

**THE ROLE OF ATTITUDES IN THE INTENTION TO PARTICIPATE IN
HIGH RISK SEXUAL BEHAVIOUR WITHIN THE ADOLESCENT GROUP**

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Assignment presented in partial fulfillment of the requirements for the degree of
Master of Philosophy (HIV/AIDS Management) at Stellenbosch University



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DECLARATION

I, the undersigned, hereby declare that the work contained in this assignment is my own original work, and that I have not previously, in its entirety or in part, submitted it at any university for a degree.

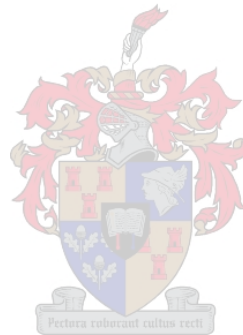
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ABSTRACT

Eighty-four males and sixty-six female subjects participated in a survey that assessed their attitude towards the intention to participate in high-risk sexual behaviour (i.e. sex without condom use) and the perception that participating in high risk sexual behaviour can lead adversely to HIV infection. All the subjects were randomly selected to fall into the age group ranges of 17-18, 19-20 and > 20. The output of the descriptive statistics revealed that there is a statistically significant main effect for gender, however there was no significant difference in the effect of age on the intention to participate in high-risk sexual behaviour (without condom use) for males and females. The descriptive analysis also revealed that there is a statistically significant main effect for age, and also the interaction between gender and age indicates a significant difference in the effect of age on the perception that the intention to participate in high risk sexual behaviour can lead to HIV-infection for males and females.

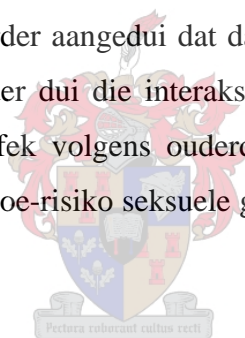


OPSOMMING

'n Steekproef van vier-en-tagtig seuns en ses-en-sestig meisies het deelgeneem aan n gevalle studie o.a. 'n opname om hul houding te assesser m.b.t. hul voorneme om deel te neem aan hoe- risiko seksuele gedrag (seks sonder kondoom gebruik) asook die persepsie dat die deelname aan hoe –risiko seksuele gedrag kan lei tot Miv-infeksie. Al die individue was ewe-kansig geselekteer om onder die ouderdomsgroepe 17-18, 19-20 en > 20 te resorteer.

Die uitslae van die beskrywende statistiek het aangedui dat daar is n` statistiese betekenisvolle hoof effek wat geslag betref, maar daar was geen betekenisvolle verskil in die effek volgens ouderdom m.b.t. die voorneme om deel te neem aan hoe- risiko seksuele gedrag (seks sonder kondoom gebruik) vir seuns en meisies.

Die beskrywende analise het verder aangedui dat daar is n` statistiese betekenisvolle hoof effek vir ouderdom. Verder dui die interaksie tussen geslag en ouderdom n` betekenisvolle verskil in die effek volgens ouderdom m.b.t. die persepsie dat die voorneme om deel te neem aan hoe- risiko seksuele gedrag kan lei tot Miv-infeksie vir seuns en meisies.



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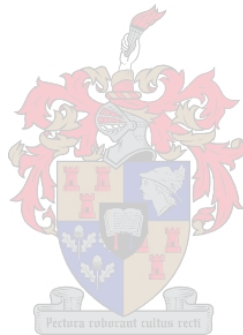


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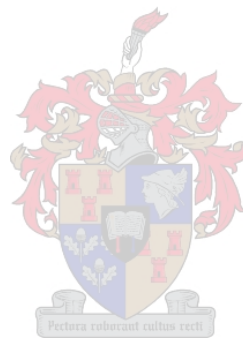
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1. Introduction

In recent years, the HIV and AIDS epidemic has gained tremendous ground in its quest to destruct, destroy and create havoc in the lives of people across the globe. AIDS has killed more than 25 million people since it was first recognised in 1981, making it one of the most destructive epidemics in recorded history (UNAIDS, 2005). Despite recent, improved access to antiretroviral treatment and care in many regions of the world, the AIDS epidemic claimed at least 3.1 million lives in 2005; more than half a million (570 000) of these deaths were children (UNAIDS, 2005). The total number of people living with HIV reached its highest level in 2005. An estimated 40.3 million people are now living with HIV with close to 5 million people being newly infected with the virus in 2005 (UNAIDS, 2005).

