of the influence of practicing risk reduction behaviours in a simulated situation on increasing the confidence in the ability to perform those same behaviours in a real life (or health) threatening situation. Another study by Brown et al. (2005) reported attitudes and perceptions held by urban college students' regarding AIDS awareness and prevention. There were high self-fficacy and condom perceptions in these young people. Furthermore, condom perception was a predictor of HIV and AIDS risk knowledge. Peltzer (2000) and Thato et al. (2005) reported and re-emphasised that increased self-efficacy in condom use would influence condom use in young South Africans. A study by Holschneider and Alexander (2003) with youth aged 15-19 years found that consistent condom use, including condom use at last sexual intercourse, fewer lifetime sexual partners were significantly related to high levels of self efficacy to communicate about HIV and AIDS or use a condom (Cecil & Pinkerton, 1998).

4.4.5 Fostering Protective Peer Norms

The last component focuses on developing or engaging social support for the individual who is making the change to help facilitate and maintain the change process (Bandura, 1990; Fisher & Fisher, 2000). Bandura (1992) highlighted that people achieve self-directed change when they understand how personal habits threaten their well-being and are taught self-protective skills, while their confidence of performing those skills is enhanced. Therefore creating an arena that will teach and show people how their behaviours are detrimental to their well-being is crucial. Bandura (1990; 1992) contended that additional to this is the importance of the social influences these people will have in their environment, and also that personal change occurs within a network of social influences. Depending on the nature of the social context, social influence can aid, assist, retard, detract or undermine efforts aimed at personal change in terms of initiation and maintenance. This is especially true in the case of sexual and drug practices, which are subjected to strong social normative influences (Bandura, 1990; 1992; Fisher &

Fisher, 2000; Wingood & DiClemente, 1999).

In SCT, normative influences regulate behaviour through two regulatory processes, namely, social sanction and instated self-sanction. This means that norms influence behaviour by the social consequences they provide (Bandura, 1990; 1992). Behaviours violating social norms are punished while actions that are consistent with social norms are approved or rewarded (unsafe and safe sexual intercourse, respectively). Bandura also argued that people adopt certain standards of behaviour for themselves and regulate their behaviour anticipatorily through self-evaluative consequences. Social norms convey standards of conduct while the adoption of personal standards creates a self-regulative system operating partly through internalised self-sanction (Bandura, 1990; 1992). People behave in ways that give them self-satisfaction and refrain from behaviours violating their standards because it will bring self-censure. Therefore, it is anticipatory self-sanctions that keep conduct in line with internal standards (Bandura, 1990; 1992). This shows that personal change begins within a person with the assistance of the outside world, confirming that social norms have to approve healthy behaviours, which must be internally embraced to result in their behaviours changing for the good. Erikson (1963) argued that young people are not well developed or have the capacity to regulate their behaviour. Thus they model what the media depicts as exciting, fun, and consequently engage in sexual risky behaviours. However, loveLife has the aim to develop such traits in the youth as well as provide or enhance the social environment for them to solidify their protective behaviours (loveLife, 2004).

The normative influences fostering preventive measures centre on the behavioural practices by which the virus is transmitted and on the cultural patterning of social relationships (Bandura, 1990, 1992). The inter-personal influences operating within one's immediate social network claim a stronger regulatory function than do general normative sanctions. Particularly because of the proximity, immediacy and prevalence of the normative influences, which are more distal and applied only infrequently to the behaviour of any given individual because unfamiliar others are not around to react to it (Bandura, 1990, 1992). Furthermore if the norms of one's immediate network are at odds with those of the larger group, the reactions of outsiders carry lesser weight, if not disregarded altogether even when unfamiliar others are around (Bandura, 1990, 1992). Therefore social norms proximal to the people making efforts to change behaviours are important as they exercise influence by supporting or hindering the efforts (Fisher & Fisher, 2000).

Bandura (1990, 1992) argued that people who are fully informed about the modes of HIV transmission

and effective self-protective methods acquire the virus only if they allow it to happen. He argued that they allow it to happen because interpersonal, socio-cultural, religious, and economic factors operate as constraints on self-protective behaviour (Kirby, 1992; Loyce, 1998; Resnick, 1992; Yarber & Parrillo, 1992). People at risk of HIV often contend with socio-cultural obstacles to the use of preventive methods that afford protection against HIV infection. Women, for instance carry the burden for self-protection against heterosexually transmitted diseases, such as the need to exercise control over condom use requiring women to control men's behaviours (Bandura, 1990; 1992). Bandura (1990; 1992) argued that men possessing coercive power over their partners resist the use of condoms if they think it reduces sexual pleasure, threatens their sense of manliness and authority, casts aspersions on their faithfulness and carries the frightening implications that they may be carriers of disease. This makes it difficult for women, particularly of poor and minority status to press the issue in the face of emotional and economic dependence, coercive threat, and sub-cultural prescription of compliant roles for them. This can also be inclusive of young women including tertiary level ladies who have "sugar daddies", that is, they date older man who give them money or gifts in exchange for sexual favours (Pettifor et al., 2004; Simbayi et al., 2005).

Attitudes and social norms must be altered to increase men's sense of responsibility for the social consequences of their sexuality at the broader societal level. Furthermore, if HIV and AIDS prevention programmes are to be effective and achieve greater success, they must address the socio-cultural realities that impose constraints on the exercise of self-protective measures (Bandura, 1990; 1992). A major benefit of community mediated programmes is the ability to mobilise the power of formal and informal networks of influence for transmitting knowledge and cultivating beneficial patterns of behaviour. A community mediated approach is a potentially powerful vehicle for promoting both personal and social change in a sense that it provides an effective means for creating the motivational preconditions of change, for modelling requisite skills, enlisting natural social incentives for adopting and maintaining beneficial habits, and establishing protective practices as the normative standards of conduct (Bandura, 1990; 1992). Lastly, Bandura (1992) pointed out to the behavioural practices that create widespread health problems as requiring group solutions that are best achieved through community mediated efforts. Some researchers have used this strategy to pioneer health promoting programmes through using community networks for transmitting knowledge and cultivating beneficial patterns of health behaviours (Bandura, 1992). [L]oveLife provides grounds for health promotion amongst young South African. It utilises community networks for conveying knowledge and cultivating beneficial patterns of health behaviours (loveLife, 2004).

Peer educators are often used within the SCT framework to amplify positive health-promoting norms and displace unhealthy norms to reinforce health preventive skills (Bandura, 1990; 1992; Wingood & DiClemente, 1999). The media is also used as a tool to create healthy sexual behaviour norms in society. Therefore targeting the social influences in preventive behaviour is vital in order to facilitate safer (sexual) behaviour endorsement (Bandura, 1990; 1992; Fisher & Fisher, 2000). A strong involvement in a social network supportive of self-protective practices by people at high risk sexual behaviour increases knowledge of risky behaviours, beliefs of self-efficacy and the adoption of safer sex practices (Bandura, 1990; 1992).

Contextualisation of loveLife within SCT demonstrates that loveLife emphasises the need for the youth to identify with and own the new lifestyle brand. This focuses on attaining the youth's attention and pro-actively involving them in the programmes (changing HIV risk behaviours), as part of their lives. The next stage focuses on the awareness of risky behaviours through dialogue and debate to allow the youth to personalise risk and internalise communication through community outreaches (including schools) and workshops and youth services. It is in this component that awareness of risky behaviours is created (Stadler & Hlongwa, 2002). Determinants of sexual behaviour are of crucial importance in discussions to facilitate change of risky sexual behaviour patterns. This component is holistic as it considers behaviours or constructs putting the youth at risk of sexual health, and it facilitates change by empowering the youth (teaching about condom use and skills, including negotiation skills in terms of communication about HIV related issues with one's partner as well as socio-economic factors) (Africa, 2008). [L]oveLife focuses on factors crucial in the youth developmental stage, such as peer pressure, by promoting a healthy lifestyle in the midst of their challenges (loveLife, 2004; Pettifor et al., 2004; Stadler & Hlongwa, 2002). This is through the media as well as communities, whose involvement helps create new norms of sexual health and a positive attitude towards the future.

The loveLife model of behaviour change as shown on Figures 8 and 9 highlight that the first level or component aims to promote youth sexual health and healthy futures through the national brand driven communication and media strategy. The second component focuses on counselling, referrals to clinics and youth services. The third one focuses on reaching out to the youth through education and motivation in the community. The fourth component focuses on behaviour change. Lastly, the fifth component focuses on creating and facilitating open communications about sexuality between the youth themselves, together with parents and the community at large. [L]oveLife's intervention components are somewhat related to SCT components as they ensure the creation of awareness of the programme, HIV risk related behaviours and self protective behaviours through the media. They also have Y centres, NAFCIs and

franchises ensuring that the youth develop life and work skills and also get information on healthy sex life (HIV free behaviours) in their social contexts (Adih & Alexander, 1999; Fisher & Fisher, 2000; loveLife, 2004; Pettifor et al., 2004; Stadler & Hlongwa, 2002; Wingood & DiClemente, 1999). All these activities are essential in helping young people form integrated identities and adapt healthier lifestyles in the midst of their challenging context (Erikson, 1963).

4.4.6 Critiques of Both the SCT and Lovelife's Model of Behaviour Change

A strong point of the model is that SCT has received support as a behaviour change model for a number of unhealthy behaviours, also as an HIV preventive measure (Fisher & Fisher, 2000; Wingood & DiClemente, 1999). However, one of its weaknesses is that because the interrelations between constructs remain unspecified, it cannot be tested as an integrated multivariate model. Nevertheless, there is support for predicted relations between individual SCT constructs and HIV behaviour, especially between self efficacy and social normative support for HIV risk behaviour change (Adih & Alexander, 1999; Bandura, 1992; Brigham et al., 2002; Holschneider & Alexander, 2003). Overall, work involving SCT in HIV risk reduction has involved SCT-inspired interventions (having SCT elements) and not model tests. Therefore, SCT contains most or all elements typically associated with effective interventions, with the possible exception of an explicit attitude change component. Hence another weakness is its failure to account for attitude change. Also that SCT does not include an explicit elicitation research component, which could be very useful in targeting particular intervention needed of the HIV population (Fisher & Fisher, 2000).

4.5 General Conclusion of the Literature Review

STI, HIV and pregnancy are global and public health concerns mostly affecting the young South African population, particularly the 18-25 years old age cohort (Tshabalala-Msimang, 2008; loveLife, 2004; Shisana & Simbayi, 2002). The highest rates of the HIV infection are found in women (Shisana et al., 2005). Research has provided biological and socio-cultural evidence for the large HIV rates in women (Ackerman & de Klerk, 2002; Aggleton & Rivers, 1999; Baingana et al., 2003; Balyagati & Schapink, 2000; Barnett & Whiteside, 2002; Bhaskara Rao, 2000; Brown, Jara & Braxton, 2005; Dayton & Merson, 2003; Deverell & Ross, 2004; Elford & Hart, 2003; Eaton et al., 2003; Fassin & Schneider, 2003; Jackson & Highcrest, 1996; McCloy, 2008; McKee et al., 2004; Mwizarubi et al., 1997; Nyonyo & Schapink, 1997; O'Grady, 2004; Papalia et al., 1998; Parker et al., 2007; Pettifor et al., 2005; Shisana et al., 2009; Simbayi et al., 2005; The Gauteng Provincial government, 2005; UNAIDS, 1998).

South Africa has set in place HIV prevention campaigns to regulate these concerns. These have had some successes in reducing the rate of HIV, but the rates remain high despite these efforts (Tshabalala-Msimang, 2008). The youth represents an important target group for HIV preventive intervention programmes. Furthermore, young people represent a large percentage of the general population in the developing world. They require special attention and needs, they present the greatest hope for the future and yet remain the largest challenge in reducing the HIV and AIDS pandemic (McKee et al., 2004). Thus focusing on communications that would change attitudes and behaviours relating to sexuality, as well as provide sexual health services that the youth would be willing to access are of crucial importance (Stadler & Hlongwa, 2002; Stall et al., 1989). This study explored the level of awareness and participation young people have to loveLife, an HIV prevention campaign targeted at them. The author hoped to establish the disinterest or interests young people have in the programme as well as their willingness to participate in the programme in terms of de/motivators.

Various social factors make it difficult to carry out effective HIV prevention campaigns in South Africa. There exist misconceptions about the virus, its modes of protection, as well as its incurability (Pembrey, 2008). HIV and AIDS awareness campaigns that actually influence people's behaviour are a challenge to establish, and are not enough without relevant protective behavioural trainings (Pembrey, 2008). Thus targeted people need to be encouraged to participate in such campaigns or programmes to gain protective behaviours (Bandura, 1990; 1992; Fisher & Fisher, 2000; Wingood & DiClemente, 1999). This research argued that motivation to participate in or utilise any programme requires an exploration of factors related to de/motivation of participation from the targeted audience. This is given the fact that awareness alone is not sufficient to bring about and sustain behaviour change in young people (Bandura, 1992). Furthermore, prevention programmes have to be relevant to the targeted group. As such, young uneducated people may respond and require different strategies from educated people, visa versa.

This research is an attempt to establish the youth's patterns of HIV risky behaviours, level of HIV knowledge and exposure and participation to loveLife services. Literature has demonstrated the general patterns of risky behaviours in the youth, their HIV knowledge as well as exposure and participation in loveLife. However, there was paucity of research documenting why the youth in higher learning institutions were not participating in loveLife services. Having identified such gaps, the aims of the study and research question were established and justified.

The preceding chapters were successful in documenting an overview and understanding of HIV, its modes of transmission, and treatment. In addition to STI and HIV risky behaviours, the level of HIV

knowledge, STI and cases of pregnancy amongst the young South African population were provided. A contextual analysis and evaluation outcomes in the form of behaviour change of the South African HIV prevention programmes directed at the general population, as well as specific to the youth were also outlined.

Theoretical underpinnings of the variables under investigation were provided. A developmental theory contextualising young people's developmental processes and challenges was outlined and justified. [L]oveLife's model of behaviour change and theoretical construct for intervention were outlined, to better understand the basis of their intervention programme. Furthermore, a theory of behaviour change relevant and applicable to HIV prevention and risky behaviours was also provided. Bandura's Social learning theory was outlined to understand and explain learned behaviours that need to be changed if detrimental to one's health. This chapter provided the literature that formed the basis and arguments of this research study; Chapter 5 focuses on providing detailed methodological formulations of this research project.

CHAPTER 5

Methods

5.1 Introduction

This chapter describes the research methods applied in this study. The focus is on the research design of the study, the sample used, the procedures, the instruments, the evaluation approach that was employed, data analysis, and concludes with the ethical standards that were followed throughout the research process.

5.2 Research Design

This study was interested in establishing associations between variables (levels of HIV knowledge and behaviours, and levels of awareness and participation of young people's to loveLife services; as well as establishing differences between gender and race). The research design was a non experimental correlation method, and exploratory to provide quantitative and qualitative descriptions of young people's level of HIV knowledge as well as participation to loveLife services (Bryman, 2004; Cozby, 1985; Rosnow & Rosenthal, 1996). This study was specifically cross sectional in nature as as data was collected at one point in time in different groups (institutions) (Neuman, 2003; Rossi & Freeman, 1982). The cross sectional approach is most commonly used because of being inexpensive, not time consuming and easy to utilise (Bryman, 2004; Cozby, 1985; Neale & Liebert, 1986).

5.3 Research Approach

This research used a multi-method approach to collect data to answer the research questions. This was a combination of the qualitative and quantitative methods (Chen, 2006). "Quantitative and qualitative methods are based on contrasting assumptions and ideologies about social phenomena and knowledge" (Chen, 2006, p. 75). Qualitative approaches often involve open-ended or semi-structured questionnaires and its data becomes subjected to a series of analyses such as extrapolations of themes to provide a detailed report of respondents' views (Creswell, 1998; Devlin, 2006). Quantitative approaches involve

scales that are close-ended and the application of statistical techniques in analyzing the data from the scales (Huck, 2004; Rosnow & Rosenthal, 1996). This research study used an open ended questionnaire as a qualitative instrument, as well as close ended questionnaires that are likert and dichotomous (scales) as quantitative instruments. The characteristics of the data were in the form of words (themes) as well as numbers (scores) from precise measurement (as per the responses from the questionnaires) (Huck, 2004; Rosnow & Rosenthal, 1996). An advantage of using multi-methods is that the weaknesses of one approach are balanced by the strengths of the other (Holsti, 1969). Furthermore, qualitative methods enhance the depth and richness (meaningfulness) of the findings, in addition to the statistical significances revealed from the quantitative methods. This research utilised the qualitative method to aid the minute evaluation of loveLife through an open ended questionnaire and obtain indepth knowledge of the programme from respondents, and quantitative method to obtain statistical inferences of young learners HIV knowledge as well as HIV risky behaviours.

5.4 Sampling

The study was conducted in the Braamfontein area in Johannesburg. The sample comprised of students from Higher education institutions (One university and two colleges) located in the area. The names of these institutions are not mentioned for ethical reasons as some of the institutions wished to remain anonymous. The sample size of the current research study comprised of 152 of which, 76 were men and 76 were women. One hundred and fifty two responses were obtained for the quantitative aspect while 57 (of the 152), 43 of which were women and 14 men; responses were obtained for the qualitative aspect.

Sampling is done to ensure that the sample of respondents is representative of the population to which it belongs (Caplovitz, 1983; Henry, 1998; Huck, 2004; Rosnow & Rosenthal, 1996). There were two reasons why college and university students were used as the sample. Firstly, the research was seeking to answer the research questions using 18 to 25 year olds, and this is the age that the youth commence or conclude higher education in either colleges or/and university. Much of the HIV risky behaviours and the high rates of HIV levels in the country are observed in young people at this age group (Pettifor et al., 2004; UNAIDS, 2008). This study was interested in establishing the level of HIV knowledge and risky behaviours among tertiary level youth in the Braamfontein area, and specifically this in relation to their utilisation of HIV prevention campaigns targeted at them. Second, there was a need to use literate respondents who would be able to comprehend and answer the questions without difficulty.

Needless to mention, this was a convenient sample as the higher education institutions were within a close range to the researcher. Convenient sampling falls under the non probability sampling strategy (Devlin, 2006; Henry, 1998; Huck, 2004; Neale & Liebert, 1986; Rosnow & Rosenthal, 1996). This signifies that every member in the population has a known, non-zero chance of being included in the sample and suggests that there was no guarantee that all undergraduates at the participating education institutions would be in the sample (Huck, 2004; Rosnow & Rosenthal, 1996). Thus generalisation of the findings of this study are limited to similar contexts of higher education, with comparable characteristics as those of the respondents of this study, such as the institutions (college and university with HIV prevention programmes (and, or related courses) and sample (race, age, gender) (Patton, 2002; Rosnow & Rosenthal, 1996). The findings served to provide an idea of the nature of risky behaviour, HIV knowledge as well as awareness and exposure to the two loveLife services within youth in tertiary (higher) learning. Figure 16 and Tables 3, 4 and 5 below represent the frequency counts of race, age and gender of the sample.

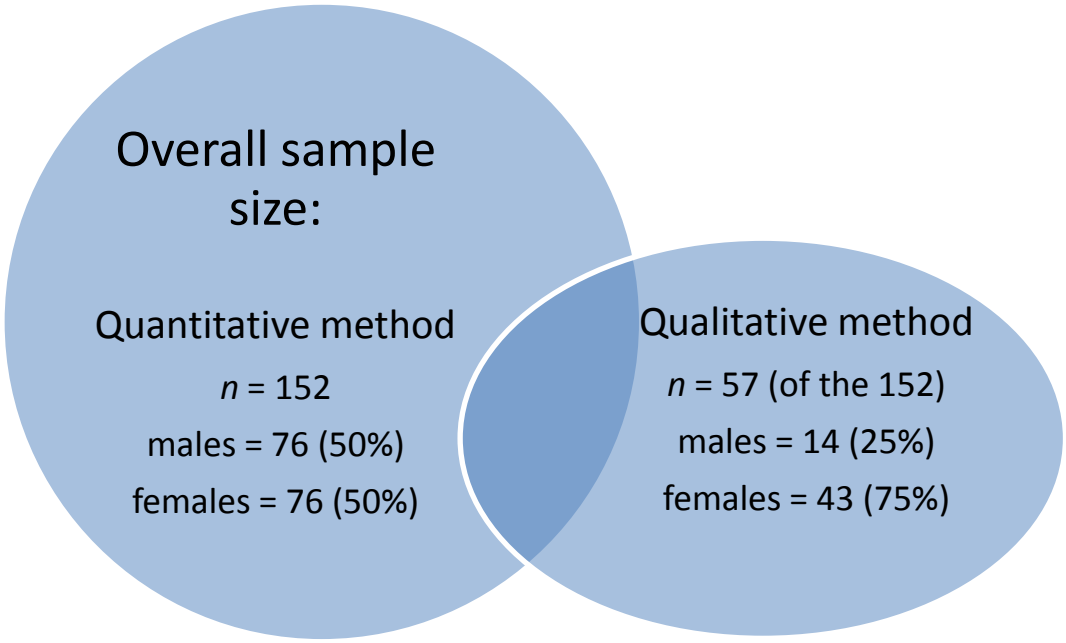

Figure 16: *Frequency counts of gender*

Equal numbers of men and women were used to get a gender balanced explanation of the level of HIV knowledge and risky behaviours (quantitative aspect of the study). However, there was a huge discrepancy in the gender distribution of the loveLife minute evaluation (the qualitative aspect). The reader must remember that the qualitative sample came out of the larger sample of the study which is refferd to here as the quantitative sample. Thus this suggests bias, favouring women in the interpretation

of students' utilisation of loveLife's services. The overall sample (152) would allow for recommendations based on a gender balanced sample. Furthermore, it is important to establish men' level of HIV knowledge as well as their pattern of risky behaviours and explore their held misconceptions towards the virus and condoms. This would also enable one to explore one of the many factors relating to why and how *young* and middle adult men are (less) infected with the virus, but are however, dying at a higher rate than women (Ratele, 2008). Sexual behavioural factors pertinent in the young age could have an association to the high mid-adulthood mortality of men. Such findings could also indirectly assist with reductions of the HIV rates in women (loveLife, 2004; Pettifor et al., 2004).

Age was normally distributed with a mean of 21 (*SD* = 1.99). Table 3 indicated the age of 21 years as the most frequent age, followed by 22 and 25 years old.

Table 3:

Frequency counts of age:

a. *Quantitative:*

Age	Frequency	Percent
18	3	1.97
19	17	11
20	23	15
21	28	18
22	27	17.8
23	22	14.5
24	5	3.
25	27	17.8

b. *Qualitative:*

Age	Frequency	Percent
18	0	0
19	6	10
20	11	19
21	10	18
22	15	26
23	4	7
24	2	4
25	9	16

Table 4:

Descriptive statistics of age

Variable	Mean	Standard deviation	Minimum	Maximum	Range	Variance
Age	21	1.99	18	25	7	3.99

Table 5:

Frequency counts of race:

a. Quantitative sample

Race	Frequency	Percent
Black	134	88
White	18	12

b. Qualitative sample

Race	Frequency	Percent
Black	46	80
White	11	20

African young men and women were used for the study, particularly due to the fact that the loveLife HIV prevention programme was specifically designed for the previously disadvantaged youth (loveLife, 2004; Pettifor et al., 2004). However, due to racial concerns in South Africa, the researcher used both Black and White respondents to establish knowledge and patterns of HIV risky behaviours and understand the general utilisation of the programme by the Johannesburg-Braamfontein youth. Black in this context comprised of people of the following descendant: African, Indian and Coloured youth. These were grouped together because the South African constitution classifies them all as Black, also mainly because some of the groupings such as the Coloureds had too few respondents, which were not suitable for any statistical analysis.

The sample comprised of students from various fields of study such as social (and health) sciences, engineering, commerce arts and humanities to avoid bias based on the assumption that social science students are much more likely to identify with the HIV prevention programme than those from other faculties. Social and health science students cover course work involving sexual behaviours and HIV and AIDS related issues.

5.5 Procedures

Research data was gathered through a survey research, specifically questionnaires relating to demographics descriptors as well as the variables under investigation (Rosnow & Rosenthal, 1996). Students volunteering for the study were given questionnaires for completion in a leaflet form. Specifically, young tertiary students with awareness and some use of the loveLife services and reports (documents) on HIV prevention programmes' were used as the sources of information to answer the enquiry of the loveLife minute evaluation. Volunteering served as consent to the study. Questionnaires were administered in a booklet form and their completion did not take more than 45 minutes. The researcher arranged the time to approach the students with the relevant lecturers, during their lectures in

the respective colleges and university. Respondents were asked to complete the questionnaires, and encouraged to complete them during their leisure time and return them by placing them in a box that was provided in the administration office of their respective institutions and departments.

5.6 Instruments

A hybrid of open- and close-ended questionnaires in the form of a booklet was employed in this study to collect various types of information from the respondents. All questionnaires were self report (Caplovitz, 1983; Rosenthal & Rosnow, 1991). This booklet comprised of a demographic questionnaire, Condom attitude scale; Previous and current sexual behaviours scale; a Socio-sexual orientation index; Self-efficacy for protective sexual behaviours scale; an HIV and AIDS knowledge and understanding questionnaire including the sources of HIV and AIDS information and the loveLife exposure, participation and response questionnaire. See appendix C for instruments. The researcher removed the headings of the instruments when administering them to avoid leading participants on and giving them ideas on how it would be best to answer the questions. This was to avoid issues such as halo and hawthorne effects and also faking bad from the participants (Neale & Liebert, 1986; Rosenthal & Rosnow, 1991).

Young people may possibly be unwilling to answer specific questions on HIV, sexual behaviour perceptions and practices honestly when in personal contact with the researcher (Howard, 2006). In as much as the most common form of collecting data regarding issues of sexual behaviour (including HIV and AIDS) is to use one-on-one interviews, given the sensitive nature of the topic (people's experiences of HIV), it was thought most appropriate to use a questionnaire instrument to collect such data as participants would read and answer questions by themselves without feeling embarrassed before the researcher **(**Howard, 2006; Rosenthal & Rosnow, 1991; Terre Blanche & Durrheim, 1999).

The youth's level of exposure and participation to the call centre and outreach programmes was established through an open ended questionnaire to provide respondents with the opportunity to expand on their answers, to express feelings, motives or behaviours spontaneously (Rosenthal & Rosnow, 1991; Rosnow & Rosenthal, 1996). The questionnaire was used to address the evaluation aim of this research. It was piloted to ensure that questions were sensible, understandable and meaningful. Piloting was done on a sample with similar characteristics as those of the actual sample used (Devlin, 2006; Rosnow & Rosenthal, 1991; Rust & Golombok, 1989).

It is important to note that some of the questionnaires were modified to make them more relevant to the current research study and sample used. The Self-efficacy for protective sexual behaviours scale and the current and previous sexual behaviours scale in particular. All three questionnaires, the Self-efficacy for protective sexual behaviours scale, Previous and current sexual behaviours scale together with the loveLife exposure and participation questionnaire were piloted on a sample of 35 young students and the items of each scale were modified according to the responses received from the pilot sample. Most corrections were grammatical, to make items more sensible. The following sections provide descriptions of the questionnaires that were used to collect data.

5.6.1 Demographic Questionnaire

The demographic section required participant's age, gender, ethnicity (race) (the categories were Black, White, Coloured, Indian, and an open category), home language and preferred language when calling loveLife (Stadler & Hlongwa, 2002). The first five scales presented next were used to measure HIV knowledge within the young population and their patterns of sexual behaviour.

5.6.2 Condom Attitude Scale

The Condom attitude scale was developed by Sacco, Levine, Reed and Thompson (1991) as a scale to assess people's attitudes towards condoms. The items reflect common positive and negative attitudes towards condoms. It has seven items and requires participants to either agree or disagree with their content to get a sense of their attitudes toward condoms. It is a dichotomous scale (Sacco et al., 1991). The first five items of this scale were adapted from the original scale developed by Sacco et al. (1991) by Simbayi et al. (2005) for their research study in South Africa, using a sample of young Cape Town residents. These researchers added two more items for the purpose of their study (Simbayi et al., 2005). The researcher of the current study saw the relevancy of the items of this adapted scale for the purpose of this research and decided to use the modified version. No reliability or validity information was provided. The researcher could also not find any other studies that provided reliability or validity information.

5.6.3 Previous and Current Sexual Behaviours

This questionnaire asked respondents about their previous and current sexual behaviour to determine their sexual behaviour. It was an open ended measure that consisted of three items. The measure was adapted from Simbayi et al. (2005), who conducted a study in Cape Town on risky behaviours amongst

young people. The modification undertaken included an addition of questions on age of first sexual encounter, whether the respondents are currently sexually active or not and whether they are using condoms or not during sexual intercourse. This was to ensure the truthfulness of their sexual in/activity. The modified version consists of seven items. It asked participants about their previous and current sexual behaviours together with their first sexual encounter age. It is an open-ended questionnaire as it allows the participants to fill in their responses without giving them options to choose from (Rosnow & Rosenthal, 1996). It was useful in this research to determine the youth's current sexual practices particularly in relation to their exposure to loveLife services, and other sources of HIV information. This provided the researcher with the risk taking behaviours that young people engage in. The researcher was authentic, open to respondents' responses (neutral) and objective in collecting as well as analysing qualitative data (from previous and current sexual behaviours, and loveLife exposure and participation questionnaires) to ensure that the process and findings were reliable, rigorous and trustworthy (Lincoln & Guba, 1995).

5.6.4 Socio-Sexual Orientation Index (SOI)

This measure is used to demonstrate individual differences in their willingness to engage in uncommitted sexual relations (Webster & Bryan, 2007). It was developed by Simpson and Gangestad (1991) to measure socio-sexuality in terms of behaviour and attitude towards uncommitted sexual activity (Townsend & Wasserman, 1998; Webster & Bryan, 2007). It is a seven item scale and respondents highlight the degree to which each item applies from a scale of 0 to 10 indicating the number of partners (items 1 to 3), the degree of fantasizing about sex (item 4), and whether they agree or not with the statements (item 5 to 7) (Townsend & Wasserman, 1998; Webster & Bryan, 2007). The first four behavioural questions request the frequency of a particular behaviour; while the last three attitudinal questions are answered on 9-point, Likert-type scale (Townsend & Wasserman, 1998).

In terms of scoring, the two components are averaged together. Low scores indicated that respondents required commitment before engaging in a sexual relationship. High scores indicated that they required little or no commitment (Webster & Bryan, 2007). The seven SOI questions are aggregated and weighted according to the originator's formula (Simpson & Gangestad 1991). Item 7 must be reverse scored first, and then items 5-7 must be aggregated. The following weighing scheme was used to aggregate components of the SOI, *5 X (item 1) + 1 X (item 2) + 5 X (item 3) + 4 X (item 4) + 2 X (aggregate of item 5-7)* (Simpson & Gangestad, 1991). Respondents who scored below the median (low scores) on their SOI are classified as having a *restricted socio-sexual orientation,* while those who scored above the

median (higher scores) as having the *unrestricted socio-sexual orientation.* Simpson and Gangestad (1991) indicated that young people with unrestricted SOI may prefer partners based on attributes not promoting stability and commitment in the relationship such as physical attractiveness, financial and material possession and personal charisma.

Reported coefficient alpha by Webster and Bryan (2007) is .85. Internal consistency of the behavioural component was .78. For the attitude component it ranged from .79 to .82 from a factor analysis. This was through using a sample of students from the University of Colorado at Boulder. Gangestad and Simpson (1991) reported a reliability coefficient of .73 using undergraduate students at A & M University in Texas. The researcher could not find any validity information of the scales, as well as any South African studies that provided reliability or validity information.

5.6.5 Self-Efficacy for Protective Sexual Behaviours Scale

This scale was used to measure respondents' perceptions of their ability to refuse sexual intercourse, question potential sexual partners and use condoms. It had three subscales, namely, the ability to say no, discuss and perform different activities as per the items. It was developed by Cecil and Pinkerton from the University of Alabama in Birmingham and The Medical college of Wisconsin in Milwankee in 1998. It is a 22 item scale requiring respondents to rate their responses on a 4 point Likert scale, where 1 is true, 2 is somewhat true, 3 is not so true and 4 is not true (Schiff & Zeira, 2005). This indicated the confidence participants had about the self efficacy to refuse unwanted sexual activities to partners. Its reliability was reported to be .91 using students from an Israeli high school (Schiff & Zeira, 2005). Cecil and Pinkerton (1998) also found an alpha of .82 using as sample of 221 undergraduate students. This indicates good internal consistency between items. No validity test studies were found. A high level of self-efficacy was indicative of confidence to discuss condom usage with partners and refusing sex when they did not want it. The researcher added one item relating to condom usage discussions by the respondent. The scale then became a 9 item scale. This scale was used to measure the self-efficacy that the youth has to refuse unwanted sexual activities with partners and to also discuss condom usage. The researcher could not find any South African studies that provided reliability or validity information.

5.6.6 HIV and AIDS Knowledge and Understanding Questionnaire

This questionnaire was adapted by Howard (2006) from studies that were done by Lebodi (1999) and Mbengashe (1996). This was done in order to remain in line with current levels of scientific knowledge on HIV and AIDS as well as to accommodate the aims and context of her study. The contest of this study was quite similar to that of Howard (2006); the samples are also almost identical and HIV is still a problem prevalent in the youth. This questionnaire has four categories, namely basic knowledge about the HI virus itself (items 1, 7, 13, 18, 20 and 23); knowledge of modes of HIV transmission (casual) (items 2, 5, 6, 8, 12 and 16); knowledge of modes of HIV transmission (sexual) (items 3, 4, 11, 14, 15 and 19); and the knowledge of prevention against HIV infection (items 9, 10, 17, 21, 22, 24 and 25). It consists of 26 items (Howard, 2006). While a number of the knowledge and under-standing items remained the same as the original HIV knowledge scale (Items 1, 2, 3, 5, 6, 7, 10, 12, 14, 17, 18, 19, 21, 22, 24, 25) others were removed and replaced with items from other well-established questionnaires used previously in the area of HIV and AIDS namely The HIV and AIDS Workplace questionnaire (Items 8, 15, 20, 23); as well as The HIV Knowledge Scale, developed in a collaborative environment between Health Initiates for Youth and The Measurement Group (1998) (Items 4, 9, 11, 13, 16) (Howard, 2006). The modifications and adaptations were done to accommodate the sample of the study (tertiary education students) by Howard (2006) as the test appeared to be too basic for their level of understanding when it was piloted. This was also confirmed by the tests of reliability (Cronbach's alpha = .18) (Howard, 2006). It is noteworthy that Howard (2006) incorrectly used a cronbach alpha instead of a Kuder Richardson given the categorical scale of measure of the questionnaire. This will be reported correctly in this research study as Kuder Richardson.

