The Influence of Self-Esteem and Self-Efficacy on Sexual Risk-Taking Behaviour in School-Going Adolescents in the Durban Metropolitan Area

By

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DECLARATION

I declare that this dissertation is my own work. It is being submitted for the partial fulfillment of the degree Master of Social Science (Psychology) at the University of Kwa-Zulu Natal. It has not been submitted before for any other degree or examination at any other university.

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Keshnie Lalbahadur Date

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ABSTRACT

Adolescents engaging in sexual risk behaviours may experience negative psychological and social outcomes, and there can be consequent interference with the accomplishment of developmental tasks. Identified risk influences for sexual risk behaviour range from intrapersonal factors to social normative behaviours and contextual/environmental issues. This study focuses on two areas of intrapersonal factors namely, self-esteem and self-efficacy in understanding sexual behaviours in a sample of school going adolescents. The sample was made up of learners who were in grades nine, ten and eleven from a school in the Durban Metropolitan area (N=259). The results of the study indicated that adolescents who had never engaged in sexual intercourse (primary abstinence) have higher self-esteem and self-efficacy than those adolescents who had previously engaged in sexual intercourse. Also, the findings indicated that that there is no association between levels of self-esteem and self-efficacy, and sexual risk behaviours in relation to the dimensions of condom use, number of sexual partners and age of sexual debut of those who are sexually active. These findings are essentially supportive of the fact that involvement in the sexual domain is mediated by self-esteem and self-efficacy for adolescents who are not sexually active. Intervention programmes should be aimed at increasing self-esteem and self-efficacy at a primary school level, prior to sexual debut, to delay the age of sexual debut, thereby protecting against sexual risk behaviours.

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CHAPTER ONE
INTRODUCTION

1.1 General Introduction

The HIV/AIDS epidemic is the world's most serious developmental crisis as well as one of the most devastating epidemics in history. More than 20 million people have died with AIDS since the first documented case in 1981 (UNAIDS, 2006). To this day, the virus continues to deprive numerous people of the resources on which human development depends. HIV/AIDS exacerbates every other challenge to human development, from maintenance of public services, to health services and conflict avoidance (UNAIDS, 2006).

In an attempt to understand the full impact of the pandemic, current prevalence statistics are outlined. In reviewing statistics regarding HIV/AIDS, the findings are indeed startling where according to estimates, 38.6 million people worldwide are living with HIV/AIDS (UNAIDS, 2006). Southern Africa remains the global epicenter of the epidemic. One-tenth of the world's population lives in sub-Saharan Africa, which is home to 64% (24.5 million) of all people living with HIV. Almost one in three people infected with HIV globally live in this sub-region. About 43% (860 000) of all children living with HIV are in Southern Africa (UNAIDS, 2006). In most of the region, women are disproportionally affected by the epidemic, comprising an estimated 13.2 million adults living with HIV in sub-Saharan Africa (UNAIDS, 2006).

The pandemic has impacted on South Africa in profound proportions. South Africa's AIDS epidemic is one of the worst in the world and shows little evidence of a decline. Infection rates are continuing to escalate, having disastrous consequences for communities and South Africa as a whole. Based on national surveys with HIV testing, extensive antenatal clinic surveillance systems and mortality data from the civil registration system, an estimated 5.41 million people were living with HIV in 2006 in South Africa. Further, it is estimated that nationally, 29.1% of pregnant women were HIV positive in 2006 (Department of Health, 2007). Also, according to antenatal clinic

data, the pattern of provincial prevalence shows that the epidemic has progressed at a different pace in the various provinces in South Africa. For example, KwaZulu Natal reported the highest prevalence rates whilst the Western Cape reported the lowest prevalence rates (Department of Health, 2007). These findings show that HIV is still a public health challenge in South Africa. Infection rates are continuing to escalate, having disastrous consequences for communities and South Africa as a whole. Further, there seems to be no sign of the epidemic declining (UNAIDS, 2006).

In recent years, there has been a proliferation of studies on adolescent sexual risk-taking behaviour. Adolescents engaging in these risk behaviours may experience negative psychological and social outcomes, and the potential to interfere with the accomplishment of developmental tasks and the fulfillment of expected social roles. The identification of risk influences that contribute to risk behaviour in adolescence has received a fair amount of attention. Identified risk influences range from intrapersonal factors for example, low self-esteem to social normative behaviour and environmental/contextual issues. These factors are likely to have important implications for designing effective intervention programmes. The present study is located within a broader study that aims to investigate the multiple influences of self-esteem, self-efficacy, social norms, the social environment and feelings of hopelessness on risk behaviour in adolescents. The current study however, is delimited to focus on self-esteem and self-efficacy as possible factors influencing sexual risk-taking behaviour during adolescence. The broader study aims to inform multi-pronged interventions that aim to protect adolescents engaging in risky sexual practices and behaviour.

According to the South African National Prevalence, HIV Incidence, Behaviour and Communication Survey, the highest incidence of the epidemic occurs in young people of the ages 15-24 years. The national survey also found that the highest HIV prevalence amongst youth was found in the province of KwaZulu-Natal (Shisana, Rehle, Simbayi, Parker, Zuma, Bhana, Connolly, Jooste & Pillay, 2005). Experimentation and heightened sexual awareness that is characteristic of adolescent development has implications for placing adolescents at risk of unprotected sexual activity, unplanned pregnancies and sexually transmitted diseases. Further, these risk behaviours endanger and make

vulnerable adolescents' health, psychological and social well being. Reducing the risk of HIV in youth is critical to 'slowing down' the epidemic as young people will continue to fuel the epidemic as newly sexually active youth become part of the susceptible pool (Bradshaw, Pettifor, MacPhail & Dorrington, 2004). Prevention cannot be reduced to a single, limited intervention. Most prevention interventions in South Africa have used AIDS education to increase awareness and knowledge about HIV and its causes. However, risk-reduction efforts that are based on education alone are not sufficient to produce behaviour changes for AIDS prevention. Intervention programmes emphasizing that acquisition of knowledge will automatically lead to behaviour change limits the focus on other important factors that are potentially protective, such as intrapersonal factors (for example, self-esteem), social support, bonding processes, and cultural-environmental influences. It is thus important to understand adolescent risk from a multi-pronged perspective.

Research shows that self-esteem and self-efficacy are possible mediators that enable adolescents to resist engaging in risk behaviour (Bryan, Aiken and West, 2004; Dillard, 2002). The relationship between low self-esteem and self-efficacy, and high sexual risk has been suggested by numerous studies (Abel & Chambers, 2003; Bryan et al., 2004; Sterk, Klein & Elifson, 2004). For comprehensive interventions to take place, understanding the intrapersonal aspects of the adolescents' nature and well-being is crucial.

The primary aim of this study is to investigate the role of two areas of intrapersonal factors namely, self-esteem and self-efficacy in understanding sexual risk-taking behaviour in a sample of learners who are in grades nine, ten and eleven. In achieving this aim, two primary objectives are set out. Firstly, given that this is an adolescent population, to determine whether higher levels of self-esteem and self-efficacy are associated with a delay in sexual debut in those adolescents who have never engaged in sexual intercourse (primary abstinence). Secondly, to determine whether higher levels of self-esteem and self-efficacy is associated with protective sexual behaviour amongst those adolescents who had previously engaged in sexual intercourse. From the findings,

suggestions will be made to inform interventions that aim to protect adolescents from engaging in sexual risk behaviours.

1.2 Definitions

Definitions of regularly used terms relating to adolescent sexual behaviour will be defined for the purpose of this study.

1.2.1 Risk Behaviours

A variety of demographic, behavioural, psychological and social factors have been examined in the literature as predictors of sexual risk behaviours among youth.

Within this study, adolescents' sexual risk taking behaviour has been conceptualised and measured in relation to the dimensions of condom use, number of sexual partners and age at first sexual intercourse (sexual debut). Each of these variables can be considered an aspect of risk taking. Frequent change of sexual partners is an important component of risk-taking since it increases the possibility of contact with someone who is infected (Beadnell, Morrison, Wilsdon, Wells, Murowchick, Hoppe, Gillmore & Nahom, 2005). The risk of HIV acquisition increases with unprotected sex with a greater number of sexual partners. In the context of a generalised epidemic, this risk is increased (Shisana et al., 2005). Condom use, the factor most commonly used in research as a risk indicator, has been shown to reduce (but not necessarily eliminate) the risk of disease acquisition and pregnancy (Beadnell et al., 2005). Condoms are an important means of preventing unwanted pregnancy, HIV infection and other sexually transmitted infections. Consistent condom use is thus an important factor in reducing the risk of transmission of sexually transmitted infections and HIV. Earlier age of initiation of sexual intercourse also increases risk of HIV infection. Shisana et al. (2005) note that delaying the age of sexual debut is one of the major goals of prevention campaigns in South Africa. Youth are encouraged to practice primary abstinence to protect against HIV infection.

1.2.2 Safer-Sex and Health Enhancing Behaviours

In this study, health enhancing or safer-sex behaviours refers to sexual activities that contain low risk of transmitting HIV infection from one person to another. Examples of safe-sex behaviours include hugging, kissing, masturbation and heavy petting (Kalichman, 2003).

1.3 Conclusion

In this introductory chapter, the context of this study was introduced along with the motivation and aim of the study.

In the following chapter, the relevant literature regarding HIV/AIDS in adolescents is explored and discussed. Emphasis is placed on sexual risk behaviours in relation to the dimensions of condom use, age of sexual debut, and number of sexual partners. The association between self-esteem, self-efficacy and the above-mentioned sexual risk behaviours is also highlighted and discussed. The literature is structured within a theoretical framework.

The third chapter outlines the research methodology of the study. As such, the chapter details the specific aims, hypotheses, research questions, sampling methods, data collection and data analysis used in the study. Ethical considerations are also discussed.

In the fourth chapter, the results of the statistical analyses are presented. The chapter includes demographic and descriptive statistics, as well as chi-square analyses, t-tests and correlations.

The fifth and final chapter discusses the demographics and results of the statistical analyses in relation to the literature. The results are compared with previous studies and the limitations of the study are also examined. Concluding remarks are noted, ending with implications for interventions and recommendations for future research.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter details the relevant literature regarding pertinent issues under investigation in the study. Youth sexual risk behaviour is discussed in an international and South African context. As such, significant articles and studies are explored in relation to condom use, sexual debut, peer influence and multiple partners. The theoretical framework is then presented as applied to the study. Following this, HIV/AIDS prevention programmes are outlined. Having done so, self-esteem and self-efficacy as possible influences on adolescent sexual risk taking behaviour is detailed, ending with a brief look at the impact of these variables on future research and intervention strategies.

2.2 Youth Sexual Risk Behaviour

Adolescence is typically understood as beginning with the onset of puberty, but this varies across societies depending on when adult responsibilities are taken up. It is the transition from childhood towards physical, psychological and social maturity (Maart, n.d.). The ways in which adolescents understand and perceive themselves, their own agency and personality, has a marked effect on their subsequent reactions to various life events (Coleman & Hendry, 2002). From the literature reviewed, it is clear that the development task of establishing an identity develops rapidly during the adolescent period. As adolescents progress from infancy into childhood and then into adolescence, the awareness and acceptance of self and the development of an identity becomes an important developmental task (Buzwell & Rosenthal, 1996; Heaven, 2001). As adolescents mature, they realize that they are different from others in various ways. Adolescents may thus try to understand themselves as unique individuals (Heaven, 2001).

Adolescence is thus thought of as being a time of both change and consolidation. This is owing to the major physical changes that take place, intellectual growth, emotional independence, friendship choices, sexual behaviours and role changes experienced. The ways in which young people understand and perceive themselves, their personality and

various situations have a powerful effect on their subsequent reaction to various life events (Coleman & Hendry, 1991).

During adolescence, experimentation is an important process in gaining independence and responsibility for self-action. There is also a heightened risk to engage in activities that impinge on one's health (Coleman & Hendry, 2002). Adolescents may discover drugs or enter into power relationships that could be based on money or sex (Gullette & Lyons, 2005; Maart, 2006).

Heightened sexual awareness is part of adolescent development. Whilst this is a normal process in adolescence, it is often characterised by experimentation. This has the potential of placing adolescents at risk for unprotected sexual activity, unplanned pregnancy and sexually transmitted infections (Reddy, Panday, Swart, Jinabhai, Amosun, James, Monyeki, Stevens, Morejele, Kambaran, Omardien & Van den Barne, 2006). Crucially, 15-24 year olds are presently the age group most susceptible to sexual risk behaviours (UNAIDS, 2006).

The scale of the HIV/AIDS epidemic amongst youth both internationally and nationally is mammoth and the virus continues its deadly course. The pandemic is affecting large numbers of adolescents, often leading to various problems (Coombe, 2002; UNAIDS). Risk behaviours are critical to reducing and 'decelerating' the burden of the epidemic in adolescents, highlighting the need for exploration into sexual behaviours of this age group. This has implications for further research and development in the domain of adolescent sexual risk taking.

2.2.1 General Trends within an International Context

Literature reviews and international studies have shown a general trend of high sexual risk taking behaviour amongst adolescents. Adolescent risk taking has been conceptualised in various ways. This includes early age at first intercourse, number of partners, type of partner or length of relationship, frequency of intercourse, consistency of condom use, and use of other birth control methods (Beadnell et al., 2005). Further,

the literature identifies four sets of factors that have been associated with risky behaviours and unintended pregnancy: race, socio-economic status, social influences and attitudes toward contraception, condoms and pregnancy (Beadnell et al., 2005; Kalmuss, Davidson, Cohall, Laraque, & Cassell, 2006; Kurtz, Douglas & Lugo, 2005).

As mentioned above, there is a general consensus that the proportion of teenagers who engage in behaviours that put them at risk of pregnancy, HIV and other sexually transmitted infections (STI) is very high. Studies conducted in the United States of America (USA) reveal that the risk of acquiring a STI is higher amongst adolescents than among adults. Further, rates of unprotected sexual activity, STIs and pregnancy are alarming. In the USA, the Centre for Disease Control and Prevention Surveillance Summaries (2004) note that substantial morbidity and social problems result from about 870 000 pregnancies that occur each year amongst females aged 15-19 years, and the estimated 3 million causes of sexually transmitted diseases that occur each year among youth aged 10-19 years.

In the Caribbean, there is also mounting concern about the rapid increase of not only HIV/AIDS amongst the adolescent population, but also the observed trends toward earlier sexual initiation of sexual intercourse and the inconsistent use of condoms (Kurtz et al., 2005). Further, research suggests that males are more likely to engage in sexual intercourse at an earlier age than are females (Kurtz et al., 2005). Young people in Haiti are also becoming sexually active at earlier ages. The average age of first intercourse for males and females declined by one year between 1994 and 2000. Further, condom use amongst 15-24 year olds has become less frequent. Also, in India, an estimated 5.2 million people in the 15-49 year old age group are living with HIV. Further, HIV prevalence appears to be higher in industrialised states in India (UNAIDS, 2006).

It is interesting to note that the literature also suggests that the norms and behaviours of peers affect youth sexual risk behaviour. When adolescents believe that their peers have permissive attitudes toward premarital sex or actually engage in sex, then they themselves are more likely to engage in sex, have sex more frequently and have sex with

more sexual partners (Ben-Zur, 2003; Kirby, 2001). We understand that the norms of a specific group impacts upon adolescents (Kirby, 2001). As relationship patterns and social contexts change during adolescence, peers become significant providers of information. In their study for example, Moore and Rosenthal (1991) found that adolescent sexual risk taking behaviour was related to perceived attitudes of significant others in ways which varied across gender and type of relationship. In another study, Ben-Zur (2003) found that perceived peer behaviours may influence sexual risk taking as well as the denial of HIV/AIDS. The findings of research conducted by Sieveing, Eisenberg and Skay (2006) reveal that the higher the proportion of youths' friends who were sexually experienced, the greater the odds of sexual debut; and the odds were elevated among youth who believed they would gain their friends respect by having sex. Walter, Vaughan, Ragin, Kasen and Cohall (2002) found that beliefs about norms and self-efficacy could strongly influence involvement in AIDS risk behaviours. From the literature perused, international studies suggest that peer influences on sexual behaviour amongst adolescents should become a prevention research priority.