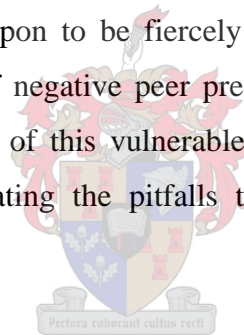
Sub-Saharan Africa remains hardest-hit by this epidemic and is home to some 25.8 million people living with HIV, which is almost one million more than in 2003 (UNAIDS, 2005). This represents two thirds of all people living with HIV. An estimated 2.4 million people died of HIV-related illnesses in this region in 2005, while a further 3.2 million became infected with HIV (UNAIDS, 2005). South Africa presently, can be regarded as a country with the one of the largest HIV-positive populations. Based on antenatal data, it is estimated that 6.29 million South Africans were HIV positive at the end of 2004 (AVERT, 2005).

This current situation can be considered alarming and extremely disturbing to say the least. This deadly disease is having a snowball effect in South Africa, impacting negatively on society, the private and public sectors and the community at large. It is a particularly damaging development in the labour and economic sectors where large amounts of financial resources are put into place to cover the resulting losses of production and to compensate for the slow growth rate.

Pressure groups, faith based organisations and the media are constantly seeking answers and new avenues in the hope of finding solutions and interventions that can be used to combat this disease. Despite the huge and intensive HIV and Aids awareness campaigns and educational promotions of abstinence and condom use, the

HIV incidence rate amongst the adolescent group shows a consistent increase, hence the identification of this group as a vulnerable group in terms of high risk sexual activities. Recent research, according to the South African Statistics Association has indicated that deaths among young adults have more than doubled between 1997 and 2002, but the government's official statistics agency is cautious about blaming HIV/AIDS for this trend. Various indicators show that deaths caused by the virus are steadily increasing and many believe that we have entered a very critical phase of the disease's onslaught.

The adolescent stage has long been regarded by social researchers and psychologists as a stage that is characterised by many challenges and changes both on the emotional, cognitive, social and physical fronts. It is further characterised by the identity crisis that is often experienced by adolescents (Pretorius, 1998). This is a crucial phase that can almost be considered as a "make or break" phase where especially the attitude of the individual must be called upon to be fiercely steadfast and firm to be able to withstand the total onslaught of negative peer pressure and adverse influences that impacts negatively on the lives of this vulnerable group. Positive decision-making will go a long way in eradicating the pitfalls that lingers in the way of these developing adults.



The question can thus be asked as to the possible reason why the intention to participate in high-risk sexual behaviour remains high amongst the teenager and adolescent groups. The aim of this research is therefore to scrutinize within adolescents the role that attitudes play in the intention to participate in high-risk sexual behaviour (i.e. sex without the use of a condom) and also to assess the perception whether the intention to participate high-risk sexual behaviour can lead to HIV-infection.

One of the factors that can significantly influence both attitude and the intention to participate in high-risk behaviour is *perceived risk*. Fazio and Zanna (1981, p.56) states that rather than asking whether attitudes relates to behaviour, we should ask, "Under what conditions do what kinds of attitudes of what kinds of individuals predict what kinds of attitude?" Fazio and Powell (1981) further emphasises the influence of

the overall person's character as an important factor in the extent to which attitude is related to direct behaviour. They reiterated that the more a person is intrinsically motivated and makes independent decisions without the aid of outside sources (i.e. has an internal locus of control) the more he/she will show a strong attitude to behaviour relationship. A person who is affected more by outside or external sources or cues (i.e. eccentrically motivated and external locus of control) will likely have a weak attitude to behaviour relationship. Other factors, e.g. the norms of society also come into play within this relationship. Here one can cite the impact of peer pressure, the use of substances like alcohol and drugs that can adversely affect an individual's decision- making skill.