This measure was used to gather information regarding the participants' level of HIV knowledge as well as any misconceptions regarding HIV. The HIV knowledge and understanding section of the questionnaire consists of 25 items regarding the HI virus itself, HIV transmission and HIV prevention statements that participants respond to as being true or false (yes/ no style). A score of '1' was assigned for every correct response and a score of '0' for every incorrect response. Thus, the highest score an individual could receive was 25 (100%). The use of this questionnaire was to provide quantitative data about the fact that participants may have a high intellectual knowledge about the disease yet their beliefs/perceptions and behaviours may be impacted on by other factors.

The final item of this instrument asks the participants to indicate which source they most rely upon to gain information regarding HIV and AIDS, namely friends, siblings, parents, relatives, written media,

consulting health care professionals, television, lecturers or school teachers, or the church (Howard, 2006). Kuder Richardson alpha (KR-21) total reliability score was calculated for this instrument to determine the internal consistency between items on the scale, i.e. 0.8 (Howard, 2006). Construct validity revealed the following themes to the items, namely, knowledge regarding the virus; Knowledge of casual transmission; knowledge of sexual transmission; knowledge of modes of prevention (Howard, 2006). The instrument was then divided according to these variables and a reliability score provided for each variable, as indicated on Table 6.

Table 6:
The reliability score for each variable in the HIV knowledge and understanding questionnaire

Kuder Richardson alpha (KR-21) of the HIV and AIDS knowledge and understanding	
Knowledge regarding the virus	0.6
Knowledge of casual transmission	0.5
Knowledge of sexual transmission	0.5
Knowledge of modes of prevention	0.5

The calculations produced good reliability KR-21 alpha scores. The respondents (tertiary education students) were expected to score highly on the items of the HIV knowledge and understanding section thus, producing low variability within the variables of this instrument (Howard, 2006). The content validity of this instrument was 0.92 (92%). In terms of face validity, the appearance of the HIV knowledge and understanding test reflected to be authentic in its presentation of items in line with questioning participants about their knowledge regarding the HI virus, modes of transmission and methods of prevention against HIV infection (Howard, 2006).

5.6.7 [L]ovelife Exposure and Participation Questionnaire

This questionnaire was developed by the researcher for the purpose of this current research. It was developed to evaluate the programme, to establish the level of exposure and participation the youth has to loveLife's call centre and community outreach services. It is an open-ended questionnaire. [L]oveLife has developed a questionnaire for the purpose of their research to monitor the progress of the programme (loveLife, 2004). This questionnaire was designed to consist of questions asking respondents questions pertaining to exposure and utility of loveLife services. It further enquires of self report behaviours such as pregnancy and symptoms of STIs; sexual behaviour, age of first intercourse and key antecedents;

contraceptive use; sexual coercion and violence; attitudes, norms and communication around HIV; perceived risk of HIV and health seeking behaviours.

This questionnaire has been used to conduct research in the field of HIV and AIDS prevention programmes, for instance Pettifor et al. (2004) and Pettifor et al. (2005) and the loveLife team themselves from 2002 until present. However, this questionnaire was inaccessible and as a consequence, the researcher of the current study designed a new questionnaire, with items resembling those reported to be in the original questionnaire. It is also a self-report of the awareness, participation and actions taken through being exposed and participating in loveLife services (loveLife, 2004; Pettifor et al., 2004). However, the researcher limited it to exposure and communication around HIV. Standard measures pertaining to HIV knowledge, sexual behaviours and perceived risk were used to establish HIV risky behavioural aspects.

The newly developed questionnaire consists of items related to loveLife exposure, participation and actions taken as a response to loveLife. It is a 15 item questionnaire. It is a "fill in the blank" type of questionnaire requiring participants to answer the questions by filling in their responses (Rosenthal & Rosnow, 1991). This type of a questionnaire has been reported useful when research requires more specific responses (Rosenthal & Rosnow, 1991). As mentioned before this questionnaire together with the previous and current sexual behaviour questionnaire and the self efficacy for protective behaviours scale were piloted "to test out the measure on a small number of participants that are similar to the proposed sample" (Devlin, 2006, p.75). It can also be understood as a preliminary testing of materials prior to being used to the actual sample to improve the items and ensure their validity (Rosenthal & Rosnow, 1991).

5.7 Evaluation Approach/Strategy

Programme evaluation is concerned with the establishment of whether social programmes are required, effective and likely to be used (Nevo, 1983; Weiss, 1998). Furthermore, the role of evaluation research is to apply social research procedures in assessing and the conceptualisation and design, implementation and utility of social intervention programme to track the efficacy of such programmes (Potter, 2006; Rossi & Freeman, 1982). The central goal of programme evaluation is focused on answering specific practical questions about social programmes and their development (Potter, 2006). Weiss (1998) and Patton (2002) defined evaluation as the systematic assessment of the operation, characteristics and/or outcomes of a programme or policy, compared to explicit or implicit standards, in order to contribute to

the improvement of the programme or policy and inform decisions about future programmes. Patton (1997) and Taylor-Powell and Henert (2008) defined programme evaluation as the systematic collection of information about activities, characteristics and outcomes of programmes used to make judgments, improve effectiveness, add to knowledge, and inform decisions about programmes in order to improve programmes and be accountable for positive and equitable results and resources invested. Weiss (1998) defined a programme as a structured intervention designed to improve the well-being of people, groups, organisations, or communities. Therefore, evaluations are done with the goal of making recommendations for improvements pertaining to the implementation of that particular programme. An advantage of using a qualitative method in an evaluation is that qualitative findings illuminate the people behind the numbers and put faces on the statistics to facilitate deeper understanding and meaning (Patton, 2002).

The aim of this study that pertained to programme evaluation was the examination of whether tertiary level youth are exposed to and utilise loveLife services. Thus their level of exposure and participation to its services was assessed. This was in addition to assessing their level of HIV knowledge and risky behaviours in exposure to these services. The loveLife theoretical constructs for intervention suggests that exposure and participation in its services is associated with thorough HIV knowledge, perceived risk and self efficacy of healthy behaviours, which then results in changes in levels and characteristics of risky sexual behaviours (loveLife, 2004). Hence this current study's aim to evaluate the connection in the loveLife intervention constructs through relating the respondent's level of HIV knowledge, risky behaviours and the youth's self efficacy to healthy sexuality with their level of exposure and participation to its services. This was determined through the youth who are exposed to and identified loveLife as their source of HIV information. Moreover, this research study also explored factors negatively or positively influencing the youth's level of utility of the loveLife services. Shisana and Simbayi (2002) argued that telephone helplines provide opportunities to increase understanding of information needs, and recommended that resources be committed to monitoring, analysing and evaluating telephone helpline services. This current study aimed to explore and analyse (provide monitory results of) thethajunction and the community outreach programme of loveLife from the perspective of a sample representative of the programme's targeted audiences. The evaluation approach that was used was guided by the programme's (loveLife) theory as highlighted by the theory-driven approach (Chen, 1990; 2005; Wandersman & Linney, 1991). The logic model was used because it provided the logic that would enable the researcher to best conduct and provide a detailed account of the evaluation. Weiss (1998) highlighted that there is no correct way of conducting programme evaluation. Thus this research aim was evaluative based on the implementation of the programme theory (its theoretical constructs for intervention) as well

as a relevant theory drawn from literature. The theory drawn from literature was assumed to be guiding the programme of focus (loveLife) to allow for success in carrying out the intended objectives; and also decide the method for the enquiry accordingly.

Theory-driven evaluation is "any evaluation that uses programme theory or programme logic as its guiding framework" (Davidson, 2004, p.248). A logic model is described as a logical series of statements linking a condition, the activities to be employed to address a specific condition, short term outcomes resulting from activities and the long term impacts expected to occur as multiple outcomes are achieved (Wandersman & Linney, 1991). The following sections provide a detailed discussion of these two approaches to evaluation, with particular emphasis on the logic model of evaluation. The programme's theory, as obtained from the programme's (loveLife) documents and social science theory (social learning and cognitive theory and the loveLife's model of behaviour change), were used as the basis for analysis and interpretation.

5.7.1. Chen and Rossi's Theory-Driven Approach

The theory-driven approach was developed by Chen and Rossi in 1980 as an alternative evaluation approach to the atheoretical nature of programme evaluation approaches that were dominating this field at that time. The major concern was that evaluation approaches were characterised by step-by-step methods of conducting evaluations without the consideration of the theoretical implications of the programmes content, setting, participants, implementing organisation and so forth (Chen, 1990). Chen (2005) further pointed out that these atheoretical views tended to result in simple overall relationships between input/output or black box type of evaluations, without any consideration of concerns for the transformation processes in the middle. Chen and Rossi (1990) argued for the importance of a programme theory, that is, evaluation should include theoretical issues (Lipsey & Pollard, 1989). Chen (1990) highlighted that interventions are structured to lead to the desired outcome and that the programme operates under some theory. However, this theory is often implicit or unsystematic providing general guidance for the formation of the programme and explains how the programme is supposed to work. He defined theory as a set of interrelated assumptions, principles and propositions to explain or guide social action (Chen, 1990).

The central argument in the theory-driven approach is that programme theory has to be integrated into the evaluation process. The emphasis is on the significance of examining the nature of programme theory

(Chen 2005). A programme theory is defined as "a specification of what must be done to achieve the desired goals, what other important impacts may also be anticipated, and how these goals and impacts would be generated" (Chen, 1990, p.43). This definition implies that programme theory involves a combination of the descriptive and prescriptive theoretical aspects. Descriptive in a sense that it is concerned with explaining phenomena — what are the underlying causal mechanisms that link relationships between programme components (treatment, implementation, processes, and outcomes); and prescriptive in a sense that it focuses on specifying how things should be done how to bring improvements, in particular what should be the structure of the programme including the four components mentioned above as they are related to the value of the programme (Chen, 1990). Prescriptive theory is normative theory while descriptive theory is causative theory.

Theories in theory-based evaluations can be social science theories, while they can also be any model setting forth the logic that must be involved if a programme is going to work. Thus the programme theory itself could be referred to as a 'logic model' (Chen & Rossi, 1987; Coffman, 1999; McLaughlin & Jordan 1999; Weiss, 1998). McLaughlin and Jordan (1994) indicated that theory driven evaluation assumptions about resources and activities, as well as how they lead to realising intended outcomes are often referred to as programme theory. Furthermore a logic model is a tool for describing programme theory. The term *logic model* is frequently used interchangeably with the term *programme theory* in the field of evaluation (McLaughlin & Jordan 1994). Thus logic models can alternatively be referred to as *theory* as they describe how a programme works and to what end (Kellogg Foundation, 2001). The theory driven approach was used to make the link and association between its (theory driven) and the logic model's view of programme theory.

5.7.2. Logic Model: Programme Performance Framework

5.7.2.1. Historical Origins of the Logic Model

The logic model was founded in the early 1970's and was advanced over the years (McClaughlin & Jordan, 1999; Rush & Ogbourne, 1991; Suchman, 1967). Joseph Wholey began using the model in 1983, and emphasised theories that programme managers had about their programmes for use in evaluations during initial planning of an evaluation. This model is still similar to the one used today, even though it has undergone many refinements and variations in terms of its basic concepts (Nazar, 2006). Falcone (2002) and Kellogg Foundation (2001) described the logic model as a systematic and visual tool used to describe the underlying logic or conceptual framework of a subject under study. It is also used to present

and share understanding of the relationships among resources operating a programme, activities to be operationalised, and the changes or results hoped to be achieved (Julian, 1997; Millar, Simeone & Carnevale, 2001). Models that outline the approach and expectations behind the intended results of a programme are most useful in designing effective evaluation and reporting strategies (Kellogg Foundation, 2001). The Foundation also indicated that mapping a proposed programme helps visualize and understand how human and financial investments contribute to achieving intended programme goals, and lead to programme improvements. The logic model can also be useful for describing organizations and programmes (McNamara, 2008). It also provides a common approach for integrating planning, implementation, evaluation and reporting (Taylor-Powell & Henert, 2008). The logic model in its simplest form has three components, namely, inputs, outputs and outcomes (Kellogg Foundation, 2001; McLaughlin & Jordan 1994; 2004; Taylor-Powell & Henert, 2008). In its simplest form, a logic model is a graphic representation that shows the logical relationships between inputs (programme resources), outputs (programme activities) and outcomes (resulting changes), as depicted on Figure 17 (McNamara, 2008; Millar et al., 2001; Taylor-Powell & Henert, 2008). Logic models link the problem (situation concerning the subject under study i.e. programme) to the intervention (inputs and outputs), and the outcome. It also helps to identify partnerships critical to enhancing performance of the programme (Kellogg Foundation, 2001).

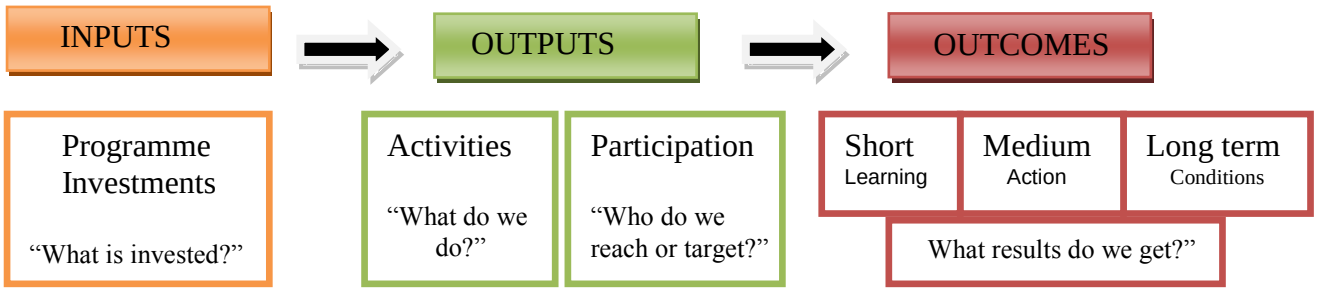

Figure 17: Basic Components of the Logic Model (Taylor-Powell & Henert, 2008b).

Inputs are the resources required to enable provision of the programme's services and its effectiveness. Outputs are activities undertaken by a programme. These are services provided to fulfil the programmes' mission. Outputs are also described in terms of the size and/or scope of the services and products delivered or produced by the program (Kellogg Foundation, 2001; McClaughlin & Jordan, 2004; McNamara, 2008; Taylor-Powell, & Henert, 2008). Outcomes are the changes or benefits resulting from activities of the programme. They are benefits experienced by clients during or after participating in the programme. Outcomes can be measured through indicators, which are observable and measurable aspects

of behaviour, attitude or knowledge that changes as a result of programme involvement (Kellogg Foundation, 2001; McClaughlin & Jordan, 2004; McNamara, 2008; Taylor-Powell & Henert, 2008). The diagram below (Figure 18) illustrates the basic structure of a programme logic model together with descriptions as well as units making up each level.

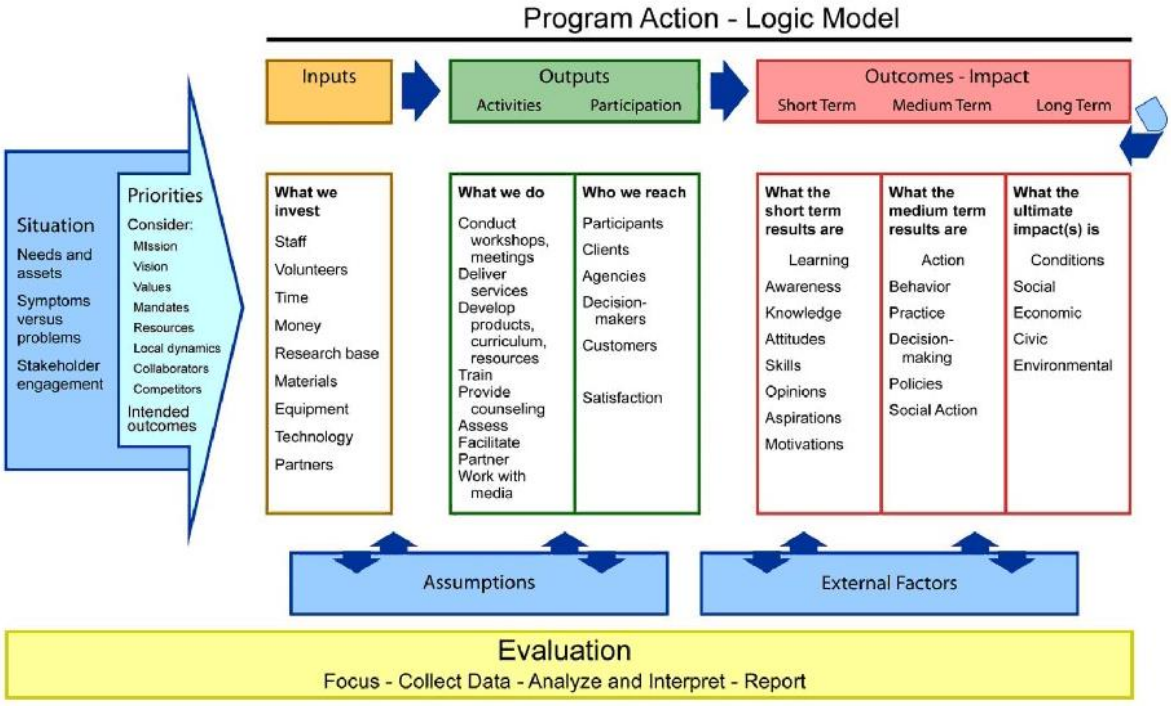

Figure 18: An example of an elaboration of a logic model (Taylor-Powell & Henert, 2008b, p.14)

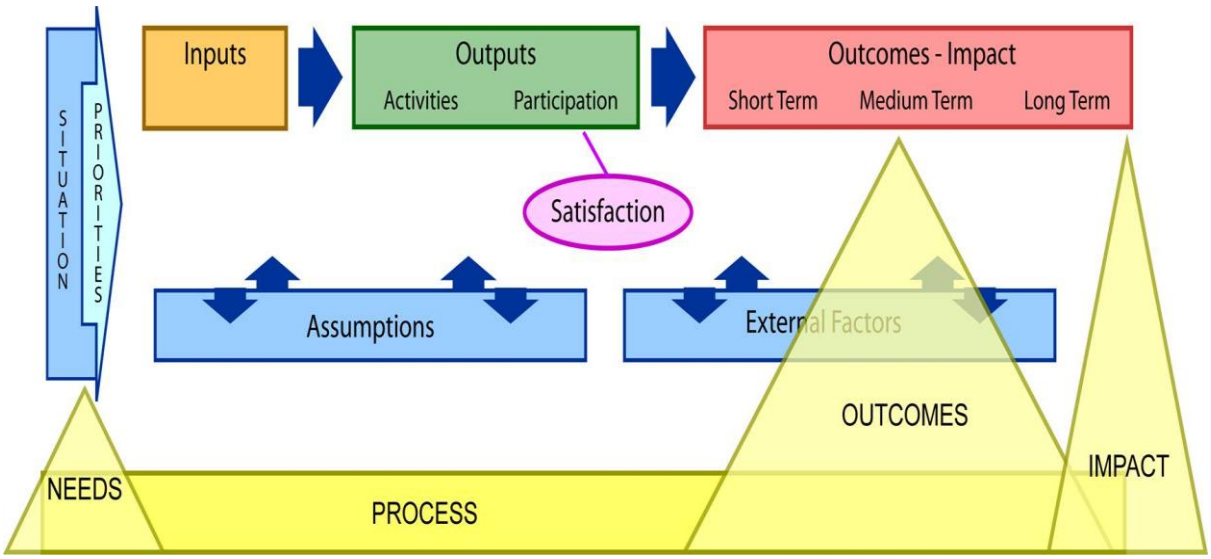

Figure19: An example of the process of a logic model (Taylor-Powell & Henert, 2008b, p.54).

Figures 18 and 19 above depict elaborations of the components of the logic model as well as the types of evaluation conducted when applying the logic model. There are four types of evaluations, namely, *needs/asset assessment*, which focuses on the assessment of characteristics, needs, priorities of the target population. *Process evaluation* is concerned with the manner in which the programme is implemented, its activities, their implementations as well as its participants, including their views about the programme (McNamara, 2008; Taylor-Powell & Henert, 2008). *Outcome evaluation* focuses on the extent to which desired changes are occurring and who is benefiting/not benefiting from the services rendered by the programme. It also considers what works and does not work for the programme and what the influential factors are. This is in terms of both the programme as well as the consumers of the programme. *Impact evaluation* focuses on the extent that changes can be attributed to the programme and what the net effects are (McNamara, 2008), and lastly whether the programme is worth the resources it costs (Taylor-Powell & Henert, 2008), as depicted on Figure 20. "Impact is the fundamental intended or unintended change occurring in organizations, communities or systems as a result of programme activities within 7-10 years" (Kellogg Foundation, 2001, pp.2). The hierarchy of effects below is an additional diagram depicting the process by which change is achieved when using the logic model (Bennett & Rockwell, 1995).

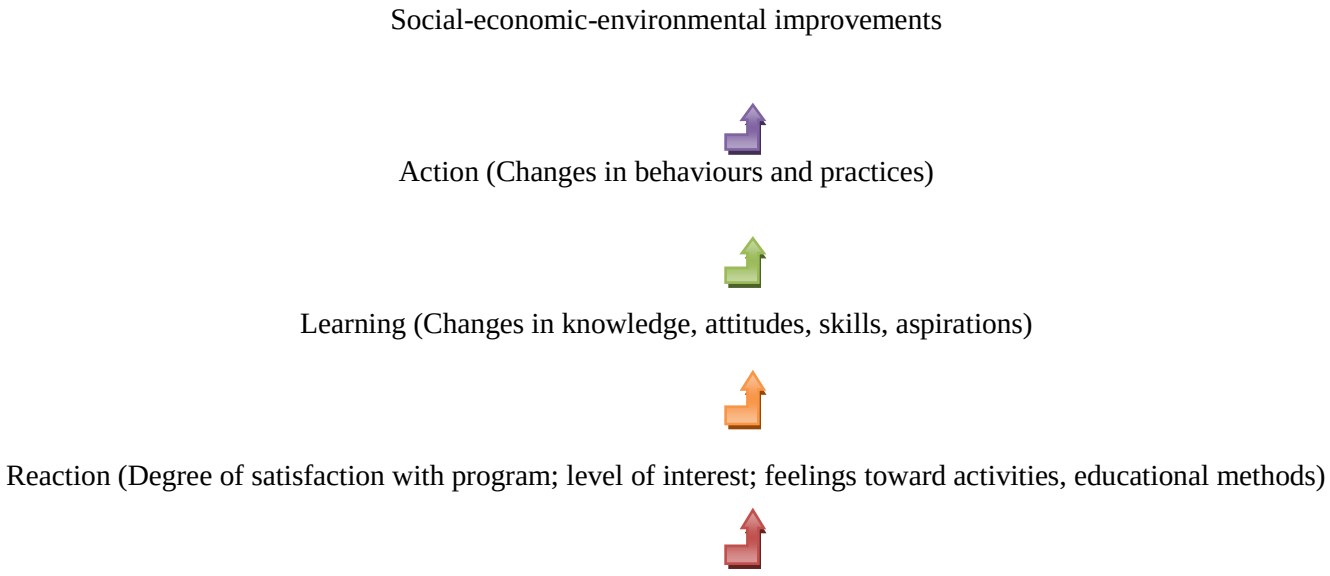

Figure 20: Hierarchy of effects: A hierarchy for targeting outcomes and evaluating their achievement (Bennett & Rockwell, 1995).

There are multiple types of logic models (Kellogg Foundation, 2001). The type of logic model most appropriate for this study, given the nature of the loveLife programme is the outcomes approach model. This model focuses on early aspects of program planning and attempt to connect resources and activities

with the desired results in a workable programme. It displays interrelationships between specific program activities and their outcomes. The linear, columnar model emphasizes the causal linkages assumed to exist between programme components, see Figure 22 (Kellogg Foundation, 2001; Wholey, Hatry & Newcomer, 1994). It often subdivides outcomes over time to describe short-term (1-3 years), long-term (4-6 years), and impact (7-10 years) that may result from a given set of activities (Kellogg Foundation, 2001).

Short-term outcomes are results expected to be achieved between 1-3 years after activities of a program are underway. They are specific changes in attitudes, behaviours; knowledge, skills, status, or level of functioning expected to result from program activities. These are often expressed at an individual level among programme participants. Long-term outcomes are results expected to be achieved in 4-6 years. They are also specific changes in attitudes, behaviours, etc expected to result from programme activities. These usually build on the progress expected by the short-term outcomes (Kellogg Foundation, 2001). The evaluation aim of the current study related to short and long term outcomes as experienced by participants of the loveLife programme. Impact was not a focus of the study given the nature and scope of research, as it requires strict research design and sampling formulations.

The logic model expresses the "theory of action" or "theory of change". Parts of the logic model are connected to depict a theory of change, signifying the process by which the change occurs (Taylor-Powell, & Henert, 2008). A theory of change is a description of how and why a set of activities that are part of a highly focused programme or a comprehensive initiative are expected to lead to early, intermediate, and long-term outcomes over a given period (Anderson, 2000; Julian, 1997; Taylor-Powell & Henert, 2008). The theory connects the activities of a program with the goals of the program. It expresses the relationship between actions and results. Furthermore, the logic model draws its basic structure from systems' theory (Julian, 1997). Systems theory is an approach of information gathering or processing with a primary feature of acknowledging interconnectedness (Taylor-Powell & Henert, 2008). Systems theory suggests a dynamic and circular approach to understanding causal associations rather than a uni-dimensional, linear approach. Logic models can be created to depict these causal mechanisms and associations by adding feedback loops and two-way arrows and narrative explanations (Millar et al., 2001; Taylor-Powell & Henert, 2008). The logic model depicts assumed causal connections, not true cause-effect relationships. These helps clarify expected linkages, focus on principles to test, educate funders and policy makers, and propel a program into action and learning (Taylor-Powell & Henert, 2008). Linked to the causal associations is the if-then relationship.

At the heart of logic model is the assumption of the "If-then relationships". The "if then relationship" imputes that the programme's theory of change is related to the causal link between the constructs. If inputs are put in place, then there will be outputs, and these will result in the desired outcomes (Kellogg Foundation, 2001; Taylor-Powell & Henert, 2008). ***If*** there is access of resources, ***then*** they can be used to accomplish planned activities. ***If*** planned activities are accomplish, ***then*** hopefully the amount of intended product and/or service will be delivered. ***If*** planned activities are accomplished to the extent intended, ***then*** participants will benefit in specific ways. ***If*** these benefits to participants are achieved, ***then*** certain changes in organizations, communities, or systems might occur under specified conditions (Kellogg Foundation, 2001; Taylor-Powell & Henert, 2008). [L]oveLife's chain of constructs as an "if-then relationship" imputes that if the youth is exposed to their HIV prevention campaign then they will have thorough HIV knowledge and perceived risk, together with attitudes, norms, sense of future and self-efficacy (determinants of behaviour). This will then lead to changes in levels and sort of sexual activity amongst them (Behavioural outcomes) and the long term outcome of reductions in the prevalence of HIV, STIs, and pregnancy (biological indicators).

5.7.2.2 The Operationalisation of the Logic Model of Evaluation Used in this Study

The current study's minute evaluation plan was informed by the theoretical assumption of the loveLife's theory and constructs of intervention. This included the aims of loveLife, particularly the two services (thethajunction and community outreach) and their intended outcomes as a way of assessing the youth's level of exposure and utility of (and response to) the services and factors influencing these. As a result of the focus of the study, only the outputs (activities and participation) and outcomes (short-and medium-term) were considered within the framework of the research question in this study. The inputs are not considered as the study only sought to explore whether these youth are aware and using loveLife services in relation to loveLife's objectives and plan of action, and how that had benefited them. The focus was not much on what resources loveLife invests in order to reach its goals (inputs). However, the outputs were considered together with the inputs (i.e. community outreach as well as thethajunction services are targeted at youth people and rendered by qualified personnel, with enough funding to implement their programme). Thus the outputs (thethajunction and the community outreach programmes) are linked to the outcomes of the programme (improved determinants of behaviours). The measurement was on the benefits of exposure to and participation in the two loveLife services as experienced by the sampled youth.

See Figure 21. A combination of qualitative and quantitative methods was used to obtain the data for the minute evaluation, as recommended in the literature (Chen, 1990; 2005; Weiss, 1998).

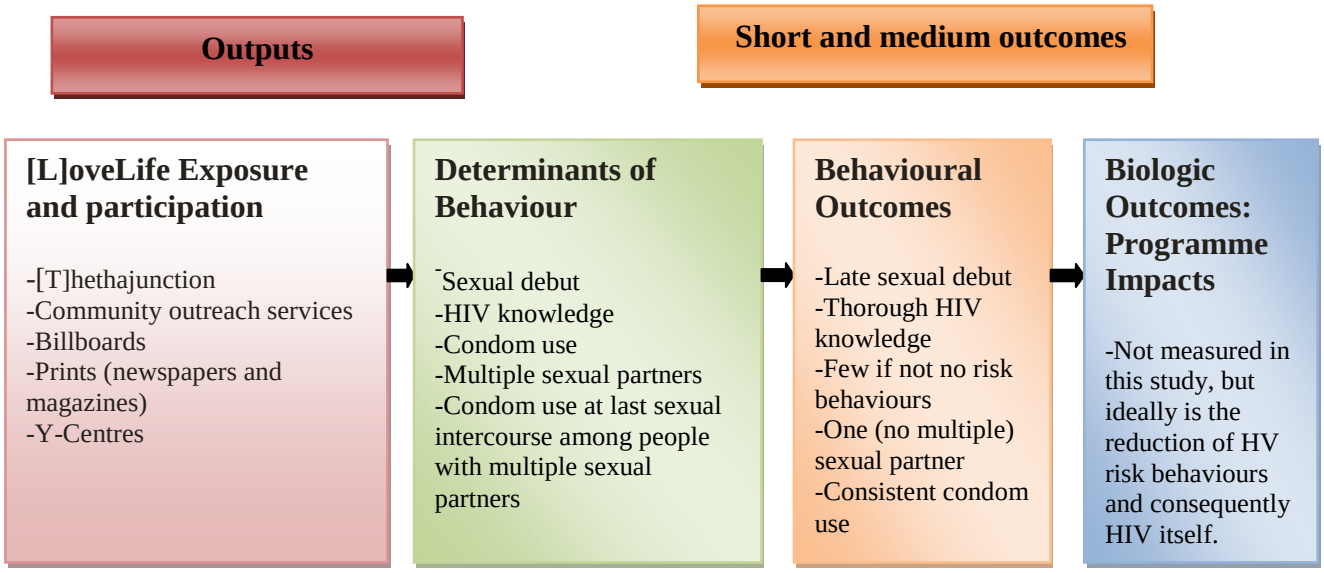

Figure 21: The study's evaluation model based on the loveLife's theoretical construct for Intervention and programme action-logic model

5.7.2.3 Strengths and Benefits of Using the Logic Model

The logic model has gained increasing attention over the years. Some of the reasons for its widespread include simplicity of its constructs, its flexibility to accommodate the complex breadth, depth of public sector and non profit activities, as well as the structure it provides to make explicit the implicit and underlying assumptions specific to the programme under evaluation (McLaughlin & Jordan, 1999; Millar et al., 2001). "The Logic Model process is a tool that has been used for more than 20 years by program managers and evaluators to describe the effectiveness of their programmes" (McCawley, 2008, p.1).

The logic model is helpful in programme improvement, by identifying projects critical to goal attainment that are redundant, or have inconsistent or implausible linkages to programme goals (Kellogg Foundation, 2001; McDonald and Teather, 1997; McLaughlin & Jordan, 1999; Nazar, 2006; Taylor-Powell & Henert, 2008). Logic models build a common understanding of the programme and expectations for resources, people reached and result. It enhances teamwork, guides prioritization and allocation of resources, motivates staff, helps to identify important variables to measure; and uses evaluation resources wisely, and supports replication (McDonald & Teather, 1997; McLaughlin & Jordan 1994; Taylor-Powell & Henert, 2008). Lastly, it finds "gaps" in the theory or logic of a program and work to resolve them.

5.8 Data Analysis

5.8.1 Quantitative Data Analysis

Descriptive statistics, describing the nature of the sample in the form of cross tabulations and frequency distributions of the nominal variables in the study were obtained i.e. race and gender. Descriptive statistics of moments in terms of means, standard deviations, ranges, skweness, kurtosis coefficients of interval and ordinal measures (some questionnaires, i.e. HIV and AIDS knowledge and understanding, Socio-sexual orientation index and the self efficacy for protective sexual behaviours) were conducted (Howell, 1997; Huck, 2004; Moursund, 1973). Measures of central tendency (mean, median and mode numerical values), frequencies, standard deviations, ranges and skewness were computed to describe the nature of the sample and characteristics of gathered data (distribution nature) (Cozby, 1985, Huck, 2004, Neale & Liebert, 1986). Furthermore, the kolmonorov test of normality wase applied to confirm the distribution analysis of scales. In the case of a non normal distribution such as SOI, a logarithm transformational test was applied since the scale was positively skewed (Tabachnick & Fidell, 2001). The reliability of the scales were also computed in the forms of Cronbach Coefficient Alpha for interval scales and Kuder Richardson alpha (KR-21 score) for dichotomous scales. These analyses were conducted with SAS version 4.0 and SPSS statistical software packages.

Chi squared analyses were applied to establish the percentages and frequencies of the condom attitude scale together with the HIV and AIDS knowledge and understanding scale as they are dichotomous response variables (Huck, 2004; Moursund, 1973; Rosnow & Rosenthal, 1996). Specifically, a two group independent sample chi squared test with a dichotomous response variable was applied. Frequencies of condom attitudes and HIV knowledge across gender and race (which were summarized through percentages) were assessed. Furthermore, the frequency counts of previous and current sexual activity, home language and preferred language when calling loveLife, sources of HIV information, as well as the components of loveLife questionnaire that are nominal were examined.