2.2.2 South African Research on Youth Sexual Risk Taking

In South Africa, the scale of the HIV/AIDS pandemic amongst youth is enormous. Coombe (2002) notes that the AIDS epidemic affects large number of adolescents, leading to serious psychological, social, economic and educational problems. According to the South African National HIV Prevalence, Incidence, Behaviour and Communication survey conducted by Shisana et al. (2005), overall HIV prevalence in the 15-24 year old age group was 10.3%. In the 15-19 year old age group, prevalence is higher amongst females (9.4%) than males (3.2%). In the 20-24 year old age group, similar patterns are evident with females (15.2%) having a higher prevalence rate than males (6.0%). HIV prevalence is highest in KwaZulu-Natal (16.1%) and lowest in the Western Cape (2.3%). Furthermore, prevalence is highest in youth living in informal settlements within urban areas (17.8%), and lowest for those in the urban formal locality types (6.9%). Youth living with HIV/AIDS are from every race group in South Africa, although the observed prevalence in African youth is substantially greater than in any other racial group (Shisana, et al., 2005).

In corroboration with international studies, South African literature also suggests that adolescents appear to have high levels of awareness about HIV/AIDS but this has not translated into substantial behaviour change. The use of preventative measures is often poor, with adolescents sometimes receiving conflicting messages about sex and sexuality, and lacking in negotiation skills in sexual relationships (Hartell, 2005). Literature reviews and studies about adolescents sexual behaviours conclude that there is inconsistent condom usage, the turnover of sexual partners fluctuate and peer norms strongly influence sexual transmission risk behaviour (Bradshaw et al., 2004; Maart, n.d.; Pettifor, Rees, Steffenson, Hlongwa-Madikizela, MacPhail, Vermaak & Kleinschmidt, 2004).

2.2.2.1 Sexual Debut

The South African Youth Risk Behaviour survey conducted in 2002 indicated that on a national level, the prevalence of learners who reported having first sex before the age of 14 years was 14.4% (Reddy, Panday, Swart, Jinabhai, Amosun, Monyeki, Stevens, Morejele, Kambaran, Omardien & Van den Borne, 2003). However, the results of the 2005 survey indicate that 15-24 year olds are now engaging in sexual intercourse much earlier when compared to the national survey conducted in 2002 (Shisana et al., 2005). Pettifor et al. (2004) indicate that the age of first sex is one of the many factors attributed to the decline of HIV. HIV prevention campaigns often focus on delaying the age of sexual debut by encouraging primary sexual abstinence amongst youth. National surveys show that the average age at first sex for youth aged 15-24 years as a group is 17 years. There is little variation between males and females in their sexual experience when examining age, as over half of each sex had sexual intercourse by the age of 18 years (Shisana et al., 2005).

In another study, Flisher, Reddy, Muller and Lombard (2003) examined sexual behaviour of a South African adolescent population. The findings indicated that by the age of 14 years, 23.4% of males and 5.5% of females had participated in sexual intercourse. Their study also indicated that by the age of 19 years, gender differences in the proportions of adolescents that had experienced sexual intercourse were no longer significant. Pettifor

et al. (2004) found that the mean age for first sexual intercourse was 16.4 years for males and 16 years for females.

The reasons for sexual activity commencing at an early age are varied in the literature. Hartell (2005) notes that there can be pressure to engage in early and unprotected sexual intercourse, coercion, low perceptions about personal risk and low perceived self-efficacy in preventative behaviour.

2.2.2.2 Condom Use

Consistent use of condoms is as important factor in reducing the transmission risk for HIV infection, STIs and in preventing unwanted pregnancies (Shisana et al., 2005). The distribution of male condoms by the Department of Health has increased from 267 million in 2001 to 346 million in 2004. Condoms are available from clinics, hospitals and other distribution locations (Shisana et al., 2005).

The recent national survey on sexual behavioural risks indicates that condoms are more likely to be used by individuals who are single, rather than those who are married. Further, the survey indicated that individuals who had multiple partners were more likely to use a condom than those with one or two partners. Condom use at last sex amongst youth aged 15-24 years was 72.8% for males and 55.7% for females. HIV prevention, pregnancy prevention and STIs were the major reasons why youth opted to use condoms (Shisana et al., 2005).

In their study, Flisher et al. (2003) found that condoms were one of the most common contraception methods used by high-school students. This corroborates the finding from Reddy et al. (2003) who also found that significantly more learners used condoms as a contraception method as compared to any other methods. Giles, Liddell and Bydawell (2005) conducted a study exploring condom use in African adolescents. The findings show that of the 81% of respondents who reported to have had sex previously, 60% had used a condom at least once during previous sexual encounters. Further, 73% of respondents reported to have had discussions about condom use with their partners. The

study also indicated that self-efficacy is important in the context of condom use (Giles et al., 2005).

Another study by Peltzer and Pengpid (2006) indicated that of their sample, only 40% of girls and 57% of boys had used a condom during first sexual intercourse. In an earlier study, Richter (1996, as cited in Hartell, 2005) did extensive research on black youth aged 16-20 years in Soweto, Khayelits and Umlazi. The results indicated that 40% of younger women and 6% of young men had multiple partner relationships in which condom use was relatively low.

Other studies emphasise the inconsistent use of condoms amongst adolescents. For example, Eaton, Flisher & Aarø (2003) conclude that it is likely that fewer than 20% of adolescents in a South African population use condoms at every sexual encounter. Also, Harvey (1997) showed that no more than 10% of sexually active learners regularly use a condom.

2.2.2.3 Number of Sexual Partners

It is understood that unprotected sex with greater numbers of sexual partners increases the risk of HIV infection and STIs. In the context of a generalised epidemic, this risk is further increased. Reddy et al. (2003) found that 54.0% of learners reported having two or more sexual partners in their lifetime. In corroboration with Shisana et al., (2005); Reddy et al. (2003) also found that a higher proportion of males (16.3%) than females (2.6%) reported having multiple sexual partners. Other studies also yield similar results. Harvey (1997) showed that more than a third (34.9%) of Zulu-speaking grade ten students reported being sexually active, with some having more than one sexual partner. In another study, Naidoo (1994) found that 55% of students were sexually active at two high schools in Motherwell and Magxaki in Port Elizabeth, with 10% having had 4 or more sexual partners in the last year.

We thus understand that concurrent sexual relationships that promote the spread of HIV infection are not uncommon in South African adolescents. Many youth do not perceive themselves to be at risk and many do not see HIV/AIDS as a personal threat.

2.2.2.4 Peer Influences

In corroboration with international literature, South African studies also suggest that the norms of the individuals or groups with whom adolescents are connected or with whom they interact affect their sexual behaviour (Campbell & MacPhail, 2002; Harrison, Xaba, Kunene & Ntuli, 2001; Kirby, 2001; Maart, n.d.). Maart (n.d.) notes that the culture adopted by the peer group has a powerful influence on the behaviour patterns of youth. In adolescence, this can manifest in behaviour that is negative, for example drug taking; positive behaviour such as respect; or neutrally, for example in music preference/tastes and colloquial speech

In their study, Harrison et al. (2001) found that peer pressure of various kinds appeared to drive the initiation of sexual relationships in youth. One of the findings of the peer group discussions illustrated the above: During the focus group, an adolescent girl told the group that "some girls pressure others by telling them how nice it is to have sex" (Harrison et al., 2001, p. 72). Also, girls said that friends can "influence each other to take up with a boy so that they can cover for each other – like both returning home late from school" (Harrison et al., 2001, p. 72). The findings also confirmed that both boys and girls clearly experience peer pressure of various kinds to engage in relationships. For the girls, peer pressure can be either subtle or overt (Harrison et al., 2001). Other research emphasise that peer-based education if carefully managed leads to sustainable action driven by communities (Maart, n.d.). The complexities of the above findings highlight the importance of self-esteem and self-efficacy in mediating adolescents' values, expectations of themselves, degree of self-awareness, and degrees of self-control in their sexual behaviour (Bryan et al., 2004).

2.2.3 Socio-Demographic Variables in Youth Risk Behaviour

2.2.3.1 Gender

The HIV/AIDS epidemic is often identified as a "gendered epidemic" (Hoosen & Collins, 2004; Shisana, 2004). Gender roles and relations powerfully influence the course and impact of the epidemic. Gender related factors shape the extent to which adolescents are vulnerable to HIV infection, the ways in which AIDS affects them, and the kinds of responses that are feasible in different communities and societies. The writer contends that gender based inequalities overlap with other social, cultural, economic and individual aspects.

A variety of factors influence the vulnerability of females to HIV. They include social norms that deny women sexual health knowledge and practices that prevent them from deciding the terms on which they have sex. Male youth are vulnerable too. Social norms and types of work they do can entail mobility and family disruption (for example, migrant labour) and thus increases their vulnerability (UNAIDS, 2006). Using data from antenatal statistics from pregnant women to estimate the HIV prevalence may also contribute to the perception that women bring HIV to their partners, yet it is a synergised effect of gender, biology, socio-economic status, and various behaviours that increase women's risk to infection.

Boer and Mashamba (2005) note that in Africa, young women tend to have unsafe sex with men who are substantially older. Harrison et al. (2001) conducted a study into understanding adolescent female's risk for HIV/AIDS in rural KwaZulu-Natal. The findings of the study confirm that many young women are at high risk, and that the patterns ascribed to risky behaviour include young age at sexual initiation, older partners, unprotected sex, limited power in sexual negotiation and decision-making, and the presence of coercion. These patterns however, are often very complex. Many of these risk behaviours for example, the desire for an older male partner or the acceptance of male control in relationships are driven by young girls. This is illustrative and suggestive of the power of socialisation around an approved set of social and/or peer norms. Peltzer (2006) conducted another study on sexuality among adolescents in rural and urban South

Africa. The results indicate that females living in urban areas seem to take more initiative at first sexual intercourse than rural females.

2.2.3.2 Socio-Economic Status

In South Africa, Africans are more likely than any other racial group to belong to the low socio-economic strata (Shisana, Peltzer, Zungu-Dirway & Louw, 2005). As such, they may often not have money for basic needs like food or they tend to earn less. Low socio-economic status increases vulnerability to HIV because the power to negotiate safe sex can be related to economic power. Irwin, Millen and Fallows (2003) note that evidence from all over the world shows that the primary motive driving women to engage in sex work is economic hardship. These findings link poverty and a low socio-economic status with vulnerability to HIV.

2.2.3.3 Race

Shisana et al. (2005) report that there are major differences in HIV prevalence in youth by race. Whilst youth living with HIV in South Africa can be found in every race group, the observed trend differs. HIV prevalence is substantially higher in Africans than any other race group. HIV prevalence among youth aged 15-24 years were 12.3% for Africans, 0.3% for whites, 1.7% Coloured and 0.8% Indians (Shisana et al., 2005). These findings suggest that exposure to risk differs substantially by race.

There are various reasons for the observed differences that may lie in exposure to risk factors. For example, upon completion of their education, many African youth are usually more likely than any other race to get employment away from family or home dwellings. Such displacements are associated with increased vulnerability for HIV infection (Kalipeni, 2004). As such, we understand that Africans live in a context that increases their vulnerability to many illnesses. Race is thus important to understand in that it embodies the socio-economic contexts that influences risk to HIV infection (Shisana et al., 2005).

2.3 Theoretical Framework

The theoretical framework that was used for the study is the Theory of Triadic Influence (TTI). A description of the theory will be provided, highlighting the relevance and application to the study.

Throughout the plethora of health behaviour related literature that has emerged over the past decade, most have focused on proximal cognitive predictors of behaviour, on expectancy and bonding processes and some on personality and intrapersonal factors. Few theories of health behaviours incorporate a comprehensive framework for understanding health related behaviours. The TTI integrates constructs from a number of previous theories (Flay & Petraitis, 1994). This allows for a holistic understanding of health behaviour and a useful framework for informing interventions, as the emphasis is placed on attitudinal, social and intrapersonal influences on health behaviours. The TTI contends that attitudinal; social and intrapersonal influences independently and interactively affect decisions to act or not to act in a certain way (Flay & Petraitis, 1994). The theory attempts to account for the various factors influencing sexual behaviour. Factors influencing such behaviour incorporate explanations that are emotional, cognitive, cultural and attitudinal. The TTI gives a clear multipronged description of the contributing factors that can impact on youth sexual risk behaviour.

This study is a microstudy of a broader study that aims to investigate the influences of social norms, social environmental factors, self-esteem, self-efficacy and feelings of hopelessness on risk taking behaviour in adolescents. As such, the broader study takes a multi-pronged approach where investigation is done on the emotional, cognitive, social, cultural and attitudinal levels. For the purpose of the current study however, the scope is delimited to one stream of influence (intrapersonal). However, it is endorsed that the intrapersonal stream alone is unlikely to provide an adequate aetiological explanation for sexual risk taking behaviour in adolescents. Complete and responsible explanations for adolescent risk behaviour are complex and incorporate all streams of the TTI.

In its simplest form, the TTI asserts that the various causes of problem behaviour fall into three distinct "streams" of influence: sociocultural factors that affect attitudes toward a problem behaviour, factors that involve social bonding and associated perceived social pressure on adolescents to engage in problem behaviour, and intrapersonal factors that affect problem behaviour including self-efficacy or self-efficacy (Flay, 2007). Further, in addition to the direct influences of these streams, there are important interstream effects and influences that flow between tiers. The theory is thus intended to account for factors that have direct effects as well as indirect effects on behaviour (Flay, 2007).

The TTI emphasizes that socio-cultural influences impact on health related decisions through attitudes. However, even though individuals may be subject to similar socio-economic environments and adopt similar attitudes towards health related behaviour, they often do not make the same decisions regarding such behaviours (Flay & Petraitis, 1994). Attitudes toward behaviour are derived from expected outcomes of the behaviour (expectations) and the value placed on these outcomes (attitudes). These are in turn derived from information/opportunity and beliefs or practices. Self-efficacy in sexual behaviour is derived from an adolescent's skills to perform the behaviour and his/her strength of will to engage in the said behaviour. These are in turn, derive from the adolescent's general social competence and sense of self. Using the TTI, we understand that decisions of whether or not to engage in sexual risk taking behaviour are derived from self-efficacy as well as attitudes and normative beliefs (Flay, 1999).

The TTI identifies five intrapersonal influences called "The Big Five". Flay and Petraitis (1994) argue that personality can be characterised by:

1. Behaviour control (for example, task persistence, impulsivity or the motivation to achieve).
2. Emotional control (for example, emotional stability or psychological adjustment).
3. Extraversion/Introversion (for example, social activity or social adaptability).
4. Sociability (for example, friendliness or likeability).
5. General intellectual intelligence.

It can be assumed that with respect to the first two influences of the Big Five, the greater an individual's ability to control his/her behaviour and emotions, the more likely he/she is to have stronger sense of self-esteem and a more coherent concept of self. As a result, such an individual would be more inclined to plan, regulate and restrain their health risk behaviours. It is understood then, that individuals who may hold an incoherent self-image of him/herself will be more likely to engage in risky behaviour practices and act impulsively, without considering the consequences of their health related behaviour. Individuals who are able to control their moods and actions are more likely to develop a stronger self-esteem and a more coherent concept of self. In turn, the TTI hypothesizes that they are likely to place greater value on self-determination in relation to sexual risk behaviours. Individuals who have the will to control their behaviours and the belief that they have the skills to perform a given health related behaviours are more likely to engage in health-enhancing sexual behaviours. Such people have a stronger health-related self-efficacy, thereby protecting against risky sexual behaviours.