2. Literature Study

The following section provides an overview of the relevant literature pertaining to this topic. As the purpose of this study was to investigate the role of attitude in the intention to participate in high-risk sexual behaviour, it is thus important to highlight some definitions of this construct.

2.1. Defining Attitude

Thomas and Znaniecki (1918) view attitude as a process of individual consciousness, which determines real or possible activity of the individual counterpart of the social value, activity in whatever form. It can also be acknowledged as a more or less permanently enduring state of readiness of mental organisation, which predisposes an individual to react in a characteristic way to any object or situation with which it is related (Cantrill, 1934). Allport (1967, p. 320) proposed a similar notion when he defined attitude as "...a mental and neutral state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's responses to all subjects and situations with which it is related." He was very strongly asserting the "reality" of attitudes, "they really are there, inside us ..., somewhere." An attitude is always an attitude towards something, such as a person or group or idea, and that "something" is conventionally referred to as the attitude object.

Bogardus (1931) reiterates the fact that attitude is a tendency to act toward or against

something in the environment which becomes thereby a positive or negative value. He states further that an attitude characteristically provokes behaviour that is acquisitive or avertive, favourable or unfavourable, affirmative or negative toward the object or class of objects with which it is related. Thurstone (1932, p.56) accordingly defines an attitude as, "...the effect for or against a psychological object."

2.2 Consequences of Sexual Behaviour as an Anticipated Risk

Fishbein (1962) first started thinking about the role attitudes play in influencing behaviours in the early 1960`s and in the 1970`s. Ajzen joined him and together they collaborated and developed the *Theory of Reasoned Action* and the *Theory of Planned Behaviour* (Fishbein & Ajzen, 1967).

As early as the year 1862, psychologists began developing theories showing how attitude impacted on behaviour. Between the years 1918 and 1925 many new theories started emerging and it consistently suggested that attitudes could explain human actions. (Ajzen & Fishbein, 1980). As these theories started featuring prominently, Allport (1935) theorised that the attitude behaviour relationship was not one-dimensional as previously thought, but rather multi-dimensional. Attitudes were viewed as complex systems made up of the persons beliefs about the object, his feelings toward the object and his action tendencies with respect to the object. As these developments unfolded, Fishbein and Ajzen (1980) joined forces to explain ways to predict behaviours and outcomes. They assumed that individuals are usually quite rational and make systematic use of information available to them. People considered the implications of their actions before they decide to engage in a given behaviour (Ajzen & Fishbein et al, 1980).

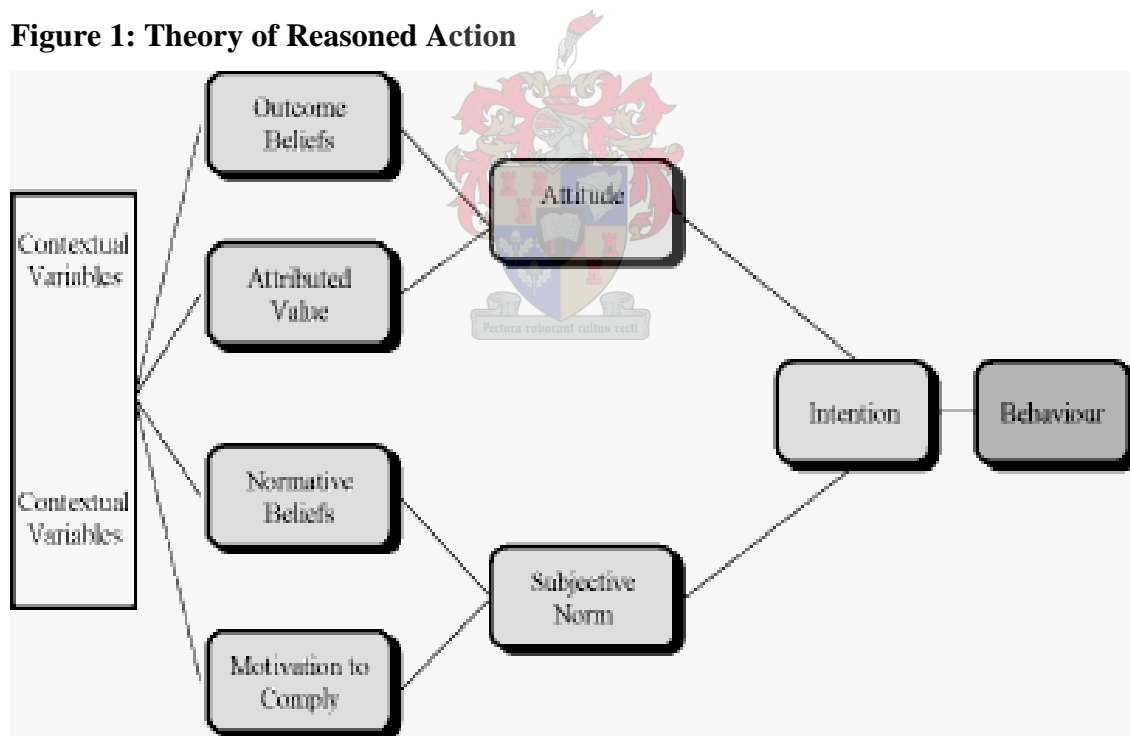
Some of the characteristics and key terms for the Theory of Reasoned Action is that it provides a frame a framework to study attitude toward behaviours. According to the theory, the most important determinant of a person`s behaviour is behavioural intent. The individual`s intention to perform behaviour is a combination of attitude toward performing the behaviour and subjective norm. The individual`s attitude toward the behaviour includes, behavioural belief, evaluations of behavioural outcome, subjective norm, normative beliefs and the motivation to comply.