A Point biserial correlation was applied to examine the relationship between sexual behaviour (condom attitude, SOI) and awareness of the two loveLife services (media). The association was sought between an interval measure (SOI) and a nominal scale awareness of loveLife services (Howell, 1997; Huck, 2004). This was an appropriate statistical technique.

A two independent t-test was applied to compare means of two genders on the transformed SOI, and

Self-efficacy for protective sexual behaviours scale. The assumptions for t-test statistical techniques (parametric tests) are normal distribution, random independent sampling, and interval scale data (especially the dependent variable) and equal variance (Howell, 1997; Huck, 2004). Furthermore, T-test is robust to violations of assumptions of normality and homogeneity of variance when sample sizes are equal, n1 = n2 (Huck, 2004). Furthermore, a Mann-Whitney U test was used to assess gender differences in sexual debut. This was given that the age of first encounter was ordinal, and thus didn't meet the assumptions for a parametric test, t-test.

5.8.2 Qualitative Data Analysis

Qualitative research seeks to describe and analyse the culture and behaviour of humans and their groups from their point of view in depth and detail (Bryman, 1988; Patton, 2002). Qualitative analysis is typically deductive in its early stages, especially when developing a codebook for analysis or figuring out possible categories, patterns and themes. This process is called open coding, with the central purpose of opening the enquiry widely (Lawrence, 1995; Patton, 2002). There are different types of qualitative data analysis. This research applied thematic content analysis to extract themes and examine ideologies from the dataset (Lawrence, 1995).

Thematic Content Analysis is a method for identifying, analysing and reporting patterns (themes) within data (Bryman, 2004). Boyatzis (1998) defined thematic analysis as qualitative method that allows for the encoding and translation of qualitative information into quantitative data. Content analysis refers to a process of searching text for recurring words or themes, as well as their frequencies in the form of both counts and the absence, presence or frequency of activities in the form of words used such as often, never, rarely, sometimes, always, etc. (Boyatzis, 1998; Bryman, 2004; George, 1995). It is "the effort to take a volume of qualitative material and attempts to identify consistencies and meaning" (Patton, 2002:453). This systematic method of analysis was intended to reveal trends and identify important examples, themes, or concepts and patterns in the loveLife data (Braun & Clarke, 2006; Holsti, 1969; Lawrence, 1995; Patton, 1987; Silverman, 1985).

Thematic Content Analysis was applied in the form of recording units, with an inductive defining category of analysis from theory and data from the questionnaires (George, 1959; Holsti, 1969; Lawrence, 1995). Inductive analysis involves the use of direct observations to confirm ideas and link together observed facts to form theories or explanations of how natural phenomenon occur. It means that

the identified themes are strongly linked to the data themselves, and may bear little or no relation to the specific research question asked to respondents on data collected specifically for the research (Braun & Clarke, 2006). Furthermore, these themes would not be driven by the researchers' theoretical interest in the area or the topic. For this matter, inductive analysis is a process of coding data without fitting it into a pre-existing coding frame, or the researcher's analytic preconceptions (Lawrence, 1995; Patton, 2002). This process "inductive or bottom up analysis", way of identifying theme and patterns was applied in the current research. The cross sectional nature of data collection employed in this research allowed respondents to complete an open ended questionnaire in a natural setting, according to their own experiences. The responses provided (data) were analyzed in terms of their occurrences (words, patterns or phrases, as well as meaningfulness in capturing an important aspect related to the research questions), and were categorised and integrated into meaningful themes. The themes from the data were rich thematic descriptions, an accurate reflection of the content of the entire dataset with predominant ideas (Braun & Clarke, 2006).

A theme is defined as "a simple sentence, a string of words with a subject and a predicate" (Lawrence, 1995, p.181). It is a pattern found in the information that at minimum describes and organises the possible observations and at maximum interprets aspects of the phenomenon under study. Braun and Clarke (2006), and Gery and Russell (2003) highlighted that themes capture something important about the data in relation to the research question, and also represents some level of patterned response or meaning within the data. Patterns are descriptive findings while themes are categorical or topical (Maxwell, 1998). Maxwell (1998) highlighted that categorising makes it easier for researchers to develop a general understanding of what is going on to generate themes and theoretical concepts, and organise and retrieve data to test and support general ideas. In this research study, a theme was identified through the frequency and patterns of words, from the data as well as their meaningfulness in relation to the research questions. These were integrated together into meaningful answers of specific questions. Consistency was maintained in how this was done. Thus the significance of a theme was not only dependant on quantifiable measures but rather its ability to capture an important aspect in association with the overall research question (Braun & Clarke, 2006).

Content analysis has eight linear steps of analysis while thematic analysis on the other hand has 6 steps. A combination of the two was used in the analysis of data, however concentrated on thematic analysis on data from the loveLife exposure, participation and response questionnaire investigating the participants' utility of the thethajunction and the community outreach services, and also factors contributing to their utilising the services. The responses from the questionnaire were neatly hand written on A4 papers, read

for familiarity, then organised (in terms of frequency counts and patterns of similar data) and integrated into meaningful and manageable themes, per question. Before integrating data into themes, it was coded according to dominance and similarities in meaning, as well as frequency to avoid losing data (Boyatzis, 1998; Braun & Clarke, 2006). The units of analysis were sentences, phrases and words. Categories were established based on the similarities and relatedness of data, as well as guided by literature. However, in terms of categorising sources of HIV knowledge, established categories (such as general media-Radio-TV, billboards, print) were used. The frequency of words and phrases were recorded. No data was considered irrelevant; however in cases where it did fit into categories, it was reported and discussed separately. Inductive analysis considers and reports all data as important as it is respondents' perspectives (Holsti, 1969; Lawrence, 1995; Palmquist, Carley & Dale, 1997). The researcher then collated data relevant to each other in relation to their frequencies to make up overarching themes, and prepared for discussion. These two methods of analysis were used to code and categorised data into themes see Table 7.

Table 7:

Themes/Categories and their descriptions relevant to loveLife exposure or knowledge

Theme/Category	Theme/Category description	Examples of coded phrases
loveLife		
HIV and AIDS prevention	This theme refers to loveLife being a HIV prevention campaign and its key concepts such as abstinence, faithfulness, responsible or safe sex (condomise), do not have sex at a young age or before marriage, STIs, HIV and AIDS, pregnancies, the spread of HIV and AIDS and relationships, love relationships.	**Respondent 130** "*It is a programme that allows people to talk about everything they want to including relationships, sex, disease (HIV and AIDS) STDs* **Respondent 41** *"they give information about HIV and AIDS and how its spreads and how to prevent it to young people"* **Respondent 19** *"provide awareness of HIV and AIDS and ultimately its prevention"*
Outreach programme for the youth	This theme refers to loveLife being an educational programme aimed at young South Africans. It teaches, encourages, promotes, advises, emphasises, creates awareness, empowers and counsels its targets to be knowledgeable mainly about HIV and AIDS and life related issues.	**Respondent 50** "*It's a programme that promotes awareness of HIV and AIDS issue…*" **Respondent 2** *"its an outreach programme geared at spreading HIV and AIDS awareness"*
Healthy living or lifestyle	This theme refers to loveLife being about health sexuality and living, confidence, self esteems, responsibility and optimism about the future. This is through activities such as sports, debating, life skill course and many more that contribute to the growth of young people to have positive living and attitude, love and relationships.	**Respondent 35** "*It's a programme that promoting healthy and positive living*" **Respondent 32** *"emphasise…healthy lifestyle, focus on the future, be optimistic, equip young people to be focused and positive about life"*
Not clued up	This theme refers to the respondent to not be clued up about or know about loveLife, by providing incorrect information or irrelevant to the question asked.	**Respondent 40** "*I only know that it exists, I have never actively participated in such a programme. All the information I have obtained from loveLife is really from their TV programmes"*

thethajunction		
Free and anonymous HIV and AIDS helpline	This theme refers to thethajunction as a loveLife's youth call centre where youth can call for free from a telephone line (Telkom phone) to speak to trained counsellors.	**Respondent 34** *"is a telephone line that helps young people, which is free to call from a Telkom phone. It helps young people to solve their problems and motivates them to get attitude"* **Respondent 48** "*young people can call and get information on HIV and AIDS*" ***Respondent 11*** *"you can call anonymously and they will give you information on any question you may have, you can select the language you want help back with"*
HIV and AIDS helpline for youth	This theme refers to thethajunction as a helpline that deals in answering, motivating, supporting and discussing problems, queries, advice and information concerning HIV and AIDS, STIs, sex, drugs, rape, abuse, pregnancy, love, life, family and relationship issues, getting attitude and any other social problems or life challenges young people are experiencing.	**Respondent 28** *"it is linked to loveLife and its involved in educating people about HIV and AIDS in the form of a call centre"* **Respondent 91** "*it allows people to reveal their status so that they can help others who are still shy about their status and encourage them to go and test in order for them to know where they are standing in terms of their status*"
Incorrect/irrelevant/not clued up	This theme refers to the respondent to not be clued up about or know about thethajunction, by providing incorrect information or irrelevant to the question asked.	**Respondent 72** "*I just saw magazines with issues related to HIV and AIDS and making the right decision"* **Respondent 40** *"I first find a poster on a newspaper"*
Not much/from this study	This theme refers to the respondent to not be clued up about or know about thethajunction with an indication that they don't know much or that they only learned about it from this study.	**Respondent** 19 *"not much"* **Respondent** 16 *"not much"* **Respondent** 9 *"I got to know about it from this questionnaire"*
Community outreach programmes		
Community based programme for health and HIV and AIDS related education	This theme refers to loveLife's community outreach programme as situated and working in, and for the community to educate, develop and empower them at large i.e. the youth, adults, and schools, about HIV and AIDS and STI diseases.	**Respondent 27** "*they go to schools to teach about sexual intercourse relations and its consequences. They also teach the community at large as they are situated within communities*"
Fun events	This theme refers to loveLife's community outreach programme as using fun activities and games to emphasise their teachings, through school visitations, organising events for the youth, namely, sports and arts competition, computer and leadership courses, workshops on healthy sexual conduct in their franchises and Y-centres.	**Respondent 140** "*they give people (the community) information about HIV and AIDS and related issues like living with a HIV positive person, dating, etc and they let the community participate in their programmes by using games and other fun activities so as to teach or emphasise that teaching*" **Respondent 32** "*they have games, workshops, etc. for young people, Y-Centre franchises where youngsters learn about healthy lifestyles (behaviours) and focus on the future*".
Empowering community by training the youth to volunteer	This theme refers to loveLife's community outreach programme as developing and empowering youth, students and community through education and social issues.	**Respondent 64** *"during school holidays they create sports and art competition which keeps students busy. They also run computer courses and leadership courses"* **Respondent 44** "*it is working in with the communities in bringing development and support in terms of the poor and orphans"* **Respondent 28** *"they are aimed at educating people about HIV and AIDS and also help impoverished communities"*

Not clued up	This theme refers to the respondent to not be clued up about or know about the community outreach programmes, by providing incorrect information or irrelevant to the question asked.	**Respondent 39** *"not really but I am aware of what loveLife does"* **Respondent 9** *"nothing specific"*

Themes for other questions are mentioned in the results chapter. However the same method of analysis was applied. In terms of participation, frequency counts were examined and are presented in the results together with quotations of why or why not respondents utilised loveLife services, what they did and didn't learn.

5.9 Ethical Considerations

A certificate of ethics clearance was requested from the ethics committee at the University of the Witwatersrand for permission to conduct the study and use the identified population as the sample. A letter of permission to use students as the sample of this research was obtained from the relevant lecturers and college principals. Refer to appendix B and D for the respective letter and certificate. Arrangements were made with lecturers to have time for data collection. Students were approached during their lectures and the researcher briefly explained the aims of the research and highlight that the study would not pose any risks or benefits (Bryman, 2004). The researcher then requested students to volunteer to participate in the study. The researcher orally and in written form emphasised that participation was voluntary and no one was forced to partake, and also that there were no negative consequences for those who did not wish to partake. Respondents were also told that they had the right to withdraw at any time. Participation served as consent to the study (Bryman, 2004).

Confidentiality was ensured through telling respondents that only the researcher and researchers' supervisor would have access to the results. Anonymity was ensured as respondents were not required to provide their names on the demographic form and data was analyzed in terms of the group and not individual trends (Bryman, 2004). For confidentiality, participants were asked for permission to use their direct quotes from the open ended questionnaires in the research report as in this case it would not be possible to guarantee confidentiality. However, they remained anonymous as their names were not provided in the direct quotations. Institutions, particularly colleges were also protected through remaining anonymous as the researcher did not include the names of the institutions in the research report.

Respondents were asked to properly and completely fill all six questionnaires with no time constraints at their leisure. No deception was used (Bryman, 2004). Respondents were thanked for their participation

and the researchers' and supervisor's contact details were provided for any enquiries related to the study. Furthermore, participants were provided with loveLife's call centre (thethajunction) toll free numbers, CCDU, Lifeline and Campus Health Wellness Centre telephone numbers in case any individuals required psychological counselling as a result of participating in study. Respondents were also given information sheets and orally told that feedback would not be provided in terms of individual results but rather overall results would be given as group trends. Therefore, a report of the study would be made available on the psychology research and library websites of the University of the Witwatersrand after completion of the research project (2010) on: http://witspsychresearch.blogspot.com. The next chapter provides the results of the research study.

CHAPTER 6

Results

6.1. Introduction

The following chapter presents the results obtained in an attempt to answer the research questions. These results are presented in the form of Tables and Figures, each followed by a brief description. The chapter reports on both the quantitative as well as qualitative results. The chapter commences with the descriptive statistics and distribution nature of the gathered data from the various measures. The reliability coefficients of the Condom Attitude Scale, Socio-sexual orientation index, HIV and AIDS knowledge and understanding questionnaire and the Self-efficacy instruments are also reported. This is followed by the results of associations and differences between all variables of interest. All analyses of results were performed with an alpha level of 0.05 to test for significance.

6.2. Descriptive Statistics of the Research Variables

6.2.1. Condom Attitude Scale

The scale of measure of this instrument was categorical (nominal) in nature. Its distribution nature only has two points (the presence or absence of an item). Table 8 presents frequency counts of the scale. Three respondents did not complete this scale.

Table 8:

Descriptive statistics of the Condom Attitude Scale

Condom Attitude Scale		**Frequency**	**Percent**
CAS1	Disagree	6	4.0
	Agree	143	95.97
CAS2	Disagree	42	28.19
	Agree	107	71.8
CAS3	Disagree	13	8.72
	Agree	136	91.3
CAS4	Disagree	74	49.7
	Agree	75	50.3
CAS5	Disagree	57	38.3
	Agree	92	61.7
CAS6	Disagree	16	10.7
	Agree	133	89.3
CAS7	Disagree	64	42.95
	Agree	85	57.1

The majority of the respondents agreed with all 7 item of the CAS. There was no difference in the frequency of responses for item 4 as 75 respondents agreed while 74 respondents disagreed with the statement. These responses are indicative of a negative attitude towards condoms as most statements depicted a negative connotation of condoms.

6.2.2 Socio-sexual Orientation Index (SOI)

Table 9:

Descriptive statistics of the Socio-sexual orientation index

Variable	**N**	**Mean**	**Standard Deviation**	**Median**	**Min**	**Max**	**Range**	**Variance**
SOI	148	63.02	33.04	54.50	27	179	152.0	1091.87

Table 10:

Goodness-of-Fit Tests for Normal Distribution for the Socio-sexual orientation index

Test	Statistic (D)	p Value
Kolmogorov-Smirnov	0.13783726	<0.010

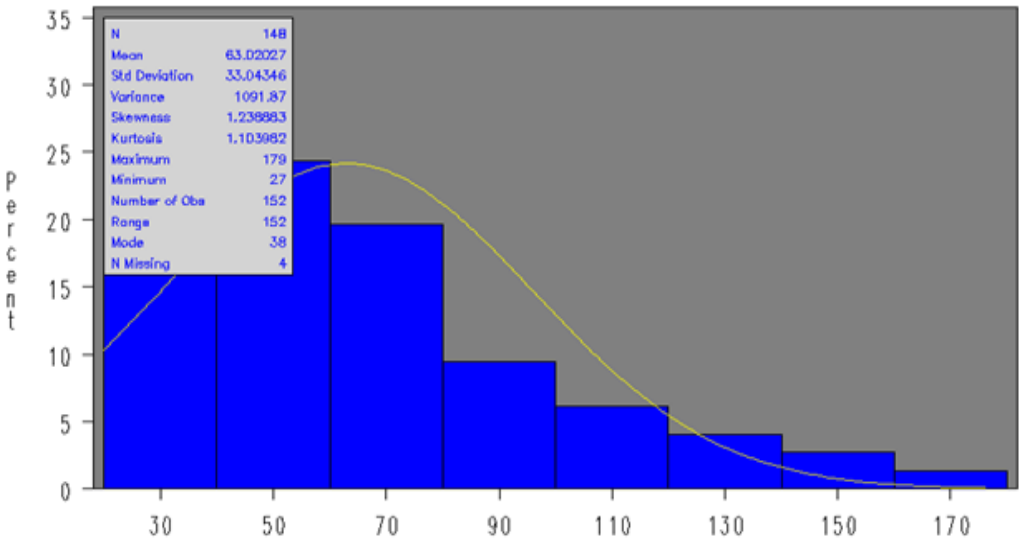

Figure 22: Histogram of the SOItotal scores

Basic statistical measures, as revealed by Table 9 indicate a mean of 63 (*SD* = 33), median of 54 and mode of 38 from the SOI measure (of 148 valid responses) to be different (un-identical) and not equally distributed. Furthermore, the histogram revealed scores from the SOItotal to be skewed to the right (positively skewed). This was also shown by the skeweness value of 1.24, which fell outside of the normal range. However, kurtosis yielded a positive 1.10, which is neither overly peaked nor overly flat (Mesokurtic distribution shape) (Huck, 2004). This distribution shape was also evident on the histogram (Figure 22). A goodness of fit test (Kolmogorov-Smirnov) for normality was also used to assess the normality assumption, and it revealed the SOItotal scores to not be normally distributed (<0.01) (Huck, 2004). Thus normality was not assumed. Since the mean is above the median most respondents can be considered to be of unrestricted SOI (Simpson & Gangestad, 1991). However, from the distribution analysis most respondents appear to be of restricted SOI. A logarithm transformational test was applied to normalise the positively skewed distribution as recommended by Tabachnick and Fidell (2001). Applying this technique would enable the researcher to analyse data with SOI using a parametric t-test, which have power and allows for detection of differences or relationships (Tabachnick & Fidell, 2001).

This resulted in a normal distribution as observed of Figure 23 overleaf. The skeweness as well as kurtosis values also improved to.366 and -.759 respectively, after the transformation, both of which were within the normal range (Huck, 2004).

Table 11:
Descriptive statistics of the Socio-sexual orientation scale

Variable	**N**	**Mean**	**Standard Deviation**	**Min**	**Max**	**Range**	**Skewness**	**Kurtosis**
Transformed SOI	148	1.75	.21	1.43	2.25	.82	.366	-.759

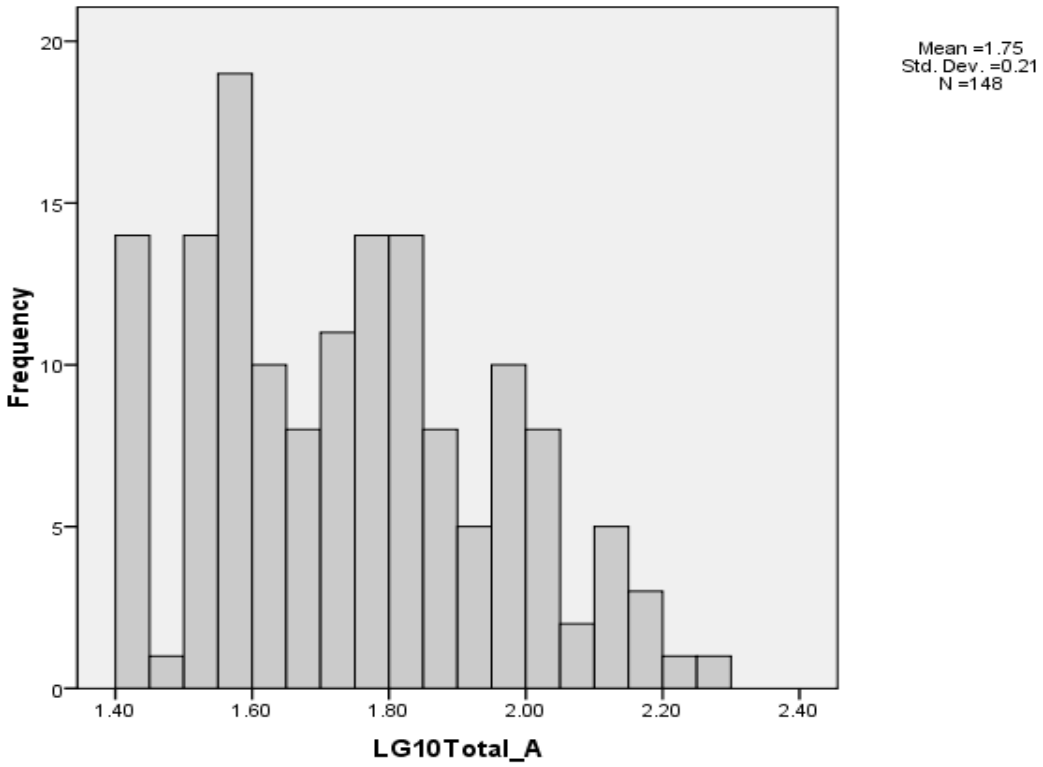

Figure 23: Histogram of the transformed SOItotal distribution

6.2.3 Self-efficacy for Protective Sexual Behaviours Scale

Table 12:

Descriptive statistics of the Self efficacy for protective sexual behaviours scale

Variable	N	Mean	Standard Deviation	Median	Min	Max	Range	Variance
Self efficacy	150	73.1	10.67	74.0	46	92	46.0	113.82

Table 13:

Goodness-of-Fit Tests for Normal Distribution of the Self efficacy for protective sexual behaviours scale

Test	Statistic (D)	p Value
Kolmogorov-Smirnov	0.0698	0.073

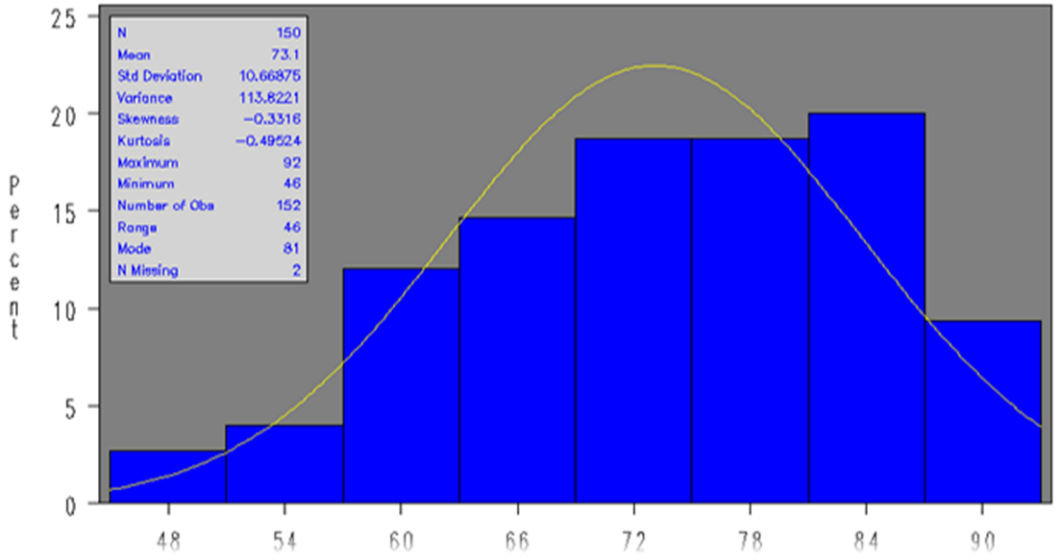

Figure 24: Histogram of the Self-efficacy for Protective Sexual Behaviours Scale distribution

Basic Statistical Measures, as revealed by Table 13 indicate a mean of 73 (*SD* = 10.67), median of 74 and mode of 81 from the Self efficacy scale measure (of 150 valid responses) to be similar and identical, therefore equally distributed. Examination of the Table and the histogram also indicated that the scores were normally distributed. See Figure 23. This was also shown by the skewness value of -0.3 and kurtosis of -0.49 falling within the normal range (Huck, 2004). Furthermore, a goodness of fit test (Kolmogorov-Smirnov) for normality (0.073) also confirmed normality (Huck, 2004). Hence there is a normal range of self- efficacy for protective behaviour.

6.2.4 HIV and AIDS Knowledge and Understanding Questionnaire

Table 14:

Frequency counts of the total HIV and AIDS knowledge and understanding total

Frequency counts		
Value	**Count**	**Cell Percents**
11	1	0.7
14	1	0.7
15	5	3.3
16	1	0.7
17	6	3.9
18	13	8.6
19	20	13.2
20	26	17.1
21	30	19.7
22	27	17.8
23	17	11.2
24	3	2.0
25	2	1.3

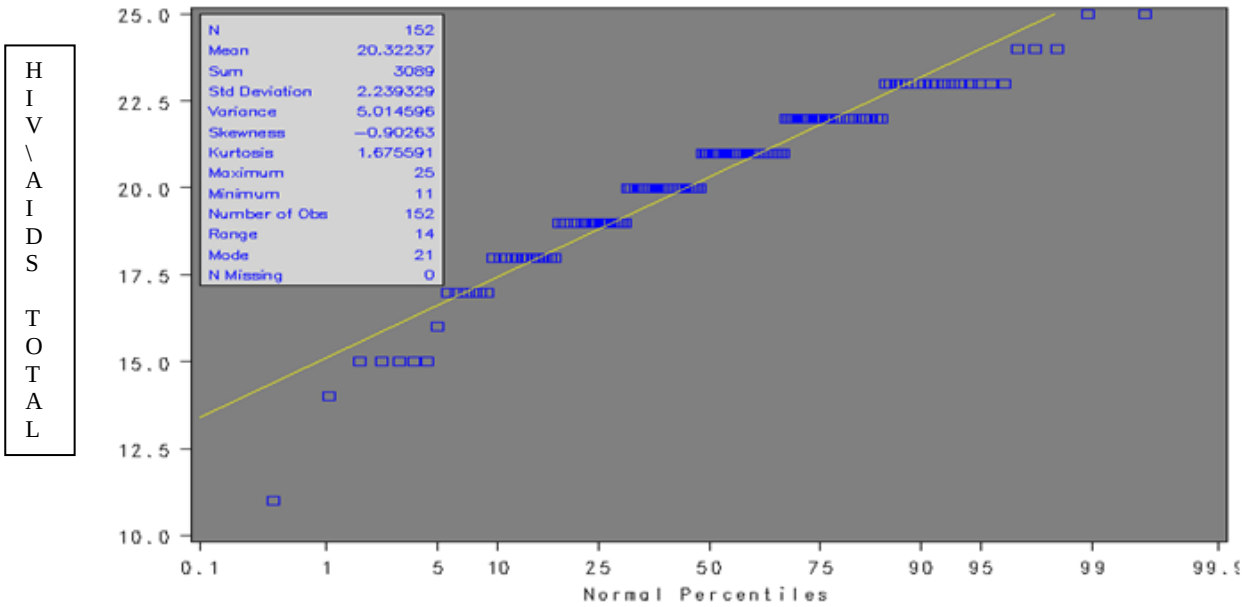

Figure 25: Distribution graph of the total scores of HIV and AIDS knowledge and understanding distribution

Only 2 respondents answered 100% correctly (see Figure 25 and Table 14). A breakdown of item responses highlighted that only 13 items were answered correctly by majority of respondents. These items were item 1, 3, 4, 10, 11, 13, 14, 15, 18, 19 and 21, 23 and 25. In summary, the majority of respondents answered moderately in their knowledge of HIV and AIDS. Only two respondents answered all items correctly thereby scoring 25.

The HIV knowledge scale was scored with 0 and 1, o as a false score and 1 as a true score. Thus it can be summed up to give a total score out of 25. In terms of the basic statistical measures of total score of the HIV knowledge, the mean was 20 (*SD* = 2.2), median was 21 and mode also 21, which were identical. See Table 15. The histogram on Figure 25 also demonstrated a normal distribution. This was also shown by the skewness value of -0.9 and kurtosis yielded a positive 1.67, which is neither overly peaked nor overly flat (Mesokurtic distribution shape) (Huck, 2004). Furthermore, a goodness of fit test (Kolmogorov-Smirnov) for normality (0.073) as well as the distribution on the histogram on Figure 26 below also confirmed normality (Huck, 2004). Hence normality was assumed for this measure.

Table 15:
Descriptive statistics of the HIV and AIDS knowledge and understanding questionnaire

Variable	**N**	**Mean**	**Standard Deviation**	**Median**	**Min**	**Max**	**Range**	**Variance**
HIV and AIDS knowledge and understanding questionnaire	152	20.3	2.2	21	11	25	14	5.0

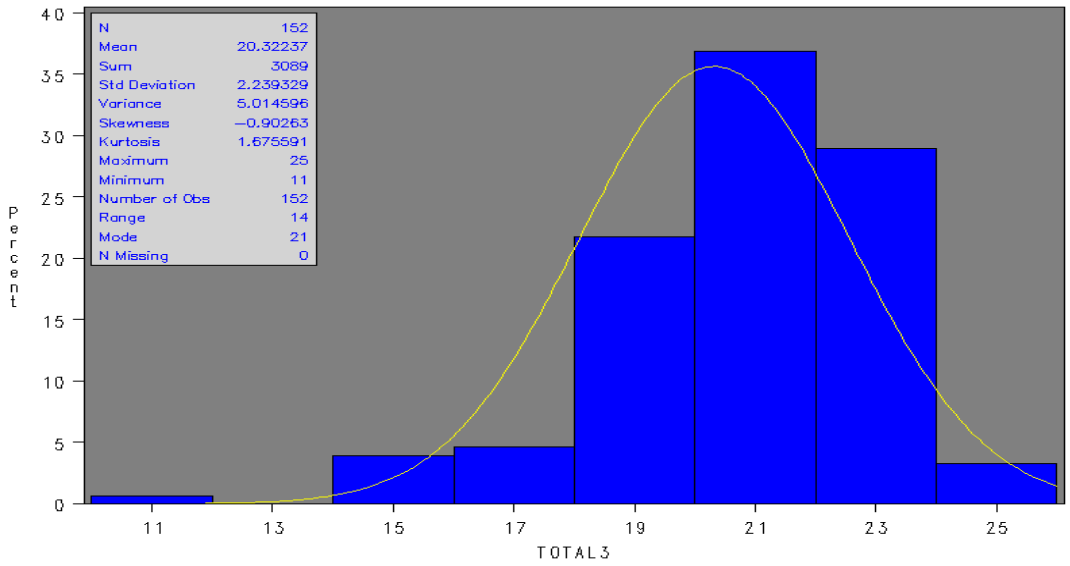

Figure 26: Histogram of the total scores of HIV and AIDS knowledge and understanding questionnaire

6.2.5 Age

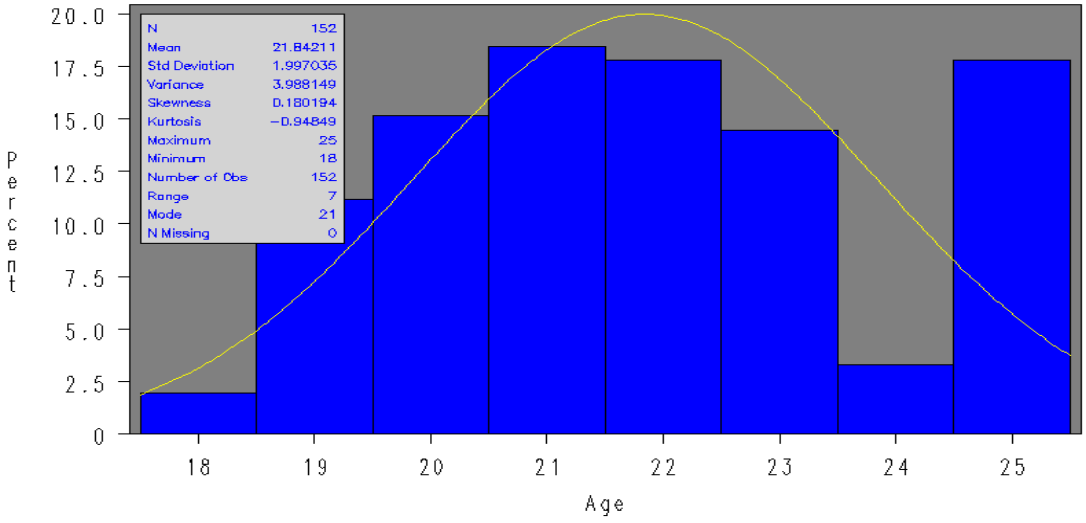

Figure 27: Histogram of age

Age was normally distributed with a mean of 21 (*SD* = 1.99). The mean mode and median were all identical (21, 21, and 22). For the quantitative sample, the majority of the respondents were 21 years old, while 22 for the qualitative sample. See Figure 27 above.

6.2.6 Gender

The descriptive statistics of gender were provided in the previous chapter on page 84. Gender is a categorical variable and thus, only frequencies of categories and not means nor standard deviations could be determined. The quantitative gender distribution was 76 men and 76 women while the qualitative distribution was 47 women and 14 men.

6.2.7 Race

The descriptive statistics of race were provided in the previous chapter. Race is also a categorical variable and thus similar descriptive statistics as those of gender were provided. There were huge discrepancies in the racial distributions. The majority of the respondents were Black (n = 134) and 18 Whites and were mainly used for the quantitative aspect while 46 Blacks and 11 Whites (of the 152) for the qualitative aspect. However, these statistics were representative of the South African population since the majority of the population is Black (Statistics South Africa, 2008).