2.4 HIV/AIDS Prevention Programmes

During the 1990's, there were many national interventions that focused on HIV prevention amongst youth in South Africa. These include condom use marketing by the Society for Family Health; school-based Life Skills conducted by the national and provincial Department of Education and Health; television and radio activities by Soul City; expansion of a national toll free AIDS helpline and condom distribution undertaken by the Department of Health (Parker, 2003). These activities are ongoing and many have expanded since the inception of the national preventative intervention programme, loveLife.

Thomas (2004) argues that loveLife's HIV/AIDS awareness and prevention campaign obscures rather than addresses the AIDS epidemic in South Africa. Prevention programmes in South Africa need to address sex, sexual violence, work, individual, contextual, cultural and other factors. In other words, there needs to be a multifaceted approach to risk reduction. The loveLife campaign has been subject to controversy and critique, much of which focuses on loveLife's public information campaigns that often

feature abstract text (Thomas, 2004). As such, youth may receive conflicting messages about sexual risk behaviour. Given the alarming statistics of sexual risk behaviours in South African youth, it is crucial that awareness and prevention programmes formulate ways to address the HIV/AIDS crisis. There are multiple social and individual causes as to why young people are vulnerable to HIV infection. Representations of youth who love life and thereby avoid infection or of youth who have a basic knowledge of sexual risk, has failed to successfully address the crisis.

Historically, there have been many efforts to reduce the spread of HIV/AIDS by intervening with learners through the school system (Aarø, Flisher, Kaaya, Onya, Fuglesang, Klepp & Schaalma, 2005). In 1995, the Department of Health and Department of Education convened a national consultative forum on Life Skills education in South African schools. As a result, a learning programme covering various themes was developed and is presently aimed at primary school learners (grades 1-5) and high school learners (grades 8-12). The focus of the Life Skills programme aims to provide information that assists learners to decide what behaviours are healthy and responsible, and to also teach learners skills particularly relevant to HIV/AIDS preventative and coping behaviours (Department of Education, 2000). Attitudes that are promoted include positive attitudes towards delaying sex, personal responsibility and safer sexual practices as a means of protection and living positively with an HIV positive status (Department of Education, 2000).

We thus understand that there is clearly a complex environment of interventions addressing HIV prevention in the youth of South Africa. HIV incidence in youth cannot be reduced by a single intervention. The current study being a part of a larger study that aims to investigate multiple influences on risk taking behaviour in adolescents acknowledges and endorses that interventions and research need to be multifaceted taking interpersonal, intrapersonal, socio-cultural and attitudinal factors into account. For the purposes of the current study however, the scope is delimited to the intrapersonal stream. There is thus specific emphasis on the influence of self-esteem and self-efficacy in sexual risk reduction. This intrapersonal influence should be incorporated into comprehensive

programmes where interventions aim to protect adolescents engaging in sexual risk behaviours.

2.5 Adolescent Self-Efficacy and Self-Esteem

In understanding adolescent risk behaviours, multiple domains need to be incorporated; the social environment, biology/genetics, personality and other actions need to be considered (Jessor, 1991). Many studies in South Africa that have focused on sexual risk taking behaviour have focused on adolescents' knowledge and attitude towards HIV/AIDS, STIs and pregnancy (Aiken, 2005; Kurtz et al., 2005). Such investigations limit out understanding of other important factors that are potentially protective, like levels of self-esteem and self-efficacy.

The literature suggests that efficacy expectations influence initiating behaviours and the degree of persistence applied in overcoming difficulties encountered in the pursuit of tasks (Bandura, 1997; Lane, Lane & Kyprianou, 2004). Other research has demonstrated, for example, self-esteem effects in such diverse areas as achievement, competition and coping with a stressful life. Findings of studies often suggest that people with high self-esteem are generally more effective in meeting environmental demands than are those with low self-esteem (Baumeister, 1993; Coopersmith, 1967). Rosenberg's (1965) landmark study showed that low self-esteem was associated with a variety of factors, namely depression, anxiety, and poor school performance. Further, individuals with low self-esteem were characterized by a sense of incompetence in social relationships; they felt socially isolated and believed that others neither understood nor respected them.

Recent studies investigating the relationship between self-esteem, self-efficacy and performance accomplishments also lend support to the effectiveness of self-esteem and self-efficacy in youth behaviour (Lane et al., 2004). For example, in their study Lipschitz-Elhaw & Itzhaky (2005) found that self-esteem was related to academic adjustment. In another study, Wilburn & Smith (2005) found that stress and self-esteem was significantly related to suicidal ideation; low self esteem significantly predicted suicide.

We thus understand that low self-esteem and self-efficacy has been linked to numerous adolescent risk behaviours such as smoking, drug use and sexual activity. Adolescents engaging in these risk behaviours may have significant health problems (Modrcin-Talbott et al., 1998). Given the alarming findings of the above studies and the fact that we are living in an era of the HIV virus, the need to explore self-esteem and self-efficacy influences on sexual risk behaviour is highlighted.

As mentioned above, the literature suggests that an adolescent's close group of friends has a great influence on the timing of sexual debut (Dillard, 2002; Sieving et al., 2006). Findings also suggest that adolescents' sexual behaviours are influenced by the sexual attitudes and behaviours of their friends (Sieving et al., 2006). Adolescents whose friendship network includes friends who engage in low risk behaviours are half as likely to experience sexual intercourse as are adolescents whose close friends comprise mostly high-risk friends (Dillard, 2002). We thus understand that adolescents are required to respond to forces, both internal and external, which influence risk taking behaviour (Coleman & Hendry, 2002). Peer influences have long been portrayed as predominantly negative opposed to the values of parents and of the wider society (Coleman & Hendry, 2002). However, as presented above, research on peer groups among adolescents presents a complex and differentiated pattern. Peer influence can be protective as well negative, encouraging risk taking behaviours, depending on the social norms within the peer group. However, it is important to conceptualize that self-esteem and self-efficacy are possible mediators that enable adolescents to resist negative peer influence to engage in sexually risky behaviour and to make informed choices about their sexual lives.

2.5.1 Self-Esteem

2.5.1.1 Definition and Components

The literature provides several definitions of self-esteem. Many of these definitions arise from diverse theories or view points. However, the definitions appear to describe the same construct.

Self-esteem is one component of the self-concept. We understand the self-concept as the totality or whole, comprising of the thoughts that an individual has, and feelings with reference to him/herself as an object (Rosenberg, 1979). Burns (1979, in Gerdes, 1988) also provides a definition of the self-concept noting that it is a composite image of what individuals think they are what they think they can achieve, what others think of them, and what they would like to be.

Global self-esteem has been described by Rosenberg (1979) as the overall negative or positive concepts about the self. Further, people are motivated to have high self-esteem, and having it indicates positive self-regard and not egotism. In the classic work by Coopersmith (1967), self-esteem refers to an evaluation a person makes and customarily maintains for him/herself. Berk (2003, p. 447) notes that self-esteem refers to "the aspect of self-concept that involves judgment about one's own worth and the feeling associated with those judgments". In general then, self-esteem refers to an individual's evaluation of him/herself, including feelings of self-worth (Rosenberg, 1979).

Self-esteem is an expression of self-approval or disapproval, indicating the extent to which a person believes he or she is competent, successful, significant or worthy (Modrcin-Talbott et al., 1988). High self-esteem is associated with feelings of complete satisfaction with one's self, a feeling of self-worth. Low self-esteem can be associated with incompetence, dissatisfaction with one's self and also self-depreciation (Gerdes, 1988). The sources of self-esteem development rest in reflected appraisals and social comparisons (Coleman & Hendry, 1999). Sometimes, an adolescent may compare his/her competencies to those of his/her peers in order to discern his/her level of self-worth.

A review of literature suggests that self-esteem can be understood in a hierarchy of dimensions. Specifically, a global self-esteem is at the top of the hierarchy. Under this, several specific dimensions of self are included. Coopersmith (1967) and Harter (1990) outlined four dimensions underlying global self-esteem. These include competence in meeting demands to achieve; positive reinforcement or social acceptance received from

significant others, control, or feelings of internal responsibility for specific outcomes; and adherence to moral standards and beliefs. These categories can be further subdivided. For example, social acceptance can be subdivided to include adults and fellow peers (Coleman & Hendry, 1999).

2.5.1.2 The Relationship between Self-Esteem and Sexual Risk Behaviour

With the arrival of adolescence, adolescents broaden their sphere in the people they look to for validation of their self-esteem. Some may rely more on parents, some on teachers and others on peers (Berk, 2003). In terms of self-esteem, there is a general agreement that the construct has a powerful influence on adolescent adjustment across a wide range of domains (Coleman & Hendry, 2002). The literature suggests that raising adolescents' self-esteem will help to protect them against adopting risk behaviours (Wild, Flisher, Bhana & Lombard, 2004).

Various researchers have argued that individuals with low self-esteem are predisposed to adopt risk behaviours. In their study, Sterk et al. (2004) found that lower self-esteem corresponds to greater HIV risk involvement in female youth. The study attempted to address two principal research questions namely: 1) How does self-esteem relate to sexual risk taking in women?; 2) Assuming there is a relationship between self-esteem and risky behaviours, what factors are predictive of self-esteem levels? Findings showed that self-esteem was related to the number of times of having oral sex, the frequency of sexual risk taking, the number of different HIV risk behaviours practiced during the previous year and condom use attitudes and self-efficacy. Further, females experiencing problems as a result of their financial situations tended to have low-self esteem. The analyses also showed that females with greater religiosity were associated with higher levels of self-esteem. The study concluded that young women's self-esteem is related to a variety of sexual and HIV-related risk outcomes. The findings play an important role in understanding factors that underlie low self-esteem levels, having important implications for HIV prevention programmes.

Abel and Chambers (2003) found that Hispanic women of childbearing age (18-44 years) were more motivated to engage in heath enhancing behaviours than women who reported low self-esteem. Semple, Grant & Patterson (2005) examined the relationship between negative self-esteem and sexual risk taking behaviours in a sample of adolescent, males and females who were 18 years and younger. Their study established a relationship between negative self-esteem and high sexual risk behaviour.

Other studies tend to show considerable variation in comparison to the above studies. For example, Paul, Fitzjohn, Herbison and Dickinson (2000) found that higher self-esteem was actually an independent predictor of early sexual intercourse in female youth. However, this was not for males. Still, another study showed that low self-esteem is unrelated to early sexual activity and adolescent pregnancy in adolescents (McGee & Williams, 2000).

Published literature on the relationship between self-esteem and HIV risk/protective behaviours amongst youth in South Africa is limited. Wild et al. (2004) investigated associations amongst self-esteem and risk behaviours related to sexuality, suicidality and other risk behaviours. The sample was representative of public high schools in Cape Town. It was found that self-esteem was significantly associated with at least one risk behaviour.

A study by Perkel (1992) aimed to investigate various psychosocial factors that influence sexual behaviours and attitudes in youth in the Western Cape. The study found that poor self-concept was related to risky sexual behaviour in youth.

Given the vast body of research, it is evident that self-esteem is a multidimensional construct. Research findings suggest that interventions that aim to protect adolescents from engaging in risky behaviour by increasing their self-esteem are likely to be effective and cost effective, and should be included as part of comprehensive interventions aimed at youth.

2.5.2 Self-Efficacy

2.5.2.1 Definition and Components

According to Bandura (1986), the concept of self-efficacy originates from social cognitive theory. We understand that social learning theory proposes that human functioning is the product of the reciprocal relationship between personal factors (cognitive, affective and biological events), behavioural and environmental influences. Gerdes (1988) notes that social learning theory makes an important contribution to the understanding in which socially unaccepted behavioural patterns are acquired. Self-control is highlighted, acknowledging that an adolescent can control his/her actions through self-judgement for example (Gerdes, 1988). Importantly, Bandura (1986) also notes that youth learn through observation and imitation of others. In order to understand how behaviour is influenced by environmental and other factors, we need to be able to recognise how an individual cognitively processes information in order to obtain the desired results. As such, importance is placed on the role of cognitive processes. Self-efficacy beliefs form the core of these cognitive processes.

Self-efficacy can be defined as having a belief in one's capabilities to arrange and perform the course of action that is required to deal with and control potential situations (Bandura, 1997). Efficacy expectations are said to influence initiating behaviour, and the degree of persistence applied in overcoming difficulties encountered in the pursuit of accomplishing a task or tasks (Bandura, 1997).

Bandura (1986) defines the concept of self-efficacy in accordance with a grouping of specific abilities that he believes adolescents and adults have the ability to possess. These abilities include: extracting meaning from their environment; planning alternative strategies; learning through observation; self-regulating their behaviour; and engaging in self-reflection. As noted above, self-control is emphasised. The ability to have control enables individuals to determine their own destiny. It is also understood that individuals have the motivation to persevere in difficult situations due to their self-efficacy beliefs. As such, the reciprocal interaction and influence between an adolescent and his/her social environment is highlighted.

2.5.2.2 Differentiating Self-Esteem from Self-Efficacy

Self-esteem and self-efficacy are different constructs that are often used interchangeably (Bandura, 1997). Self-efficacy is concerned with the capability to perform/execute specific tasks, or sources of action, the outcomes of which may or may not have any bearing on self-esteem. Hence, if a person has high levels of self-efficacy on tasks in which he/she has invested much self-worth, then there is likely to be a correlation between self-esteem and self-efficacy (Lane et al., 2004). We thus understand that self-efficacy relates to judgments of personal capability, whereas self-esteem is focused on judgments of self-worth. According to Bandura (1997), self-efficacy is influenced by how information is cognitively appraised. Factors that influence cognitive appraisal of information include self-esteem.

2.5.2.3 The Relationship between Self-Efficacy and Sexual Risk Behaviour

As an adolescent develops, a strong sense of self-efficacy enhances his/her personal well being in many ways (Bandura, 1997). When faced with challenges of sexual risk behaviours, a strong sense of self-efficacy allows an adolescent to rationally think out a course of action and believe that he/she can act in a way to control possible precarious situation. Self-efficacy is often a necessary condition for behavioral change to occur. Effective self-regulation of sexual behaviours requires and the belief in one's contributions to exercise personal control (Richard & Van Der Plight, 1991).

Self-efficacy can be studied with respect to prevention of unprotected sexual behaviour, for example, the resistance of sexual coercion and the use of contraceptives to avoid unwanted pregnancy (Bandura, 1999). Self-efficacy in condom use – the belief that one can successfully engage in condom use – is an important mediating factor between attitudes and beliefs about reproductive health and adopting condom use (Meekers & Klein, 2002). It is understood that condom use requires not only some technical skills but interpersonal negotiation as well. In order to convince a resistant partner to comply with safer-sex practices, an adolescent needs to have a high sense of efficacy to exercise control over sexual activities (Bandura, 1999).

Bryan et al. (2004) conducted a study on HIV/STD risk, optimism about the future, self-esteem and condom use self-efficacy among incarcerated adolescents. In the context of sexual risk behaviour in youth, they characterized self-efficacy as a multidimensional construct that includes skill at condom use, social aspects of negotiating condom use with one's partner and the ability to use condoms while under the influence of alcohol, drugs and other substances. In another study, Lindberg (2000, in Abel & Chambers, 2003) researched relationships between knowledge and self-efficacy in condom use amongst women. Both studies confirmed a simultaneous direct relationship of self-efficacy to condom intention.