For instance, if a person anticipates that the outcome from performing behaviour is positive, he/she will have a positive attitude before performing that behaviour. The opposite can also be stated that if the behaviour is thought to be negative, the fact that knowing that the chances of contracting life threatening diseases when participating in high risk sexual behaviour can be considered as a vital determinant in making crucial decisions. For the purpose of this study the role of attitude towards the intention to participate in high risk sexual behaviour will be measured.

2.3 Theoretical Model and Measurement of Intention

For the measurement of intention, the Attitude-toward-Behaviour measure is considered together with additional aspects in a model referred to as the Theory of Reasoned Action. Ajzen and Fishbein (1980) present the following graphic representations of the Theory of Reasoned Action (see Figure 1 below).

Figure 1: Theory of Reasoned Action



Source: Ajzen and Fishbein (1980)

The additional factor that will be taken into consideration in determining intention, referred to as the subjective norm, points to the social pressures that are exerted on an individual to perform or not to perform a specific behaviour. In the case of

adolescents, it can be referred to as the effects of peer group pressure.

3. Research Objectives

The current research was initiated by the constant rise of HIV-infection amongst adolescents despite vigorous intervention methods like comprehensive media HIV/AIDS awareness campaigns as well as educational information presentations in magazines, newspapers and booklets.

Review of current information suggests that attitude, as a function of HIV risk perception is a significant factor influencing the intention to participate in high-risk sexual behaviour. It is also important to note that attitude can play a crucial role in determining future intention to participate in high-risk sexual behaviour, especially amongst the adolescent group. The adolescent group is a vulnerable group in terms of the challenges they face during their emotional, physical and cognitive development Pretorius (1988).

The main objectives of this research was therefore to gauge adolescent's attitudes towards participating in high-risk sexual behaviour, as well as the role that their perception of the level of adverse consequences that would follow from such behaviour plays in these attitudes.

This information was sought as it could be used to investigate the intention to participate in high-risk sexual behaviour with the objective to reduce HIV-infection. Secondly, the research outcome can be used to plan and strategise intervention methods that will equip adolescents to face the many challenges they face regarding this important issue.

This research therefore proposes that the perception of adverse consequences like HIV-infection following from high risk sexual behaviour is a significant determinant in attitude relating to the intention to participate in high-risk sexual behaviour.

4. Research Methodology

The following section will deal with the chosen research methodology and sampling procedure used in the present study.