6.2.8 Home Language

The majority (n = 33) of the respondents spoke Zulu as their home language, followed by English (n = 24). See Table 16.

Table 16:
Frequency counts of home language

Home language	Frequency	Percent
English	24	15.9
Ndebele	2	1.3
Sepedi	19	12.6
Sesotho	19	12.6
SiSwati	12	7.3
Xitsonga	7	4.6
Setwana	15	9.9
TshiVenda	3	1.99
IsiXhosa	15	9.9
Isizulu	33	21.9
Other	3	1.99

6.3 Cronbach Alpha Coefficients

Table 17:
Cronbach Alpha reliability coefficient for the SOI, Self-Efficacy for protective sexual behaviours scale and HIV and AIDS knowledge and understanding questionnaire, respectively.

Variable	**Cronbach Coefficient and Kuder Richardson Alpha**
SOI (7 items)	.83
Condom attitude scale (7 items)	.47
3 subscales of Self efficacy scale (23 items) 1. Self efficacy (9 items) 2. Discussion (5 items) 3. Performance (9 items)	.82 .81 .81 .80
HIV and AIDS knowledge and understanding questionnaire (25 items)	.50

Table 17 represents standardised cronbach alpha of the SOI, Self efficacy scale; HIV and AIDS knowledge and understanding questionnaire and CAS. Sexual orientation index and elf efficacy for protective behaviours had high internal consistency, which indicated these measures to be reliable. HIV and AIDS knowledge and understanding questionnaire and condom attitude scale yielded a KR-21 value of .50 and .47, respectively, which was indicative of strong inter-item reliability. This scales comprised of dichotomous items; thus, internal consistency was calculated using Kuder-Richardson 21 (KR-21) rather than Cronbach Coefficient alpha.

In terms of the credibility and dependability of the qualitative measures (the previous and current sexual behaviours and loveLife exposure and participation questionnaires), the researcher triangulated with measures of sexual behaviours to ensure credibility and confirmability, the richness and depth of the data. Besides, simple and clear language was used for the qualitative questionnaires that were open-ended in nature. The contact details of the researcher and supervisor were provided to allow for respondents to enquire about the study or questions in particular. However none of the respondents used the details. This suggested that they had no concerns or questions regarding the questionnaires, which alluded to the language, used having been understandable. Furthermore, a clearly defined sample was used as well as thorough descriptive findings, reported in the results and discussion chapters. All these ensured that the method of enquiry as well as findings were authentic and objective. The focus of the discussion will now turn to the results found from exploring relationships between variables represented by the total scores of the various measures used in this research.

6.4 Research Results

6.4.1 Research Question 1

What is the youth's level of HIV knowledge as measured by HIV and AIDS knowledge and understanding questionnaire?

Table 18:

Descriptive statistics of the HIV and AIDS knowledge and understanding questionnaire

HIV questionnaire		**Frequency**	**Percent**
HIV1	False	7	4.6
	True	145	95.39
HIV2	False	2	1.3
	True	150	98.7
HIV3	False	6	3.95
	True	146	96.1
HIV4	False	62	40.8
	True	90	59.2
HIV5	False	50	32.9
	True	102	67.1
HIV6	False	8	5.3
	True	144	94.7
HIV7	False	10	6.6
	True	142	93.4
HIV8	False	118	77.6
	True	34	22.4
HIV9	False	13	8.6
	True	139	91.5
HIV10	False	7	4.6
	True	145	95.4
HIV11	False	61	40.1
	True	91	59.9
HIV12	False	19	12.5
	True	133	87.5
HIV13	False	66	43.4
	True	86	56.6
HIV14	False	5	3.3
	True	147	96.7

HIV questionnaire		Frequency	Percent
HIV15	False	53	34.9
	True	99	65.1
HIV16	False	34	32.7
	True	70	67.3
HIV17	False	14	9.2
	True	138	90.8
HIV18	False	9	5.9
	True	143	94.1
HIV19	False	21	13.8
	True	131	86.2
HIV20	False	2	1.3
	True	150	98.7
HIV21	False	12	7.9
	True	140	92.1
HIV22	False	8	5.3
	True	144	94.7
HIV23	False	12	7.9
	True	140	92.1
HIV24	False	57	37.5
	True	95	62.5
HIV25	False	7	4.6
	True	145	95.4

The majority of respondents responded moderately to knowledge of HIV and AIDS. Thirteen out of 25 items were answered correctly by the majority of respondents. These items were item 1, 3, 4, 11, 10, 13, 14, 15, 18, 19 and 21, 22 and 25. See Table 18 above for frequencies of each item. For instance, the majority of the respondents answered item 3 “The HI virus can be transmitted via sexual contact with an infected person” (*n* = 146); 4 “You can get HIV by performing oral sex” (*n* = 90); item 10 “Transmission of HIV and AIDS can be prevented via the use of condoms during sexual activities” (*n* = 145) and item 15 “During vaginal sex, it is easier for a woman to receive the HI virus than for a man” (*n* = 99) correctly. Item 5 “HIV can be transmitted by donating blood to the SA blood transfusion services” (*n* = 102), 6 “HIV can be transmitted by sitting on a public toilet sea” (*n* = 144) and 7 “AIDS can be cured by taking certain medications prescribed by doctors” (*n* = 142) were answered incorrectly by most respondents. The majority of respondents answered item 8 “A child born to an HIV infected mother will automatically be HIV+” (*n* = 118), 9 “Cleaning injection equipment with water is a good way of killing HIV” (*n* = 139) as well as item 16 “A hangnail is a potential route for HIV infection”

(*n* = 70) incorrectly. Only 34 answered item 16 correctly. However, item 16 was the only item that had missing data as 48 respondents did not answer the item. Item 17 "A women using oral contraceptives as a method of birth control is protected against getting HIV and AIDS" was also answered incorrectly by most respondents (*n* = 138). Item 20 "A healthy person cannot get HIV because of their strong immune system" was answered incorrectly by most respondents (*n* = 150). The pattern of responses indicated that students are knowledgeable about the ABC mode of transmission but there remains confusion about other modes of HIV transmission, prevention and/or treatment.

6.4.2 Research Question 2

What HIV risky behaviours do young people engage in as measured by Condom attitude scale (CAS), Socio-sexual orientation index (SOI), Previous and current sexual behaviours and Self-efficacy for protective sexual behaviours scale?

The condom attitude test revealed the young respondents to have negative attitudes towards condoms. This was discussed in the begining of this chapter on section 6.2.1 descriptive statistics of CAS.

The majority of the respondents (*n* = 127, 84%) reported to have had sexual intercourse and 25 had not. The majority of the respondents further reported having penetrative vaginal sex (*n* =118, 77%), while 2 had non penetrative vaginal sex. Thirty two (21%) respondents reported that penetrative vaginal intercourse was not applicable to them, perhaps they had other modes of sexual intercourse — not particularly penetrative vaginal intercourse. In terms of anal sex, majority of respondents (*n* = 128, 84%) reported that the statement of penetrative or non penetrative anal sex did not apply to them. This could suggest that these respondents do not engage in anal sex activities. Nine (6%) respondents reported to be engaging in anal sexual intercourse, while one had penetrative and non- penetrative anal sex.

Table 19:

Frequency counts of the age of first sexual encounter

Age of first sexual encounter (in years)	**Frequency**	**Percent**
Have never had a sexual encounter	27	17.76
5	2	1.32
6	2	1.32
10	1	0.66
12	1	0.66
13	2	1.32
14	2	1.32
15	12	7.89
16	16	10.53
17	23	15.13
18	25	16.45
19	18	11.84
20	7	4.61
21	13	8.55
22	1	0.66

Twenty seven respondents instead of 25 reported to not have had sex when asked to indicate their age of first sexual encounter (see Table 19). There were inconsistencies in self reports of sexual behaviour. Most of the respondents (n = 25) reported their age of first sexual encounter to be 18 years old, followed by 17 years old (n =23). Four men respondents had their first sexual encounter when they were ages 5 and 6 years. This may have been rape or sexual harassment cases. The mean, median and mode revealed the sexual debut to not be normally distributed (14, 17 and 3 respectively). Even the histogram on Figure 28 below suggests that sexual debut was not normally distributed.

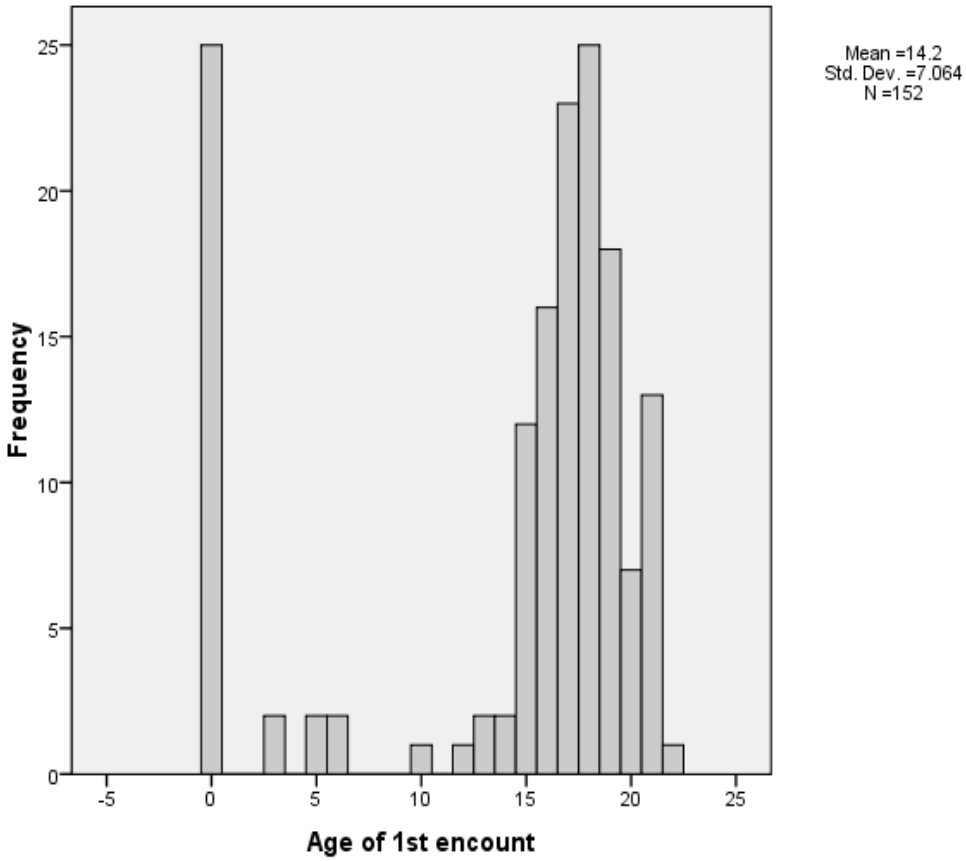

Figure 28: Histogram of the sexual debut distribution

The majority of the respondents (*n* = 81, 53%) reported being sexually active. Forty four (29%) respondents were not sexually active. Twenty seven (18%) respondents reported that the question of whether or not they are sexually active does not apply to them.

Table 20:

Frequency counts of the number of sexual partners in the past three months

How many sex partners have you has in the past in 3 months	**Frequency**	**Percent**
0	15	9.87
1	69	45.39
2	15	9.87
3	50	32.89
4	1	0.66
6	1	0.66
7	1	0.66

The majority of respondents reported having only one sexual partner in the past three months (*n* = 69). This was followed by 3 partners by 50 respondents. The maximum number of sexual partners that respondents reported to have had was 7; however, this was reported by only one respondent. See Table 20.

Table 21:
Frequency counts of whether respondents are currently having vaginal sex with or without a condom

Do you currently have vaginal sex with or without a condom	**Frequency**	**Percent**
with	68	44.74
without	19	12.50
not applicable	61	40.13
both with and without a condom	3	1.97
without condom because married	1	0.66

Of the respondents who are currently sexually active, 68 reported having vaginal intercourse with a condom. Sixty-one respondents reported that the statement did not apply to them. It is possible that respondents were not comfortable in disclosing whether or not they use condoms. People may not disclose such information, particularly when they are not using protection when engaging in sexual intercourse. According to the figures on Table 21, a total number of 91 (68+19+3+1=91) respondents are having sexual intercourse (some with and without a condom) even though 81 respondents were sexually active. There seems to be inconsistencies in the self report response to the questions of sexual activity and of being sexually active and using condoms. Thus one may deduce that ten respondents of the 91 and 81 may have provided false responses of the nature of their current sexual activity in terms of condom usage during sexual intercourse. Furthermore, one respondent reported to have sexual intercourse without a condom because they are married. Four respondents reported having vaginal intercourse both with and without a condom. Nineteen respondents indicated having sexual intercourse without using protection, condoms.

The majority of the respondents (*n* = 132, 87%) reported that the question "Do you currently have anal sex with or without a condom" did not apply to them (perhaps they are currently not having anal sex). Seventeen (11%) respondents reported to be currently having anal sex with a condom.

The research also explored a possible relationship between the self-efficacy and socio-sexual orientation (individual differences in their willingness to engage in uncommitted sexual relations) of those

respondents and their attitudes towards condoms to get a sense of the communication between partners (or perceptions partners hold) concerning HIV related issues. Tables 22, 23, 24, and 25 represent these associations.

Table 22:

Associations between self efficacy and CAS

Variable	**Point Biserial Correlation Coefficient**	**Alpha**	**N**
CAS1	.22	.101	147
CAS2	.11	.134	147
CAS3	-.01	.928	147
CAS4	.00	.281	147
CAS5	.34	.079	147
CAS6	.01	.886	147
CAS7	.03	.699	147

* Significant at 0.05(5%) level of significance

There were no significant relationships between self-efficacy for protective behaviours and condom attitude. See Table 22. This suggested that there was not sufficient evidence to suggest relationships between variables.

Table 23:

Associations between transformed socio-sexual orientation and CAS

Variable	**Point Biserial Correlation Coefficient**	**Sig. (2-tailed)**	**N**
CAS1	-.80	.336	145
CAS2	.01	.897	145
CAS3	.03	.723	145
CAS4	-.17	.046*	145
CAS5	.03	.699	145
CAS6	-.05	.594	145
CAS7	-.05	.580	145

*Significant at 0.05(5%) level of significance

Only CAS item 4 “Condoms are unnatural” was significantly related (r_{pb} = -.1.66, p = .046) to young respondents’ socio-sexual orientation (individual differences in their willingness to engage in

uncommitted sexual relations). See Table 23. This was a strong and negative linear relationship. A description of point biserial correlation would suggest that true scores in the attitude that was associated with socio-sexual orientation.

Condom attitudes between the two races as well as age were also investigated. Table 24 represents Chi square association between CAS and race.

Table 24:

Chi square associations between race and condom attitude

Variable	**Chi square test of association X^2**		**Alpha**	**N**
	DF	**Coefficient**		
CAS1	1	2.66	.103	149
CAS2	1	0.36	.548	149
CAS3	1	0.26	.611	149
CAS4	1	0.95	.329	149
CAS5	1	4.04	.044*	149
CAS6	1	0.75	.386	149
CAS7	1	0.41	.519	149

*Significant at 0.05(5%) level of significance

Only CAS5 was significantly related ($X^2 = 4.04$, $p = 0.044$) to race. There was however not much difference between races in terms of scoring as both Blacks and Whites agreed with the statement that "Partners dislike condoms". Seventy-seven out of 131 (58.78%) Blacks and 15 out of 18 (83.33%) Whites agreed with this statement.

Table 25:

Correlations between age and condom attitude

Variable	**Point Biserial Correlation Coefficient**	**Alpha**	**N**
CAS1	-.07	.404	149
CAS2	.04	.647	149
CAS3	-.06	.453	149
CAS4	-.14	.094	149
CAS5	.03	.647	149
CAS6	.00	.967	149
CAS7	. 10	.206	149

*Significant at 0.05(5%) level of significance

There were no significant relationships between age and condom attitude. See Table 25. This suggested that there was not sufficient evidence to suggest relationships between variables.

6.4.3 Research Question 3

What are the youths' sources of HIV related information?

Table 26:

Frequency counts of HIV sources of information

HIV questionnaire		**Frequency**	**Percent**
Family	Important	61	42.36
	Neutral	17	11.81
	Not important	66	45.83
Friends	Important	57	39.58
	Neutral	34	23.61
	Not important	53	36.81
Health professionals	Important	108	75.00
	Neutral	6	4.17
	Not important	30	20.83
General media	Important	116	80.56
	Neutral	13	9.03
	Not important	15	10.42
loveLife	Important	95	65.97
	Neutral	14	9.72
	Not important	35	24.31
[T]hetha Junction	Important	74	51.39
	Neutral	11	7.64
	Not important	59	40.97
loveLife community outreach	Important	63	43.75
	Neutral	13	9.03
	Not important	68	47.22

HIV questionnaire		Frequency	Percent
Lifeline and Khomanani	Important	53	36.81
	Neutral	27	18.75
	Not important	64	44.44
Teachers and lecturers	Important	64	44.44
	Neutral	27	18.75
	Not important	53	36.81
TAC and CCDU	Important	41	28.47
	Neutral	34	23.61
	Not important	69	47.92
Campus Health Wellness	Important	71	49.31
	Neutral	10	6.94
	Not important	63	43.75
Church	Important	46	31.94
	Neutral	16	11.11
	Not important	82	56.94
Hospital and clinics	Important	45	31.25
	Neutral	20	13.89
	Not important	79	54.86

Eight respondents did not complete the sources of HIV information item. Since there were too few respondents choosing certain sources over others and a Chi Square test gives incorrect results when categories have too few respondents, thus variables had to be collapsed into categories (Rosnow & Rosenthal, 1996). Relatives, parents and siblings were collapsed into a "family" variable. Call centre variables of lifeline and Khomanani were collapsed into one variable, as well outreach organisations such as TAC and CCDU, and lecturers and teachers. Most respondents indicated family (siblings, parents and relatives), loveLife community outreach, TAC and CCDU, Church, Hospital and clinics as not important sources of information. The most important source of information was general media (n = 118) followed by health professionals (n = 108), loveLife (n = 95), thethajunction (n = 74) and Campus Health Wellness (n = 71) represented on Table 26. Magazine and newspaper (n = 88), and Television media (n = 80), were the most frequently selected sources by respondents (before variables were collapsed). Radio (n = 74) and billboards (n = 56) were the other options.

6.4.4 Research Question 4

Did the media bring awareness of the thethajunction call centre and the outreach programmes?

A total number of 42 (out of 54) respondents reported their sources of hearing about thethajunction. While 26 respondents (out of 57) reported their sources of hearing about the community outreach programme. The majority of the respondents indicated television (*n* = 12) as the main source of where they heard about thethajunction. This was followed by radio and billboard. The main source respondents indicated to have heard about the community outreach programme was billboards (*n* = 6), followed by Television (*n* = 5). See Table 27 for frequency counts of specific media that respondents indicated as their sources of knowledge of thethajunction and community outreach services.

Table 27:
Frequency counts of sources of awareness of loveLife services

Sources of awareness of the loveLife services		
	[T]hethajunction	Community outreach programme
Television	12	5
Radio	5	2
Billboard	5	6
Newspaper	3	1
Magazines	1	0
loveLife magazine	2	1
Poster	1	0
Pamphlet	2	0
High school	4	4
Friend	2	2
Family	1	1
Community centre or hometown	1	3
From this questionnaire	1	0
loveLife outlet (Lilly dale NAFCI)	1	2
Total	**41**	**27**

6.4.5 Research Question 5

What is the youths' level of exposure and participation to loveLife, particularly thethajunction and community outreach programme as measured by loveLife exposure, participation and response questionnaire?

It should be noted that 95 respondents did not complete the loveLife questionnaire. Only 57 responses were received for the loveLife exposure and participation questionnaire. Please note that where quotes occur, spellings were maintained according to their appearance as reported by respondents'.

6.4 5.1. Exposure to [L]oveLife

Fifty-seven respondents answered the question "Do you know about the loveLife programme? And what do you know about it? 40 of the 57 respondents said they know about loveLife, while 17 said they do not know about it. Three themes of what respondents know about loveLife were identified from the data of the 40 responses. See Table 28 for frequencies of each theme. The themes were HIV and AIDS prevention, outreach programme and healthy living or lifestyle. Attached to these themes were different meanings and descriptions, and a few quotations are provided that best capture the commonalities of responses. Themes indicated that respondents know loveLife as an educational HIV and AIDS prevention campaign in that *"it teaches young people about the importance of safe sex or like using condoms and abstainance"(Black woman, 25). "It is a youth programme that is trying to consciondise the youth to think about their future dreams and also maintain the state of healthy lifestyle for them not to be infected by HIV and AIDS and get pregnant at an early age"(Black woman, 23).* It further emphasises healthy living through *"….keeping the youth out of streets by creating a home for them through sports and other activities, to pre-occupy them" (Black woman, 20).*

Table 28:
Theme frequencies of loveLife knowledge

Theme/Category	**Frequency count**
HIV and AIDS prevention	28
Outreach programme for the youth	35
Healthy living or lifestyle	7
Not clued up	1

6.4.5.2 Level of Exposure to thethajunction and the Community Outreach Programmes

6.4.5.2.1 The Knowledge Respondents have about [T]hethajunction

A total number of 55 responses were received. Therefore 2 of the 57 respondents did not answer this question. This is counted as missing data. Twenty eight respondents (49%) reported to not know about thethajunction while 27 (47%) said they do know about it. There was no difference between the two (1% difference).

Twenty four respondents gave rich details of what they know about thethajunction. The overall themes indicated that thethajunction *"its where one can call in with their problems" (Black woman, 19)* and *"I can call and ask sensitive questions and remain anonymous" (Black man, 22)* as well as some responses that pointed out to incorrect knowledge about thethajunction *"I know it's like a magazine where the youth related issues are discussed" (Black woman, 25).* See Table 29 for frequency counts of the themes.

Table 29:
Theme frequencies of thethajunction awareness

Theme/Category	**Frequency count**
Free and anonymous helpline	4
HIV and AIDS helpline/service for youth	18
Incorrect/irrelevant/not clued up	4
Not much/from this study	3

6.4.5.2.2 Level of Participation to [T]hethajunction

Table 30:
Frequency counts of the frequency of calling [T]hethajunction

How frequently have you called thethajunction	**Frequency**
No	52
1-3 times	3
3-6 times)	1
>10 times	1

The majority of the respondents (*n* = 52, 91%) reported to have not called thethajunction. Only 5 respondents (9%) had called thethajunction. In terms of the frequency of calling, 3 of the 5 respondents had called the call centre within the range of 1-3 times. One respondent has called 3-6 times, while the other one had called more than 10 times. This is all shown on Table 30.

In terms of the language used by callers, most of them (4 of the 5 respondents who had called thethajunction) used English when calling. Only one respondent used Zulu when calling. However, English was not their home language as 2 were Zulu, 1 Xhosa, 1 Swati, 1 Tsonga and 1 Sotho speakers.

6.4.5.2.3 The Knowledge Respondents Have About the Community Outreach Programmes

Thirty three (58%) respondents reported to not know about the community outreach programmes while 24 (42%) said they do know about it. There was a 12% difference between the two. The themes captured that these programmes are *"usually in rural areas with the loveLife site placed at the local clinic. They help spread the word about HIV through using volunteers called mphintshis and groundbreakers" (Black woman, 19)* and *"they give the community information…HIV and AIDS…living with an infected person…by using games and other fun activities to teach or emphasise their teachings"(Black woman, 23)* as well as *"nothing specific"(White man, 23).* Table 31 represents the frequency counts of each theme.

Table 31:
Theme frequencies of community outreach programmes knowledge

Theme/Category	**Frequency count**
Community based programme for health and HIV and AIDS related education	19
Fun events	5
Empowering community 83-trainig of youth-volunteer	6
Not clued up	5

6.4.5.2.4 Level of Participation to Community Outreach Programme

Table 32:
Frequency counts of the frequency of participation in community outreach programme

How frequently have you participated in the community outreach programme	Frequency
No	48
1-3 times	7
3-6 times	1
>10 times	1

The majority of respondents (*n* = 48) reported to have not participated in the community outreach programme. Only 9 respondents had participated in the programme. In terms of the frequency of participation, 7 of the 9 respondents had participated within the range of 1-3 times. See Table 32. One respondent had participated 3-6 times, while the other one had participated more than 10 times. Participation in the community outreach programme was mainly in the form of being part of the audience when loveLife visited their high school, followed by being a volunteer "Mpintshi, and lastly participating in their games (debates, tournament games and courses). "*I participated in winter school holidays soccer tournament and computer course*" said a Black man (20) whilst a Black woman (20) indicated that "*they visited my high school once and I saw the television programme some time back*".

6.4.6 Research Question 6

What does the youth personally feel they learned from participating in loveLife services and how have they used the knowledge gained, as measured by the LEPRQ?

This research question sought to establish what respondents had learned and done with what they learned. This was also established by the nature of relationships these respondents were or are in and how they conducted these relationships.

6.4.6.1 What did Respondents Learn from Participating in the Two Lovelife Services?

Five respondents reported calling with different questions and having learned about different things from thethajunction, namely, pregnancy, coping, uniqueness (individuality), anti-climax, how risky kissing was, dating issues and women abuse. For instance a Black woman (20) indicated having learned

to have *"fun, to be free in talking about sex and learnt a lot about HIV and AIDS and how to help disadvantaged infected people and also raise awareness of HIV and AIDS*". "*I learned how to cope with problems, to admit, open and honest. I even learned that if you have a problem you should get a knowledgeable somebody and share your problem for help*" said an Black man (25) and "*I learned about dating issues, women abuse and other stuff I can't remember now*" by another Black man (25). These respondents also reported having done different things after calling thethajunction, namely, visiting the pharmacy to buy morning after pills, helping other young people with the information obtained from thethajunction and also applying it (the information) to their own situations, became comfortable living with HIV positive people and practised what was told. A Black woman (21) reported to have "*went to the pharmacy and bought morning after pills but could not drink them*", while a Black man (20) "*stopped being anxious about living with HIV positive people*". In terms of the community outreach programmes, 9 respondents reported having learned about different things from the community outreach programme, namely, HIV and AIDS and its consequences, motivation, faithfulness, public speaking, people in the world care, to have fun and be free in talking about HIV and AIDS, discipline and responsibility in relationships, always using contraceptives (condoms and pills). Next are exact quotes or raw data as per the responses from the questionnaire. An Black man (25) said "*I'm today at Wits bcos' of loveLife's motivation, I didn't know what to do after matric then joining loveLife as a volunteer rewarded me to become a Wits student*" and "*discipline and responsibility, for example having more than one partner might kill me (what if the condom burst with one of them?)*" said a Black woman (22).

6.4.6.2 What did Respondents not Learn from Participating in the Two loveLife Services?

Four respondents responded to this question of what they did not learn from calling thethajunction as well as participating in the community outreach programmes. Two reported that they learned a lot from the community outreach programmes, while two indicated to not have learned specific things from each service. In particular, a Black woman (19) said that she "*would have not gained anything as I did not see the need to call*" when she called thethajunction. A Black man (20) indicated that he did not learn that "*HIV virus cannot be transferred through cutluary utensils*". This suggests that the respondent felt thethajunction did not teach him that HIV can be transmitted through external things such as the sharing of cutlery. In terms of community outreach programmes, a Black woman (22), a *mpintshi* said that she did not learn "*time management, we use to get to schools late*". This suggests that the respondent felt that they could have been taught time management as volunteers, which they were never taught. Even though one could argue that they were supposed to be responsible and keep time as loveLife volunteers.

6.4.6.3 Nature of Respondents' Relationships

Thirty-seven respondents described the nature of their relationship. The majority of the respondents reported being in a relationship (*n* =21). Followed by being single or had just broken off their relationship(s) (*n* =16). Of those in a relationship, some are abstaining from sex and waiting for the right time (*n* =5), some until marriage (*n* =4). One of the five respondents who are abstaining from sexual intercourse and waiting for the right time indicated that s/he was engaged for marriage. Three other respondents were having sexual intercourse with a condom. Other respondents did not indicate whether they were using protection or not. One respondent indicated to be having oral sex while another is not having sexual intercourse (vaginal intercourse).

One respondent (74) indicated being in a boring relationship because her partner is always around; she said she was bored and interested in someone else. The rest of the respondents were in happy relationships and did not report whether or not they had sexual intercourse. Faithfulness, trust and commitment were important aspects for all respondents' relationships as it was mentioned and implied by the majority of respondents (n =33) in relationships (those having sex and those who did not indicate having or not having sexual intercourse). "*I am single at the moment*" said a Black woman (21) and man (20) said "*it's a normal relationship and we have decided not to have sex before we get married, and I am comfortable with that. We share problems and motivate each other when things are not looking good*". According to a Black woman (21) "*loveLife has instituted my values of abstinence deeply in me as ever before and guided me on what type of partner I should look for in a man*". Another Black woman (25) said that "*we have a stable relationship and are faithful to each other, we do talk about issues related to HIV and AIDS and how we can help our young brothers and sisters to protect themselves from the epidemic. We know our status and have talked about how we can protect ourselves from infection. We also read on information around the subject and share that information with each other as well as our friends*". A White woman (22) said that "*I have known my partner since we were kids. We have been going out for a year and a half. I love him deeply and trust him completely; he is compassionate and loving*".

6.4.6.4 Reasons Given For Not Participating and Whether Those Who Participated Would Participate in the Two loveLife Programmes Again

The main reason for not calling was not seeing any need to call thethajunction again or anymore, having no (or anymore) questions to ask, having all the information required, and getting most information elsewhere (doctors and lecturers). For instance a Black woman (20) indicated that "*I don't see any need anymore 'cause everything is out in the open now, through media and academic institutions. I simply know what to do in any situation*". A Black man (20) said that "*I dedicated my life to abstinence and most information I get from my doctors*". Only 2 out of 6 respondents said they would call thethajunction again as it had impacted their lives, but this would only happen if they had a question to ask.

In terms of the community outreach programmes, respondents indicated that they would not participate because they have no time; busy schedules; lack of availability, access or awareness of the centres in their communities; being well aware of the virus; too old; distance (being far from any loveLife centre) and having moved places. A Black woman (20) reported that "*I have not participated in loveLife community outreach programme as I have not heard about any programmes in my area*" while another Black woman (25) said "*I have never participated and am not well informed about the programme and where I can go attend*". A Black woman (22) mentioned that it's "*because I moved to Joburg and I participated in Natal*"

Most respondents indicated that they would participate (for the first time or again) in the community outreach programme because they obtain an opportunity to make a difference in the community, and get more information. They also mentioned that they would participate if they had something to gain and if the outreach were to be more accessible and visible. For instance a Black man (21) said he would participate because he "*would want the youth of today to know the truth about diseases such as HIV and AIDS*". While a Black woman (22) mentioned that "*It's a good programme. They could improve their services though and be more accessible and visible. It's a good thing, really teaching young people about HIV related issues*"

Furthermore, a few respondents indicated that they would not participate in the community outreach programme because they feel they are not effective, they have no time, as well as because people working at the outreach service are corrupt and cruel. In particular, a Black woman (20) reported that "*I feel like they are not effective. The media plays a bigger role in influencing people than them or its*

outreach programme" while another Black woman (25) said that "*I would not participate because of the lack of time*".

6.4.7 Research Question 7

Are there differences between gender and race, in terms of the condom attitudes, HIV knowledge and HIV risky behaviours, and also their level of exposure and participation to loveLife's thethajunction and community outreach programmes?

Table 33:
Chi square associations between condom attitude and gender

Variable	Chi square test of association X^2		Alpha	N
	DF	Coefficient		
CAS1	1	0.72	.395	149
CAS2	1	2.27	.131	149
CAS3	1	0.80	.370	149
CAS4	1	11.28	.000*	149
CAS5	1	0.19	.659	149
CAS6	1	1.06	.303	149
CAS7	1	0.35	.555	149

*Significant at 0.05(5%) level of significance

Only CAS4 was significantly related (X^2 =11.2792, p =.000) to gender, as shown on Table 33. The majority of the respondents (n = 48), of 75 (64%) women agreed with the statement that "Condoms are unnatural" while 47 (63%) men disagreed with the statement. Twenty-seven women and men respectively disagreed and agreed with the statement. In summary, there was not much difference in the association.

Abbreviation used in Table 34:

Lower CL Mean- Lower class level mean
Upper CL Mean- Upper class level mean
Lower CL Std Dev- Lower class level standard deviation
Upper CL Std Dev- Upper class level standard deviation
Std Err- Standard Error

6.4.7.1 Gender and HIV and AIDS Knowledge and Understanding

Table 34:

t-test Statistics of HIV and AIDS knowledge and understanding and gender

Variable	Gender	N	Lower CL Mean	Mean	Upper CL Mean	Lower CL Std Dev	Std Dev	Upper CL Std Dev	Std Err	Min	Max
HIV and AIDS	Men	76	19.19	19.72	20.26	2.00	2.32	2.77	0.27	11	23
HIV and AIDS	Women	76	20.47	20.92	21.38	1.72	1.99	2.37	0.23	15	25
HIV and AIDS	Diff (1-2)		-1.89	-1.20	-0.50	1.94	2.16	2.44	0.35		

Table 35:

Levene's test for Equality of variance of HIV and AIDS knowledge and understanding and gender

Variable	Method	Num DF	Den DF	F Value	Pr > F
HIV and AIDS	Folded F	75	75	1.36	0.183

Significant at 0.05(5%) level of significance

According to Table 35, there was no significance in the equality of variance

$t_{75;\,75}$ =1.36; p = 0.183. Thus equality of variance was assumed.

Table 36:

t-test statistic of HIV and AIDS knowledge and understanding and gender

Variable	Method	Variances	DF	t Value	Pr > |t|
HIV and AIDS	Pooled	Equal	150	-3.41	0.000

Significant at 0.05(5%) level of significance

Table 37:

Effect size of HIV and AIDS knowledge and understanding and gender

Effect size	
Calculated t	- 3.41
Sample size (*n*)	152
Cohen's D	.28

There was a significant difference in the relationship between gender and HIV and AIDS knowledge and understanding, $t_{150} = -3.41$, $p = .000$. There was sufficient evidence suggesting a difference in the knowledge and understanding of HIV and AIDS between young men and women. This was proven by their means, i.e., young men yielded a mean score of 19.7 (*SD* = 2.32) while women yielded a mean score of 20.9 (*SD* = 1.99). Furthermore, the maximum score by women is 25 while men scored 23. The highest score for the HIV and AIDS knowledge scale was 25. Thus this indicated that (some) women scored 100% correct as compared to men. Only two respondents scored 100%, this result indicates that they were women. The practical significance of this relationship was small and weak; thus, the result was not meaningful (Huck, 2004). The difference between men and women was not practically significant to merit anything important. Tables 34 to 37 represent these t-test results.