Richard and Van Der Pligt (1991) also researched factors affecting condom use in adolescents. They found that previous condom use was related to attitudes, subjective norms, self-efficacy, anticipated affective reactions and habits. Self-efficacy had a strong effect on taking precautionary measures, especially for girls. Meekers and Klein (2002) conducted a study attempting to understand gender differences in condom use self-efficacy among youth in Cameroon. Their findings indicate that perceived ability to discuss and negotiate condom use was high for both sexes. However, females were more likely than males to be shy accessing condoms. Prior experience in attaining condoms and using condoms, and parental support were indicated as affecting perceived ability to correctly use condoms (Meekers & Klein, 2002). The study also emphasized that programs aiming to increase self-efficacy in condom use should focus on increasing confidence in adolescent ability to access condoms and use them correctly, especially for adolescent females.

Other research examined how perceived self-efficacy to communicate about sex with parents related to sexual experienced adolescents condom use (Halpern-Felsher, Kropp, Boyer, Tschann & Ellen, 2004). Results indicate that males who reported greater self-efficacy to communicate with parents used condoms more frequently. Further, self-efficacy is significantly related to AIDS preventative-behavioral interventions, perceived knowledge, and measures knowledge about HIV/AIDS (Goh, Primavera & Bartalini, 1996). In their study, Koesten, Miller and Hummert (2001) looked at the relationship

between contraceptive self-efficacy and contraceptive use among adolescents. The study also attempted to explore the influence of demographic and background characteristics on contraceptive self-efficacy. The results point out that female adolescents who live with parents and whose mothers approve of contraceptive use report higher contraceptive self-efficacy. The results highlighted the importance of giving adolescents the skills they need to feel efficacious in their ability to communicate about sex and contraception. We also understand that there are thus indeed links between family communication culture, self-efficacy and risk behaviour (Koesten et al., 2001; Slicker, Patton & Fuller, 2004).

Another study aimed to determine South African youths' sense of self-efficacy to control events surrounding safe sexual practices. It is interesting to note that the majority of youth felt that they could refuse sex with a sexual partner, if that partner did not want to use a condom. Further, the majority of youth felt sure that they could use a condom every time they engaged in sexual intercourse (Pettifor et al., 2003).

Perkel (1992) found that a weak sense of self-efficacy and higher rates of vulnerability toward peer pressure were related to risky sexual behaviour. These variables were also related to a higher incidence of unsafe sexual practices.

In an earlier study, Gilchrist & Schinke (1983) attempted to test the effectiveness of skills-based training in approving an adolescents' contraceptive use. The findings showed that the acquisition of appropriate skills was related to higher levels of self-efficacy. This has implications for intervention modalities as the findings suggest that adolescents who are trained will be more likely to use their skills in subsequent sexual encounters. Levinson (1986) also showed that self-efficacy is able to predict contraceptive use by young females.

2.6 Future Directions

South Africa has a fast growing HIV rate, with the highest prevalence being amongst young people between the ages 15-24 years. The scale of the pandemic is mammoth among youth as the virus continues a deadly course (Hartell, 2005; Shisana et al., 2005).

Given the high rates of unprotected sex, unintended pregnancies and STIs among youth in South Africa, a wide variety of programmes to reduce sexual risk taking have been developed. However, despite governmental and non-governmental efforts to curb the pandemic in South Africa, there appears to be no specific path for future intervention strategies. Research findings show that that whilst HIV information can change the knowledge base of HIV preventative behaviour, behaviour change does not necessarily follow.

From the literature reviewed several viewpoints merit further research and consideration for the development of AIDS-prevention programmes. There seems to be paucity on research investigating 'sexual self-esteem' and 'sexual self-efficacy' amongst youth in the South African context. In order to investigate the extent to which a sense of self-worth affects sexual decision-making, it is necessary to focus more on an adolescent's sexual world. As such, measures of self-esteem specifically related to sexuality and a measure of self-efficacy that addressed perceived mastery over many aspects of sexual behaviour/activity as well as cautionary behaviour related to HIV/AIDS is emphasized.

The literature highlights that the reason for adolescents engaging in unsafe sexual behaviour is related to his/her perceived inability to control what is happening to them sexually. This we understand as low self-efficacy. Further, feelings of sexual inadequacy related to low self-esteem may act against asserting such control. The findings suggest that there is a need for adolescents to achieve a sense of mastery, efficacy and self worth in the sexual domain.

Various studies have found that gender differences exist in condom use efficacy. Steyn, Myburgh and Poggenpoel (n.d.) note that different roles and motives exist for male and female adolescents in terms of sexual activity. Further, the acceptability of involvement in sexual activity is viewed differently from females. As such, male adolescents have specific needs in terms of prevention programmes.

It is also clear that the decision to engage in safe sex is very complex, being influenced by various factors. However, although strategies for future intervention can be divergent, the need for media campaigns to be accompanied by interventions which aim to protect adolescents from engaging in risk behaviours by increasing their self-esteem and self-efficacy is highlighted. Such interventions should be aimed at the family or school domains to be most effect (Wild et al., 2004).

2.7 Conclusion

From the literature reviewed, it is apparent that youth are presently the most susceptible to HIV risk, both nationally and internationally. Low self-esteem and self-efficacy are two possible precursors of sexual risk behaviour in adolescence. A relationship between low self-esteem, low self-efficacy and high sexual risk has been suggested by various studies. International studies show that individuals with low self-esteem are predisposed to adopt risk behaviours and that lower self-efficacy corresponds to greater HIV risk involvement. The literature shows that there is an association between self-esteem and risk behaviours in a South African adolescent population. South African research relating to self-efficacy and risk behaviours also shows a direct correlation. These findings suggest the value of examining self-esteem and self-efficacy in relation to sexual risk behaviour amongst youth. Further research into self-esteem and self-efficacy influences on sexual risk behaviour of South African youth is required to be included as part of comprehensive interventions aimed at youth.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 INTRODUCTION

This study uses a quantitative design and is exploratory in nature. A cross sectional survey is used and hypothesis testing is involved. The aims, objectives, research questions and hypotheses of the study are first detailed. Subsequently, the methodology is explained in terms of the sampling method, procedure involved in the collection of data, measuring instruments and the analysis of data. Having done so, relevant ethical considerations of the study are explored.

3.2 AIMS AND OBJECTIVES

The primary aim of this study is to focus on two areas of intrapersonal factors namely, self-esteem and self-efficacy in understanding sexual behaviours in a sample of school going adolescents in the Durban Metropolitan area.

In achieving this aim, two primary objectives are set out. Firstly, given that this is an adolescent population, to determine whether higher levels of self-esteem and self-efficacy are associated with a delay in sexual debut in those adolescents who have never engaged in sexual intercourse (primary abstinence). Secondly, to determine whether higher levels of self-esteem and self-efficacy is associated with protective sexual behaviour amongst those adolescents who had previously engaged in sexual intercourse. From the findings, suggestions will be made to inform interventions that aim to protect adolescents from engaging in risky sexual behaviours.

3.3 HYPOTHESIS

Hypothesis 1: Those adolescents who have never engaged in sexual intercourse (primary abstinence) have a higher self-esteem than those who had previously engaged in sexual intercourse.

Hypothesis 2: Those adolescents who have never engaged in sexual intercourse (primary abstinence) have higher self-efficacy than those who had previously engaged in sexual intercourse.

Hypothesis 3: Of those who have ever engaged in sexual intercourse, there is an association between higher self-esteem and low sexual risk behaviours measured by the dimensions of number of sexual partners, age of sexual debut and condom use.

Hypothesis 4: Of those who have ever engaged in sexual intercourse, there is an association between higher self-efficacy and low sexual risk behaviours measured by the dimensions of number of sexual partners, age of sexual debut and condom use.

3.4 METHODOLOGY

3.4.1 Sampling

A school in the Durban Metropolitan area was identified and selected owing to accessibility and proximity.

The sampling frame included 300 learners who were randomly selected from grades nine, ten and eleven. These grades were identified owing to the nature of the study where focus is on sexually related behaviours and because the age of sexual debut among adolescents in South Africa occur normally between the ages of 15-17 years (Kurtz et al., 2005; Shisana et al., 2005). Further, the decision was also based on information by Gullette and Lyons (2005), and Maart (n.d.) who highlighted that adolescents who are in the 14 to 18 year old age category, comprise part of a formative phase for adolescent sexual development. As such, the selected sample accounted for a similar developmental level and also allowed for a large number of respondents.

Participation in the study was purely voluntary and there were some learners who opted not to participate. In total, 259 students whose ages ranged from 14 years to 18 years responded to the questionnaires. Respondents were from grades nine, ten and eleven. Grade 12 learners were not included in the sample as they were on study leave for trial

examinations during the period of data collection. Of the total number of respondents, 56% were female and 44% were male. In terms of race, 81.1% were black African, 14.3% Indian/Asian and 4.6% of a mixed race/coloured.

3.4.2 Procedures and Data Collection

At the outset, a meeting was held with the school principal to discuss the nature, aims and objectives of the study. Following a meeting with other teaching staff at the school, the principal consented for the learners to participate in the study. A letter confirming that the school agreed to participate in the study was obtained. This letter of consent is attached in Appendix A.

Once the school consented to participate in the study, the superintendent responsible for the district that the school falls in was contacted so as to attain permission from the Department of Education to conduct the study. The superintendent advised the researcher that the research office of the Department of Education needed to be contacted. A research proposal was submitted to the Department of Education (DOE) offices in Pietermartizburg. Members of the research office within the DOE reviewed the proposal, and the study was given approval, subject to the DOE receiving a copy of the study upon completion. Further, the DOE reiterated that the study should not be disruptive to the operational functioning of the school and should not in any way interfere with school examinations. The letter of approval from the Department of Education is attached in Appendix B. Since the current study was a low-risk one, parental assent was not obtained individually. However, permission for the study was obtained on behalf of the parents from the school governing body.

In discussion and liaison with the deputy principal of the school, the survey was conducted over a series of days during the flexi-period time slot so as to minimise interference with academic study. Questionnaires were administered in multiple group settings upon receiving assent from the learners. Ethical procedures were adhered to as discussed in section 3.5 below. Upon completion of the survey, the questionnaires were

stored in a locked cupboard within the Department of Psychology at the University of KwaZulu-Natal.

3.4.2.1 Pilot Study

"Pilot studies are used to identify possible problems with proposed research, using a small sample of respondents before the main study is conducted" (Terre Blanche & Durrheim, 1999, p. 298). The pilot study was conducted prior to the commencement of the actual study using a small sample representative of the proposed sample. Although the data collection measures had been used in previous studies in the South African context, a small pilot study was used to check the clarity of instructions and questions, administration time and layout within the specific sample population.

Twenty learners from grades ten, eleven and twelve were randomly selected and asked to participate in the pilot study. Prior to administering the questionnaire pack, learners were provided with a brief purpose and motivation for the study. Further, issues of confidentiality and anonymity were endorsed. The availability of follow-up counselling at the University Clinic and other referral sources was also highlighted. Learners were given the opportunity to withdraw from the study at any time.

Upon completion of the questionnaires, a focus group was held with the 20 learners asking them to give feedback about the content and nature of the questionnaires. They were asked if there were any queries regarding the questionnaire, any vague or unclear questions, and whether they felt some of the questions were too explicit or invasive. Further, the pilot study allowed the researcher to estimate the average time that students will take for the completion of the questionnaires in the actual study. The results obtained from the pilot study were not statistically analysed.

The result of the pilot study indicated that all the respondents were very interested in the study. On average, the questionnaire took between 20-30 minutes to complete. During the focus group, one respondent indicated that she was not aware of what "sugars" was

and the drug had to be described to her. Other than that, all questions were clear to the respondents. No other concerns were indicated.

3.4.2.2 Main study

Once the study was approved by the ethics committee at the University of KwaZulu-Natal and the Department of Education, appointments were made over a series of days with the deputy principal to facilitate the completion of the questionnaires. Several days in the month of September 2006 were used for the collection of data.

Class teachers assisted in handing out the questionnaires to the learners and also to maintain a level of cooperation. It appeared that a small number of learners found the questionnaire pack too long to complete and expressed a level of dismay over this. Forty one learners chose to not participate in the study.

3.4.3 Data Collection Measures

Each respondent completed 3 self-administered questionnaires.

3.4.3.1 Assent Form

An assent form (Appendix C) was included with the questionnaire pack, requesting participation in the research study. The assent form emphasized that participation in the study will enable the researchers to learn more about behaviours that put adolescents' health at risk. A summary of the study was provided and reinforced various issues for example, confidentiality, anonymity, and the fact that participation in the study is voluntary. Further, the cover page emphasised that participation in the study will assist to increase the researchers' understanding of risk influences for poor health amongst the youth. Also, contact numbers for the supervisors of the study were provided should the learners' want further information.

3.4.3.2 The South African Youth Risk Survey

The South African Youth Risk Survey (Appendix D) is a close-ended questionnaire that was designed to obtain data from youth on behaviours that might affect their health. The

Human Science Research Council (HSRC), in partnership with the Medical Research Council (MRC) and the Reproductive Health Research Unit (RHRU) developed the survey to assess the prevalence of youth engaging in risk behaviours in South African. The questionnaire draws from the experience of the Youth Risk Behaviour Survey designed in the United States of America. The South African survey was developed in English and pre-tested for face and construct validity for use in the South African context (Reddy et al., 2003). The survey includes gathering data on sexual risk taking behaviour, and has been widely used in South Africa, providing some of the most comprehensive information to date on young South African's engagement in risk behaviours.

The current study focused on Items 36 – 46 which included questions related to youth sexual risk behaviour. As such, these eleven items on sexual risk taking behaviour were statistically analysed for the purpose of the study.

The survey also requested demographic data and included the following variables: gender, age, race and current grade at school. In terms of race, a footnote was included highlighting that the category 'race' refers to a racial categorisation of a sector of the South African population that originated from the Apartheid era. The category 'race' was used in the study highlighting its historical and socially constructed nature. As such, there is acknowledgment of the history of prejudice and discrimination that was differentially suffered by people being labeled as 'Indian', 'Coloured', and 'Black'. Importantly, it was pointed out to respondents that asking the specific category will have strategic value in our present context for historical and socio-economic redress initiatives.

3.4.3.3 The Rosenberg Self-Esteem Scale (RSES)

The Rosenberg Self-Esteem Scale (Appendix E) was originally developed to measure global feelings of self-worth that an adolescent has of him/herself. It is a brief and unidimensional measure of global self-esteem (Rosenberg, 1965). The scale is a straightforward estimate of positive or negative feelings about the self (Robinson, Shaver & Wrightsman, 1991). The scale consists of 10 items comprised exclusively of first

person evaluative statements about the self. There are an equal number of positively (for example, people feeling satisfied with life) and negatively (for example, people feeling they are failures) worded items. Respondents are asked to report feelings about the self in a direct way. Individuals respond on a 4-point Likert scale (Butler & Gasson, 2005).

To characterise the RSES more completely, Cronbach's alpha and the standard deviations were computed. Cronbach's alpha for reliability of the RSES in the present study was quite good (α=0.739), indicating a high degree of internal consistency and stability amongst the items (Table 1). Cronbach's alpha for the original sample for which the scale was developed was similar to the present study; α=0.78 (Rosenberg, 1965). The scale generally has high reliability. Test-retest correlations are typically in the range of 0.70 to 0.88 (Rosenberg, 1986). Other studies have found that the scale has shown to have good internal consistency with African American adolescents; α= 0.78 (McCreary, Slavin & Berry, 1996). The scale showed a test-retest correlation of .85 after a two-week interval (Silber & Tippet, 1965 in Robinson et al., 1991). Adequate internal reliability of the RSES was also found by Schmitt and Allik (2005). Their study explored the RSES in 53 nations. The mean reliability across all nations was substantial (α=0.81). Cronbach's alpha for Zimbabwe was 0.75, United States of America 0.80, Argentina 0.77 and India 0.78. These results corroborate the results of the present study. In the South African context, reliability has been found to range between 0.78 and 0.92 (Westaway & Wolmarans, 1992).