4.1 Research Design

The descriptive research approach attempts to provide an accurate description of a particular situation or phenomenon and tries to identify what exists between variables. Because the variables of interest are not subject to direct manipulation, the survey method and more specifically an ex post facto research design was used in this study. Cristensen (2004) states that a survey is a widely used non-experimental research technique. Kerlinger (1992) identifies several weaknesses that accompany the use of survey methods including low response frequency and incomplete response information. An educator was used to reduce the effect of the above limitations, as he was available to hand out questionnaires and to answer any enquiries from the respondents.

4.2 Sampling Procedure

The sample comprised of a group of 150 matriculants (i.e. scholars that are currently in their 12th year of schooling) sourced from different schools in Port Elizabeth. A simple random sampling method was used to ensure that each of the approximately 200 matriculants have an equal probability of being selected for the sample. Acquiring a list of the matriculants and choosing 150 respondents randomly ensured that any biases be eradicated. The objective was also to ensure that the group is equivalent on a particular characteristic to reduce any extraneous factors that might have an impact. On this particular aspect it is important that the subjects must be matched on the basis of their socio-economic status, hence the selection of no particular high school in this low socio- economic area. Demographic factors such as race, age, ethnicity, geographic location was considered during sampling, in order to get a focused result from a specific group. The characteristics of the sample is summarised in Table 1 below.

Table 1: Demographics of the Sample

		Frequency	Percentage
AGE	>20	18	12
	17-18	81	54
	19-20	51	34
GENDER	Female	66	44
	Male	84	56

It can be seen from Table 1 that the largest group of respondents was between 17 and 20 years of age, which is the age a learner would be when they are in their twelfth year of schooling. All the respondents came from the black race group and all represent the Xhosa ethnic group, confirming their home language as Xhosa.

4.3 Data Gathering

Data was gathered using a questionnaire intended to elicit responses from the responders. Before initiating the study, the life-skills educator was briefed on the specific purpose of the survey and the specific research problem that will be assessed. The educator liaised with the principal and a subsequent staff meeting was held to decide on whether any ethical issues such as personal rights and privacy of the participants would be compromised in the exercise. It was decided to conduct the survey on the condition that all the data remained confidential, that no names are attached and that the group of respondents be debriefed afterwards.

All questionnaires regarding the measurement of the intention and attitude were adapted to fit guidelines as set out by Ajzen and Fishbein (1980). Questions measuring intention and attitude were presented as statements utilising the scale format as described by Thurstone (1929). Respondents were asked to select a response on a seven point Likert-type scale. Attitude questionnaire items were formulated to trigger responses regarding the possible consequences of interacting in high-risk sexual behaviour. This corresponds to the possibility of certain outcomes as a result of behaviour as proposed by Fishbein and Ajzen (1980). Thus the measure was calculated from the behaviour questionnaire. A copy of the questionnaire may be found in Addendum A.

4.4 Statistical Analysis

The SPSS (version 13) program was used for the statistical analyses and included the calculation of descriptive statistics, Pearson Correlations Coefficients, t-tests, and Analysis of Variance. The SPSS program was also used to provide an indication of the power of the t-test that was conducted, taking into account effect size and sample size.

5. Results

The following section summarises the results of this research obtained for the two variables in question (i.e. 1. intention to participate in high risk sexual behaviour, and 2. the perception that the participation in high risk sexual behaviour can lead to HIV infection).

5.1 Descriptive Statistics

The following descriptive statistical results were obtained with the *intention to participate in high risk sexual behaviour* variable:

- The age group >20 indicated a positive skewness (0,667), indicating scores clustered to the left at the low values. The kurtosis value points to below 0 (-1,179) indicating a distribution that is relatively flat (i.e. many cases in the extremes).
- The age group 17-18 indicated a positive skewness (2,150) indicating scores clustered to the left at the low values. The kurtosis value points to above 0 (3,919) indicating a distribution that is rather peaked (clustered in the centre).
- The age group 19-20 indicated a positive skewness (1,069) indicating scores clustered to the left of the low values. The kurtosis value points to below 0 (-0,120) indicating a distribution that is relatively flat (many cases in the extremes).