6.4.7.2 Gender and Self-efficacy for protective behaviours

Table 38:

t-test statistics of Self efficacy for protective sexual behaviours and gender

Variable	Gender	N	Lower CL Mean	Mean	Upper CL Mean	Lower CL Std Dev	Std Dev	Upper CL Std Dev	Std Err	Min	Max
Self efficacy	1	75	66.47	69.03	71.58	9.56	11.09	13.23	1.28	46	92
Self efficacy	2	75	75.22	77.17	79.13	7.33	8.51	10.14	0.98	58	92
Self efficacy	Diff (1-2)		-11.34	-8.15	-4.96	8.88	9.89	11.16	1.61		

Significant at 0.05(5%) level of significance

Table 39:

Levene's test of Equality of variance

Variable	Method	Num DF	Den DF	F Value	Pr > F
Self efficacy	Folded F	74	74	1.70	0.023

*Significant at 0.05(5%) level of significance

According to the Table 39, there was significance in the equality of variance $t_{74;\,74} = 1.70$; $p = 0.023$. This suggested that there was no equality of variance.

Table 40:

t-test statistic of Self efficacy for protective sexual behaviours and gender

Variable	Method	Variances	DF	t Value	Pr > |t|
Self efficacy	Satterthwaite	Unequal	139	-5.05	<.000

*Significant at 0.05(5%) level of significance

Table 41:

Effect size of Self efficacy for protective sexual behaviours and gender

Effect size	
Calculated t	- 5.05
Sample size (*n*)	152
Cohen's D	.41

There was a significant difference in the relationship between gender and self efficacy for protective sexual behaviours, $t_{139} = -5.05$, $p <.000$. Young men and women differed in their self-efficacy for protective sexual behaviours, their confidence in performing protective sexual behaviours between. This was proven by their means, i.e., young men yielded a mean score of 69.03 (*SD* = 11.09) while women yielded a mean score of 75.216 (SD = 8.51). The slight difference in the means suggest that women had better confidence in their ability to perform protective behaviours as compared to men. However, both men and women had the highest scores of 92. The practical significance of this relationship was small and weak; the result was not meaningful (Huck, 2004). Thus the difference between men and women was not important to merit anything. These results are represented on Tables 39-42.

6.4.7.3 Gender and Socio-sexual orientation

Table 42:

t-test statistics of gender and SOI

Variable		Levene's test for equality of variances		t-test for equality of means					
		F	Alpha	T	df	Alpha (2tailed)	Mean	Standard Error	95% Confidence Interval
									Lower / Upper
Transformed SOI	Equal variances assumed	8.985	.003	7.096	146	.000	.21156	.298	.15264 / .27048
	Equal variance not assumed			7.131	131.265	.000	.21156	.2967	.15287 / .27025

An independent sample t-test was conducted to compare the commitment in a relationship prior to engaging in sexual activity scores for men and women. The equality assumption of t-test was not met as there was no equality of variance (t =8.99; p = .003). There was a significant difference ($t_{(131)}$ = 7.13; p = .000) in scores for men (M = 1.85; *SD* = .21) and women (M = 1.64; *SD* = .14). See Table 42. The magnitude of the differences in the means was very small (eta squared = .25) which was 25%. Men scored higher than women. This means, compared to women, men required less commitment to a relationship prior to engaging in sexual activity.

6.4.7.4 Gender and Sexual Debut

Table 43:

Test Statistics of gender differences in sexual debut

	Transformed SOI
Mann-Whitney U	1861.500
Z	-3.814
Asymp. Sig. (2-tailed)	.000

Mann-Whitney U test revealed a significant difference in sexual debut between men and women,

Z = -3.81; *p* = .000 (as shown on Table 43). Men had early sexual debuts of 17 followed by 16 years old (and 18 and 15 years) while women had it as late as 18 followed by 21 and 19 years of age.

6.4.7.5 Race and HIV and AIDS Knowledge and Understanding

Table 44:

Chi square association between race and HIV and AIDS knowledge and understanding

Variable	**Chi square test of association X^2**		**Alpha**	**N**
	DF	**Coefficient**		
HIV1	1	0.04	.838	152
HIV2	1	0.27	.602	152
HIV3	1	0.84	.359	152
HIV4	1	7.45	.006*	152
HIV5	1	2.71	.099	152
HIV6	1	1.13	.287	152
HIV7	1	0.03	.852	152
HIV8	1	3.32	.068	152
HIV9	1	1.91	.167	152
HIV10	1	0.04	.838	152
HIV11	1	1.29	.255	152
HIV12	1	0.04	.849	152
HIV13	1	1.22	.269	152
HIV14	1	0.69	.405	152
HIV15	1	0.02	.884	152
HIV16	1	1.91	.167	152
HIV17	1	2.07	.150	152
HIV18	1	0.99	.320	152
HIV19	1	16.09	<.000*	152
HIV20	1	0.27	.602	152
HIV21	1	0.29	.589	152
HIV22	1	1.13	.287	152
HIV23	1	0.29	.589	152
HIV24	1	0.42	.517	152
HIV25	1	0.98	.321	152

*Significant at 0.05(5%) level of significance

Only HIV4 (X^2_1= 7.45, p = .006) and HIV19 (X^2 =16.09, p <.000) were significantly related to race as represented on Table 44. There was however not much difference between races in terms of scoring as both Blacks and Whites agreed with the statements that HIV4 "You can get HIV by performing oral sex" and HIV19 "Having a sexually transmitted infection (STI) increases your risk of getting HIV and AIDS". Seventy four of 152 (55.22%) Black and 16 out of 18 (88.89%) White individuals agreed with the HIV4 statement. It seems the majority of White individuals (88%) agreed with the statement that one can get HIV by performing oral sex more than Blacks (55%). Furthermore, 121 (90.30%) Black respondents and 10 (55.56%) White individuals agreed with the HIV19 statement. In this case, majority of Blacks (90%) agreed with the statement that having an STI increases your risk of getting HIV and AIDS more than Whites (56%).

6.4.7.6 Race and SOI, Self Efficacy for Protective Behaviours, HIV and AIDS Knowledge and Understanding

A non-parametric t-test, Mann-Whitney U was applied to assess difference in racial groups and the fore mentioned variable. A parametric t-test could not be applied to there as the racial groups had extremely unequal numbers in the racial group. There were 18 Whites and 134 Blacks, which meant little variability in the White group. Thus a non parametric technique was most appropriate given that the sample was less than 30 cases (Howell, 1997).

There were no significant differences between racial groups in either variable, transformed SOI (Z = -1.697; p = .090), self efficacy for protective behaviours (Z = -1.696; p = .090), total score of HIV and AIDS knowledge and understanding (Z = -.756; p = .450), sexual (Z = -.759; p = .448). See Table 45 below for an example (with SOI) of these analyses.

Table 45:
Test Statistics for SOI and race

Transformed SOI	
Mann-Whitney U	881.000
Wilcoxon W	1052.000
Z	-1.697
Asymp. Sig. (2-tailed)	.090

6.4.7.7 Gender and loveLife Awareness and Participation

Table 46:
Chi square association between gender and loveLife service awareness and participation

Variable	**Chi square test of association X^2**		**Alpha**	**N**
	DF	**Coefficient**		
Awareness of thethajunction	2	13.36	0.001 *	152
Have you called thethajunction	2	16.85	0.000 *	152
Awareness of community outreach	2	14.86	0.000 *	152
Have you participated in community outreach	2	15.76	0.000 *	152

*Significant at 0.05(5%) level of significance

All loveLife awareness and participation variables were significant across men and women. See the Table 46 for alpha levels and chi square coefficients. More women 17 (63%) than men 10 (37%) were aware of thethajunction, inasmuch as more women 21 (75%) than men 7 (25%) also, were not aware of thethajunction. In terms of calling thethajunction, 3 (60%) men had called thethajunction as compared to 2 women (40%). There was not much difference between the two genders. Furthermore, 14 (27%) men in comparison to 38 (73%) women indicated to not have called thethajunction. In terms of frequency of calling, the two women had called within the range of 1-3, while each of the three men called thethajunction within the range of 1-3, 3-6, and more than 10 times. In terms of the awareness of the community outreach, more women 17 (71%) than men 7 (29%) were aware of this programme, inasmuch as more women 23 (70%) than men 10 (30%) were not aware of the programme. It appeared that more women 5 (56%) than men 4 (44%) participated in the outreach programme even though the difference was small. Furthermore, more women35 (73%) also did not participate in the outreach programme than men 13 (27%). In terms of the frequency of participation, more women5 (71%) than men 2 (29%) participated in the outreach between the range of 1-3. Two other men each participated in the outreach within the range of 3-6, and more than 10 times.

6.4.7.8 Race and loveLife Awareness and Participation

Table 47:
Chi square association between race with loveLife awareness and participation

Variable	Chi square test of association X^2		Alpha	N
	DF	Coefficient		
Awareness of thethajunction	2	21.05	<.000*	152
Have you called thethajunction	2	17.30	.000*	152
Awareness of community outreach	2	14.97	.000*	152
Have you participated in community outreach	2	20.31	<.000*	152

*Significant at 0.05(5%) level of significance

All loveLife awareness and participation variables were significant across Black and White individuals. See Table 47 above for alpha levels and chi square coefficients. Consideration of the association between exposure (awareness) and participation of the two loveLife services and HIV related behaviours (healthy and risky sexuality) revealed the following results.

6.4.7.9 Respondents Risk Behaviours in Response to Awareness and Participation in lovelife Services

Table 48:
Point Biserial associations between SOI, Self efficacy, HIV and AIDS knowledge and understanding with awareness of thethajunction

Variable	Point Biserial Correlation Coefficient	Alpha	N
SOI	-.06	.673	54
Self efficacy	.63	.067	55
Total HIV and AIDS knowledge	-.05	.726	55

*Significant at 0.05(5%) level of significance

There were non-significant relationships between self efficacy for protective behaviours (r_{pb} =.63, p = .067), HIV and AIDS knowledge and understanding (r_{pb} =-.05, p = .726) as well as socio-sexual orientation (r_{pb} =-.06, p = .673) and awareness of thethajunction. This suggested that there was not

enough evidence to indicate a relationship between the two variables. All these values are represented on Table 48.

Table 49:
Chi square association between condom attitudes and awareness of thethajunction

Variable	**Chi square test of association X^2**		**Alpha**	**N**
	DF	**Coefficient**		
CAS1	2	1.51	.469	149
CAS2	2	0.09	.957	149
CAS3	2	1.11	.573	149
CAS4	2	0.46	.795	149
CAS5	2	0.37	.832	149
CAS6	2	1.93	.381	149
CAS7	2	1.25	.535	149

*Significant at 0.05(5%) level of significance

Condom attitude was not significantly related to awareness of thethajunction, as shown in Table 49. This suggested that there was insufficient evidence to suggest associations between condom attitude and thethajunction awareness.

Table 50: *Point Biserial associations between SOI, Self efficacy, HIV and AIDS knowledge and understanding with calling of thethajunction*

Variable	**Point Biserial Correlation Coefficient**	**Alpha**	**N**
Transformed SOI	.07	.625	56
Self efficacy	.02	.885	57
Total HIV and AIDS knowledge	-.24	.076	57

*Significant at 0.05(5%) level of significance

There were non-significant relationships between HIV and AIDS knowledge and understanding (r_{pb} =-.24; p = .076); socio-sexual orientation (r_{pb} =.07, p =.625), and self efficacy for protective behaviours (r_{pb} =.02; p = .885) and calling thethajunction. This suggested that there was not enough evidence to indicate a relationship between the two variables — see Table 50.

Table 51:
Chi square association associations between condom attitudes and calling thethajunction

Variable	**Chi square test of association X^2**		**Alpha**	**N**
	DF	**Coefficient**		
CAS1	2	1.21	.546	149
CAS2	2	.36	.835	149
CAS3	2	.63	.728	149
CAS4	2	6.68	.035*	149
CAS5	2	.29	.866	149
CAS6	2	1.01	.604	149
CAS7	2	1.10	.576	149

*Significant at 0.05(5%) level of significance

Only CAS item 4 "Condoms are unnatural" was significantly related (X^2_2= 6.68, p = .035) to calling thethajunction, as represented on Table 51. All 5 (100%) respondents who reported calling thethajunction disagreed with the statement that condoms are unnatural. Thirty (59%) respondents who had not called thethajunction agreed with the statement while 21 (41%) of those who also had not called agreed with the statement. It seems that calling thethajunction was helpful as those respondents had a positive attitude towards condoms, particularly by disagreeing with the statement that condoms are unnatural. The remaining respondents had missing data.

Table 52:
Point Biserial associations between SOI, Self efficacy, HIV and AIDS knowledge and understanding with awareness of the community outreach programmes

Variable	**Point Biserial Correlation Coefficient**	**Alpha**	**N**
Transformed SOI	.01	.923	55
Self efficacy	.10	.461	56
Total HIV and AIDS knowledge	-.14	.321	56

*Significant at 0.05(5%) level of significance

There were non-significant relationships between self efficacy for protective behaviours (r_{pb} =.10, p = .461), HIV and AIDS knowledge and understanding (r_{pb} = -.14, p =.321), and socio-sexual orientation (r_{pb} =.01, p =.923) and awareness of the community outreach programme, respectively. This suggested that there was not enough evidence to indicate a relationship between these variables as shown in Table 52.

Table 53:
Chi square association between condom attitudes and awareness of the community outreach programmes

Variable	**Chi square test of association X^2**		**Alpha**	**N**
	DF	**Coefficient**		
CAS1	2	1.78	.410	149
CAS2	2	0.48	.788	149
CAS3	2	0.75	.688	149
CAS4	2	0.59	.744	149
CAS5	2	0.35	.841	149
CAS6	2	0.86	.649	149
CAS7	2	1.09	.580	149

*Significant at 0.05(5%) level of significance

Condom attitude was not significantly related to awareness of the community outreach programmes, as depicted on Table 53 through alpha levels and chi square coefficients. Thus not enough evidence was available to suggest associations between respondents' condom attitudes and their awareness of the community outreach programmes.

Table 54:

Point Biserial associations between SOI, Self efficacy, HIV and AIIDS knowledge and understanding with participation in the community outreach programme

Variable	**Point Biserial Correlation Coefficient**	**Alpha**	***N***
Transformed SOI	-.05	.739	56
Self efficacy	.09	.519	57
Total HIV and AIDS knowledge	.00	1.000	57

*Significant at 0.05(5%) level of significance

There were non-significant relationships between self efficacy for protective behaviours (r_{pb} =.09, p = .519), socio-sexual orientation (r_{pb}= -.05, p =.739), HIV and AIDS knowledge and understanding (r_{pb} =.00, p =1.000) and participation in the community outreach programme. This suggested that there was not enough evidence to indicate a relationship between these variables, as represented on Table 54.

Table 55:
Chi square association between condom attitudes and participation in the community outreach programmes

Variable	**Chi square test of association X^2**		**Alpha**	***N***
	DF	**Coefficient**		
CAS1	2	1.25	.534	149
CAS2	2	0.13	.939	149
CAS3	2	0.49	.781	149
CAS4	2	0.39	.822	149
CAS5	2	0.27	.873	149
CAS6	2	2.28	.319	149
CAS7	2	1.16	.559	149

*Significant at 0.05(5%) level of significance

Condom attitude was not significantly related to participation in the community outreach programmes as shown on Table 55. This suggested that there was insufficient evidence to suggest associations between condom attitude and participation in the community outreach programmes.

Cross tabulations of sexual debut and awareness and participation in loveLife services indicated the following. Of the 26 respondents who were aware of thethajunction 10 had never had sexual intercourse, 4 had a sexual debut of 18 years. This was followed by a sexual debut of 17 (n =3) and the rest between ages 10-16 years (*n* = 6). Furthermore, the majority of the 24 respondents who were aware of the community outreach programmes had their first sexual experience at the ages of 18 (*n* = 6), 17 (*n* = 5), 19 (*n* = 3) and 15 (*n* = 3) years. Four respondents had not had sexual intercourse.

Each of the 5 respondents who had called thethajunction had never had sexual intercourse; and had sex at the age of 10, 15, 18 and 19 years. In terms of participating in the community outreach programmes, of the 9 who had participated, 2 had not had sex, 2 had sex at the age of 15, one at the age of 16 years, 3 at the age of 18 and the last one at the age of 19 years. The latest sexual debut was 18 and 19 year, which is a year above the frequent sexual debut in South Africa. Thus one cannot say that participation in loveLife succeeded in instilling late sexual debut in this sample.

Furthermore, the majority of those aware of both thethajunction and the community outreach programmes (*n* = 16; *n* = 11, respectively) had 3 sexual partners, followed by one partners (*n* = 7; *n* = 10, respectively). Similarly, the majority (*n* = 3) of thethajunction callers had 3 sexual partners while those who participated in the community outreach programmes had one sexual partner (*n* = 5).

6.5 Conclusion

This chapter provided all the research results beginning with the descriptive statistics, the reliabilities of the three measurement scales and the actual results addressing the research questions. There were significant relationships between condom attitudes, socio-sexual orientations (the commitment respondents require prior to engaging in sexual intercourse) self efficacy, HIV knowledge and understanding, as well as with loveLife awareness and participation. This was despite the fact that a small sample size responded to the loveLife (thethajunction and the community outreach programme) awareness and participation questionnaire. There some were significant difference in the relationship between race, gender and all sexual risk behaviours and the awareness and utilisation of loveLife services. These results were analysed at a significance level of 5%. The subsequent chapter discusses findings in the context of previous studies that aimed to address similar research aims.

CHAPTER 7

Discussion

7.1 Introduction

This chapter discusses the results presented in Chapter 6. It begins with a discussion of the descriptive statistics, followed by that of the six measuring scales that were used (Condom Attitude Scale, the Previous and current sexual behaviours, Socio-sexual orientation index (SOI), Self-Efficacy for Protective Sexual Behaviours Scale, the HIV and AIDS knowledge and understanding questionnaire, and the loveLife questionnaire). The Cronbach as well as the Kuder Richardson (KR-21) alpha coefficients are discussed to contextualise the reliability and consistency of the scales that were used in this study. The actual results addressing the driving research questions that aided the investigation of the research aims are also discussed. This chapter ends with concluding remarks concerning the entire study.

7.2 Descriptive Statistics

This research study consisted of a sample size of 152 respondents, which was considered moderate taking into account the number of investigated variables and the aim of the study. The sample size was also considered to be fair enough for the analysis of t-test and correlations, which are inferential statistic test requiring “fairness”, that is, a big enough sample to give sufficient statistical power to make the results of the tests unambiguous (Sturgis, 2006). Thus the sample was fair enough for the exploration of associations between variables and also differences in the means of the variables.

The quantitative sample comprised of an equal number of both men and women (76 and 76 respectively), as well as 43 women and 14 men of the qualitative sample. There was a big discrepancy in the gender distribution of the qualitative sample. This has implications of gender differences in terms of the reported usage of loveLife services by young students. These were young, 18 to 25 years old tertiary students (higher learning) who were considered a relevant age cohort to investigate the levels of HIV knowledge and self reports of changes in HIV risky behaviour given their early exposure and

participation in loveLife services. Pettifor et al. (2004) considered young people with ages 19-24 years old in their investigation of loveLife's effectiveness in HIV prevention amongst the youth. Their results revealed that the peak incidence of HIV occurs within the 19-24 year old age cohort. Thus loveLife programme contended that focusing on ages 16 years old and below would create grounds for a fairly rapid behaviour change, from observations that teenagers below 16 years old had low HIV incidence rates (>5%). Furthermore, these young tertiary students were chosen as the sample for this study for their ability to comprehend English given their level of study.

Literature revealed that young people account for 40% of the population of the country (Sekwati & Hirschowitz, 2001). In 2008, there were 4.3 million 15-19 year old, and 3.96 (4) million 20-24 year olds (Statistics South Africa, 2008). Furthermore, the Gauteng Province has 4.4% College and 5.8% Technikon or University attending students that are young (Statistics S.A., 2007). Of the 9,1% young South Africans aged 20 years old and above that are in higher learning, 5.6 % are Africans and Coloureds, 16.6% Indians and 31% Whites (Statistics S.A., 2007). Thus only a small number (portion) of this young population studying in Johannesburg, Gauteng province was sampled in this study. This study had an extremely small sample size as compared to a national study that was conducted in 2004. Despite this shortcoming, the study still made interesting findings using a sample size of 152 (quantitative sample size) but 57 (qualitative sample size) who were interested on providing information about their exposure and awareness to loveLife services.

The sample age ranged from 18 to 25 years, which is a typical age group found in the early years of higher learning education. The age range was normally distributed. Furthermore, the sample comprised of 18 White and 134 Black youth. Race was not equally distributed as the predominant grouping was Black. Given the large discrepancy between racial groups, the statistical analysis undertaken using these variables should be interpreted with caution. However, it is noteworthy that the race of the sample could be somehow taken to be representative of the South African (S.A.) population, as there are generally more Black than White individuals (Statistics S.A., 2008). Perhaps a similar pattern could exist in the population of S.A. higher learning institutions as there could be more Blacks (comprising of Indians, Coloureds, Africans and Asians) than Whites. Young South Africans aged 20 years and above that are in higher learning comprise of 5.6 % Black (Africans and Coloureds), 16.6% Indians and 31% Whites (Statistics S. A., 2007). It should also be stated that the sample of this research study originally comprised of Africans, Indians, Coloureds, Whites, and Asians. However, these categories were extremely unequal in that there were too few Indians, Coloureds and Asians. Therefore Africans, Indians, Coloured and Asians were compressed together into one racial group (Blacks) (Rosenthal &

Rosnow, 1991). One could deduce that the sample age and race was representative of the young higher learning education population would allow for generalisations of quantitative findings to contexts with similar characteristics as those of this current study.

In relation to the generalisation of quantitative and qualitative results; qualitative researchers often study a single setting or small number of people or sites using theoretical or purposeful rather than probability sampling (Patton, 2002). They rarely make explicit claims about the generalizability of their accounts (findings) (Patton, 2002). The value of a qualitative study may depend on its lack of generalizability (not being representative of a larger population), it may provide an account of a setting or population that is illuminating as an extreme or "ideal type" (Patton, 2002). The generalizability of qualitative studies is usually not based on explicit sampling of some defined population to which the results can be extended but on the development of other cases. This process is called transferability rather than generalizability in qualitative research (Patton, 2002). Hence the qualitative findings of this research are not transferrable to any other setting but only apply to this sample. They only shed light to the ideology of tertiary level youth. In quantitative research, generalisation of results depends on a large sample size that is representative of the population from which it was drawn. This notion refers to external validity (Rosnow & Rosenthal, 1996). It is quintessential for research findings to be generalised to other similar populations and context, settings, events and situations. This study was naturalistic in nature and utilised a convenient sampling strategy that would allow findings to be generalised to populations (higher learning institutions) with similar characteristic as those that were sampled.

7.2.1 Condom Attitude Scale (CAS)

The condom attitude scale was dichotomous. Thus only frequencies were applied to describe the nature of the scores. Scores revealed differences in scoring per item. The majority of the respondents agreed with the statements concerning attitudes towards condoms. The statements of which were indicative of a negative attitude towards condoms. Thus there seems to be some level of misconceptions and distrust of condoms in young people. Positive attitudes towards condoms indicated that respondents believe that condoms are easy to access as well as that they protect against AIDS. This was consistent with previous findings by Simbayi et al. (2005). In terms of held misconceptions about condoms, respondents seemed to believe that condoms get in the way of sex, are unnatural, free condoms are not safe, condoms from overseas are ineffective and that partners dislike condoms. These findings were consistent with those by Francis (2008), Mkhusane et al. (2008), Ross and Deverell (2004), Shisana and Simbayi (2002) and Van Dyk & Van Dyk (2003), who reported that young people hold misconceptions about condoms. The

finding that respondents seem to be uncomfortable with free condoms and those manufactured overseas was interesting in that most condoms are produced abroad, even your costly and luxurious condoms such as lovers plus. Perhaps further research could explore factors behind free and internationally made condoms, as well as which particular condoms these young people prefer as an alternative to the aforementioned condoms. Furthermore, respondents reported using condoms during last sexual intercourse. This was consistent with previous findings of condom use increasing with education in the family (London, 2005).

7.2.2. Socio-Sexual Orientation Index (SOI)

Tests for normality were conducted on the observed total scores of the SOI scale. The kolmogorov test as well as the histogram indicated the SOI total score to not be normally distributed. This was also evidenced by a large skeweness (1.24) value that fell outside of the normal range. However, there was a mesokurtic distribution shape which is neither overly peaked nor overly flat (Huck, 2004). The skeweness indicated that young people held a particular view about sexuality, that is to say they required little commitment prior to engaging in sexual intercourse with their partner (s) irrespective of the length of time of the relationship or commitment (unrestricted socio-sexual orientation). This is typical of the youth in their teen and young adulthood as argued by Erikson (1960, 1963 & 2003).

7.2.3 Self-Efficacy for Protective Sexual Behaviours Scale

Tests for normality were conducted on the observed total scores of the Self-efficacy for protective sexual Behaviours Scale. The kolmogorov test, histogram as well as a low skewness value of -0.3 and kurtosis of -0.49, which both fell within the normal range, indicated the Self-efficacy for protective sexual behaviours scale score to be normally distributed (Huck, 2004). This indicated that the level of self-efficacy for protective sexual behaviours was normally distributed in this particular sample of young students. However, there seemed to be a discrepancy between the attitude towards condoms and the self-efficacy of using a condom. This inconsistency could suggest that respondents may have given incorrect responses in their self report. Perhaps students were faking good and/or bad, and thus gave responses that may have been distorted by a desire to meet social expectations or please the researcher, and in the process gave inconsistent responses (Neale & Liebert, 1986; Rosnow & Rosenthal, 1991). Nonetheless, the self efficacy for protective behaviours scale shows that young students have confidence in their ability to discuss and perform self protective behaviours (Bandura, 1990; 1992; Fisher & Fisher, 2000; Wingwood & DiClemente, 1999).

7.2.4 HIV and AIDS Knowledge and Understanding Questionnaire

The HIV and AIDS knowledge and understanding questionnaire was dichotomous. Thus frequencies were applied to describe the nature of scores per item while the measures of central tendency were applied onto the total scores which were scored as 0 and 1, false and true respectively. The scores were also summed up to a total of 25. Scores revealed differences in scoring per item as well as when tallied. Furthermore, tests for normality were conducted on the observed total scores of the HIV knowledge and understanding. The kolmogorov test as well as the histogram indicated the total score to be normally distributed. This was also evidenced by a positively skewed distribution with a coefficient value of (1.24) that fell outside of the normal range. However, there was a mesokurtic distribution shape which is neither overly peaked nor overly flat (Huck, 2004). This was indicative of the nature of knowledge the youth had about HIV, its spread, transmission, prevention and treatment.

The two remaining measures, "previous and current sexual behaviours, and the loveLife exposure and participation questionnaires" were qualitative in nature and are discussed shortly. However, the basic statistics revealed the age of first sexual intercourse to be ages 17 and 18 years old. The majority of the young respondents are having penetrative vaginal sex, with protection. Only a few respondents, $n = 10$ were having anal intercourse. Previous literature reported sexual debut in South Africa to be within ages 12-19 years (Knox, 2008; McGrath et al., 2009; Parker et al., 2007; Shisana et al., 2005; 2009). However, there seemed to be inconsistencies in the self report response to the questions of sexual activity and of being sexually active and using condoms. As demonstrated in the results chapter, ten respondents gave false responses of the nature of their current sexual activity as depicted by inconsistencies in the responses. Respondents were more aware of thethajunction than the community outreach services of loveLife. Participation however, was rather poor for both services.

7.3 Reliability

Cronbach alpha coefficients were calculated for the total scores obtained from the three quantitative scales, the Condom attitude scale, and Socio-sexual orientation index, Self efficacy for protective sexual behaviour scale, and the HIV and AIDS knowledge and understanding questionnaire used in this study.

7.3.1 SOI

SOI yielded a cronbach alpha of .83, which is indicative of strong inter-item reliability. This finding is consistent with findings by Webster and Bryan (2007), who reported an alpha coefficient of .85. Gangestad and Simpson (1991) reported a reliability coefficient of .73[1]. The cronbach alpha observed for this study was high, possibly due to the fact that the items of this scale were measuring the same construct (Devlin, 2006). Furthermore, this study's cronbach alpha is similar to that of Webster and Bryan (2007) possibly because they both use undergraduate university students (n = 152 and 2787, respectively). This scale was a reliable and good measure of the level of commitment young people in this sample require prior to engaging in sexual activity.

7.3.2 Self-efficacy for Protective Sexual Behaviour Scale

Self efficacy for Protective Sexual Behaviour Scale yielded a cronbach alpha of .82, which is indicative of strong inter-item reliability. There was good internal consistency between items. This finding is consistent with a coefficient alpha from a study conducted by Schiff and Zeira (2005) whose alpha coefficient was very strong at .91[2] using students from an Israeli high school. Cecil and Pinkerton (1998) also found an alpha of .82 using as sample of 221 undergraduate students. The cronbach alpha observed for this study was high, similar to that found by Cecil and Pinkerton (1998) possibly due to the similar characteristics (undergraduate students) of the sample used. This scale was a reliable and good measure of the confidence young people in this sample possessed concerning performing protective sexual behaviours (Devlin, 2006).

7.3.3. HIV and AIDS Knowledge and Understanding Questionnaire

This scale comprised of dichotomous items, thus internal consistency was calculated using Kuder-Richardson 21 (KR-21) rather than Cronbach Coefficient alpha. HIV and AIDS knowledge and understanding questionnaire yielded a KR-21 value of .50, which was indicative of strong inter-item reliability. Howard (2006) calculated Kuder Richardson alpha (KR-21) total reliability score for this instrument to determine the internal consistency between items on the scale, and found a value of .8 in a study involving South African university students. The Kuder-Richardson 21 (KR-21) score of the

[1]No South African studies that calculated the reliability coefficients of the scale were found.
[2]No South African studies that calculated the reliability coefficients of the scale were found.

current study was lower than that of previous studies possibly due to the fact that Howard (2006) incorrectly used a Cronbach alpha on instead of a KR-21 as the scale was dichotomous. According to Rosnow and Rosenthal (1996) this scale was a reliable and good measure of young students HIV and AIDS knowledge.

7.4 Research Results

7.4.1 Research Question 1

What is the youth's level of HIV knowledge as measured by HIV and AIDS knowledge and understanding questionnaire?

There was good but biased knowledge and understanding of HIV in the current sample. Only 13 out of 25 items were answered correctly by the majority of respondents. These items were item 1, 3, 4, 11, 10, 13, 14, 15, 18, 19 and 21, 22 and 25. All of which focused on basic HIV knowledge and sexual intercourse as a mode of HIV transmission. This finding was somewhat consistent with previous findings on tertiary level young students. Howard (2006) together with Simbayi et al. (2005) highlighted that the university attending youth have high levels of knowledge about the HIV virus. Furthermore, Shisana et al. (2009) reported that the youth aged 15-24 years had low levels (43% and 40%, men and women respectively) of the correct knowledge of HIV sexual transmission and prevention, and rejection of major misconceptions about HIV transmission (Ross & Deverell, 2004; Van Dyk & Van Dyk, 2003). Students generally had poor HIV knowledge of casual modes of transmission.

Frequency tests revealed differences in scoring per item. Only two respondents scored a total of 25 (100%) out of the 152 respondents, the remaining scored differently with the majority scoring a total of 21 (n = 30), 22 (n = 27), 20 (n = 26), and 19 (n = 20). Differences per item scoring indicated that items 1 "AIDS is caused by the Human Immunodeficiency Virus (HIV)", 3 "The HI virus can be transmitted via sexual contact with an infected person", 14 "Someone can get HIV and AIDS by having one sexual encounter with an HIV infected person", 22 "Abstaining from any sexual contact is the most effective way of not becoming HIV+", and 25 "Being faithful to one sexual partner reduces the risk of HIV infection" were answered correctly, among other items, by approximately 140-147 respondents out of a sample size of 152. Item 2 "A person can get HIV and AIDS by sharing food and eating utensils with someone who has HIV" was the item most incorrectly answered 150 incorrect responses. It seems the majority of respondents answered individual items on HIV and AIDS knowledge incorrectly, even the

total numbers of respondents who scored correctly was minimal (the highest score being *30* respondents who scored 21 out of 25, which suggests that approximately *122* respondents scored lower than 21).

The youths' current knowledge and understanding of HIV is indicative of young tertiary level students having a good understanding of the primary mode of transmission, ABC campaign (Howard, 2006). Peltzer (2001b) reported that university students had thorough knowledge and understanding of condoms as protecting against STIs. Literature also indicated that sexual behaviour drives the HIV epidemic; therefore changes in established sexual behaviour patterns are essential to reducing HIV infection rates. In particular abstinence and a delay in the first sexual encounter, significant sexual partner reduction and consistency of condom usage in the sexually active are of importance with this regard (loveLife, 2004; Stadler & Hlongwa, 2002). Edgar et al. (1998) indicated that HIV knowledge in college students was related to their adoption of safer sex practices.

Furthermore, the fact that only 2 out of 152 student respondents had thorough knowledge about HIV and AIDS, indicated that young students do not have comprehensive knowledge about HIV and AIDS even though it is widely available to them. They show uncertainty, especially with regards to the virgin myth, HIV transmission through kissing and witchcraft, which was also the case reported by Shisana and Simbayi (2002). Particularly in relation to a hangnail (open cut or wound on the finger nail) being a possible route of HIV transmission. The majority of the respondents did not answer this item as they did not understand it. This point was also noted in the November 2008 AIDS symposium held at the University of the Witwatersrand Medical School. It seems young people only know for certain, about the sexual intercourse and condoms, fidelity and abstinence aspects of HIV transmission and prevention. This confirms the effectiveness of the ABC model (UNAIDS, 2007a; UNESCO, 2006). It is also possible that the high rates of HIV in the young South Africans, at least the educated group, are not necessarily only due to their sexual practices, but also to their ignorance and bias of HIV knowledge. Perhaps focusing on other modes of transmission would contribute to the controlling of the spread of the virus in young people. However, one could contend from this that perhaps, there is *inadequate* teaching or emphasis of other modes of HIV contraction. On the other hand, there is also a possibility that young students are ignorant to the information taught to them and choose not to take necessary precautions against the virus.