TABLE 1. Reliability of the Rosenberg Self-Esteem Scale

Variable	n	M	SD	Minimum	Maximum	Cronbach's alpha
Self-esteem	259	29.4472	5.09133	16.00	40.00	.739

3.4.3.4 The General Self-Efficacy Scale (GSE)

The General Self-Efficacy Scale (Appendix F) was developed to assess a general sense of self-efficacy of both adults and adolescents. "Each item on the scale refers to successful coping and implies an internal-stable attribute of success" (Jerusalem & Schwarzer, 1993, p. 1). The scale consists of 10 items and responses are made on a 4-point scale. In samples from 23 nations, Cronbach's alphas ranged from 0.76 to 0.90 with the majority in the high 0.80s. The scale is unidimensional. Criterion validity is documented where positive correlations were found with favorable emotions, dispositional optimism, and work satisfaction. The measure has been internationally used with success for two decades and is suitable for a broad range of applications (Jerusalem & Schwarzer, 1993).

In the present study, the reliability of the scale was very good ($\alpha = 0.8782$), indicating a high degree of internal consistency (Table 2). In previous studies, Cronbach's alpha ranged from 0.75 to 0.94 across a number of different language versions (Schwarzer & Jerusalem, 2000). The scale has been used in various research projects, where its stability has been examined. Although reliability scores for the uses of the GSES in South Africa were unavailable, international research shows high levels of internal consistency. For example, in a sample of 140 teachers in Germany, an internal consistency of α=0.75 was found (Schwarzer & Scholz, 2007). In a recent study, the scale was used to assess cross-cultural coping resources. The results indicate alpha coefficients in the range between 0.79 and 0.84 (Schwarzer & Scholz, 2007).

TABLE 2. Reliability of the General Self-Efficacy Scale

Variable	n	M	SD	Minimum	Maximum	Cronbach's alpha
Self-efficacy	259	31.8740	.53250	10.00	40.00	.872

3.4.4 Data Analysis

Quantitative data enables a researcher to describe his/her data more succinctly, and make inferences about the characteristics of the sample (Terre Blanche & Durrheim, 1999). Congruent with the aims and objectives of the study, the researcher investigated the relationship between the independent variables (self-esteem and self-efficacy) and the dependent variables of sexual risk as measured by primary abstinence, and high risk sexual behaviours. High risk sexual behaviours has been conceptualised and measured in relation to the dimensions of condom use, number of sexual partners and age at first sexual intercourse (sexual debut). The data was analysed using the Statistical Package for the Social Sciences (SPSS Version 12.5). After capturing the data electronically on SPSS, the data was checked to ensure that it had been entered correctly. The response categories ranged from A = 1 to H = 8, except for age of sexual debut which was recoded using B = 1 (11 years or younger) to H = 7 (17 years or older), and condom use B = 1 (yes) and C = 2 (no).

Cronbach's alpha coefficient was used to assess the reliability of the scales. Prior to performing Cronbach's alpha (and other analyses) using the Rosenberg Self-Esteem Scale, items 3, 5, 8, 9, and 10 was reverse coded.

Analyses were first performed on the complete sample of adolescents and then on a sub-sample consisting only of those who have ever engaged in sexual behaviours. As a first step, frequencies and crosstabulations were used to examine the frequencies and distribution of the variables of the total sample population. The socio-demographic variables included age, gender, race and grade. Grades 9 (n=6) and 10 (n=40) were combined to form one category given the small numbers in each grade. The item was then dichotomised (Grades 9 and 10 = 1, and Grade 11 = 2). The item relating to ever had sexual intercourse was measured by Yes = 1 and No = 2. The item relating to the age of first sexual intercourse was used as a continuous variable.

For the full sample, t-tests were then used to test for significant differences between the means of various independent sample groups. t-tests were conducted to assess differences in self-esteem and self-efficacy mean scores for participants who had previously engaged in sexual intercourse and those who had not. t-tests were also conducted to assess gender differences in self-esteem and self-efficacy mean scores. In addition, Pearson's correlation analyses were done to identify the nature and extent of the relationship between the continuous variables age, self-esteem and self-efficacy.

Analyses were then performed for the sub-sample of sexually active respondents. SPSS frequencies and crosstabulations were used to examine the frequencies and distribution of the variables of the sub-sample. One-sample chi-square tests of independence were performed to examine the demographic variables of gender and grade pertaining to the engagement in sexual behaviour. The same analysis was performed to examine risky sexual behaviour in relation to number of sexual partners, condom use and age of sexual debut for the sexually active respondents. Condom use was measured by B = 1 (yes) and C = 2 (no). The response category for number of sexual partners was dichotomised as '2-6 partners' were viewed as 'multiple partners' and thus imply risky sexual behaviour (1 partner = 1 and 2-6 partners = 2).

For the sub-sample of sexually active respondents, independent sample t-tests were conducted to assess gender differences in the mean scores of risky sexual behaviour (in terms of condom use, age of sexual debut and number of sexual partners) for male and female adolescents. Condom use was measured by B = 1 (yes) and C = 2 (no), and the response category for number of sexual partners was dichotomised as explained above. t-test analyses were also performed to examine differences in self-esteem and self-efficacy mean scores for sexually active respondents who use condoms and those who do not, and for respondents who have multiple partners and those who have just one partner. The same recoded variables as explained above were used for the analyses.

For the sub-sample of sexually active respondents, Pearson's correlation analyses were done to establish the direction of the association between levels of self-esteem and self-efficacy with age of sexual debut and number of sexual partners measured as continuous variables.

3.5 ETHICAL CONSIDERATIONS

The research proposal for this study was approved by both the Research Ethics committee of the University of KwaZulu-Natal and by the Department of Education, KwaZulu-Natal. The study adhered to ethical codes of assent, informed consent and confidentiality. Approval from the school principal and the school governing body on behalf of the parents to conduct the study was an initial emphasis.

At the outset, assent was first obtained from the learners. Assent was voluntary and the questionnaires were completely anonymous. Learners were given the opportunity to withdraw from the process at any time should they feel that they no longer wanted to participate. Learners were also informed that grades or academic performance would not be affected by their participation or lack of participation. This was done in effort to minimise feelings of coercion. Further, the motivation of the study was outlined and the importance of confidentiality, anonymity, honesty and informed consent were all highlighted. As such, the school academic staff and all students were briefed on the nature of the study and were assured that individual information provided would remain confidential and not be divulged to any other person. The learners were made aware of their right to withdraw form the study at any time.

As done during the pilot study, the availability of follow-up counselling and referral sources was indicated. Contact details of numerous independent referral agencies that would be available for counselling services was specified should any specific issues or traumas have risen regarding the content of the study.

As indicated previously, parental assent was not obtained given the minimal risk afforded by the study as well as the logistics entailed in obtaining such assent.

3.6 CONCLUSION

This chapter attempted to outline the method of sampling, provide description and explanation of the measuring instruments used, and also detailed the procedure for the pilot and actual study conducted. The statistical analyses were outlined, ending with considerations of relevant ethical principles as applied to the study. The following chapter will detail the results of the statistical analyses.

CHAPTER FOUR
RESULTS

4.1 Introduction

In this chapter, the results of the statistical analyses used to test the hypotheses of the study are presented. Adolescent sexual behaviours of the full sample are first reported. Subsequently, intercorrelations between measures of self-esteem and self-efficacy are highlighted. The final section explores sexual behaviours of the sub-sample of sexually active respondents. A statistical level of significance of $p \leq 0.05$ is used as the acceptable level for the purpose of this study.

4.2 Adolescent Sexual Behaviours of the Full Sample

4.2.1 Demographic Profile

Table 3 shows demographic variables of the participants in the study. It shows the frequencies and the percentages of adolescents according to gender, age, grade and race.

The Table indicates that the ages of respondents ranged from 14 years to 18 years and older. 11.3% of respondents were 14 years, 23.9% were 15 years, 26.6% were 16 years, 17.4% were 17 years and 20.8% were 18 years or older. Respondents were from grades nine, ten and eleven. In terms of gender, 56% of the respondents were female and 44% were male. In terms of race, 81.1% were black African, 14.3% Indian/Asian and 4.6% of a mixed race or Coloured.

The Table also shows the frequencies and percentages of adolescents engaging in sexual intercourse. From a total sample of 259, 32.4% of respondents had previously engaged in sexual intercourse whilst 67.6% had not.

TABLE 3. Demographic characteristics of participants (N = 259)

Characteristic	Frequency	Percentage
Gender		
Male	114	44.0
Female	145	56.0
Age		
14 years	29	11.3
15 years	62	23.9
16 years	69	26.6
17 years	45	17.4
18 years and older	54	20.8
Grade		
Grade 9	31	12.0
Grade 10	109	42.1
Grade 11	120	45.9
Race		
Black/African	210	81.1
Asian/Indian	37	14.3
Coloured/Mixed Race	12	4.6
Engaging in sexual intercourse		
Yes	86	32.4
No	173	67.6

4.2.2 Demographic Variables and Sexual Behaviour

Table 4 shows the crosstabulation between participants' gender and sexual activity of the two sub-samples, which included those respondents who were sexually active and those who were not. As illustrated in the table, we see that of the sexually active group, 20.1% are males and 12.4% are females. There are therefore more males than females who are sexually active. Of the not sexually active group, 43.6% are females and 23.9% are males, indicating that more females than males are not engaging in sexual intercourse. The Table also shows the crosstabulation between the participants' grade and sexual

activity. Grade 9 has been combined with grade 10. Of those having sex, a higher proportion is from grades 9 and 10.

TABLE 4. Crosstabulation between demographic variables and sexual activity (N=259)

Characteristic	Sexually active (n=84)	Not sexually active (n=175)
	f (%)	f (%)
Gender		
Male	52 (20.1)	62 (23.9)
Female	32 (12.4)	113 (43.6)
Grade		
Grade 9 and 10	46 (17.8)	94 (36.3)
Grade 11	38 (14.6)	81 (31.3)

4.2.3 Most Influential Person with Regard to Sexual Behaviours

Crosstabulations between respondents' age and the most influential person in his/her life regarding sexual activity are illustrated in Table 5. The results showed that the majority of 14-year-old respondents considered their parents/grandparents/guardians and other adults as the most influential with regards to their sexual behaviour. Fifteen-year-old respondents also considered their parents/grandparents/guardians as most influential, followed by their siblings. The results also show that in comparison to 14 year-old respondents, a higher number of respondents in the 15-18 year old age category found friends to be most influential with regards to their sexual behaviours.

TABLE 5. Crosstabulation between age and most influential person with regards to sexual behaviour of the total sample population (N = 247)

	Parents/Grandparents Guardians	Brothers/ Sisters	Friends	Other Adults
	f (%)	f (%)	f (%)	f (%)
Age				
14	11 (16.4)	0 (.0)	15 (9.7)	3 (17.6)
15	17 (25.4)	2 (25.0)	33 (21.3)	3 (17.6)
16	15 (22.4)	3 (37.5)	44 (28.4)	4 (23.6)
17	7 (10.4)	1 (12.5)	33 (21.3)	4 (23.6)
18	17 (25.4)	2 (25.0)	30 (19.3)	3 (17.6)

Changes in sample size are due to missing values on the variables concerned

4.2.4 Differences in Self-Esteem and Self-Efficacy for Sexually Active Adolescents and Adolescents Who Have Never Engaged in Sexual Intercourse

T-tests were conducted to assess differences in self-esteem and self-efficacy mean scores for participants engaging in sexual intercourse and those who had not (N=248). The t-test analysis was thus done to establish whether those adolescents who had never engaged in sexual intercourse (primary abstinence) have higher self-esteem and self-efficacy than sexually active adolescents. As such, the t-test was also done to establish whether self-esteem and self-efficacy serves as a protective influence (through primary abstinence) to delay the initiation of sex of those who are yet not sexually active.

Table 6 shows that there was significant differences in the mean scores for adolescents who are sexually active and those who are not sexually active pertaining to their self-esteem and self-efficacy scores. Those adolescents who did not previously engage in sexual intercourse scored higher than those who were sexually active. There was thus a significant difference ($p<0.01$) between the two groups, with the adolescents who were not sexually active demonstrating significantly higher levels of self-esteem (M=29.95; SD=4.94) than those who were sexually active (M=28.40; SD=5.22). Further, there was also a significant difference ($p<0.01$) in self-efficacy for those engaging in sexual intercourse and those who were not. Adolescents not engaging in sexual intercourse reported higher levels of self-efficacy (M=32.56; SD=5.26) than those who were engaging in sexual activity (M=30.43; SD=5.76).

TABLE 6. T-test for differences in self-esteem and self-efficacy for respondents who have engaged in sexual intercourse and those who have not (N=248)

	Ever engaged sexual intercourse						
Variable		n	M	SD	df	t	p
Self-esteem	No	167	29.95	4.94	245	2.26	.024*
	Yes	81	28.40	5.22			
Self-efficacy	No	167	32.56	5.26	246	2.904	.004**
	Yes	81	30.43	5.76			

**.Correlation is significant at the 0.01 level (2-tailed).
*.Correlation is significant at the 0.05 level (2-tailed).
Changes in sample size are due to missing values on the variables concerned

4.2.5 Gender Differences in Self-Esteem and Self-Efficacy

T-tests were conducted to assess gender differences in self-esteem and self-efficacy for the total sample (N=259). There was a significant difference in the mean scores for males and females pertaining to their self-esteem and self-efficacy scores (Table 7). Female adolescents reported higher levels of self-esteem (M=30.28; SD=5.02) than male adolescents (M=28.43; SD=4.97). Further, female adolescents also reported higher levels of self-efficacy (M=32.79; SD=5.05) than male adolescents (M=30.76; SD=5.85). The t-test for gender thus shows that self-esteem and self-efficacy differs significantly between males and females, with females having higher mean scores than males.

TABLE 7. T-test for gender differences in self-esteem and self-efficacy of the total sample population (N=247)

Variable	Gender	n	M	SD	df	t	p
Self-esteem	Female	135	30.28	5.02	245	2.893	.004**
	Male	112	28.43	4.97			
Self-efficacy	Female	135	32.79	5.05	245	2.920	.004**
	Male	112	30.76	5.85			

**.Correlation is significant at the 0.01 level (2-tailed).
Changes in sample size are due to missing values on the variables concerned

4.2.6 Correlations between Age, Self-Esteem and Self-Efficacy

Correlations between age, self-esteem and self-efficacy were explored in all respondents (N=259) to establish whether there was a correlation between age and self-esteem and self-efficacy.

As indicated in Table 8, the correlation of age and self-esteem was highly significant (r=-.170, p=.008). The Pearson correlation (r value) is negative indicating that the relationship is inversely proportional. As such, we understand that younger respondents tended to have higher levels of self-esteem than older respondents. The correlation of

age and self-efficacy was also significant (r=-.190, p=.003). Younger respondents tended to have higher levels of self-efficacy than older respondents (Table 8).

TABLE 8. Correlations between self-esteem and self-efficacy with age for the total sample population (N=259)

Item	Self-esteem		Self-efficacy	
	r	(p)	r	(p)
Age	-.170	.008*	-.190	.003*

**.Correlation is significant at the 0.01 level (2-tailed).

4.2.7 Intercorrelations between Measures

Intercorrelations were run between the self-esteem and self-efficacy measures to establish whether any relationship exists between the two variables of the total sample population. The Pearson correlation coefficient was used to establish whether there exists a relationship between the two variables. The measure also allowed the writer to establish the direction and strength of the relationship.

The findings of the intercorrelations indicated that self-esteem and self-efficacy correlate significantly (r=0.630, p=0.000), that is those who have high self-esteem also had high self-efficacy (Table 9).