The descriptive results on the *perception that the participation in high-risk sexual behaviour can lead to HIV infection* yielded the following results:

- The age group >20 indicated a negative skewness (-0,766) indicating a clustering of scores at the high end (right hand side). The kurtosis value points to below 0 (-1,248) indicating a distribution that is relatively flat (many cases in the extremes).
- The age group 17-18 indicated a negative skewness (-2,719) indicating a clustering of scores at the high end. The kurtosis value points to above 0 (6,804) indicating a distribution that is rather peaked in the centre.
- The age group 19-20 indicated a negative skewness (-0,960) indicating a clustering of scores at the high end. The kurtosis value points to above 0 (0,230) indicating a distribution that is rather peaked in the centre.

The descriptive results on the *intention to participate in high-risk sexual behaviour* according to *gender* heeded the following results:

- The results for females indicated a positive skewness (0,695) indicating scores clustered to the left at the low values. The kurtosis values points to below 0 (0,057) indicating a distribution that is relatively flat (many cases in the extremes).
- The results for males indicated a positive skewness (2,7630) indicating scores clustered to the left at the low values. The kurtosis value points to above 0 (7,582) indicating a distribution that is rather peaked in the centre.

The descriptive results on the *perception that the participation in high-risk sexual behaviour can lead to HIV infection* also according to *gender* heeded the following results:

- The results for females indicated a negative skewness (-0,952) indicating a clustering of scores at the high end. The kurtosis value points to below 0 (-0,162) indicating a distribution that is relatively flat (many cases in the extremes).
- The results for males indicated a negative skewness (-2,790) indicating a clustering of scores at the high end. The kurtosis value points to above 0

(8,678) indicating a distribution that is rather peaked in the centre.

Furthermore, in order to determine whether there is significant difference in the mean *intention to participate in high risk sexual behaviour without condom use* and the *perception that the intention to participate in high risk behaviour can lead to HIV-infection* for *age*, it is necessary to scrutinise the scores as derived from the descriptive statistics of output.

The mean statistics for the *intention to participate in high-risk sexual behaviour* on age decreases: >20 ($\underline{M}= 2.77$, $\underline{SD}= 1.9$) and 19-20 group ($\underline{M}=2.19$, $\underline{SD}=1.54$) and 17-18 group ($\underline{M}=1.67$, $\underline{SD}=1.40$), thus indicating more variability exists among the higher age group. As can be seen in the mean statistics for *perception that the intention to participate in high risk behaviour can lead to HIV-infection* on age, it increases, >20 group ($\underline{M}=5.55$, $\underline{SD}=1,7$), 19-20($\underline{M}=5.62$, $\underline{SD}=1.5$) 17-18 group ($\underline{M}=6.3$, $\underline{SD}=2.2$) thus indicating more variability exists among the lower age group.

The test of normality by means of the Kolmogorov-Smirnov test heeded the following result. The significance value for *intention to participate in high-risk sexual behaviour*: > 20 group was, 0,002 and for *perception that the intention to participate in high-risk behaviour can lead to HIV-infection* >20 = 0,001 indicating a value less than 0,05 suggesting a violation of the assumption of normality. For the age groups 17-18 and 19-20, on both *intention to participate in high risk sexual behaviour* and *perception that the intention to participate in high risk behaviour can lead to HIV-infection*, the sig. value was 0,000 suggesting a violation of the assumption of normality.

As can be seen in the mean statistics for the *intention to participate in high-risk sexual behaviour* on *gender*, it decreases females ($\underline{M}=2.5$, $\underline{SD}=1,76$) and males ($\underline{M}=1.5$, $\underline{SD}=1.20$) thus indicating more variability exist with the females. This may indicate that females are more vulnerable than males.

The mean statistics for the *perception that high risk sexual behaviour can lead to HIV-infection* on *gender* increases, females ($\underline{M}=5.4$, $\underline{SD}=1.8$) and males ($\underline{M}=6.5$, $\underline{SD}=1.10$) thus indicating a more variability exists with the males, thus indicating that

males can be more aware that high risk sexual behaviour can lead to HIV infection.