Previous literature suggests that young people are well equipped with the information to protect themselves against HIV (loveLife, 2004; Soul Buddyz, 2008; Soul City, 2007; Varga, 2004), in addition to possessing relevant information about HIV (Howard, 2006; Pembrey, 2008; Simbayi et al., 2005).

The HIV knowledge results of this study indicated a discrepancy between what young people claim to know and what they actually know about HIV and AIDS. Additional prevention work still has to be done for the reduction of HIV risk behaviours and consequent HIV prevalance within the young population. Comprehensive basic knowledge is important in making people understand why they need to protect themselves against the deadly virus, as well as its incurable nature. Young people need to have thorough understand of the ARV treatment to prevent the confusion of AIDS being curable (Reach 2010, 2009).

To provide the context of understanding of treatment and cure, take item 23 for instance "Taking certain medications after sex will cure HIV infection". Respondents indicated that some medications can cure HIV, when in actual fact they thought that the question related to the treatment of HIV. Literature has indicated that there is strict treatment in the form of medication that can destroy or prevent the HIV virus if taken within 72 hours of contracting the virus through sex or any other mode of transmission (Queensland Health, 2009). Reach 2010 (2009) indicated that there is no cure for HIV but only a treatment regimen known as HAART a highly active antiretroviral therapy. When successful, this combination therapy can reduce the level of HIV in the bloodstream to very low, even undetectable, levels and sometimes enables the body's CD4 immune cells to rebound to normal levels.

There was clearly a lack of clarity about HIV and AIDS being curable; in fact young respondents suppose that AIDS can be cured by certain medications prescribed by doctors. This report is consistent with previous literature by Shisana et al. (2005) who reported that there was lack of clarity about whether AIDS is curable. Contrary to some of Shisana and colleagues' findings, this study established that students had the correct knowledge of HIV causing AIDS, which was different to what they found in their study. Contrary to previous findings, this study found that young people understood that having minimal sexual partners reduces the likelihood of contracting HIV, whereas Shisana et al. (2005) found that respondents were unsure about the HIV infection being reduced by having fewer sexual partners and emphasised the need for much attention on the area by HIV communication campaigns.

7.4.2 Research Question 2

What HIV risk behaviours do young people engage in?

The majority of the respondents, $n = 127$, reported that they had had sexual intercourse. One hundred and eight respondents indicated having had penetrative vaginal sexual intercourse, while only two had

non-penetrative vaginal sexual intercourse. The remaining, *n* = 32 indicated that the item was not applicable to them; this could suggest that they had other forms of sexual intercourse, and not penetrative vaginal or no vaginal intercourse at all. Sexual debut for this sample was between the ages of 18 and 19. This finding was consistent with previous literature by McCathy et al. (2008) and Pettifor et al. (2004). Furthermore, 9 respondents indicated having had penetrative anal sex, while the majority, *n* = 128 indicated the item to not be applicable to them. Only 1 respondent had had both penetrative and non penetrative anal intercourse, and 14 respondents had had non penetrative anal intercourse. In terms of the current sexual activity status, the majority of the respondents, *n* = 81 indicated being currently sexually active, while 44 respondents were not currently sexually active. Twenty seven respondents indicated that the item was not applicable to them, which could suggest that they either did not feel comfortable disclosing their current sexual activity status or that they did not consider themselves to really be sexual active as they neglected to say no if they were not currently sexually active. This is mainly because respondents clearly answered "yes or no" when asked if they had had sexual intercourse, and did not have the not applicable option.

The majority of the respondents, *n* = 69 indicated having had one sexual partner in the last 3 months. This was followed by 3 sexual partners in the last 3 months by 50 respondents. It seems the majority of the students do not have multiple sexual partners; however, there are those that have approximately three, which is a risk factor for sexual infections. Therefore, there is some level of risk to HIV in relation to multiple sexual partners in this sample as is reported by the following researchers Peltzer (2000, 2001b) Shisana et al. (2005) and Thato et al. (2005). Erikson (1960, 1963), Ewen (2003) and McKee et al. (2004) indicated that young people are at risk of sexual infections due to their their developmental stage, identity crises, as the youth experiments with different ideologies at this time. This is particularly because they engage in experimental behaviours, including sexual activities, unprotected sexual intercourse, multiple partners, drug use and alcohol consumption, which alter their perception of reality and reduce their likelihood of using condom during sexual intercourse (Eaton et al., 2003; Papalia et al., 1998; Pettifor et al., 2005; Resnick, 1992; Schiff & Zeira, 2005; Simbayi et al., 2005; Wekerle & Wolfe, 1999). All this exposes them to sexual illnesses.

The condom attitude test revealed the young respondents to have negative attitudes towards condoms. However, some respondents use condoms during vaginal sexual intercourse *n* = 68, particularly during the last sexual encounter. This finding is consistent with previous literature by Francis (2008); Mkhusane et al. (2008); Ross and Deverell (2004); Simbayi et al. (2005) and van Dyk and van Dyk (2003) who maintained that South Africans hold misconceptions around sexual viruses (HIV) and

condoms usage. A few of the respondents indicated having anal sex with a condom, $n = 17$.
An exploration of possible relationships between the self-efficacy and socio-sexual orientations (individual differences in their willingness to engage in uncommitted sexual relations) of respondents and their attitudes towards condoms to get a sense of the nature of communication between partners in a relationship (or perceptions partners hold) concerning HIV related issues. Some of the associations were statistically significant.

There were no significant associations between self-efficacy for protective sexual behaviours and condom attitude items. This suggested that there was not sufficient evidence to suggest associations between respondents' confidence of their protective behaviours and attitudes towards condoms. Thus not enough evidence was available to establish the respondents' communication or discussions around condom attitudes and confidence in protective behaviours. This was not consistent with previous literature, which reported communications and discussions of sexual related issues among couples in a relationship (Coulson, 2001; Fassin & Schneider, 2003; Harrison & Steinberg, 2002; Holscheider & Alexander, 2003; Khomanani, 2006; loveLife, 2004; Stadler & Hlongwa, 2002).

Only CAS 4 'Condoms are unnatural' (r_{pb} = -.1.66, p =.046) was significantly related to socio-sexual orientation (individual differences in their willingness to engage in uncommitted sexual relations). A negative attitude towards condoms being unnatural was was related to socio-sexual orientation. Nonetheless, this significance indicated that respondents required little if not no commitment prior to engaging in sexual relations; they have an unrestricted socio-sexual orientation. However, they did not think that condoms are unnatural. The risk implied in this result is in relation to premarital sexual intercourse even though these young people were likely to use condoms as they didn't think that they are unnatural. However, they were willing to engage in sexual intercourse "casual sex" even under non committed relationships (Townsend & Wasserman, 1998; Webster & Bryan, 2007). Simpson and Gangestad (1991) indicated that young people with unrestricted socio-sexual orientation may prefer partners based on attributes not promoting stability and commitment in the relationship such as physical attractiveness, and so forth.

An analysis of risk behavioural factors with demographic variables indicated the following. There was a non significant association between condom attitudes and age. This could suggest that respondents might have discomfort with condoms for the reason, belief or misconception that condoms get in the way of sex (Francis, 2008; Ross & Deverell, 2004; Shisana et al., 2005; Simbayi et al., 2005).

In addition, the condom attitude that condoms are un-natural was significantly related (X^2 =11.3, p =0.01) to gender. The majority of the respondents, 48 women (64%) agreed with the statement that 'Condoms are unnatural' while 47 (63%) men disagreed with the statement. There was however, not much difference in the association. It seems both men and women think that condoms are unnatural (Shisana et al., 2005). There were significant differences in HIV, self efficacy for protective behaviours, socio-sexual orientation and sexual debut between men and women. Previous literature has consistently reported females to have high scores of HIV knowledge as well as low risk taking behaviours (Auvert et al., 2001; Campbell et al., 2002; Cromer & Brown, 1992; Guttmacher Institute, 2005; Harrison & Steinberg, 2002; Howard, 2006; Knox, 2008; McGrath et al., 2008; McKee et al., 2004; Papalia et al., 1998; Parker et al., 2007; Pettifor et al., 2004; Pollack, 1992; Pittman et al., 1992; Reddy, 1999; Shisana et al., 2005; 2009; Simbayi et al., 2005; Simpson & Gangestad 1991; Stadler & Hlongwa, 2002; Thato et al., 2005; Thomas, 2005; Varga, 1999; Webster & Bryan, 2007; Wilson et al., 1994).

Furthermore, only CAS 5 was significantly related (X^2 = 4.04, p = 0.04) to race. There was however, not much difference between the races in terms of scoring as both Blacks and Whites agreed with the statement that 'Partners dislike condoms'. Seventy-seven out of 131 (58.78%) Blacks and 15 out of 18 (83.33%) Whites agreed with this statement. Both Blacks and Whites seem to be under the impression that partners dislike condoms. This most probably emanates from their personal experiences in relationships. Results of condom attitude from this study were consistent with previous findings. Multiple partners and inconsistent or no intentions to use condoms during sexual intercourse were significantly associated with HIV infection (DiClemente, 1992; Smereck, 1998; Thato et al., 2005). This was observed among both Black and White men and women as discussed (Cromer & Brown, 1992; London, 2005; Peltzer, 2000; Peltzer, 2001a; Peltzer, 2002; Reddy et al., 1999; Shisana & Simbayi, 2002). Furthermore, these behaviours were reported from young undergraduate university students by Peltzer (2000; 2001b). Erikson (1963) argued in his psychosocial developmental theory that young people engage in risky behaviours as part of their identity formation, which exposes them to explore with many different and risky ideas and behaviours. Blacks, mainly Africans also reported having poor access, expense, personal barriers such as shyness about buying condoms and difficulty discussing use with partners (McKee et al., 2004).

There was also a significant relationship between HIV and race, HIV4 (X^2_1= 7.45, p = .006) and HIV19 (X^2 =16.09, p <.000). In particular, item 4 'You can get HIV by performing oral sex' and 19 'Having a sexually transmitted infection (STI) increases your risk of getting HIV and AIDS'. Seventy four of the

152 (55%) Black and 16 of the 18 (88%) White individuals agreed with the statement that one can get HIV by performing oral sex. This suggests that more White individuals (88%) agreed with the statement than Blacks (55%). Furthermore, more Black respondents 121 (90%) and 10 (55%) White individuals agreed with the statement that having an STI increases your risk of getting HIV and AIDS. However this could be accounted for by the majority of the sample being Black. Previous findings didn't make much reference to racial differences in terms of HIV knowledge (Howard, 2006; Shisana et al., 2005; Peltzer, 2000; Peltzer, 2001a; Peltzer, 2002).

7.4.3 Research Question 3

What are the youths' sources of HIV related information?

The most important source of information for HIV related information was the general media (*n* = 118) followed by health professionals (*n* = 108), loveLife (*n* = 95), thethajunction (*n* = 74) and Campus Health Wellness of the University of the Witwatersrand (*n* = 71). Magazine and newspaper (*n* = 88), and television (*n* = 80) were the most frequently selected type of media (before they were collapsed into one variable as previsouly explained). Radio (*n* = 74) and billboards (*n* = 56) were the other options. These findings are consistent with previous literature by Bertrand et al. (2006) who highlighted that mass media (in the form of radio, television and print magazines and newspapers) had played a huge role in creating awareness of the existence of the virus, the modes of transmission and the means of prevention. Mass media is widely acknowledged as able to reach many South African; it is estimated that 99% of people have access to the radio, 75% have access to television and 7% reader newspapers (Coulson, 2002; Shisana & Simbayi, 2002). Sixty percent of young people watch TV five or more days a week (Coulson, 2002). Harrison and Steinberg (2002) reported that 82% of the youth watch television. In this study, readership followed by television were the most reported type of media young people reported as their source of HIV information. Perhaps this finding had to do with the sample's level of education, higher education. Higher learning students are required and known for reading or studying their course-material more than watching TV.

7.4.4 Research Question 4

Did the media bring awareness of the thethajunction call centre and the outreach programmes measured using the LEPRQ?

A total number of 42 (out of 54) respondents reported their sources of where they had heard about thethajunction. While 26 respondents (out of 57) reported their sources of having heard about the community outreach programme. The majority of the respondents indicated television (*n* = 12) as the main source of knowledge of thethajunction. This was followed by radio and billboard. This was not consistent with previous loveLife findings (loveLife, 2009) as friends (30%) were reported to be the primary source of information about the helpline. The secondary source of information was the media, particularly television (12%) followed by radio (11%) and billboard (10%) (loveLife, 2004). This indicates that communication amongst friends about thethajunction had declined, and that the media, particularly television was the primary source of thethajunction. Its (thethajunction) toll free numbers are advertised using billboards, on electronic and print media (loveLife, 2004) as well as television advertisements (Personal Communication with a loveLife Counsellor, 22 January 2009).



Figure 29: One of loveLife's billboard (loveLife, 2009)

Billboards (*n* = 6) followed by Television (*n* = 5) was the main source of knowledge of the community outreach programme. This finding was contradictory to loveLife's literature as the loveLife billboards rarely if not seldom show or display advertisement about the community outreach programme. See Figures 29 and 30 for an old as well as a most recent image of loveLife billboards, which do not have information on community outreach services. Furthermore, loveLife does not advertise its community outreach programmes on television, however, people can surf the net, call thethajunction or visit franchises, Y-centres', or NAFCIs to found out about the schedule of the outreach programmes (Personal Communication with a loveLife counsellor, 22 January 2009)

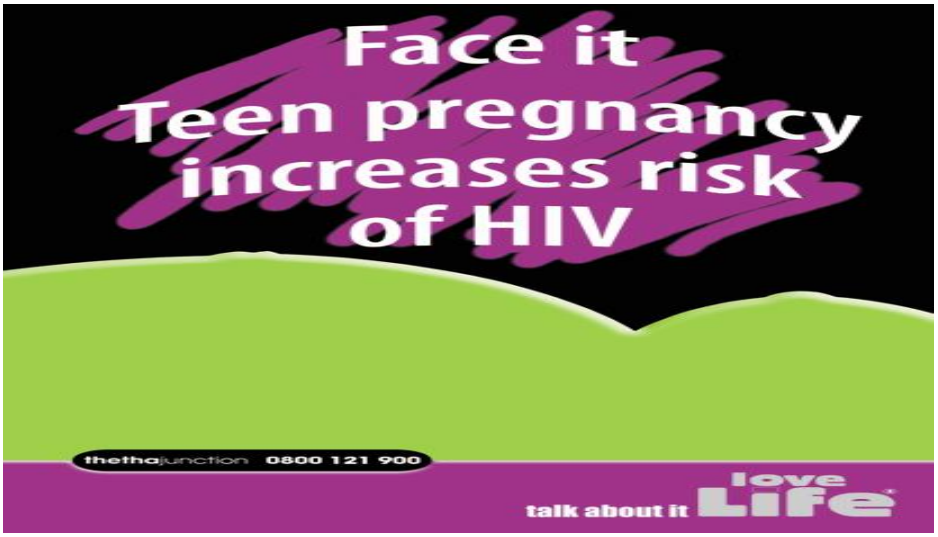

Figure 30: One of the recent loveLife billboard (loveLife, 2009)

It seems that the media did bring awareness of the thethajunction call centre and the outreach programmes. This finding is consistent with the aspirations of loveLife. Previous literature indicated that young South Africans reported to have gathered information about thethajunction from the media, particularly television (12%) followed by radio (11%) (loveLife, 2004). Previous literature further indicated that the media, a high profile campaign comprising of outdoor media, broadcast media and print media served as the most powerful communication strategy as it allows for the reinforcement of all the other components of the campaign (Harrison & Steinberg, 2002; loveLife, 2009; Parker, 2003; Pembrey, 2008; Pettifor et al., 2004). Furthermore, thethajunction is advertised on billboards (outdoor media) and print media, as well as on television. The community outreach programmes are also mainly advertised through print media as well as franchises, Y-Centres and NAFCIs (Personal Communication with a loveLife Counsellor, 22 January 2009). The community outreach programmes are however not advertised on billboards even though the majority of respondents indicated to have primarily seen it on the billboards.

It was of interest to note that 41 respondents indicated sources of awareness of thethajunction, while only 24 indicated to know about it. Therefore a total number of 17 respondents did not give thorough responses to the questions of awareness and knowledge of thethajunction. It seems these 17 respondents were at ease with providing their sources of awareness of thethajunction but not whether or not they knew about it and their use of it. Perhaps this was a misinterpretation on their part as they could have thought they indicated their awareness and exposure to the service, whereas they had not. This may have influenced the observed and reported results for little awareness and exposure of loveLife services. Furthermore, 27 respondents also indicated their sources of awareness of the community outreach

programmes, whereas 48 indicated to know about it. Thus 21 respondents did not indicate their source of awareness of the programme.

7.4.5 Research Question 5

What is the youths' level of exposure and participation to loveLife, particularly thethajunction and community outreach programme as measured by loveLife exposure, participation and response questionnaire (LEPRQ)?

Question 5 and 6 were the main questions that tackled the minute evaluation aspect of this research work, which attempted to measure the benefits of exposure and participation in the loveLife as outcomes of the programme through linking them to the two loveLife services as outputs in their project using the sampled youth (Kellogg Foundation, 2001).

7.4.5.1 Exposure to [L]oveLife

Seventy percent of the respondents (40 of the 57) reported knowledge about loveLife, while 30% (17) said they do not know about it. Ninety five respondents did not complete the loveLife questionnaire. These frequencies were not sufficient to warrant awareness or lack thereof of loveLife amongst young higher learning students. Literature indicated that in 2002, 62% of young people had heard about loveLife as a general programme (Harrison & Steinberg, 2002). In 2004, 85% of the youth reported to have heard about loveLife (Pettifor et al., 2004). Ninety seven percent of the youth who had heard about loveLife reported it being a good programme for the South African youth (Pettifor et al., 2005).

Three themes emerged out of the data of what respondents knew about loveLife. The themes were that loveLife emphasises and teaches on HIV and AIDS prevention, outreach programme and healthy living or lifestyle. Attached to these themes were different meanings and descriptions. These were consistent with loveLife literature and in-line with its aims (loveLife, 2001; 2004; 2009). The first theme revealed that loveLife's messages and concepts of abstinence, faithfulness, responsible or safe sex (condomise), do not have sex at a young age or before marriage, STIs, HIV and AIDS, pregnancies, control the spread of HIV and AIDS and relationships, love relationships were interpreted as sending a preventive message to young people. One respondent (Black woman, 22 year old) reported that loveLife "*emphasises abstinence, faithful, plus condomise; healthy lifestyle, focus on the future-be more optimistic; equip*

young people to focus and be positive about life". This finding is consistent with previous literature, loveLife is a HIV prevention campaign targeted at young South Africans (loveLife 2009; Pettifor et al., 2005). Its aim is to effect behaviour change for the purpose of reducing HIV, sexually transmitted infections and unwanted pregnancy among the South African youth through promoting themes of positive sexuality, shared responsibility, healthy and positive lifestyle (Coulson, 2001; loveLife, 2004; Parker, 2003; Pettifor et al., 2004; Stadler & Hlongwa, 2002; The loveLife generation, 2008). Bandura (1990) also gave emphasis to the development of strategic behaviour change programmes.

The second theme contextualised loveLife as an outreach programme that is youth and education based. It teaches, encourages, promotes, advises, emphasises, creates awareness, empowers and counsels its targets to be knowledgeable mainly about HIV and AIDS, its social aspects and healthy living (Harrison & Steinberg, 2002; loveLife, 2004). These were the key words that respondents indicated about loveLife as a youth outreach programme. (Black man, 20) indicated that loveLife "*focuses on HIV education and does this various ways*", while a Black woman (25) indicated that "*it teaches young people about the importance of safe sex/like using condoms and abstinence*". The third theme described loveLife as emphasising healthy living or lifestyle. This was said to be done through fun activities such as sports, debating, life skill course and many more activities that contribute to the growth of the youth, encouraging them to have a *positive* lifestyle and attitude, as well as love and good relationships. These findings were consistent with literature by Coulson (2001), Harrison and Steinberg (2002), loveLife (2009) and Stadler and Hlongwa (2002) who indicated loveLife to consist of all the aspects that respondents mentioned. A Black woman (20) said loveLife "*Is a programme that promotes awareness of HIV and AIDS issues; it keeps the youth off the streets by creating a home for them through sports and other activities;to pre-occupy them*". Furthermore, a few respondents gave answers indicating indifference in or disengagement to loveLife when asked what it is that they knew about loveLife, for instance, a Black man (22) said "*I only know that it exists, I have never actively participated in such a programme. All the information I have obtained from loveLife is really from their TV programme*".

7.4.5.1.1 Level of Exposure to [T]hethajunction

Twenty-eight of the 55 respondents reported to not know about thethajunction while 27 said they do know about it. There was no difference between the two (1% difference). Thus there was almost an equal number of young people who are exposed to as well as not exposed to thethajunction.

Respondents were further solicited on what they particularly knew about thethajunction. Twenty four of the 28 respondents who reported knowing about thethajunction gave rich descriptions of their knowledge of thethajunction. The majority of the respondents knew thethajunction to be a "*free and anonymous HIV and AIDS helpline*". Respondents indicated that young people can call thethajunction for free from a Telkom line (a landline number) to speak to trained counsellors. They indicated that callers have a selection of medium of communication to choose from. [T]hethajunction deals with answering queries, motivating, supporting and discussing problems, provide advice and information concerning HIV and AIDS, STIs, sex, drugs, rape, abuse, pregnancy, love, life, family and relationship issues, getting attitude and any other social problems or life challenges young people are experiencing. They also help young people make right decisions about life, as well as revealing their HIV status to others. Black woman (19) indicated that thethajunction "*is where one can call in with their problems*" while a Black woman (20) said that "*they are available to talk to anyone with questions relating to love, life, sex, drugs that people may be experiencing*". This finding was consistent with literature from previous studies. [T]hethajunction, or "place to talk" is a popular resource for sexual health information, counselling, and referrals to support services and clinical care (loveLife, 2009). It is a helpline that provides general and personalised information about reproductive health and related issues as well as counselling services when requested by callers (loveLife, 2004; 2009; Stadler &Hlongwa, 2002).

Two respondents (White woman, 19 and Black woman, 22) who indicated to not know about thethajunction gave responses such as "*I know thethajunction from this questionnaire*" or "*magazine, I think*". The one respondent who reported knowing about thethajunction from the current research questionnaire indicated the possibility that some young people truly may not know about thethajunction even though it is widely advertised, perhaps due to their ignorance. However, the majority of the respondents knew and gave positive descriptions about thethajunction, as mentioned above. This does not exclude those few persons that seem to not know much about the service, as they do exist. Various sources of where respondents had heard about thethajunction were identified.

7.4.5.1.2 Level of Exposure to Community Outreach Programmes

A total number of 57 responses were received. Thirty three respondents reported to not know about the community outreach programmes while 24 said they do know about it. There was a 12% difference between the two. Respondents were asked what they specifically knew about programmes. Twenty six of the 57 respondents gave rich descriptions of their knowledge about community outreach programmes.

Two themes emerged from what respondents know about the community outreach programmes. These were that it's a *community based programme for HIV and AIDS education* and that it has *fun events*. In particular, community outreach programmes were described as situated and working in, and for the community to educate, develop and empower the community at large i.e. the youth, adults, and schools about HIV and AIDS and STI diseases (Bandura, 1990); how they spread and can be prevented (using condoms, abstaining and being faithful to one partner). They have discussions around love, life, sex and its consequences, responsibility and making right decisions in life, with teenagers and the youth (loveLife, 2009).

It is a programme that goes to different communities to talk about loveLife, sex, and make it fun to learn about HIV (Black woman, 20)

The community outreach programmes are usually in rural areas with the loveLife site placed at the local clinic. They help spread the word about HIV through using volunteer called Mpintshis'and groundBreakers (Black woman, 19)

Furthermore, fun activities such as sports and arts competitions, computer and leadership courses, workshops on healthy sexual conduct in their franchises and Y-centres, and games are used to emphasise and take their teachings across to teenagers and the youth. Volunteers called Mpinthis'and groundbreakers' are used as facilitators. Molekwa (2008) also indicated the same factors about these volunteers.

I had participated during school holidays they create sport and art competition which help to keep students busy and run computer courses and leadership courses (Black man, 20)

At the outreach they give people (the community) information about HIV and AIDS and related issues like living with a HIV person, dating, etc. and they let the community participate in their programme by using games and other fun activities so as to teach/emphasise that teaching (Black woman, 23)

Furthermore, some respondents indicated that loveLife through its community outreach programmes empower HIV positive people to help themselves by having a positive attitude. They also encourage young people to test and HIV positive people to reveal their status, as well as the community (including rural areas) to live with HIV positive people without discriminating against them (loveLife, 2001; 2004; 2009; Harrison & Steinberg, 2002). loveLife further supposes that increasing the youth's ability to debate, communicate and be confident in themselves may result in decreased sexual risk behaviours by

eliminating pessimism and low self esteem which are directly linked to risky behaviours (Bandura, 1990; loveLife, 2009).

Some of the respondents indicated that loveLife community outreach programmes also provide support to the poor and orphans, "*it is working in the communities in bringing development and support in terms of the poor people and orphans"* said a Black woman (25 years). Some of the information respondents provided about the community outreach programmes were consistent with what loveLife does. They also help the poor in a sense of mobilising the community to help one another (Personal Communication with a loveLife counsellor, 22 January 2009). The counsellor indicated that their main objective of the programmes is to prevent the spread of HIV in the youth. They believe that poverty is related to HIV but they don't directly deal with it. However, their assistance is often attempts at mobilising and involving the social development services such as non governmental organisations in specific areas to be of assistance to families or youth affected by poverty, and then offer education about the link between poverty and HIV and risk behaviours thereof. loveLife introduced a new concept called 'Make YOUR Move' with the aim to mobilize young South Africans to take control of their future, by identifying and seizing opportunities to combat poverty and unemployment in the youth (Africa, 2008). Youth is encouraged to look-for-opportunities, new prospects for further education, personal development, careers and jobs at all times and to think outside the limits of their immediate environment; promoting personal initiative (Africa, 2008).

7.4.5.1.3 Utilisation of [T]hethajunction

In terms of calling thethajunction, only 5 respondents had called thethajunction. The majority of the respondents (n = 52) reported to have not called thethajunction. This could be related to the age of callers according to previous literature. [L]oveLife (2004) reported that thethajunction callers were aged 17-20 years old. Thus, the current study participants (aged 18-25 years old) may have not called thethajunction as they are outside the age of the usual callers. However, even the currently 18-20 year old had never called, as well as those ages above 20 when they were below 20 years of age. In terms of the frequency of calling, 3 of the 5 respondents had called thethajunction not more than three times (between ranges of 1-3 times). One respondent had called between 3-6 times, while the other one had called more than 10 times. Literature indicated that more than 250 000 calls were placed to the thethajunction line monthly. Furthermore, literature reported that most calls were from the Gauteng Province as compared to other provinces (loveLife, 2004). However, literature does not seem to specifically document the caller rate by young groups in the form of their occupation including tertiary

level of education. It is possible that a small percentage of these callers were tertiary students. According to Bandura's social learning theory, active participation in the prevention services is of importance in changing behaviour (Fisher & Fisher, 2000).

The majority of the respondents gave positive descriptions about thethajunction, indicating that they knew what it was about. This was despite them not calling thethajunction due to various reasons, some of which were:

Not seeing the need to (Black woman, 19 and 22)
I do not have any questions to ask them now (Black man, 22)
I do not know anything about the programme (Black woman, 23)
I do not call them as most of the questions I had have been answered by the lectures we've had (Black woman, 21).

Almost all five callers used English as their medium of communication when calling thethajunction. However, English was not their home language, as two were Zulu, one Xhosa, one Swati, one Tsonga and one Sotho speaking. This was consistent with loveLife findings of English being the mainly preferred medium of communication by callers (loveLife, 2004). This was despite English not being their first language.

7.4.5.1.4 Utilisation of Community Outreach Programmes

The majority of respondents (n = 48) reported to have not participated in the community outreach programmes. Only 9 respondents had participated in the community outreach programmes. In terms of the frequency of participation, 7 of the 9 respondents had participated in the programmes within the range of 1-3 times. One respondent had participated 3-6 times, while the other one had participated more than 10 times. Participation in the community outreach programmes was mainly in the form of being part of the audience when loveLife visited high schools, followed by being a volunteer 'Mpintshi', and lastly participating in their games (debates, tournament games and courses). Pettifor et al. (2005) reported that young people who reported participation in at least one loveLife programme were less likely to be infected with HIV; they knew their HIV status and changed their behaviour due to HIV and AIDS. Bandura (1992) also contended that people need to be actively involved in HIV prevention programmes in order for them to have great confidence in their sexual protective behaviours.

I participated in winter school holidays soccer tournament and computer course (Black man, 20).They visited my high school once and I saw the television programme some time back (Black woman, 20). I participated as a client, as a Mpintshi (volunteer/peer-educator) and participated as a groundBreaker (Black man, 25). Participated as a member of the audience during their talk in my high school (Black man, 24)

7. 4. 6 Research Question 6

What does the youth personally report to have learnt from participating in loveLife services and how have they used the knowledge gained?

7.4.6.1 [T]hethajunction

Five respondents reported contacting the call center with various questions and having learned about different things from thethajunction. These were pregnancy, coping, uniqueness (individuality), anti-climax, how risky kissing was, dating issues and women abuse.

I learned how to cope with problems, to admit, open and honest. I even learned that that if you have a problem you should get a knowledgeable somebody and share your problem for help (Black man, 25).I learned about dating issues, women abuse and other stuff I can't remember now (Black woman, 25).I have learned that you can fall pregnant even if you have sex a day before your periods (Black woman, 21).I knew what anti-climax and climax was…peaks (orgasm) and dips after sexual encounter (Black man, 19)

Some respondents indicated having not learned a few things. This again indicates that young people seek to be taught and understand manners or rather misconceptions in which one will not contact HIV. *HIV can't be transferred through cutlery utensils (Black man, 20)*

[T]hethajunction callers in 2002 and 2003 required counselling on relationship issues and information about loveLife. Queries on relationship issues were specifically around wanting to know about dating and expectations in a relationship, breaking up with a partner, and coerced or forced sex (loveLife, 2004; Stadler & Hlongwa, 2002). There seems to still be some consistency between literature and current finding about reasons for calling, some callers needed information about relationships, dating issues, while others needed help with coping with problems, which were not specified.

7.4.6.2 Community Outreach Programmes

Respondents reported having done different things after participating in loveLife community outreach services, namely, visiting the pharmacy to buy morning after pills, helping other young people with the information obtained from thethajunction and also applying it (the information) to their own situations.

I went to the pharmacy and bought morning after pills but could not drink them (Black woman, 21)
I stopped being anxious about living with HIV positive people (Black man, 20)

These experiences seemed empowering to the young students. Participation in loveLife services helped them gain a better perspective of their situation as well as that of other people, and also aided them in making responsible and informed choices. Previous literature has indicated that participation in loveLife services was associated with seeking information on sex and relationships, as well as reductions in the multiple partners for men (Harrison & Steinberg, 2002).

Harrison and Steinberg (2002) indicated that young people exposed to loveLife generally reported significant behaviour change (loveLife, 2004; 2009). The authors predicted that if the gains that were demonstrated in 2002 of decreased risky behaviours within the youth were real and could be sustained over the next few years, the HIV incidence among 15-24 year olds would be reduced by 2007. One could say that the prediction was precise in that 2008 saw slight reductions in the HIV prevalence from 30% to 28%, between the years 2005 and 2008, respectively, in the age cohort (UNAIDS, 2008). Reductions in the prevalence also suggested reductions in the HIV risk behaviours in the young population (Tshabalala-Msimang, 2008). This current study established that indeed persons exposed, but mainly participating in loveLife services exhibit less HIV risk behaviours. However, this study also established that quite a number of young students who are engaging in HIV risk behaviours are aware but not participating in the loveLife services. Literature indicate that people learn best when they practice what they are being taught (Bandura, 1990). Bandura argued that awareness of the deadliness and spread of HIV and AIDS alone is not sufficient to bring about reductions in the prevalence thereof (Bandura, 1990; Fisher & Fisher, 2000). He thus asserted that people need to be taught and are better able perform HIV reduction behaviour such as negotiating safe sex with confidence under health threatening and stressful circumstance (Bandura, 1992). Bandura (1990; 1992) reported that such procedures lead to greatly enhanced skills and to a greater sense of self-efficacy, and the stronger the sense of self-efficacy the more likely people are to use their develop skills in real life situations and maintain health promoting behaviours (Adih & Alexander, 1999; Brown et al., 2005; Fisher & Fisher,

2000; Holschneider & Alexander, 2003; Thato et al., 2005; Wulfert & Wan, 1993). This was also evidenced by Gilchrist and Schinke (1983) who taught teenagers how to exercise self protective control over sexual situation using a self-regulative programme. Thus participation in behavioural interventions that are guided by theoretical facts is crucial for risk reductions skills to be entrenched in people's minds. This also results in low level of barriers to condoms use, in the form of misconceptions around condoms, were nearly three times more likely to have used condoms in their last sexual intercourse (Mahoney, Thombs & Ford, 1995).

The following analysis were conducted to assess the level at which utilising loveLife services had been helpful to the young students. These were tests of associations between variables of loveLife awareness and utilisation and risk taking behaviours.