TABLE 9. Intercorrelations between measures of self-esteem and self-efficacy (N=259)

Measure	Self-esteem	Self-Efficacy
Self-esteem	--	.000**
Self-efficacy	.000**	--

**.Correlation is significant at the 0.01 level (2-tailed).

4.3 Sexual Behaviours of Sexually Active Adolescents

4.3.1 Descriptive Statistics

Table 10 details sexually risky behaviours with regards to sexual debut, number of sexual partners and methods used to prevent pregnancy of those participants engaging in sexual intercourse (n=86). As indicated in the table, the age of sexual debut ranged from 11 years to 17 years. At first sexual intercourse, 23.8% of respondents were 11 years old. Of the 86 sexually active respondents, 29.1% had one sexual partner in his/her lifetime, 18.6% had 2 partners and 24.4% had 6 or more partners. With regards to sexual activity three months prior to administration of the questionnaire, 52 (66.6%) respondents were sexually active. 42.3% reported having one sexual partner in the last three months, whilst 11.5% reported 2 partners. In the last three months, 26 respondents (33.3%) were sexually active, but had not had sexual intercourse. With regards to methods used to prevent pregnancy during the last sexual encounter, 63.9% indicated that they had used condoms. However, 19.3% used no method to control pregnancy, STIs or risk of HIV infection.

TABLE 10. Sexual behaviours of the sub-sample of respondents ever engaged in sexual intercourse (n= 86)

Sexual behaviour	f	%
Age of sexual debut		
11 years old	22	23.7
12 years old	5	6.0
13 years old	9	10.7
14 years old	9	10.7
15 years old	15	17.9
16 years old	15	17.9
17 years or older	11	13.1
Number of sexual partners in a lifetime		
1 person	25	29.1
2 people	16	18.6
3 people	11	12.8
4 people	7	8.1
5 people	6	7.0
6 or more people	21	24.4

TABLE 10. Sexual behaviours of the sub-sample of respondents ever engaged in sexual intercourse (n= 86) continued...

Sexual behaviour	f	%
Number of sexual partners in the last 3 months		
Sexually active but not in the last 3 months	26	33.3
1 person	33	42.4
2 people	9	11.5
3 people	5	6.4
4 people	2	2.6
5 people	0	0
6 or more people	3	3.8
Methods used to prevent pregnancy at last sexual intercourse		
No method used to prevent pregnancy	16	19.3
Birth control pills	5	6.0
Condoms	53	63.9
Depo-Provera	2	2.4
Withdrawal	2	2.4
Not sure	5	6.0

Changes in sample size are due to missing values on the variables concerned

4.3.2 Demographic Characteristics and Sexual Activity

Table 11 shows the crosstabulation between participants' gender and sexual activity of those respondents who were sexually active. As illustrated in the table, 61.9% are males, indicating that more males than females are sexually active. The Table also shows the crosstabulation between the participants' grade and sexual activity. Of those having sex, a higher proportion is from grade 10.

TABLE 11. Crosstabulation between demographic characteristics and sexual activity amongst respondents engaging in sexual intercourse (n= 84)

Characteristic	Sexually active (n=84)	Not sexually active (n=175)
	f (%)	
Gender		
Male	52 (61.9)	62 (35.4)
Female	32 (38.1)	113 (64.6)

TABLE 11. Crosstabulation between demographic characteristics and sexual activity amongst respondents engaging in sexual intercourse (n= 84) continued...

Characteristic	Sexually active (n=84)	Not sexually active (n=175)
Grade		
Grade 9	6 (7.1)	25 (14.3)
Grade 10	40 (47.6)	69 (39.4)
Grade 11	38 (45.2)	81 (46.3)

4.3.3 Prevalence of Selected Demographic Variables and Sexual Risk Behaviours

Table 12 shows the results of the one sample chi-square analyses comparing demographic variables of gender and grade as well as sexual behaviour in relation to number of sexual partners, condom use and age of sexual debut of participants who engaged in sexual intercourse (N=84). The results show demographic differences in sexually activity with regards to gender. Differences regarding risky sexual behaviour on the dimensions of number of sexual partners and condom use are also evident and included in Table 12.

TABLE 12. Prevalence of selected demographic variables and sexual risk behaviours amongst respondents engaging in sexual intercourse (n=84)

Variable	χ^2	df	p
Gender	6.857	1	.009 **
Grade	1.190	1	.275
Number of sexual partners	15.070	1	.000 **
Condom use	14.412	1	.000 **
Age of sexual debut	12.500	6	0.52

**.Correlation is significant at the 0.01 level (2-tailed).

4.3.3.1 Gender

Chi-square tests were performed to examine gender differences of those adolescents engaging in sexual intercourse. There was a significant difference between males and

females who engaged in sexual activity. Of those having sex, 61.9% of males have engaged in sexual intercourse, whereas 38.1% of females engaged in previous sexual activity ($p<0.01$).

4.3.3.2 Grade

With regards to grade at school, the results show that there were no significant differences between participants in various grades ($p>0.05$).

4.3.3.3 Number of sexual partners

The results of the chi-square showed significant differences in the number of respondents who have had sexual intercourse with multiple partners, as opposed to those who had intercourse with just one sexual partner in his/her lifetime. The majority (70.9%) of respondents have had intercourse with 2-6 people in their lifetime, whilst 29.4% have had just one sexual partner ($p<0.01$).

4.3.3.4 Condom use

In terms of condom use at last sexual intercourse, the results of the chi-square show that there is a statistically significant difference in the proportion of sexually active respondents using condoms and those who do not use a condom. 70.6% use a condom and 19.4% do not use condoms ($p<0.01$).

4.3.3.5 Age of sexual debut

With regards to age of sexual debut, the results show that there were no significant differences between participants in the categories of age of sexual debut ($p>0.05$).

4.3.4 Gender Differences in Risky Sexual Behaviour

T-tests were conducted to assess gender differences in risky sexual behaviour in terms of age of sexual debut, condom use and number of sexual partners, for those adolescents who are sexually active ($n=82$). The t-test analysis indicated that there were significant differences in the mean scores for males and females pertaining to the number of sexual

partners ($p<0.01$). Males reported significantly higher number of sexual partners (M=4.75; SD=1.989), than females (M=2.97; SD=1.349).

Also, the t-test analysis indicated that there were significant differences in the mean scores for males and females pertaining to age of sexual debut ($p<0.01$). Males reported a younger age of sexual debut (M=4.28; SD=1.98) than females (M=6.27; SD=1.83). There were no significant differences in the mean scores for males and female respondents pertaining to condom use. These results are reflected in Table 13.

TABLE 13. T-test for gender differences in risky sexual behaviours for respondents engaging in sexual intercourse (n=82)

Variable	Gender	n	M	SD	df	t	p
Number of sexual partners	Female	29	2.97	1.349	80	-4.324	.000**
	Male	53	4.75	1.989			
Sexual debut	Female	30	6.27	1.83	82	4.516	.000**
	Male	52	4.28	1.98			
Condom use	Female	28	2.36	.488	80	1.107	.271
	Male	54	2.24	.432			

**.Correlation is significant at the 0.01 level (2-tailed).
Changes in sample size are due to missing values on the variables concerned

4.3.5 Condom Use

T-tests were also performed to examine differences in self-esteem and self-efficacy for sexually active respondents (sexually active in the last 3 months and previously sexually active but not in the last 3 months) who use condoms and those who do not (n=79). As such, the t-test analysis was done to establish whether self-esteem and self-efficacy acts as a protective factor in relation to condom use of those adolescents who are sexually active.

The results of the t-test analysis indicated that there was no significant difference in the mean scores for self-esteem ($p>0.05$) and self-efficacy ($p>0.05$) pertaining to the use of condoms. This shows that respondents who choose condoms as a means of unwanted pregnancy and HIV do not necessarily have higher levels of self-esteem and self-efficacy. These results are included in Table 14.

TABLE 14. T-test for differences in self-esteem and self-efficacy for respondents who use condoms and those who do not (n=79)

Variable	Condom Use	n	M	SD	df	t	p
Self-esteem	Yes	58	2.84	.518	77	.087	.931
	No	21	2.86	.55			
Self-efficacy	Yes	58	3.06	.579	77	-.095	.925
	No	21	3.04	.592			

Changes in sample size are due to missing values on the variables concerned

4.3.6 Multiple Sexual Partners

T-tests were performed to examine differences in self-esteem and self-efficacy for sexually active respondents (sexually active in the last 3 months and previously sexually active but not in the last 3 months) who have multiple partners and those who have just one partner (n=81). As such, the t-test analysis was done to establish whether self-esteem and self-efficacy acts as a protective factor in relation to multiple sexual partners of those adolescents who are sexually active.

The results indicate that there were no significant differences in the means scores of adolescents who have one partner ($p>0.05$) and multiple partners ($p>0.05$) with regards to self-esteem and self-efficacy scores. Adolescents who have multiple partners do not have lower self-esteem and self-efficacy than those who have one partner. These results are reflected in Table 15.

TABLE 15. T-test for differences in self-esteem and self-efficacy for number of sexual partners of sexually active respondents (n=81)

Variable	Number of sexual partners	n	M	SD	df	t	p
Self-esteem	1 person	23	2.89	.475	80	.660	.511
	2-6 people	58	2.81	.541			
Self-efficacy	1 person	23	2.93	.569	80	-1.347	.182
	2-6 people	58	3.12	.596			

Changes in sample size are due to missing values on the variables concerned

4.3.7 Correlations between Risky Sexual Behaviours, Self-Esteem and Self-Efficacy

An attempt was also made to explore the relationship between age of sexual debut, number of sexual partners, self-esteem and self-efficacy to establish whether there was a correlation between self-esteem, self-efficacy and sexual risk taking behaviours of those who are sexually active (n=80). As such, correlations were done to establish whether higher self-esteem and self-efficacy acts as a protective factor against sexual risk behaviours in sexually active respondents, measured by sexual debut and number of sexual partners of those who are already sexually active.

The correlation of age of sexual debut ($p>0.05$) and number of sexual partners ($p>0.05$) was not statistically significant. There was no correlation between age of first sexual intercourse ($p>0.05$), number of sexual partners ($p>0.05$) and self-esteem and self-efficacy of adolescents who are already sexually active. The above findings are reflected in Table 16 below.

18 year old age category found friends to be most influential with regards to their sexual behaviours.

- A comparison was made with regard to self-esteem and gender of the full sample. Results showed that female adolescents had significantly higher levels of self-esteem than male adolescents ($p<0.05$). Comparisons were also made between self-efficacy and gender. Results also showed that female adolescents had higher levels of self-efficacy than male adolescents ($p<0.05$).

- There is a significant difference in self-esteem and self-efficacy between those who have never had sexual intercourse ($p<0.05$) and those who have had sexual intercourse ($p<0.05$). Those not engaging in sexual intercourse have higher self-esteem and self-efficacy than those who do.

- Significant negative correlations were found between age, self-esteem and self-efficacy of the full sample. Younger respondents tended to have higher levels of self-esteem ($p<0.05$) and self-efficacy ($p<0.05$) than older respondents

- In the sub-sample of sexually active respondents, the age of sexual debut ranged from 11 years to 17 years. Of the 86 sexually active respondents, number of sexual partners ranged between one to 6 or more partners in a lifetime. With regards to methods used to prevent pregnancy during the last sexual encounter, the majority of respondents indicated that they had used condoms.

- In the sub-sample of sexually active respondents, male adolescents reported significantly higher number of sexual partners than female adolescents. Importantly, there were also significant differences between gender and sexual debut ($p<0.01$), with males reporting a younger age of sexual debut than females.

- Sexual risk behaviours were analysed in terms of number of sexual partners, sexual debut and condom use of sexually active respondents. There were significant differences in the number of respondents who have had sexual intercourse with multiple partners, as opposed to those who had intercourse with just one sexual partner in his/her lifetime ($p<0.01$). A greater number of respondents (70.9%) have had intercourse with 2-6 people in their lifetime, whilst fewer respondents (29.4%) have had just one sexual partner ($p<0.01$). In terms of condom use at last sexual intercourse, there is a statistically significant difference in the proportion of sexually active respondents using condoms and those who do not use a condom ($p<0.01$). Also, condom use appears to be the preferred contraceptive method to avoid STIs, unwanted pregnancy and HIV infection. With regards to age of sexual debut, the results showed that there were no significant differences in sexual activity between participants in the categories of age of sexual debut ($p>0.05$).

- Of the sexually active respondents, no significant differences were found in self-esteem and self-efficacy in relation to age of sexual debut ($p>0.05$), number of sexual partners ($p>0.05$) and condom use ($p>0.05$). Age of first sexual intercourse, condom use and number of sexual partners thus does not influence self-esteem and self-efficacy of respondents who are already sexually active.

- Significant correlations were identified when examining the intercorrelations between self-esteem ($p<0.01$) and self-efficacy ($p<0.01$). The results showed that the two constructs correlate significantly, that is those who have high self-esteem also had high self-efficacy.

4.6 Conclusion

The results presented in this chapter are discussed and further explored in the following chapter.

CHAPTER FIVE
DISCUSSION

5.1 Introduction

In this chapter, the results from chapter four are discussed in light of the literature, theoretical framework and hypotheses. The general trends in adolescent sexual behaviours of the total sample population are examined. Having done so, sexual risk behaviours in relation to multiple partners, condom use and age of sexual debut of the sub-sample of sexually active respondents is explored. The relationship between self-esteem, self-efficacy and the abovementioned risky sexual behaviours of the sub-sample of sexually active respondents is also discussed. An examination of the results based on the theoretical framework as applied to the study is elaborated. Limitations are then discussed, ending with concluding remarks and recommendations for future intervention and research.

5.2 General Trends in Adolescent Sexual Behaviours

The results of the demographic information of the total sample population indicate that most of the findings of the present study were in keeping with the results of other studies.

When analyzing the sexual behaviours of respondents, the results indicated that from a total sample of 259, 32.4% of respondents had previously engaged in sexual intercourse. Of those who engaged in sexual intercourse, a higher proportion was males (61.9%) than females (38.1%). These results are similar to both national and international studies. Flisher et al. (2003) explored sexual behaviours of Cape Town high-school students. Their findings indicated that a higher proportion of males than females had participated in sexual intercourse. An international study by Kurtz et al. (2005) found that male adolescents were twice more likely to have sexual intercourse than females. The literature suggests that various societal norms contribute to the sexual behaviours of adolescent males and females. International research by Bearinger, Sieving, Ferguson and Sharma (2007) note that gender differences in norms for sexual behaviour could heighten the possibility of adolescent males feeling pressurized to engage in sex.

Involvement in sex is generally expected for the adolescent male yet at the same time not approved for adolescent females.

The results of the current study indicate that of those having sex, higher proportions are from grades nine and ten (17.8 %), than grade eleven (14.6%). Further, in the present sample, age of sexual debut started at 11-years-old or younger for some respondents. These findings highlight some important aspects about HIV/AIDS education aimed at adolescents in schools. Presently, HIV/AIDS education in KwaZulu-Natal schools comprises a Life Skills programme that is aimed at primary school learners (grades 1-5) and high school learners (grades 8-12). The learning programme focuses on aiming to increase learners' knowledge and attitude with regards to HIV and AIDS, sources of help if needed, methods to care for family members who have HIV/AIDS, means of protection from HIV/AIDS and the long asymptomatic period of HIV (Department of Education, 2000). Further, the programme aims to teach learners specific skills relevant to HIV/AIDS and STD preventative, and coping behaviours that include decision-making, assertiveness to resist peer pressure, negotiation skills to ensure abstinence/safer sex. Also, positive attitudes towards delaying sexual debut are promoted (Department of Education, 2000).

Considering the early age of sexual debut found in this study and previous studies for a South African adolescent population (Peltzer, 2006; Shisana et al., 2005), the findings affirms the need for such Life Skills programmes to be commenced at a primary school intervention level. Also, the results of the present study, indicating that the age of sexual debut often occurs in the pre-adolescent years, raises the importance of school programmes to be informed by research such as this.