This research further investigated the associations between exposure and participation in the two loveLife programmes, and risky behaviours. None of the risk behaviours were associated with the awareness and participation of both thethajunction and community outreach programmes. Risk behaviours comprised socio sexual orientation (thethajunction: awareness: r_{pb} =-.06, p = .673; participation: r_{pb} =.07, p =.625; community outreach awarenesss: r_{pb} =.01, p =.923; participation: r_{pb}= -.05, p =.739), condom attitude, self efficacy for protective behaviours (thethajunction: awareness: r_{pb} =.63, p = .067; participation: r_{pb} =.02; p = .885; community outreach awareness: r_{pb} =.10, p = .461; participation: r_{pb} =.09, p = .519), as well as HIV knowledge and understanding (thethajunction: awareness: r_{pb} =-.05, p = .726; particpation: r_{pb} =-.24; p = .076; community outreach: awareness: r_{pb} =-.14, p =.321; participation: r_{pb} =.00, p =1.000). See Tables 47- 56 for these results. Thus there was insufficient evidence to suggest associations between these risk behaviours of students' propensity to require less commitment before engaging in sexual intercourse, self efficacy and knowledge and understanding of HIV. These findigs were inconsistent with previous findings, which reported loveLife exposure and participation as well as loveLife's constructs of intervention indicate that exposure and participation in its services result in positive behaviour change in the youth (Brown et al., 2005; Harrison & Steinberg, 2002; loveLife, 2002; 2004; 2009; Pettifor et al., 2005; Stadler & Hlongwa, 2002). This is most likely to be due to the small sample size. These finding was in relation to loveLife's outputs, which in this case were implementation of and accessibility of the two services (thethajunction and the community outreach) to tertiary level youth. The outcomes were observed accordingly as presented on Figure 31 as the findings of the evaluation in the form of determinants of behaviour (as per loveLife's theoretical contructs of intervention) (loveLife, 2004; McClaughlin & Jordan 2004; McNamara, 2008; Millar et al., 2001; Pettifor et al., 2004; Taylor-Powell & Henert, 2008b).

Furthermore, the majority of students that were both aware of and had participated in loveLife services had sexual debuts of 18 and 19 years, with some as early as 10, 15 and 16 years. Furthermore, the majority of those who had called thethajunction had a maximum of three sexual partners, and one sexual partner for those participating in community outreach programmes. Only a few of the respondents (n = 2) who had participated in loveLife services had never had sexual intercourse. This confirmed, to some level that participation in HIV prevention programmes is important in bringing about behaviour change (Bandura, 1990, 1992; Brown et al., 2005).

This study was only able to establish an association with CAS item 4 "Condoms are unnatural" as significantly related (X^2 = 6.68, p = 0.04) to calling thethajunction. All 5 (100%) respondents who reported calling thethajunction disagreed with the statement that condoms are unnatural. Thirty (59%) respondents who had not called thethajunction also disagreed with the statement while 21 (41%) of those who had not called agreed with the statement. It seems that calling thethajunction was helpful as those respondents had a positive attitude towards condoms, particularly by disagreeing with the statement that condoms are unnatural. Previous literature suggested the same finding that participation in loveLife was associated with decreased risk behaviours (Harrison & Steinberg, 2002; loveLife, 2004).

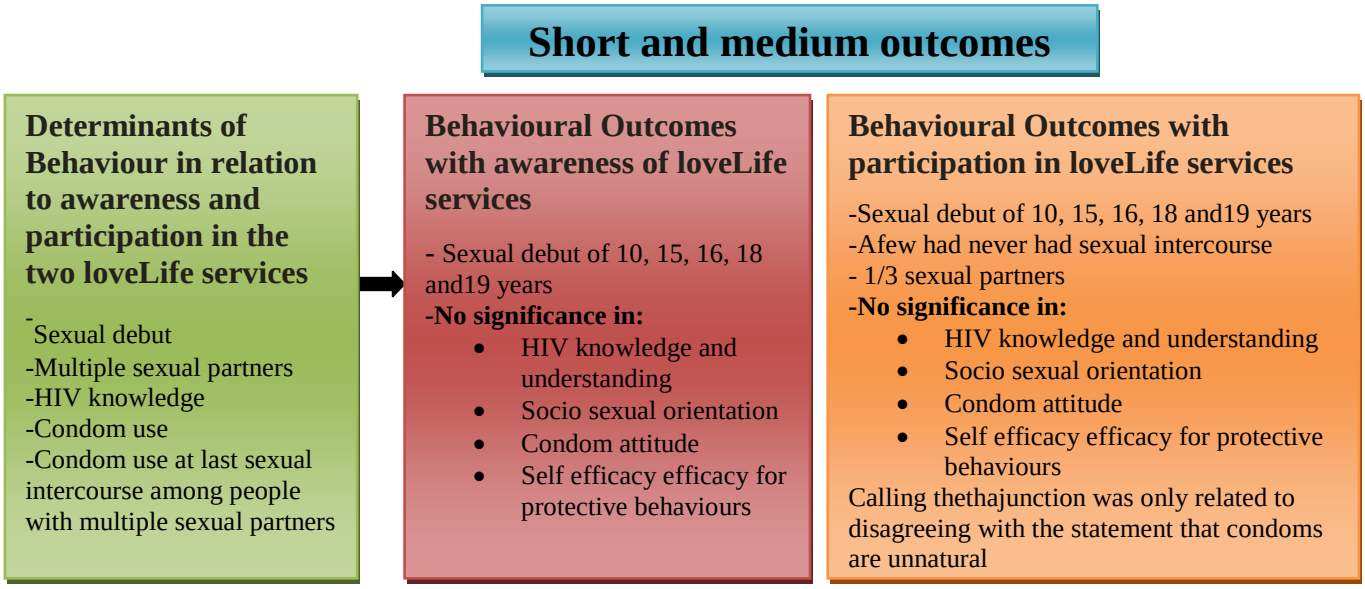

Figure 31: Behavioural outcomes in relation to loveLife awareness and participation (mini-evaluation)

Furthermore, 37 of 57 respondents indicated the nature of their current relationships. It seems that the majority of the respondents are in a relationship (n =21 of the 37), followed by being single or had just broken off their relationship(s) (n =16). Some young people are abstaining from sexual intercourse and waiting for the right time, while others are waiting for marriage. A few other respondents are having sexual intercourse with (n =3) a condom. The other respondent did not indicate whether they are using

protection or not. Two respondents indicated having oral sex and not vaginal intercourse. It is of interest that none of the respondents indicated having unprotected sexual intercourse, but only said positive things (faithfulness, trust and commitment) about the nature of their relationship. It is possible that respondents wanted to appear good and gave socially desirable responses (halo-effect) (Rosnow & Rosenthal, 1996). Furthermore, the rest of the respondents reported being in happy relationships and did not report whether or not they have sexual intercourse. A few indicated that loveLife played a major role in the establishment of their values of sexual abstinence. These were the few (n = 3) who had not had sex and participated in loveLife as the majority of those who participated in loveLife services had early sexual debut of 15 years with the latest being 18/19 years of age. This suggests that loveLife was not successful, within this samples youth, in accomplished its goal in its messages of late sexual activity, that young people must wait until marriage or when older and in committed relationships to have sexual activity. It is not surprising as respondents didn't require any commitment prior to engaging in sexual relations with their partners. The common sexual debut was 15, 18 and 19 years of age, and was consistent with previous findings in South Africa (McGrath et al., 2008). This suggests that respondents had had sexual intercourse prior to higher learning (15-17 years), while a few had during their first and/ or second year of tertiary education (Harrison and& Steinberg, 2002; Knox, 2008; Parker et al., 2007; Pettifor et al., 2004; Shisana et al., 2005; 2009; Stadler & Hlongwa, 2002).

I am single at the moment (Black woman, 21)

I am in a normal relationship and we have decided not to have sex before we get married, and I am comfortable with that. We share problems and motivate each other when things are not looking good (Black woman, 20).

We have a stable relationship and are faithful to each other, we do talk about issues related to HIV and AIDS and how we can help our young brothers and sisters to protect themselves from the epidemic. We know our status and have talked about how we can protect ourselves from infection. We also read on information around the subject and share that information with each other as well as our friends (Black woman, 25).

I have known my partner since we were kids. We have been going out for a year and a half. I love him deeply and trust him completely. He is compassionate and loving (White woman, 19).

[L]oveLife has instituted my values of abstinence deeply in me as ever before and guided me on what type of partner I should look for in a man (Black woman, 19).

7.4.7 Research Question 7

Are there differences between gender and race, in terms of the HIV knowledge and HIV risk behaviours, and also their exposure and participation to loveLife's thethajunction and community outreach programmes?

7.4.7.1.1 Gender

In terms of condom attitudes, only CAS 4 was significantly related (X^2 =11.28, p =0.00) to gender. The majority of the women respondents (n = 48), of 75 (64%) agreed with the statement that "Condoms are unnatural" whilst 47 (63%) of men disagreed with the statement. Twenty-seven women and men respectively disagreed and agreed with the statement. In summary, there was not much difference in the association. Previous literature on gender differences in condom attitudes suggests that more men (68%) than women (56%) had HIV related high risk sexual behaviours (Simbayi et al., 2005). Furthermore, the majority of both men and women were under the impression that condoms get in the way of sex, and that partners disliked condoms; they consequently did not use condoms.

Furthermore, there was a significant difference in the relationship between gender and HIV and AIDS knowledge and understanding, t_{150} = -3.41, p = 0.00. This was also supported by the slightly differing means of 19.7 (SD = 2.32) for men and 20.9 (SD = 1.99) for women. Furthermore, the maximum score by women was 25 (100%) while men scored 23. Only two respondents scored 100%, this result indicates that those respondents were women. The practical significance of this relationship was small and weak; thus the result was not meaningful (Huck, 2004). Previous literature on gender differences in HIV and AIDS knowledge suggests high level of HIV knowledge and understanding between men and women, even students (Howard, 2006; Simbayi et al., 2005). However, these high levels in HIV knowledge existed in conjunction with misconceptions about transmission as well as the progression of the virus.

There was a significant difference in the relationship between gender and self efficacy for protective sexual behaviours, t_{139} = -5.05, p <.00. This meant that men and women had distinct self efficacy to carry out protective sexual behaviours. This was also supported by mean scores of 69.03 (SD = 11.09) and 75.22 (SD = 8.51) for men and women, respectively. However, both men and women had the highest scores of 92. The practical significance of this relationship was small and weak; the result was not meaningful (Huck, 2004). Previous literature by Cecil and Pinkerton (1998) and loveLife (2004)

reported that both men and women had confidence in their ability to carry out protective behaviours against the spread of the virus such as using a condom and communicating with partner about the virus.

All loveLife awareness and participation variables were significant across men and women. See Table 51 of the results chapter for alpha levels and chi square coefficients. These variables were awareness of thethajunction, have you called thethajunction, frequency of calling, awareness of community outreach, have you participated in community outreach, frequency of participation. This suggests that men and women responded differently to loveLife by means of awareness and participation to its services. More women 17 (63%) than men 10 (37%) were aware of thethajunction. However, more women 21 (75%) than men 7 (25%) also were also not aware of thethajunction. In terms of calling thethajunction, more men 3 (60%) had called thethajunction as compared to 2 women (40%), which does not signify much difference. However, more women 38 (73%) than men 14 (27%) also indicated to not have called thethajunction. It seems women were mostly aware of thethajunction but did not call as more men took the initiative of calling thethajunction. In terms of frequency of calling, the two women had called within the range of 1-3, while each of the three men called thethajunction within the range of 1-3, 3-6, and more than 10 times. This finding was inconsistent with previous literature, which indicated that more calls to thethajunction were made by women (58%) than men 42% (Stadler & Hlongwa, 2002; Pettifor et al., 2005). It seems in this sample student men make more calls to thethajunction than women.

In relation to the awareness of the community outreach, more women 17 (71%) than men 7 (29%) were aware of the programme. However, again more women 23 (70%) than men 10 (30%) were not aware of the programme. Almost an equal number of women 5 of 9 (56%) and men 4 of 9 (44%) participated in the outreach programme; with even though the difference was small. Furthermore, more women 35 (73%) did not participate in the outreach programme as compared to men 13 (27%). In terms of the frequency of participation, more women 5 (71%) than men 2 (29%) participated in the outreach between the range of 1-3. Two other men each participated in the outreach within the range of 3-6, and more than 10 times. Previous literature indicates that more women (78%) utilised these services in 2003.

The modes of participation in the community outreach were in various forms. Both men and women participated as being part of the audience when loveLife visited their schools (1 man and 1 woman), in loveLife's games (2 women, 1 participated while one watched; and 1 man) and debate teams (1 woman), and computer courses (1 man), as well as volunteer, and peer educators 'Mpintshis' (2 men and 2 women).

However, a woman respondent aged 20 years, who had participated as a debater and watched their sport tournaments in high school indicated that "*I'm too old for such things*" when asked whether she would or would not participate in community outreach programmes again. It appears that participation was fun in high schools and not at tertiary level as the young women perceived herself to be older and such activities not appealing anymore. This could relate to the fact that loveLife is targeted at a young audience within the age cohort 12-17 years old (Coulson, 2001; Harrison & Steinberg, 2002). Thus young people in tertiary level of education may indeed not consider themselves as the youth that loveLife is targeting as they fall outside of their targeted age group. Perhaps loveLife should be innovative in activities that will involve young women in tertiary level of education, after their secondary school. It is therefore possible that young people do not sustain the HIV risk free behaviours that they learned during their 'high school' age (12-17 years old) when participating in loveLife. Perhaps they fail to identify with loveLife once in tertiary level and do not feel motivated enough to not engage in safe sexual relations.

A man who participated through attending talks indicated that he moved from where he had been staying, however, loveLife was still easily accessible. It seems some respondents found loveLife to be easily accessible while others found it to not be. Another men (Black, 21) who participated in a soccer tournament and computer course, on the other hand indicated that "*I am far away from a loveLife centre*". Proximity and accessibility of a loveLife center was an issue for the young man. Perhaps loveLife should advertise their y-Centres, franchises, etc widely in the country for easy access by young people. A woman (Black, 19) who was a volunteerer indicated that "*I would not participate because of my huge workload and also because it's no longer easily accessible and to my convenience*". It seems loveLife looses its volunteers when they make the transition from high school to tertiary as most volunteers are high school youth. This is mainly because most of the volunteers are either high school students or students who just completed their grade 12 and do not have anything to do yet (Personal Communication with a thethajunction counsellor, 17 February 2009).

7.4.7.1.2 Race

The majority of the sample consisted of Blacks, n = 134, and 18 Whites. Fifty five respondents who answered the question on awareness of thethajunction comprised of twenty-three (85%) Blacks were aware of thethajunction in contrast to Whites 4 (15%). Eighteen (64%) Blacks and 10 (36%) Whites reported a lack of awareness of thethajunction. The five respondents who reported to have called thethajunction were Blacks. None of the Whites in this study called thethajunction. Only one White

(woman, 22) respondent indicated a reason for not participating in community outreach programme "*I would participate if I knew about them and had something to gain from it*". Previous literature indicated that thethajunction was established for the Black population (loveLife, 2004; Pettifor et al., 2005; Stadler & Hlongwa, 2003). Perhaps this also accounts for why the majority of its participants are Black, in addition to their making the majority of the youth population (Statistics S.A., 2008). However, this does not exclude White youth, as the main aim of loveLife is to reduce the HIV prevalence within the South African youth through changing their HIV risk behaviours no matter their racial identity.

Of the 24 respondents who answered the question on awareness of the community outreach programmes, 17 (71%) Blacks and 7 (29%) Whites reported awareness of the programmes. Twenty six (79%) Blacks and 7 (21%) Whites respectively indicated a lack of awareness of the programmes. Again, only Blacks (*n*= 9) participated in the community outreach programmes. A summary of the awareness and participation in loveLife services between races suggest that the sample used, which had uneven racial numbers may had led to this findings. There were only 18 Whites, thus a bigger sample may have provided a better understanding of the distribution of race in relation to awareness and participation to loveLife services. However, the demographics are different in higher learning education, as there are more Whites than Blacks (Statistics S.A., 2007). A turnover of the scenario could also suggest that perhaps, Whites were not interested in participating in the study or they really are not participating in the services. A loveLife counsellor said that she can't say that more Blacks nor Whites participate more than the other race, but that she has mainly seen, from her own observations, a lot of Blacks (African in particular) participating in the programmes (Personal Communication with a thethajunction counsellor, 17 February, 2009). Previous literature indicated that the majority of callers were Blacks with home languages of were IsiZulu and Sesotho, followed by IsiXhosa (loveLife, 2004).

7.4.7.1.3 Reasons for Participation or Lack of Participation in the Two [L]ovelife Services?

This section is not referenced to previous literature in that the researcher did not find such information. It is evident from this study that an almost identical number of the students as aware as well as not aware and knowledgeable about the two loveLife services. Twenty eight versus 27 respondents knew and did not know about thethajunction respectively, while 24 and 34 respondents knew and did not know about the community outreach programmes, respectively. Thus more respondents did not know about community outreach programmes than they knew about any of the two loveLife services. In addition, the majority of the respondents indicated not having participated in thethajunction and the community outreach programmes, 52 and 48 (out of 57), respectively. Thus awareness seemed to be

better than participation. This finding was consistent with loveLife's monitory findings indicating that the majority of the youth are more aware compared to participate in loveLife services (loveLife, 2002, 2004).

Respondents who did not participate in loveLife services indicated various reasons. Lack of awareness and participation in thethajunction was linked to "*I do not know anything about that programme*" said a woman respondent (Black, 23). Another woman respondent (Black, 20) who called thethajunction between the ranges of 1-3, indicated that "*I do not see any need anymore because everything is out in the open now, through media and academic institutions. I simply know what to do in any situation*" A men respondent (Black, 22) indicated that "*I do not have any questions to ask them now*" This reason was also provided by a women respondent. Women mostly gave reasons, while men did not. No reasons were provided for whether respondents would call thethajunction again or not. Only 2 respondents gave positive reasons as to why they would call thethajunction again, because it impacted his life as well as that of people in his community (men) and a woman said he would call if she had something to ask.

Lack of awareness and participation in community outreach programmes was linked to various explanations such as "*I would not participate because of the lack of time*" by a woman (Black, 25). Another woman (Black, 20) said that "*I would like to learn more about loveLife programmes and participate in them*". A man respondent (Black, 22) indicated that "*I would, provided I have enough time that would fit my busy schedule. However, we do talk about community based issues*". One woman (Black, 21) indicated that "*It has become less interesting; people there are corrupt and cruel*". This young woman had not indicated being a participant, once or even on a regular basis or a volunteer. However, it is possible that she may have skipped that item by mistake or have not been interested in filling in the questionnaire and did not indicate participation. Her claims seem to be unsupported regardless of the intention. On the other hand it is possible that she had insight into the programmes, but again, it remains unsupported.

Furthermore, the majority of respondents did not answer this question even though they had not participated in the service. Most of the responses were received from the nine respondents who had participated and would like to participate in the community outreach programmes again. Mainly because they felt that they learned a lot from it, a woman (Black, 19) said that "*I learn a lot and it exposes you to different people as you meet many people so in a way it opens up opportunities for a person and also keeps you away from bad things*". A man (Black, 21) indicated that "*I would, cause it is great to interact with other young people and share ideas about problems of the youth as HIV*"

7.5 General Discussion

This study explored the relationship between HIV knowledge and risky behaviours as well as loveLife awareness and participation. This was contextualised within their developmental stage with Eriksons' theory of psychosocial development. Despite the fact that the majority of the youth already knew some of the basic facts of how HIV is transmitted and how to protect oneself from infection, this study was not very successful in achieving measurable increases in HIV knowledge and decreases in risky behaviours, as respondents had moderate HIV knowledge that needs to be improved. In terms of risky behaviours, the study found that the majority of young people were carrying out some of the protective behaviours against HIV, such as condom use during sexual intercourse as the majority indicated to be sexually active, and had one sexual partner (n = 69). However, a large number (n = 68) had more than 2 sexual partners. They also had early sexual debuts of 17 and 18 years of age. Moreover, these students required little or no commitment prior to engaging in sexual relations with a partner.

Furthermore, in terms of the attempt to minutely evaluate usage of loveLife services by tertiary level students through linking their outputs to outcomes as experienced by the students, there was not sufficient data to determine students' awareness to loveLife services; however, some students were aware of loveLife services but not participating in them. Fifty seven out of the 152 students reported awareness of loveLife while the rest said they were not aware of it. One wonders if their exposure to loveLife services as well as other HIV prevention campaigns is associated with their lack of thorough knowledge of HIV, as well as their misconceptions of the virus. Furthermore, is it associated with their lack of protective behaviours against the virus? This study however, established that young people who participate in loveLife but *only* through calling thethajunction, report a somewhat positive attitude towars condoms as compared to those not calling thethajunction. Bandura (1990, 1992) asserted that awareness of HIV or an HIV prevention campaign alone is not sufficient to bring about appropriate behaviour change. Thus active participation in such a programme is crucial (Fisher & Fisher, 2000). However, this study found insignificant findings between other measures of risky behaviours as well as HIV knowledge and understanding and participation in these services. This was likely due to the small sample size. Students indicated that the media was instrumental in their awareness of loveLife services.

A fair qualitative sample was used to evaluate the benefits of participating in loveLife services. This aided in the establishment of exposure and participation in loveLife being associated with thorough HIV knowledge and protective behaviours against the virus. However, it is alarming to note that only 14 of 57 respondents (9 participated in community outreach programmes and 5 called thethajunction) reported

exposure and participation to the two services. It appears that a small percentage is really exposed to loveLife (understand it) and participate in its services, at least within the educated group.

Furthermore, some of the minute evaluation findings assisted in confirming Bandura's theoretical ideas of the importance of participation in HIV prevention programmes to enhance the self efficacy of enacting protective behaviours.

There was bias in the distribution of race, as most respondents were of African descendant. Moreover, there was also some gender bias in the qualitative enquiry. More women (n = 43) than men (n = 14) responded to the loveLife evaluation. This may suggest that men in comparison with women may not be that much interested in loveLife, or HIV prevention programmes for various reasons that need further exploration (Shisana et al., 2005; 2009; Pembrey, 2008).

Given that this current study did not have the largest sample size to cover all educated youths' views of loveLife in the form of their exposure and participation to its services. One could question the level of trustworthiness of these few responses that were received, but they were recorded as they occurred. Perhaps these young educated students were not keen on participating in the study by completing the questionnaire or were just ignorant of loveLife. The researcher neglected to ask how respondents felt during and after completing the questionnaire and as a consequence does not know the students' levels of interest. Some and not all of those who answered the loveLife questionnaire filled it completely, and described their facts in detail; some did not, which is a normal trend in research.

On the other hand, one could suggest that perhaps organisations like loveLife and other major HIV prevention campaigns such as Soul City, Soul Buddyz and perhaps the Treatment Action Campaign should strategies on incorporating young students. Such an endeavour could specifically focus on their interests as young students as well as what they think will work to help increase their HIV knowledge and decrease their HIV risk behaviours, as their patterns of risky behaviours has been well established and documented (Harrison & Steinberg, 2002; Shisana et al., 2005; Simbayi et al., 2005; 2009). Furthermore, the HIV pandemic was noted to be progressing towards their kind, the educated youth (Ross & Deverell, 2005). Something has to be done to help the educated in their ignorance about the virus (Pembrey, 2008), and a starting point could be asking them what they think will work. The second generation behavioural surveillance indicated that HIV prevention efforts should be flexible enough to consider all factors related to increasing but stabilising HIV prevalence, as well as focus attention where the most risky behaviours are exhibited, such as the young educated population in this case (WHO,

2002). In addition to this, perhaps young people should be thoroughly taught about the virus before they enrol for higher learning, such that protective behaviours will already be habitual in them and they will not engage in risky behaviours when they get to tertiary level (loveLife, 2009).

Moreover, perhaps higher learning institutions should establish set, or strengthen their current HIV prevention campaigns, courses or modes of information dissemination as young students people seem to not be very much attentive to what HIV prevention programmes such as loveLife concerning HIV prevention within their age group. However, a larger sample may have provided a better view of young people's awareness and participation in loveLife services given that it is reported to be well known and utilised by the majority of the youth (loveLife, 2004; 2009).

This was a correlation study, non-experiment research design; causal relationships can thus not be established (Rosnow & Rosenthal, 1996). The study was able to describe the nature of events as they occur as well as establish relationships between variables. It has shed more light into HIV knowledge and understanding, patterns of HIV risky behaviours and loveLife services of young learners attending tertiary institutions in Johannesburg, Gauteng, South Africa. More work needs to be done to help reduce the level of risky behaviours as well as increase the knowledge about HIV and AIDS within this population group as they are the future of tomorrow. [L]oveLife reported to know what young people are all about and the risk behaviours they engage in (Africa, 2008). A point of concern in this statement is which young people, the teenagers or young adults, and of which level of education?

The findings of this research clearly showed that young educated (or rather tertiary level of education) men and women do not really care much about loveLife. This, by implication, could suggest that loveLife has not shown any valid interest in *their* developmental stage and what their concerns and interests are, and thus these students don't see its relevance in their lives. Moreover, it has also not focused its HIV prevention campaign or efforts to the higher learning students. This is because this group display high HIV risky behaviours, of which in their view loveLife is not interesting enough for them to partake in or even take heed of their prevention message. One could argue that loveLife has taken interest through the recent 'Make Your Move' campaign. However, this campaign is mainly targeted at the unemployed youth, not necessarily still studying but mainly not involved in any industrious activities. This still leaves a gap of the educated or tertiary level of education youth!

CHAPTER 8

Limitations and Strengths

8.1 Introduction

This study had strengths as well as some shortcomings. Here, the discussion focuses on the limitations of the sample size, instruments that were utilised, research design, and method of analysis. Strengths (advantages) of the study will also be discussed.

8.2 Limitations of the Sample

This study used a sample size of approximately 152 young men and women students. The sample size was fair but may have not been large enough to establish valid representation of certain aspects that were measured such as the knowledge young people had about loveLife services of thethajunction and the community outreach programmes. In some cases there was no sufficient data to determine the true level of exposure young people have to thethajunction.

The sample can be considered to have been somewhat representative of the tertiary institutions in the Braamfontein area of Johannesburg. The sample was adequately representative of young students in Braamfontein. It is noteworthy that the generalization of findings should only be limited to the sampled area. However, if an area has similar characteristics as those of this study, perhaps then generalisations of the findings could be considered. Accordingly, the population validity of this current study may be slightly affected.

Furthermore, this sample was drawn for convenience and thus there was no way of guaranteeing that everyone would be in the sample, as students volunteered. This means that a non probability sampling method was used, with the implication that no systematic format of selecting the sample was followed. It could have been open to threats as they were not controlled. As such there were no selection effects.

Sampling errors could also not be calculated due to the absence of random assignment. A further limitation to this was the possibility of students refusing to participate.The majority of students, particularly Whites had poor participation as they never returned their questionnaires. As a consequence, there may have been volunteer bias (Huck, 2004).

Another limitation related to the racial distribution of the sample. There were extremely unequal balance between Blacks and Whites. However one advantage of the sample was that an equal number of both men and women were used and the results were thus not concentrating into either direction.

There was also gender bias in the qualitative sample, as 43 women and 14 men were sampled. This may have affected the reported results and indicated that men are not interested in loveLife.

8.3 Limitations of the Instruments

The disadvantages of open ended questionnaires are that the questionnaires can be difficult to answer or attempt, they can also be time consuming to respond to. The respondents could have been tired to complete the questionnaire and left out important information that made it seem as if they did not know much about the phenomenon under study, or perhaps could have just answered for the sake of answering. When asked what they know about loveLife-some respondents wrote three words instead of a sentence. Future studies in this field should consider conducting interviews to get in-depth information from respondents.

One may raise caution around the trustworthiness and seriousness of self reports. This method of enquiry was applied in this study and may have posed a limitation. This is particularly a concern for the HIV and AIDS knowledge questionnaire as the majority of respondents answered incorrectly even on the most obviously (true or false) incorrect items. Some respondents indicated that they did not understand what the questions were asking. However, it is possible that their lack of thorough HIV knowledge may have led to the findings and misunderstanding of the questions. This may have been the case with all scales and the loveLife evaluation. Everyone wants to appear good by faking good or bad and not at risk of HIV infections. Thus, it is possible that respondents may have provided socially desirable responses. However, the fact that there has been a decline in the HIV prevalence could suggest that young people or respondents are being truthful in their self reports of sexual behaviour (Neale & Liebert, 1986; Rosnow & Rosenthal, 1996; Weinhardt et al., 1998).

Furthermore, there were no testing problems as questionnaires were administered once, given that this study was cross sectional in nature. The same applied to maturation.

8.4 Limitations of the Research Design

A non-experimental research design was used in this study as it was interested in establishing associations between variables. A disadvantage for using this kind of design is that it does not allow for causal inferences to be drawn if its criteria are not met (Cozby, 1985; Fife-Schaw, 2006; Rosnow & Rosenthal, 1996). It also does not allow for generalizations but only allows for investigating relations between variables. Thus it is not necessary for the chosen sample to represent characteristics of the population fairly and accurately because the aim is to find the relationship, understand it and predict the likelihood of the occurrence of risky behaviours in a similar context or group (Neale & Liebert, 1986). However, this was not much of a limitation in this study as it was mainly interested in exploring relationships between variables not for the purpose of generalising but of understanding and making recommendations accordingly.

8.5 Limitations of the Method of Analysis

A mixture of qualitative and quantitative research methods was used in this study, and questionnaires (instruments) that were open and closed ended were used to measure variables. Parametric statistical techniques assumptions were not all met at some instances; hence, the power of those research results were affected. This was because the variables were dichotomous in nature (Rosnow &Rosenthal, 1996). This was particular to the Chi square test of associations, which are non-parametric. Non parametric tests are likely to lead to type II error (the null hypothesis is not rejected when it is actually false) (Huck, 2004).

This study had no practical significance. This was observed from the t-test analysis, which revealed no major effect (Cohen's D).

The disadvantages of using content analysis are that content analysis could be locating unobtrusive messages relevant to the research question. Another limitation is that content analysis can only be as good as the documents on which it was applied on (Lawrence, 1995). This raises issues of authenticity, credibility and representativeness of which if not considered or tampered with the data and the

conclusion drawn from the sample data cannot be trustworthy (Bryman, 2004). It is also difficult to ascertain the answer to questions such as 'why' through content analysis. Findings or even suggested findings from such a question are mere speculations.

There are three major threats or challenges to using thematic analysis effectively. These are the researcher's projection, sampling, and mood and style. Projection as an ego defence mechanism that helps us interact with others can become an obstacle to effective and insightful thematic analysis. It is simply reading into or attributing to another person something that is one's own characteristic, emotion, value, attitude or such (Boyatzis, 1998). There is more opportunity for an invitation to projection by the thematic analysis researcher than in most other types of research, particularly when ambiguous qualitative information exists. To prevent or minimise the effect of projection, researchers must practice thematic analysis and coding development. The challenge for the qualitative researcher is to use thematic analysis to draw the richness of themes from the raw data without reducing the insights to a trivial level for the sake of consistency of judgment (Boyatzis, 1998). The researcher of this study was objective and sought the opinion of other researchers as means of avoiding this challenge; this was fairly controlled for.

Sampling is often a challenge in thematic analysis when the data used (gathered from a specific sample) is contaminated. For instance using a specialised sample to draw conclusions and generalise to the greater population is problematic as the sample would have not been representative of the population (Boyatzis, 1998). Using a large and diverse (different units as per the population such as men and women, different faculties, etc.) in the sample is crucial in avoiding this issue (Boyatzis, 1998). However, qualitative finding do not serve the purpose of generalisation but can only be transferred to contexts with similar characteristics. The qualitative findings of this research can possibly and cautiously only be transferred to higher education learners with similar characteristics of age, race and undergraduate level of education (Lincoln & Guba, 1995). Furthermore, similar characteristics can be investigated if looking to replicate the study.

The mood and style of the researcher in collecting, analysing and interpreting qualitative data is important and could have negative implication for the study by decreasing the ability of the researcher to conduct thematic analysis. This particularly relates to the subjectivity of qualitative research. The arousal (mood and cognitive style) of the researcher can adversely affect the source material. Tolerance of ambiguity is a prerequisite for thematic analysis. The researcher must be open to learning, diversity and discovering new phenomenon (Boyatzis, 1998). In the case of this research, the researcher was

sober minded throughout the research process, from data collection to interpretation and also used second opinions of other researchers.

Some of the common limitations of logic models include the nature of representation of intention and not reality of the model. It also focuses on expected outcomes, and as a result people may overlook unintended outcomes. Thus, there may be inadequate attention on inputs and outputs and the logical relationships that connect them to end results. It also focuses on positive change; however, change is not always positive. Logic models may simplify the complex nature of causal attribution where many factors influence process and outcomes. Furthermore, it may stifle creativity and spontaneity (McCawley, 2008; McLaughlin & Jordan, 1999).

8.6 Some Strengths of the Study

This study was conducted in a natural setting. Students were approached during lecture times, in their lecture halls and requested to complete the questionnaire at their own time and returned back to the box placed in the reception or administration offices. Thus the researcher had no control over variables, and could not manipulate them. This demonstrated good ecological validity.

The study also used open ended questionnaires, which have the following advantages namely, they provide an opportunity for respondents to provide free responses without any limitations, as they can write in as much detail as they like. Furthermore, they can provide reasons without the embarrassment of talking face to face with a research interviewer. They are also convenient and easily administered as they can be administered to a large number of people at once. They also provide anonymity (Rosnow & Rosenthal, 1996).

In terms of the instruments that were used, their psychometric properties were static. The SOI, CAS, Self efficacy and the HIV knowledge and understanding questionnaire were closed-ended in nature. Thus limited respondents to choosing options seen to best describe their thoughts and behaviours in relation to the measured construct. There was a moderate response of questionnaires returned, in relation to the actual number of questionnaires that were issued (152 returned out of approximately 300). Responses depend on the truthfulness of respondents as they can lie especially because these were self reports of sexual behaviours. However, Cronbach alphas were calculated and revealed that this current study had good quality (Devlin, 2006). The SOI had a Cronbach alpha of .83, self-efficacy scale had an alpha of .82, and HIV and AIDS knowledge and understanding questionnaire had a *Kuder Richardson*

alpha of .50. All these were excellent. The Condom Attitude Scale had a *Kuder Richardson* alpha of .47. Thus this research study had good quality as shown by high relaibility results. The instruments used were reliable, valid as they are standardized sexual and HIV related behavioural measures, and were also suitable to answering the questions. Nonetheless, some caution is raised about the consistency of the SOI and condom attitude scales as they had less than 10 items (seven each), which raises questions because a scale must have at least 10 items in order for its consistency to be assessed (Personal Communication with Peter Fridjohn, May, 2008). Fridjohn indicated that the reliability coefficient of few items could be high given that the scale asks has similar items.