5.2.1 Differences in Self-Esteem and Self-Efficacy

The findings of the present study confirm the hypothesis that those adolescents who have never engaged in sexual intercourse (primary abstinence) have higher self-esteem than those who had previously engaged in sexual intercourse. When comparing self-esteem and self-efficacy of those who had ever engaged in sexual intercourse and those who had

never engaged in sexual intercourse, the findings indicated that adolescents who had never engaged in sexual intercourse had higher levels of self-esteem and self-efficacy than those adolescents who had previously engaged in sexual intercourse. Primary abstinence helps to protect against risky sexual behaviour in that it extends the age of sexual debut for adolescents who are not as yet sexually active. The findings of this study suggest that self-esteem and self-efficacy may act as a protective factor to delay the initiation of sexual activity.

Flisher et al. (2003) point to the need for an increase in intervention programmes that aim to postpone or delay first sexual intercourse of adolescents. Given that the findings of this study show that those who practice abstinence have higher self-esteem and self-efficacy, intervention programmes need to address self-esteem and self-efficacy to delay sexual debut. From the demographic data, this should occur in the pre-adolescent years when students are in primary school. In addition, other South African literature also highlight that programmes need to include teaching adolescents skills that address the more intrapersonal determinants of safe sexual behaviour, such as self-esteem and self-efficacy (James, Reddy, Ruiter, McCauley & van den Borne, 2006).

The findings of the present study also indicated that self-esteem and self-efficacy correlate significantly, that is, respondents who had high self-esteem also had high self-efficacy. This is in keeping with the literature, which suggests that perceived self-efficacy correlates positively with self-esteem (Bandura, 1997; Schwarzer & Jerusalem, 2000).

5.2.1.1 Gender

Of the total sample population, self-esteem and self-efficacy differed between males and females, with females having higher mean scores than males. The results were unforeseen given the patriarchal nature of our society, with women being historically disempowered in society. These results emphasize the importance of interventions that gives males and female adolescents specific skills so that they feel efficacious in their ability to maintain health-enhancing behaviours.

5.2.1.2 Age

Of the total sample population, the results also indicated that younger respondents tended to have higher levels of self-esteem and self-efficacy than older respondents. Interestingly, younger respondents found their parents to be most influential with regards to their sexual behaviours. Younger respondents having higher levels of self-esteem and self-efficacy could thus be a result of positive parental influence.

5.3 Sexual Behaviours of Sexually Active Adolescents

In the present study, risky sexual behaviour was measured in relation to the dimensions of number of sexual partners, condom use and age of sexual debut of those adolescents who had ever engaged in sexual intercourse.

In the present study, 29.1% of respondents had one sexual partner in his/her lifetime, whilst 24.4% had 6 or more partners. With regards to sexual activity three months prior to administration of the questionnaire, 42.3% reported having one sexual partner, 11.5% reported having two partners and 12.8% reported have more than two partners.

The results showed significant differences in the number of respondents who have had sexual intercourse with multiple partners, as opposed to those who had intercourse with just one sexual partner in his/her lifetime. 70.9% of respondents have had intercourse with 2-6 people in their lifetime, whilst 29.4% have had just one sexual partner. Also, male adolescents reported a higher number of sexual partners than female adolescents. These findings corroborate previous research by Shisana et al. (2005) who found that a higher proportion of males reported have multiple partnerships. The above findings emphasize that in the context of a generalized epidemic, the number of adolescents with multiple partners is alarming.

National surveys conducted by Shisana et al. (2005) also found that the number of sexual partners that sexually active youth had was disconcerting. Other South African research links urbanisation to adolescents having multiple partners. For example, Peltzer (2006)

found that over their lifetime, adolescents living in urban areas had a significantly higher number of sexual partners with whom they had sexual intercourse than rural adolescents.

In terms of sexual debut, the age of first intercourse ranged from eleven years to seventeen years. The results indicate that 23.8% of respondents were 11 years old or younger at first sexual intercourse, 17.4% were 15 and 16 years old and 13.1% were 17 years or older. The very early age of debut for some respondents in the current study sample population raises concerns with regards to the nature of the sexual relationship and raises the issue of possible sexual abuse. As such, this requires further research.

Importantly, the findings also showed that male respondents reported a younger age of sexual debut than females. Literature reviews of both international and South African research suggests that one factor motivating early sexual intercourse in males may be that male peer group norms endorse early sexual debut to prove masculinity and social standing (Kalmuss et al., 2006; Steyn et al., 2006). As such, exploring the motivation and nature behind early sexual experiences among male adolescents is critical for designing intervention programmes.

With regards to method used to prevent pregnancy during last sexual intercourse, 63.9% of respondents indicated that they used condoms. 19.3% indicated that they used no method to control pregnancy, STIs or HIV infection. The use of condoms reported in the present study are similar to the findings by Giles et al. (2005), Flisher et al. (2003) and Shisana et al. (2005) who found that the most common choice of contraceptive methods used by South African adolescents were condoms.

5.3.1 Risky Sexual Behaviours, Self-Esteem and Self-Efficacy

The literature suggests a relationship between high levels of self-esteem and self-efficacy and health enhancing behaviours (Modrcin-Talbott et al., 1998; Sterk et al., 2004; Wilburn & Smith, 2005). Positive self-esteem enhances a person's ability to cope effectively with stress because individuals with poor coping mechanisms are more vulnerable to environmental stressors (Wilburn & Smith, 2005). Self-efficacy

expectations influence initiating behaviours and the degree of persistence applied in overcoming difficulties encountered in overcoming environmental stressors. In the present study, self-esteem and self-efficacy were examined in the context of adolescents' sexual behaviours relating to condom use, number of sexual partners and age of sexual debut.

In relation to the hypothesis that there is an association between higher self-esteem and self-efficacy, and low sexual risk behaviours measured by the dimensions of number of sexual partners, age of sexual debut and condom use, the findings indicated that there is no association between levels of self-esteem, self-efficacy and the abovementioned risky sexual behaviours of those who were sexually active. These findings differ considerably from previous studies. For example, an international study by Semple et al. (2005) found that there is a relationship between negative self-esteem and sexual risk taking behaviours. Also, other international research found that lower self-esteem corresponds to greater HIV risk involvement in females (Sterk et al., 2004). Their study showed that self-esteem was related to the number of times of having oral sex, frequency of sexual risk taking, the number of different HIV risk behaviour practices and condom use attitudes and self-efficacy. In an earlier study, Richard and Plight (1991) found that self-efficacy had a strong effect on taking precautionary measures in sexual risk, more especially for female adolescents than male adolescents. Another international study showed that males who reported greater self-efficacy used condoms more frequently (Halper-Felsher et al., 2004).

5.4 Relevance of the Theoretical Framework

As this study is a microstudy of a broader study (that aims to investigate the influences of social norms, social environmental factors, self-esteem, self-efficacy, social capital and hopelessness on risk taking behaviour in adolescents), the scope has been delimited to the intrapersonal level of the TTI. On an intrapersonal level, the TTI assumes that health-related self-efficacy is shaped by the will to control behaviour. The findings of the present study emphasise that self-esteem and self-efficacy are protective influences in adolescent sexual risk behaviours for those who are not as yet sexually active, suggesting

that these adolescents have the will to delay sexual debut. However, other findings suggest that the intrapersonal stream alone is unlikely to provide an adequate aetiological explanation for sexual risk taking behaviour in adolescents. As such, other levels of the TTI need also be explored. This study highlighted that multiple factors operate cumulatively and interactively in understanding youth sexual risk behaviours.

Social/normative factors should also be taken into consideration and explored further in understanding sexual risk behaviours in adolescents. Societal norms in gender differences for sexual behaviours are important to consider. Also, peer and parental influences on sexual behaviours should be explored further. The results of this study suggest that peers and parents/guardians are potentially influential with regards to sexual behaviours. The findings indicated that younger respondents that is, those in the 14-15 year age cohort found their parents/guardian/grandparents most influential with regards to their sexual behaviours. On the contrary, a higher number of respondents in the 16-18 year old age category found friends to be most influential. Both South African and international literature suggests that the norms of individuals or groups with whom adolescents are connected to or with whom they interact affects their sexual behaviours (Ben-Zur, 2003; Kirby, 2001). For example, Ben-Zur (2003) investigated perceived risk behaviours of peers in relation to sexual behaviours. Other studies indicated that parental attitudes towards sexual behaviours may indeed play a role in adolescent risk behaviour (Halpern-Felsher et al., 2004; Koesten et al., 2001). Also, Wild et al. (2004) emphasised the importance of adolescent-parent communication about sexual matters, which could possibly influence risk behaviours. Halper-Felsher et al. (2004) suggested that males and females who were able to communicate with their parents about sexual behaviours used condoms more frequently.

The TTI is a useful framework for understanding adolescent sexual risk behaviours in

that multiple levels of influence are emphasised. Various domains (for example, self-esteem, self-efficacy, culture, gender, personality, and the environment) need to thus be considered in attempting to understand and address adolescent sexual risk behaviours.

5.5 Limitations of the Study

- The possibility of "dishonesty" remains when one considers that self-reporting was used as the methodological approach. Further, the subject matter of the present study included sexual-related behaviour, which may have limitations in terms of adolescents' accuracy, honesty of recall and willingness to report behaviour that may not be socially approved. However, although there remains the possibility that sexual behaviours were misreported in this study, the findings were consistent with various other studies of similar populations (Hartell, 2005; Shisana et al., 2005). Also, the strict anonymity and confidentiality of the study may well have encouraged learners to respond honestly. Thorough introduction of the research topic was also provided and participants had the opportunity to withdraw from the study at any time.

- The data collection measures included the Rosenberg Self-Esteem Scale, which measures global feelings of self-worth, and the General Self-Efficacy Scale, which assesses a general sense of self-efficacy. As such, the measures did not relate specifically to sexuality, mastery over sexual activity or HIV/AIDS precautionary behaviour (for example, the use of condoms). In order to investigate the full extent to which self-esteem and self-efficacy influences and affects sexual decision-making, global measures may thus be restrictive. In may be necessary for the data collection measures to focus specifically on an adolescent's sexual world.

- The sample population was derived from just one school in the Durban region of the province of KwaZulu-Natal. As such, the findings cannot be extrapolated to other schools in the district in which the school is situated. Without data from at least one other school, it is difficult to ascertain whether this school is typical of schools in the district. As such, attempts to generalise the findings of the present study outside of a similar sample population must be made with caution.

- It was impossible to administer all the questionnaires in one day. Data collection was thus done over a few days. As such, the possibility that students may have talked to each other about the content of the measuring instruments cannot be ruled out.

5.6 Conclusion and Recommendations

This study formed part of a broader study that aimed to investigate the multiple influences of self-esteem, self-efficacy, social norms, hopelessness and social capital on risk behaviour in adolescents. The scope of the current study was delimited to focus on self-esteem and self-efficacy as possible influences on sexual risk-taking behaviour during adolescence.

From the results of the study, it is evident that there exist gender differences in sexual behaviours and in the levels of self-esteem and self-efficacy amongst adolescents. A significant number of male adolescents are engaging in risky sexual behaviours by having multiple partners and also report a younger age of sexual debut than females. Further, male respondents tend to have lower self-esteem and self-efficacy than females. In corroboration with previous studies, the use of condoms appears to be the preferred protective method used to prevent HIV/AIDS and pregnancy. The findings also suggest the need for further exploration of the role of peer and adult influences on sexual risk taking behaviour.

The findings of this study indicated that adolescents who have never had sexual intercourse (primary abstinence) have higher self-esteem and self-efficacy. Abstinence helps to protect against risky sexual behaviour in that it extends age of sexual debut. Amongst those adolescents who were already sexually active, the findings indicated that higher self-esteem and self-efficacy were not associated with lower sexual risk behaviour in relation to number of sexual partners, age of sexual debut and condom use as was hypothesized. Once adolescents are sexually active, self-esteem and self-efficacy does not appear to act as a protective influence against risky sexual behaviour. As such, intervention programmes that address self-esteem and self-efficacy should commence

before the age of sexual debut given that for a large number of adolescents, sexual debut was 11 years or younger. These programmes should be commenced at a primary school intervention level.

In addition to self-esteem and self-efficacy, the results of this study suggest that other factors influence the sexual behaviours of adolescents, lending support to the Theory of Triadic Influence suggesting the need for intervention programmes which focus on attitudinal, social and intrapersonal influences. The importance of social norms, parental influences, cultural and gender differences in sexual behaviours, and self-efficacy and self-esteem should be addressed and incorporated in future research and interventions addressing risky sexual behaviour in adolescents. It is hoped that the findings of this study contributes positively towards HIV/AIDS intervention programmes aimed at adolescents.

5.6.1 Recommendations for Future Intervention and Research

- The findings of this study affirm the need for Life Skills programmes at schools to focus on self-esteem and self-efficacy. As the findings of the present study indicated that adolescents who practice primary abstinence have higher self-esteem and self-efficacy and given the early age of sexual debut for some adolescents, programmes need to be aimed at increasing self-esteem and self-efficacy at a primary school level to delay the age of sexual debut, thereby protecting against risky sexual behaviours.

- Future studies exploring adolescent sexual behaviours, self-esteem and self-efficacy should consider including a qualitative component to the research design, in addition to a quantitative design. In-depth interviews with respondents are recommended so that individual perspectives can be expressed. Findings from the study by Harrison et al. (2001) show that peer group discussions (using the focus group methodology) and group processes assist in uncovering group norms. Such

a method will enable the researcher to create an atmosphere of greater trust and rapport, which is critical to research on sexuality, which is a sensitive topic.

- Measures of self-esteem specifically related to sexuality and a measure of self-efficacy that addresses perceived mastery over various aspects of sexual behaviour/activity as well as cautionary behaviour related to HIV/AIDS is recommended for future studies. The findings of the present study emphasize the value of future research into 'sexual self-esteem' and 'sexual self-efficacy' amongst youth in South Africa.

- Previous research emphasizes the importance of understanding that parental attitudes to sexual behaviours can play a role in adolescent risk behaviour, self-esteem and self-efficacy (Halpern-Felsher et al., 2004). The findings of the present study indicated that younger respondents had higher levels of self-esteem and self-efficacy and also found their parents/guardians/grandparents most influential with regards to their sexual behaviours. This relationship needs further investigation and highlights that parental involvement may be important in HIV/AIDS education programmes.

  Research should also be expanded to consider how the family system assists in building self-efficacy and self-esteem in adolescents with regards to their sexual behaviour. By understanding how family communication culture encourages the development of positive self-esteem and self-efficacy, intervention programmes could be aimed at families to assist adolescents with specific skills to be able to manage sexual risk behaviours successfully during adolescences and beyond. Intervention strategies need to address social norms and parental influence at both a senior primary and secondary school level.

- The findings of the present study indicated that many participants were eleven years old or younger at first sexual intercourse. These findings are concerning

and highlights the need for further research exploring the nature of the early sexual relationships and behaviours of the adolescents in the sample population.

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APPENDICES

APPENDIX A

LETTER OF CONSENT FROM THE SCHOOL

Sea Cow Lake Secondary School
TELE/FAX : (031) 564 6010

P.O. BOX 74742
ROCHDALE PARK
4034
17 MAY 2006

To:
Prof. I. Petersen

Sir

Permission is hereby granted to conduct your research at the above institution.