The issue of the trustworthiness of self-report was dealt with in this current study by using the triangulation method. This was in the form of more than one instrument tapping into the same construct, with excellent Cronbach and Kuder Richard alphas, as well as authentic, credible and dependable. This was given that respondents may provide socially desirable answers. This was also particularly because respondents may have problems of trust around self report of sexual behaviours if interviewed (Weinhardt et al., 1998). Thus closed ended and psychometrically sound measures appropriate for the purpose of the assessment that have language that is easily understood were used. Therefore some form of triangulation was used. Moreover, respondents were specifically informed that they will remain anonymous and that confidentiality would be maintained and so were encouraged to be as honest as possible.

Furthermore, there was also triangulation in the form of using multiple theoretical underpinnings (Erikson's theory of psychosocial development, social learning theory of behaviour change, loveLife's theory of behaviour change as well as loveLife's constructs of intervention). This allowed for a rich understanding of the difficult subject of sexual behaviour and motivations as well as behaviour change in the youth from various perspectives. The study also used a mixed method approach (qualitative and quantitative) (Lincoln & Guba, 1995).

The research design of this study was cross-sectional and non-experimental designs with the advantages of being easy to implement, cost and time efficient and useful for descriptive purpose.

In terms of the statistical techniques that were applied, t-tests were used as its parametric assumptions (normality and homogeneity) were met and since it can withstand robustness as a consequence, exceptions were made and it was parametric (Huck, 2004). Therefore there were no power issues with this technique. Point Biserial correlations were appropriately used in the case of categorical and interval

variables. Furthermore, a transformational logarithm tests was applied on the SOI scale which was not normal. This test allowed for the data to be normal and for parametric techniques to be applied. Thus there was statistical validity. In relation to quantitative analysis, the statistical test that were applied were correlations, tests of association and t-tests, which were all appropriate for the study as per the research questions, which were to explore the relationship as well as differences between variables. Thus there was statistical validity and the conclusions draws were consistent with the results, sound and trustworthy. The quantitative findings can be generalised to similar contexts with characteristics matching those of the sample (undergraduate students in higher learning institutions of similar racial and gender). Similarly, the qualitative findings can be transferred in the form of applicability to very similar sample characteristics. Also, replication with the same sample would allow for similar findings to be established (credibility) as this study was conducted in a naturalistic setting.

Some of the advantages of the qualitative content analysis are that it is cost effective as the general materials needed to conduct the analysis are easy and inexpensively accessible. It is also a very transparent research method and as a result often referred to as an objective method of analysis. The coding system and sampling procedures are easily set up to allow for replications and follow-up studies. Furthermore, it is also a highly flexible method in such that it can be applied to a wide variety of different types of unstructured information (Bryman, 2004).

Thematic content analysis on the other hand has a few purposeful functions, namely, it's a way of making sense out of seemingly unrelated material. It is also a way of analysing qualitative information. It is also a way of systematically observing a person, an interaction, a group, a situation, an organisation or a culture. Lastly, it is a way of converting qualitative information into quantitative data (Boyatzis, 1998). The next chapter dwells on a discussion around implications of the study as well as recommendations for future research.

CHAPTER 9

Implications and Recommendations for Future Research

9.1 Introduction

This exploratory research study has provided information regarding the youth's HIV related behavioural patterns and knowledge and understanding, as well as their exposure and utilisation of loveLife services, despite its limitations. This chapter of the research report discusses implications of the study and recommendations for future research. It finishes of with some concluding remarks.

9.2 Implications of the Study

This study could be viewed as a brief scientific journey into the realm of HIV awareness and understating as well as prevention campaigns targeted at young educated people. This was from the perspective of young people themselves. The study has identified several possible research avenues that will hopefully be pursued in the future.

9. 2.1 Theoretical Implications

This study used the social cognitive-learning theory as well as the loveLife's model of behaviour change and constructs of intervention to account for the theoretical underpinnings. It investigated certain aspects of this model(s) and constructs given the time constraints of this research. Nonetheless, the variables that were investigated did provide an insight into HIV knowledge and related risk behaviours in relation to the youth exposure and participation in loveLife services. The SCT and the loveLife's constructs of intervention were related and captured important aspects of HIV prevention for young people. The findings of the study confirmed the importance of the theoretical ideas of SCT in that participation in loveLife services was associated with increased knowledge and understanding of HIV, as well as minimal risk behaviours in the form of high self efficacy for protective behaviours in the sample. They

also specifically added to the behavioural determinants of HIV, as stipulated by loveLife and behavioural outcome that are specifically displayed by the educated youth. Furthermore, SCT has been used internationally and has once more, through these findings, confirmed its applicability in the South African context.

As part of a theoretical contribution, the author of this research saw some inconsistencies in the theoretical structure of loveLife's model of behaviour change. The design of the structure of the model does not follow a logical flow in its pattern/structure. Behaviour change which is the fourth component is positioned in the middle, which could be demonstrating the emphasis of behaviour change by the model (Figure 32a). This could also demonstrate that at the heart of the model is behaviour change. However, when one engages with the model, it does not follow a logical flow and may confuse the reader by suggesting that inasmuch as at the heart of the model is behaviour change, counselling and referrals seem to be at the top list. At an initial glance the model gives a sense that it is a bottom up type of a structure, which it really is not as it suggests that awareness is the first step to intervening followed by outreach, open communication, behaviour change and at the top, which seems as the outcome is counselling and referrals. The first three components are logical; however, the positioning of behaviour change makes it challenging to understand the model at a first glance. This is because it gives as impression that it is merely another component that is necessary for something greater that is interrelated with the other four components. Behaviour change as the heart and main outcome (to lead to reduction of HIV prevalence) driven by the four components should be clearly represented on the graph.

Therefore to avoid confusion, it may be better to redesign the model to be a bottom-up-logic in that it will not only be logical but also provide a hierarchical pattern that flows from awareness at grass root level to behaviour change as the ultimate goal. The researcher suggests and proposes this new design on Figure 32b as it provides a logical flow of the structure of the model. Reshuffling of the components of the model as suggested by the author clearly indicates behaviour change as a priority by placing it at the top. This as suggested by loveLife still maintains that the media strategy, counselling, outreach and open communication are all related to and reinforce one another to lead to behaviour change or are different ways in which loveLife aims to reach behavioural changes in the youth.

a) The current structural flow of the model

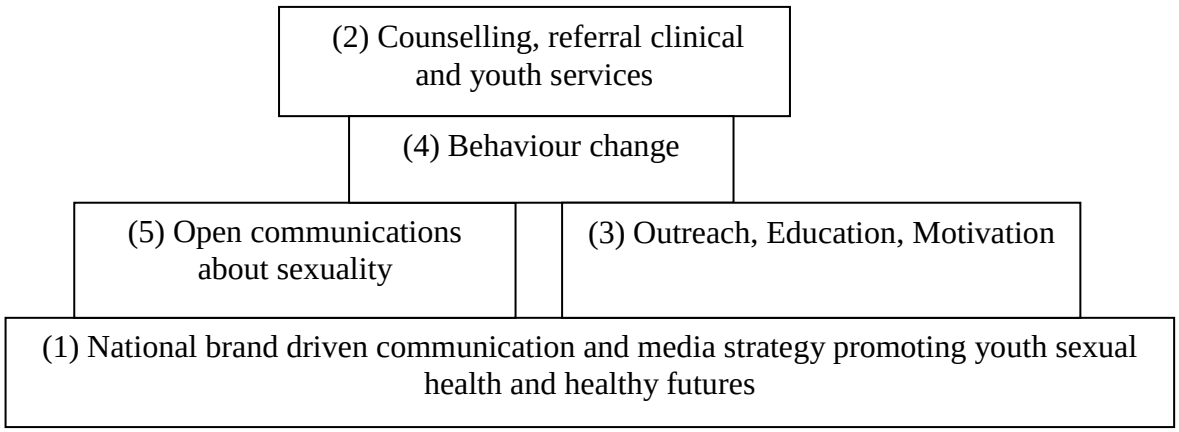

Figure 32a: loveLife's model of behaviour change

b) The researchers' proposition of the design of the structure of the model:

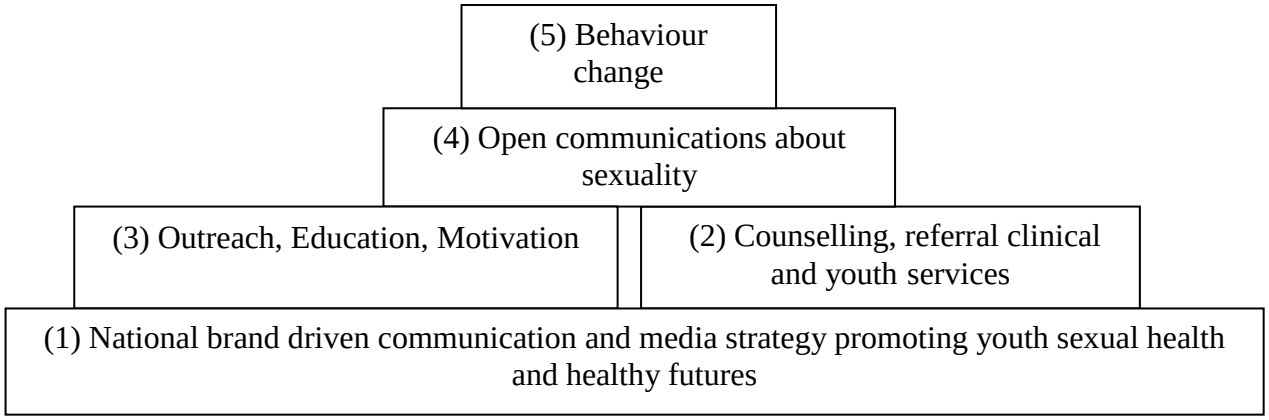

Figure 32b: loveLife's model of behaviour change

This re-ordering would bring logic and consistency to loveLife's models of intervention in that its theoretical constructs of intervention give a logical structure by showing direct links of the programme's intentions. Thus the same is needed for its model of behaviour change. The theoretical constructs of intervention clearly shows that loveLife's impact can only be seen through reductions in the biological markers (STIs, HIV and pregnancy rates) and this is achieved through targeting (changing) behavioural determinants of risky behaviours as represented on Figure 33 (Stadler & Hlongwa, 2002).

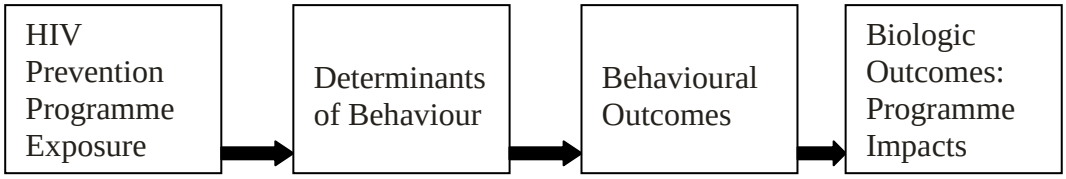

Figure 33: loveLife's constructs of intervention

9.2.2 Practical Implications

This study found significant results in HIV knowledge, patterns of sexual behaviours between genders, races and those utilising and not utilising loveLife services, as reported in the results chapter. The study also examined confounding variables in particular, the youth attitudes and beliefs towards condom, self efficacy to protective behaviours as well as the youth's relationship commitment requirement prior to engaging in sexual intercourse. These variables are critical in sustained prevention of HIV risky behaviours.

This study also looked at the level of knowledge, and awareness and participation in loveLife services in an interesting way. In that people not exposed to loveLife were also sampled to discover their perceptions of the programme and reasons for their lack of participation. This could help loveLife improve their services in order to attract a wider group of the educated youth.

Moreover, the results obtained in this study indicated young people to have moderate but biased knowledge and understanding of HIV, engage in HIV risk behaviours and are not utilising the main HIV prevention campaign aimed at educating their age group about HIV. However, of those utilising loveLife's, there seemed to be good knowledge of HIV and AIDS and minimal risk behaviours as supported by the evaluation. These results were not entirely in accordance with previous literature on HIV knowledge and loveLife. However, most of the previous research had been conducted with a sample of the youth in general and not specifically the educated ones (Shisana et al., 2002; 2005; 2009). Howard (2006) sampled university students.

Thus the light shed in the area of HIV knowledge and understanding in young students aged 18-25 years old points out to the need for higher education institutions to also place emphasis on other modes of HIV transmission, and not only focus on sexual aspect of HIV transmission. Youth know about sex even though they do not always take necessary precautions to protect themselves. They seem to not be in the clear light about other modes of transmission. One of the ways in which they could do this is the inclusion of compulsory health or HIV related courses in all fields of studies or more active campaigns on STIs, condoms and HIV and AIDS to enhance students' HIV knowledge. Given that the educated youth have uncertainty regarding HIV and STI, with vast information available to them, how much more thorough knowledge with no confusion can the general population or the large percentage of unemployed and uneducated youth have (Shisana et al., 2005; 2009).

It seems young people do not trust and like free (distributed by the government, department of health) and 'overseas condoms' or internationally made condoms, hopefully this distrust does not place them at a vulnerability of not using condoms at all during sexual intercourse even though they possess high condom use efficacy. However, the study indicated that some young people use condoms while others do not. Perhaps further research could explore factors behind free and overseas condoms, as well as which particular condoms these young people use instead of free and overseas condoms. Perhaps they are using costly and luxurious condoms such as lovers plus or local condoms. However, this is a contradiction as most condoms are from overseas. A question of interest is whether or not this suggests that young people are not using condoms because they do not trust them, or they were just reporting their attitude towards them and not necessarily their actions.

The findings of the study inclusive of those of the evaluation of the two loveLife services, has provided insight to health practitioners as well as the loveLife campaign, researchers, and NGOs about the level of HIV knowledge and patterns of HIV risk behaviours in young people, as well as their exposure to and participation in loveLife, together with factors contributing or hindering them from actively participating. This would help guide these professionals' approach in dealing with the youth concerning HIV and encouraging them to participate in HIV prevention campaigns in the future, to reduce their level of risk as well as overrule the fact that knowledge often does not transpire into actions in young people. Participation would enhance their self efficacy and actual using of the protective skills to minimise chances of contracting the virus or associated infections, STIs.

9.3 Recommendations for Future Research

Given the nature and results of this research, perhaps future research in the area should focus on establishing cultural practices or beliefs around the educated youth's utility of loveLife services, in the form of a broader perspective of the majority of South Africa youth. This would require a large sample of the educated youth who actually utilise loveLife services. Inasmuch the sample for this exploration was extremely small, the study reports legitmate findings.

This study applied a multi method approach, which was good as it allowed for rich and in-depth results. This was even though the qualitative instrument was an open ended questionnaire. Future studies could perhaps use interviews to get even more in-depth interview content.

Research, using a large sample to understand in depth why young people in tertiary level do not participate in loveLife is needed.

A few areas that were not looked into in this research are mentioned below. The Condom Attitude Scale had only two items depicting a positive attitude towards condoms, item 1 and 3, and the highest scores were observed for these two items. The highest frequencies were observed for the following items, 1 'Condoms are easy to access', 3 'Condoms protect against AIDS' and 6 'Condoms from overseas are ineffective'. This is indicative of majority of response having a good knowledge about and attitude towards condoms even though such was measured with only two items. Thus future studies should use scales that thoroughly measure both the negative and positive attitudes towards condoms.

It seemed that students only knew about the safe sex, fidelity, and abstinence aspect as modes of HIV prevention. This proved the effectiveness of the ABC model. However, this raised concerns of the youths' knowledge and perhaps inadequate teaching or emphasis about other modes of HIV contraction and, or thorough knowledge about the virus to avoid confusion. The certainty of this could be established through conducting interviews or focus groups to investigate why it is that young people only know about sex as a risk of HIV infection, and not so much of other modes of HIV contraction. Establish whether this has to do with media focusing much on sexual aspects and not other modes, or does it have to do with schools not teaching much on non sexual aspects of transmission. Such a study could also look at Soul City, Khomanani and loveLife.

This study did not thoroughly interrogate "the other" HIV prevention campaigns that were used by respondents either than loveLife (as this was not the focus of this study). The majority of the young respondents' protective behaviours against the virus may have been motivated by some other programme or sources of HIV information and not loveLife. Respondents indicated that they receive HIV information mainly from the media, but they didn't clearly describe what exactly they meant by media. Future research could further explore these extraneous variables.

9.4. Practical Recommendations

Much focus needs to be paid to 21, 22 and 25 year olds regarding risk behaviours as they seem to display more HIV sexual risk behaviours when contrasted with 18, 19, 20, 23 and 24 year olds.

[L]oveLife should develop more innovative activities that will involve the youth in tertiary level of education, after their secondary school. It is possible that young people do not sustain the HIV risk free behaviours that they learned during their "high school" exposure and participation in loveLife at ages (12-17 years old). Perhaps they fail to identify with loveLife once in tertiary level, among other things, and do not feel motivated enough to engage in safe sexual relations. More innovative and fun prevention campaigns should be designed that will target tertiary level youth.

[L]oveLife demographics of callers should be further categorised into the occupation of the youth, including a specific category for the tertiary level students.

9.5 Concluding Remark

In conclusion, the state of knowledge and patterns of HIV related behaviours in the youth is of concern and should propel all involved to do something. In particular the educated youth should not be ignored with the assumption that they know it all, because they clearly do not. They seem to be just as at risk as those who are not educated, even though social factors may be the only distinguishing factor in terms of their motivation to engage in specific risk behaviours. This is primarily given that they [the educated group] hold negative attitudes, beliefs and misconceptions towards the virus, as well as efforts placed for controlling its spread. These places them at risk of the virus, just as it does the general youth of the country, and perhaps not much of social inequality. To help contribute to the regulation of the spread of the virus and prevent the outcome of the virus claiming even more young lives, a coalition between the young, educated and non educated public, social programmes and HIV prevention programmes targeted at them is critical. Just as is clearly expressed by some of the respondents about loveLife being "A *good programme. They could improve their services though and be more accessible and visible. It's a good thing, really, teaching young people about HIV related issues*" and "*I have not participated in loveLife [...] as I have not heard about any programmes in my area*".

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Appendices

Appendix A: Subject information sheet

Appendix B: Letter of permission for data collection

Appendix C: Instruments

Appendix D: Ethics certificate

Appendix E: loveLife billboards

Appendix A: Subject information sheet

Psychology
School of Human & Community Development
University of the Witwatersrand
Private Bag 3, WITS, 2050
Tel: (011) 717 4500 Fax: (011) 717 4559

Dear Student,

My name is Lebo, and I am conducting research for the purposes of obtaining a Masters degree at the University of the Witwatersrand. My area of focus is that of HIV prevention programmes targeted towards the youth. I am particularly interested in loveLive's call centre and community outreach programmes. My study intends to investigate the level of HIV knowledge, sexual risk behaviour in relation to exposure and participation the youth has to these loveLife services or any other HIV prevention campaign implemented in the country. I would like to invite you (if your age is 18 years onwards) to volunteer to participating in this study.

Participation in this research will entail completing the attached questionnaires. The questionnaires will take approximately 45 minutes to complete. Participation is voluntary, and no student will be dis/advantaged in any way for choosing to or not to complete the questionnaires. Hence there are neither risks nor benefits for participating. While questions are asked about your personal circumstances, no identifying information, such as your name or I.D. number is asked for, and as such you will remain anonymous. Your completed questionnaire will not be seen by any person in this lecture at any time, and will only be processed by myself and my research supervisor. Your responses will only be looked at in relation to all other responses.

If you choose to participate in the study, please complete all questionnaires as carefully and honestly as possible. Once you have answered the questions, place the questionnaire in the box provided in the front of the lecture hall or reception office. I will collect the questionnaires in the box after every student has placed their completed questionnaire inside the box. This will ensure that no one has access to the completed questionnaires, and will ensure your confidentiality. Your responses will be destroyed after all data is captured and analysed on computer. I would also like to request to use your responses as direct quotes in compiling my final research report. If you do return your questionnaire, this will be considered consent to participate in the study and permission to use your responses as direct quotes. Should you require any further details please do not hesitate to contact either my research supervisor, Adilia Silva 011 717 4515/ Adilia.Silva@wits.ac.za or me, Lebohang Letsela, 011 358 2742/ letselal@webmail.co.za.

Should you require any assistance with regard to dealing with any issues or questions that arise after completing the questionnaire, the telephone number for loveLife is 0800 121 900, CCDU (Career Counselling and Development Unit) at 011 717 9140 or Lifeline at 011 422 4242 and Campus health wellness centre on 011 717 9113 where trained counsellors will assist you.

Your participation in this study would be greatly appreciated. This research will contribute both to a larger body of knowledge on the progress of loveLife services, as well as to an understanding of sexual risk behaviour patterns in South Africa's tertiary level of education students (youth) and factors influences them so as to have effective preventive programmes. Feedback on overall results can be obtained from the Wits University psychology website around late 2009 on http://witspsychresearch.blogspot.com; however, this will only be on group trends and not individual feedback.

Yours thankfully, Lebo☺

Appendix B: Letter of permission for data collection

Psychology
School of Human & Community Development
University of the Witwatersrand
Private Bag 3, WITS, 2050
Tel: (011) 717 4500 Fax: (011) 717 4559

Dear Sir or Madam,

My name is Lebohang Letsela. I am a Masters student at the University of the Witwatersrand, Johannesburg. I am conducting research for the purposes of obtaining a Masters degree in Psychology at the University. My area of focus is that of HIV prevention programmes or campaigns targeted towards the young South African population. I am particularly interested in the general level of HIV knowledge and HIV risky behaviours in this population in relation to the sources of their HIV information. My research intends to investigate the link between the youth's levels of HIV knowledge, their patterns of risky behaviours and the HIV prevention campaigns they are exposed to. In addition, this research will specifically focus on loveLife in terms of the level of exposure and participation the youth has to its call centre and community outreach programmes to get a sense of whether the youth is utilising and benefiting from its services in relation to their reported HIV knowledge and sexual behaviours.

I am writing this letter to request to use your students as my sample. Participation in this research will involve completing questionnaires. The questionnaires will take approximately 30 minutes to complete. Students will be invited to volunteer in this study by filling in the questionnaire and participation is voluntary, students who do not wish to volunteer will not be penalised in anyway. Confidentiality will also be maintained for both the students and the institution. I will not mention the name of your institution in my research report as a means of protecting the insitution.

Should you require any further details please do not hesitate to contact either my research supervisor or me, Lebohang Letsela, 011 358 2742 or 0738167065/ lebohang.letsela@students.wits.ac.za; my supervisor: Adilia Silva 011 717 4515/ Adilia.Silva@wits.ac.za.

Yours faithfully, Lebo

I....., from ..... hereby agree that I will grant Lebohang Letsela from University of the Witwatersrand the permission to use our studenst as her sample for her research "**An exploration of the level of HIV risky behaviours and the sources of information on HIV for the youth in the greater Johannesburg: Is loveLife one of their sources of information?"** to obtain her Master's degree at the University.

Signature.....

Date .....

Institution Stamp

Appendix C: Instruments

Please fill in the following:

AGE: _____

RACE:

Please place a cross on the appropriate option:

Black Coloured Indian White

Other (please specify) _____

(These categories are used solely for research purposes and are not meant to be offensive).

GENDER:

Please place a cross on the appropriate option

Male Female

LANGUAGE:

Home Language _____

INSTRUCTIONS

Please do NOT write your name on this form.

- Please answer all the questions to the best of your ability, however you may leave out answers to questions that you feel uncomfortable answering.
- If there is anything that is unclear or that you do not understand, please raise your hand and you will be assisted.

Please select the answer that best represents your attitude

ITEM	DISAGREE	AGREE
1. Condoms are easy to access		
2. Condoms get in the way of sex		
3. Condoms protect against AIDS		
4. Condoms are unnatural		
5. Partners dislike condoms		
6. Condoms from overseas are ineffective		
7. Free condoms are not safe		

Please answer the following questions honestly. *Write* your answer in the blank spaces provided or by *selecting* the applicable options

1. Have you had sexual intercourse before? [YES] [NO]
2. Did you have vaginal sex [With] or [Without] penetration?
3. Did you have anal sex [With] or [Without] penetration?

Please answer the following questions if you have had vaginal/anal sex:

4. How old were you when you had your first sexual intercourse _____?
5. Are you currently having sexual intercourse? [YES] [NO]
6. How many sexual partners have you had in the past 3 months? _____
7. Do you have vaginal intercourse [With] or [Without] a condom?
8. Do you have anal sex [With] or [Without] a condom?

Please answer the following questions honestly. For the questions dealing with behaviour, w*rite* your answer in the blank spaces provided. For the questions dealing with thoughts and attitudes, *circle* the appropriate number on the scales provided.

1. With how many different partners have you had sex (sexual intercourse) within the past year? _____

2. How many different partners do you foresee yourself having sex with during the next five years? (Please give a *specific, realistic* estimate) _____

3. With how many partners have you had sex on *one and only one* occasion? _____

4. How often do you fantasise about having sex with someone other than your current partner? (Circle one)

   - Never
   - Once every two or three months
   - Once a month
   - Once every two weeks
   - Once a week
   - A few times each week
   - Nearly everyday
   - At least once a day

5. Sex without love is OK?

   1 2 3 4 5 6 7 8 9

   I strongly disagree I strongly agree

6. I can imagine myself being comfortable and enjoying "casual" sex with different partners

   1 2 3 4 5 6 7 8 9

   I strongly disagree I strongly agree

7. I would have to be closely attached to someone (both emotionally and psychologically) before I could feel comfortable and fully enjoy sex with him or her.

   1 2 3 4 5 6 7 8 9

   I strongly disagree I strongly agree

Please select the response that best represents your behaviour.

How sure are you that you would be able to say NO to having sexual intercourse with someone….

	Very sure	Some what sure	Not so sure	Not sure
1. You have known for a few days or LESS				
2. Whose sex history is not known to you				
3. You have dated for a long time				
4. You want to date again				
5. You have already had sexual intercourse with				
6. You want to fall in love with				
7. Who is pushing you to have sexual intercourse				
8. After you have been drinking alcohol				
9. After you have been smoking marijuana				

How sure are you that you would be able to discuss the following with your boyfriend/girlfriend…

1. Ask your boyfriend/girlfriend if s/he has ever Injected drugs such as heroin or cocaine into his/her veins?				
2. Discuss preventing AIDS or sexually transmitted disease (STD- gonorrhea, etc) or PREGNANCY with your boy/girlfri				
3. Ask your boy/girlfriend about sexual relationships that S/he has had in the past?				
4. Ask your boy/girlfriend if s/he has ever had anal (rectal or b intercourse?				
5. Ask your boy/girlfriend if s/he has ever had an STD?				

How sure are you that you would be able to perform each of the following…

1. Use a condom correctly?				
2. Use a condom every time that you have sexual intercourse?				
3. Use a condom during sex after you have been drinking?				
4. Use a condom during sex after you have been using marijuana				
5. Insist on using a condom during sex, even if your boy/girlfrie Does not want to use a condom?				
6. Refuse to have sex if your boy/girlfriend will not use a condo				
7. Get the money needed to buy condoms?				
8. Walk into a store to buy a condom				
9. Access free condoms				

Please select the answer that best represents your knowledge and understanding of HIV/AIDS

ITEM	TRUE	FALSE
1. AIDS is caused by the Human Immunodeficiency Virus (HIV).		
2. A person can get HIV/ AIDS by sharing food and eating utensils with someone who has HIV		
3. The HI virus can be transmitted via sexual contact with an infected person		
4. You can get HIV by performing oral sex		
5. HIV can be transmitted by donating blood to the SA blood transfusion services		
6. HIV can be transmitted by sitting on a public toilet seat		
7. AIDS can be cured by taking certain medications prescribed by doctors		
8. A child born to an HIV infected mother will automatically be HIV+		
9. Cleaning injection equipment with water is a good way of killing HIV		
10. Transmission of HIV/AIDS can be prevented via the use of condoms during sexual activities		
11. Mucous membranes in the anus are more delicate than the membranes in the mouth.		
12. HIV can be transmitted by mosquito bites		
13. HIV antibodies can take up to 10 years to show		
14. Someone can get HIV/AIDS by having one sexual encounter with an HIV infected person.		
15. During vaginal sex, it is easier for a woman to receive the HI virus than for a man		
16. A hangnail is a potential route for HIV infection		
17. A women using oral contraceptives as a method of birth control is protected against getting HIV/AIDS		
18. A person who has HIV/AIDS might look healthy		
19. Having a sexually transmitted infection (STI) increases your risk of getting HIV/AIDS		
20. A healthy person cannot get HIV because of their strong immune system		
21. People should use condoms even with their usual partner.		
22. Abstaining from any sexual contact is the most effective way of not becoming HIV+.		
23. Taking certain medications after sex will cure HIV infection		
24. Having sexual intercourse less frequently may reduce your risk of becoming infected with HIV		
25. Being faithful to one sexual partner reduces the risk of HIV infection		

P.T.O

Thank you for completing the scales!!!

Based on how you have answered the scales, where would you say you got information about HIV from (your sources of HIV information**)**?

Please tick (√) only relevant sources YOU use or have used to get HIV related information. Rank choices with 1 as the most (important source) and 5 as the least	**1 (important)**	**2**	**3**	**4**	**5 (not important)**
Your friends					
Your brothers and/or sisters					
Your parents					
Your relatives					
By asking health professionals					
General media:					
By reading newspapers and/or magazines					
By taking note of information given on radio					
By taking note of information given on television					
Billboards					
In specific:					
loveLife					
Thethajunction					
loveLife community outreach programmes					
Lifeline					
Treatment Action Plan (TAC)					
Khomanani					
Your University/college Lecturers					
My School teachers					
CCDU (Career Counselling and Development Unit)					
Campus Health Wellness Centre					
Your church					
Esselen (Hillbrow) Clinic or Clinics in general					
Hospital i.e. Johannesburg general, Helen Joseph, etc.					

If you are ***generally exposed to*** OR ***rated loveLife, or thethajunction or loveLife community outreach programmes between 1 and 3 above***. Please, kindly complete the remaining questionnaire that asks specific questions about loveLife.

Have you ever called the loveLife's youth helpline "thethajunction?" | Yes | | No |

If yes, what language/s did you use when calling thethajunction

_____

P.T.O

1. Do you know about the loveLife programme? YES NO
What do you know about it?

_____

_____

_____

_____

_____

2. Do you know about the loveLife youth call centre (Thethajunction)? YES NO

What do you know about Thethajunction?

_____

_____

_____

_____

_____

_____

Where did you hear about Thethajunction? _____

3. Have you called Thethajunction in the past? YES NO

How frequently? Please tick the frequency range of calling.

1-3 times	3-6 times	6-9 times	>10 times

Please give reasons for calling Thethajunction?

_____

_____

_____

_____

_____

_____

4. Do you still call Thethajunction? YES NO

   Please describe **why or why not** you still call Thethajunction _____

   _____

   _____

   _____

   _____

   _____

5. Please describe what it is that you learned and gained by calling Thethajunction

_____

_____

_____

_____

_____

_____

6. Please describe what it is that you did not learn and gain by calling Thethajunction

_____

_____

_____

_____

_____

7. Please describe what it is that you did in response to having called Thethajunction

_____

_____

_____

_____

_____

_____

8. Would you call Thethajunction again? YES NO

Please describe **why you would or would not** call Thethajunction again

_____

_____

_____

_____

_____

9. Do you know about the loveLife community outreach programmes? YES NO

What do you know about the loveLife community outreach programmes?

_____

_____

_____

_____

_____

Where did you hear about the loveLife community outreach programmes?

_____

10. Have you participated (or attended) in any of the loveLife community outreach programmes?

YES NO

How frequently did you participate in the loveLife community outreach programmes?

Please tick the frequency range of participation.

1-3 times	3-6 times	6-9 times	>10 times

Please describe your participation

_____

_____

_____

_____

_____

11. Do you still participate in loveLife community outreach programme? | YES | NO |

Please describe **why or why not** you still participate in the loveLife community outreach programmes

_____

_____

_____

_____

_____

12. Please describe what it is that you learned and gained by participating in the loveLife community outreach programme?

_____

_____

_____

_____

_____

_____

13. Please describe what it is that you did not learn and gain by participating in the loveLife community outreach programme?

_____

_____

_____

_____

_____

_____

14. Would you participate in loveLife's community outreach programmes again? | YES | NO |

Please describe **why you would or would not** participate in loveLife's community outreach programmes again

_____

_____

_____

_____

15. Please describe the nature of your current relationship with your partner

If you feel comfortable enough, please be specific

_____

_____

_____

_____

_____

_____

Thank you very much for your time and co-operation!!

Appendix D: Ethics certificate

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Division of the Deputy Registrar (Research)

HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)
R14/49/1 Letsela

CLEARANCE CERTIFICATE	**PROTOCOL NUMBER H080713**
PROJECT	An exploration of the level of HIV risky behaviours and the sources of information on HIV for the youth in the greater Johannesburg: Is Love life one of their sources of information
INVESTIGATORS	Ms L Letsela
DEPARTMENT	Psychology
DATE CONSIDERED	11.07.2008
DECISION OF THE COMMITTEE*	Approved Unconditionally

NOTE:

This ethical clearance is valid for 2 years and may be renewed upon application

DATE 22.07.2008 **CHAIRPERSON** .....
(Professor R Thornton)

cc: Supervisor : Ms A Silva

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10004, 10th Floor, Senate House, University.

I/~~We~~ fully understand the conditions under which I am/~~we are~~ authorized to carry out the abovementioned research and I/~~we~~ guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/~~we~~ undertake to resubmit the protocol to the Committee. **I agree to a completion of a yearly progress report.**

.....
Signature

This ethical clearance is valid for two years from date of approval.

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

Appendix E: loveLife billboards


HIV - FACE IT
If it's not just me, you're not for me.
thethajunction 0800 121 900
love talk about it Life


HIV - FACE IT
If you aren't talking to your child about sex, who is?
PARENTLINE • 0800 121 100
love talk about it Life


HIV - FACE IT
You can't pressure me into sex.
thethajunction 0800 121 900
love talk about it Life