Thank you

Principal
W.Ponnan

APPENDIX B

LETTER OF CONSENT FROM THE KWAZULU-NATAL, DEPARTMENT OF EDUCATION

PROVINCE OF KWAZULU-NATAL
ISIFUNDAZWE SAKWAZULU-NATALI
PROVINSIE KWAZULU-NATAL

DEPARTMENT OF EDUCATION
UMNYANGO WEMFUNDO
DdepartEMENT VAN ONDERWYS

Tel: 033 341 8523
Fax:033 341 8512

Private Bag X9137
Pietermaritzburg
3200

228 Pietermaritz Street
Pietermaritzburg, 3201

NHLONGHHOYSI | PIETERMARITZBURG | HEAD OFFICE

No. 4049 P. 5

Enquiries: Imibuzo: M Francis Navrae:

Reference: Inkomba: 0224/03 Verwysing:

Date: Usuku: Datum: 21/11/06

To: Keshnie Lalbahadur

RE: APPROVAL TO CONDUCT RESEARCH

Please be informed that your application to conduct research has been approved with the following terms and conditions:

That as a researcher, you must present a copy of the written permission from the Department to the Head of the institution concerned before any research may be undertaken at a departmental institution bearing in mind that the institution is not obliged to participate if the research is not a departmental project.

Research should not be conducted during official contact time, as education programmes should not be interrupted, except in exceptional cases with special approval of the KZNDoE.

The research is not to be conducted during the fourth school term, except in cases where the KZNDoE deem it necessary to undertake research at schools during that period.

Should you wish to extend the period of research after approval has been granted, an application for extension must be directed to the Director: resource Planning.

The research will be limited to the schools or institutions for which approval has been granted.

A copy of the completed report, dissertation or thesis must be provided to the EMIS Directorate.

Lastly, you must sign the attached declaration that, you are aware of the procedures and will abide by the same.

for SUPERINTENDENT GENERAL
KwaZulu Natal Department of Education

06:48 0007

PROVINCE OF KWAZULU-NATAL
ISIFUNDAZWE SAKWAZULU-NATALI
PROVINSIE KWAZULU-NATAL

DEPARTMENT OF EDUCATION
UMNYANGO WEMFUNDO
DEPARTEMENT VAN ONDERWYS

Tel: 033 341 8523
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Pietermaritzburg
3200

228 Pietermaritz Street
Pietermaritzburg, 3201

INHLOKOHHOVISI PIETERMARITZBURG HEAD OFFICE

Enquiries:
Imibuzo: M Francis
Navrae:

Reference:
Inkomba:
Verwysing: 8224/06

Date:
Usuku:
Datum: 21/11/06

RE: PERMISSION TO CONDUCT RESEARCH

TO WHOM IT MAY CONCERN

This is to serve as a notice that Keshnie Lalbahadur has been granted permission to conduct research with the following terms and conditions:

- That as a researcher, he/she must present a copy of the written permission from the Department to the Head of the Institution concerned before any research may be undertaken at a departmental institution.
- Keshnie Lalbahadur has been granted special permission to conduct his/her research during official contact times, as it is believed that their presence would not interrupt education programmes. Should education programmes be interrupted, he/she must, therefore, conduct his/her research during nonofficial contact times.
- No school is expected to participate in the research during the fourth school term, as this is the critical period for schools to focus on their exams.

for SUPERINTENDENT GENERAL
KwaZulu Natal Department of Education

APPENDIX C

ASSENT FORM

TITLE OF RESEARCH PROJECT:
Understanding Youth Health Behaviour

Dear Participant

1. We are requesting your participation in this research study so that we can learn more about the behaviours that put your health at risk. The information you give will help us to develop better programmes to improve the health of young people like yourself.
2. The research will be conducted by Masters Clinical/Counselling Psychology students from the University of KwaZulu-Natal under the supervision of Prof. Petersen.
3. If you agree to participate in this study, you will be asked questions about your health behaviour. Your identity will be anonymous. Following analysis of the data the questionnaires will be destroyed.
4. If you agree to participate, you will contribute to increasing our understanding of risk influences for poor health amongst the youth. This will help us devise ways to reduce risk influences and strengthen protective influences.
5. You are free to withdraw at any stage from participating in the study.
6. You may ask any questions about the study. Prof. Petersen is available on 2607423 and Prof. Anna Meyer-Weitz on 2607618.
7. Signing your name at the bottom means you agree to participate in this study.

I, _____ agree to participate in the study investigating youth health behaviour. I understand that my participation is entirely voluntary and that I can withdraw at any time. If I have any questions after today, I can call Prof Petersen on 2607423 or Prof. Anna Meyer-Weitz on 2607618.

_____ _____

Participant signature Date

APPENDIX D

THE SOUTH AFRICAN YOUTH RISK SURVEY

The following questions are about health behaviour. Please read each statement carefully and place an X in the box next to the response that most describes you. **Please be sure to read each statement carefully.**

1. How old are you?

A	13 years old or younger
B	14 years old
C	15 years old
D	16 years old
E	17 years old
F	18 years old or older

2. What is your sex?

A	Female
B	Male

3. In what grade are you?

A	10^{th} grade
B	11^{th} grade
C	12^{th} grade

4. How do you describe yourself?

A	Black African
B	Asian/Indian
C	Coloured/Mixed Race
D	White

The category `race that is used in the questionnaire refers to a racial categorisation of a sector of the South African population that originated from the Apartheid era. I use the category `race in our present context in order to highlight its historical and socially constructed nature. This means acknowledging the history of prejudice and discrimination that was differentially suffered by people being labelled as `Indian', `Coloured', and `Black'. I do acknowledge that use of such categories risks perpetuating the practices that one seeks to eliminate, however it does have strategic value in our present context for historical and socio- economic redress initiatives.

The next 11 questions ask about violence-related behaviours

5. During the past 30 days, on how many days did you carry **a weapon** such as a gun, knife or club?

A	0 days
B	1 day
C	2 or 3 days
D	4 or 5 days
E	6 or more days

6. During the past 30 days, on how many days did you carry **a gun?**

A	0 days
B	1 day
C	2 or 3 days
D	4 or 5 days
E	6 or more days

7. During the past 30 days, on how many days did you **not** go to school because you felt you would be unsafe at school or on your way to or from school?

A	0 days
B	1 day
C	2 or 3 days
D	4 or 5 days
E	6 or more days

8. During the past 12 months, how many times has someone threatened or injured you with a weapon such as a gun, knife or club?

A	0 times
B	1 time
C	2 or 3 times
D	4 or 5 times
E	6 or 7 times
F	8 or 9 times
G	10 or 11 times
H	12 or more times

9. During the past 12 months, how many times has someone stolen or deliberately damaged your property such as your car, clothing, or books?

A	0 times
B	1 time
C	2 or 3 times
D	4 or 5 times
E	6 or 7 times
F	8 or 9 times
G	10 or 11 times
H	12 or more times

10. During the pasty 12 months, how many times were you in a physical fight?

A	0 times
B	1 time
C	2 or 3 times
D	4 or 5 times
E	6 or 7 times
F	8 or 9 times
G	10 or 11 times
H	12 or more times

11. During the past 12 months, how many times were you in a physical fight in which you were injured and had to be treated by a doctor or nurse?

A	0 times
B	1 time
C	2 or 3 times
D	4 or 5 times
E	6 or more times

12. During the past 12 months, did you ever hit, slap, or physically hurt your girlfriend or boyfriend on purpose?

A	Yes
B	No

13. During the past 12 months, did your boyfriend or girlfriend ever hit, slap, or physically hurt you on purpose?

A	Yes
B	No

14. Have you ever been physically forced to have sexual intercourse when you did not want to?

A	Yes
B	No

15. Have you ever physically forced someone to have intercourse with you when they other person did not want to?

A	Yes
B	No

The next 5 questions ask about sad feelings and attempts at killing oneself (suicide). Sometimes people feel so depressed about the future that they many consider attempting suicide that is, taking some action to end their own life.

16. During the past 12 months, did you ever feel so sad or hopeless almost every day for **two weeks or more in a row** that you stopped doing some usual activities?

A	Yes
B	No

17. During the past 12 months, did you ever **seriously** consider attempting suicide?

A	Yes
B	No

18. During the past 12 months, did you make a plan about how you would attempt suicide?

A	Yes
B	No

19. During the past 12 months, how many times did you actually attempt suicide?

A	0 times

B	1 times
C	2 or 3 times
D	4 or 5 times
E	6 or more times

20. If you attempted suicide during the past 12 months, did any attempt result in an injury, poisoning, or overdoes that had to be treated by a doctor or nurse?

A	**I did not attempt suicide** during the past 12 months
B	Yes
C	No

5 questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. For these questions, one drink of alcohol refers to one beer/cooler, one glass of wine or one tot of spirits.

21. Who influences you the most when it comes to drinking alcohol and taking drugs?

A	Parents or grandparents/guardians
B	Brothers/sisters
C	Friends
D	Other adults e.g., teachers

22. During your life, on how many days have you had at least one drink of alcohol other than a few sips?

A	0 days
B	1 or 2 days
C	3 to 9 days
D	10 to 19 days
E	20 to 39 days
F	40 to 99 days
G	100 or more days

23. How old were you when you had your first drink of alcohol other than a few sips?

A	I have never had a drink of alcohol other than a few sips
B	8 years old or younger
C	9 or 10 years old
D	11 or 12 years old
E	13 or 14 years old

F	15 or 16 years old
G	17 years old or older

24. During the past 30 days, on how many days did you have at least one drink of alcohol other than a few sips?

A	0 days
B	1 or 2 days
C	3 or 5 days
D	6 or 9 days
E	10 or 19 days
F	20 or 29 days
G	All 30 days

25. During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?

A	0 days
B	1 day
C	2 days
D	3 to 5 days
E	6 to 9 days
F	10 to 19 days
G	20 or more days

The next 10 questions ask about illegal drug use

26. Who do you consider to be the most influential people with regards to your behaviours around drug use?

A	Parents or grandparents/guardians
B	Brothers/sisters
C	Friends
D	Other adults e.g., teachers

27. During your life, how many times have you used marijuana/dagga?

A	0 times
B	1 or 2 times
C	3 to 9 times
D	10 to 19 times

E	20 to 39 times
F	40 to 99 times
G	100 or more times

28. During your life, how many times have you used mandrax or white pipe?

A	0 times
B	1 or 2 times
C	3 to 9 times
D	10 to 19 times
E	20 to 39 times
F	40 or more times

29. During your life, how many times have you used **any** form of cocaine, crack cocaine or rocks?

A	0 times
B	1 or 2 times
C	3 to 9 times
D	10 to 19 times
E	20 to 39 times
F	40 or more times

30. During your life, how many times have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?

A	0 times
B	1 or 2 times
C	3 to 9 times
D	10 to 19 times
E	20 to 39 times
F	40 or more times

31. During your life, how many times have you used **methamphetamines** (also called speed, whites, crystals, tik, tuk or meth)?

A	0 times
B	1 or 2 times
C	3 to 9 times
D	10 to 19 times
E	20 to 39 times
F	40 or more times

32. During your life, how many times have you used **"sugars"** (a mixture of cocaine, heroine and rat poison)?

A	0 times
B	1 or 2 times
C	3 to 9 times
D	10 to 19 times
E	20 to 39 times
F	40 or more times

33. During your life, how many times have you used **ecstasy?**

A	0 times
B	1 or 2 times
C	3 to 9 times
D	10 to 19 times
E	20 to 39 times
F	40 or more times

34. During your life, how many times have you taken **steroid pills or shots** without a doctor's prescription?

A	0 times
B	1 or 2 times
C	3 to 9 times
D	10 to 19 times
E	20 to 39 times
F	40 or more times

35. During your life, how many times have you used a needle to inject any **illegal** drug into your body?

A	0 times
B	1 time
C	2 or more times

The next 11 questions ask about sexual behaviour?

36. Which of the following views about sex are supported most by your friends?

A	Abstinence (not having sex at all)
B	Use of a condom every time you have sex
C	Use of a condom only with someone you do not know
D	Not using a condom at all

37. Who do you consider to be the most influential people with regards to your sexual behaviours?

A	Parents or grandparents/guardians
B	Brothers/sisters
C	Friends
D	Other adults e.g., teachers

38. Have you ever had sexual intercourse?

A	Yes
B	No

39. How old were you when you had sexual intercourse for the first time?

A	I have never had sexual intercourse
B	11 years old or younger
C	12 years old
D	13 years old
E	14 years old
F	15 years old
G	16 years old
H	17 years old or older

40. During your life, with how many people have you had sexual intercourse?

A	I have never had sexual intercourse
B	1 person
C	2 people
D	3 people
E	4 people
F	5 people
G	6 or more people

41. During the past 3 months, with how many people did you have sexual intercourse?

A	I have never had sexual intercourse
B	I have had sexual intercourse, but not during the past 3 months
C	1 person
D	2 people
E	3 people

F	4 people
G	5 people
H	6 or more people

42. Did you drink alcohol or use drugs before you had sexual intercourse the **last time?**

A	I have never had sexual intercourse
B	Yes
C	No

43. The **last time** you had sexual intercourse; did you or your partner use a condom?

A	I have never had sexual intercourse
B	Yes
C	No

44. The **last time** you had sexual intercourse, what **one** method did you or your partner use to **prevent pregnancy?** (Select only one response)

A	I have never had sexual intercourse
B	No method was used to prevent pregnancy
C	Birth control pills
D	Condoms
E	Depo-Provera (injectable birth control)
F	Withdrawal
G	Some other method
H	Not sure

45. Have you ever been pregnant?

A	Never
B	Pregnant once
C	Pregnant more than once

46. Have you ever made someone pregnant?

A	Yes
B	No

APPENDIX E

THE ROSENBERG SELF-ESTEEM SCALE

The following questions are about how you feel about yourself. Please read each statement carefully one by one. If the statement definitely does not describe your feelings about yourself, place an X in the box indicating DEFINITELY NOT TRUE next to this statement. If the statement does not describe how you feel about yourself, place an X in the box indicating NOT TRUE next to the statement. If the statement partly describes how you feel about yourself, place an X in the box indicating PARTLY TRUE next to the statement. If the statement definitely describes how you feel about yourself, place an X in the box indicating DEFINITELY TRUE next to the statement. **Please be sure to read each statement carefully.**

Statement	**Definitely not true**	**Not True**	**Partly true**	**Certainly True**
1. I feel that I am a person of worth, at least on an equal basis with others				
2. I feel that I have a number of good qualities				
3. All in all, I am inclined to f eel that I am a failure				
4. I am able to do things as well as most other people				
5. I feel that I do not have much to be proud of				
6. I take a positive attitude toward myself				
7. On the whole I am satisfied with myself				
8. I wish I could have more respect for myself				
9. I certainly feel useless at times				
10. At times I think I am no good at all				

APPENDIX F

THE GENERAL SELF-EFFICACY SCALE

The following questions are about how you feel about yourself. Please read each statement carefully one by one. If the statement definitely does not describe your feelings about yourself, place an X in the box indicating DEFINITELY NOT TRUE next to this statement. If the statement does not describe how you feel about yourself, place an X in the box indicating NOT TRUE next to the statement. If the statement partly describes how you feel about yourself, place an X in the box indicating PARTLY TRUE next to the statement. If the statement definitely describes how you feel about yourself, place an X in the box indicating DEFINITELY TRUE next to the statement. **Please be sure to read each statement carefully.**

Statement	**Definitely Not True**	**Not True**	**Partly True**	**Certainly True**
1. I can always manage to solve difficult problems if I try hard enough				
2. If someone opposes me, I can find the ways and means to get what I want.				
3. It is easy for me to stick to my aims and accomplish my goals.				
4. I am confident that I could deal efficiently with unexpected events.				
5. Thanks to my resourcefulness, I know how to handle unforeseen situations				
6. I can solve most problems if I invest the necessary effort				
7. I can remain calm when facing difficulties because I can rely on my coping abilities				
8. When I am confronted with a problem, I can usually find several solutions				
9. If I am in trouble, I can usually think of a solution.				
10. I can usually handle whatever comes my way				