The test of normality by means of the Kolmogorov-Smirnov test heeded the following result. The significance value for *intention to participate in high risk sexual behaviour* and *perception that the intention to participate in high risk behaviour can lead to HIV- infection* for females and males indicate a value of 0.00, which is less than 0.005 suggesting a violation of the assumption of normality. This is regarded as common in social research (Christensen, 2004)

5.2 Pearson Correlation Coefficients

When the results obtained from the two variables were correlated with one another, a Pearson Correlation coefficient of -0.466 ($p < 0.01$) was found. The two variables are therefore quite strongly negatively related. This would indicate that the higher a person's *perception that the intention to participate in high risk behaviour can lead to HIV- infection*, the lower the person's *intention to participate in high risk sexual behaviour* would be.

5.3 Independent samples t- tests

An independent samples t-test was conducted to compare the *intention to participate in high-risk sexual behaviour* scores for males and females. There was a significant difference in scores for males ($\underline{M}=1.52$, $\underline{SD}= 1.20$) and females ($\underline{M}= 2.5$, $\underline{SD}= 1.7$); $t(150) = - 4,329$ ($p=0.000$; 2-tailed). The magnitude of the difference in the means had a large effect (eta squared = 0,11), meaning only 11% of the variance in the intention to participate in high-risk sexual behaviour can be explained by gender.

$$\begin{aligned} \text{Eta squared} &= \frac{t^2}{t^2 + (n + n - 2)} = \frac{(-4,3)^2}{(-4,3)^2 + (84 + 66 - 2)} \\ &= \frac{18,49}{18,49 + (148)} \\ &= \frac{18,49}{166,49} \\ &= 0,11 \end{aligned}$$

Source : Christensen

An independent samples t-test was conducted to compare the *perception that the intention to participate in high-risk behaviour can lead to HIV- infection* scores for males and females. A significant difference in scores was found for males (\underline{M} =6.51, \underline{SD} =1.10) and females (\underline{M} =5.4, \underline{SD} =1,83); $t(150) = 4,553$, ($p=0,00$; 2 tailed). The magnitude of the difference in the means had a large effect (eta squared= 0,12), meaning only 12% of the variance in the perception that the participation in high-risk sexual behaviour can lead to HIV-infection can be explained by gender.

$$\begin{aligned}
 \text{Eta squared} &= \frac{t^2}{t^2 + (n+n-2)} &= & \frac{(4,553)^2}{(4,553)^2 + (84 + 66 - 2)} \\
 & &= & \frac{20,729}{(20,729) + (148)} \\
 & &= & \frac{20,729}{168,729} \\
 & &= & 0,12
 \end{aligned}$$

Source : Christensen

5.4 Univariate Analysis of Variance: Two-way ANOVA Test

A two-way between-groups analysis of variance was conducted to explore the impact of gender and age with regard to the *intention to participate in high-risk sexual behaviour without condom use* as measured by the questionnaire. Provision for three different groups, namely, 1) >20, 2) 17-18 and 3) 19-20 were made. There was a statistically significant main effect for gender [$F(2,144) = 10.2$, $p=0,002$], however the effect size was small (eta squared = 0,06) meaning only 6% of the variance in the intention to participate in high-risk sexual behaviour can be explained by gender.

Post hoc comparisons using the Turkey HSD test indicated that the mean score for the 17-18 group (\underline{M} =1.67, \underline{SD} =1.4) and the > 20 group (\underline{M} =2.7, \underline{SD} =1.9) was significantly different ($p \leq 0.01$), meaning the null hypothesis can be rejected.

The mean score for the 17-18 age group (\underline{M} =1.67, \underline{SD} =1.4) and 19-20 group (\underline{M} =2.1, \underline{SD} =1.5) as well as the > 20 group (\underline{M} =2.7, \underline{SD} =1.9) and the 19-20 group (\underline{M} =2.1, \underline{SD} =1,5) showed no significant difference (sig.0,119, and 0,314 respectively)

showing that the null hypothesis for age can be accepted. The interaction between gender and age is not significant (Gender*Age : $p= 0,69$). This indicates that there is no significant difference in the effect of age on the intention to participate in high-risk sexual behaviour without condom use for males and females.

A two-way between-groups analysis of variance was conducted to explore the impact of gender and age with regard to the perception that the *intention to participate in high risk sexual behaviour can lead to HIV-infection* as measured by the questionnaire. Provision for three different age groups namely, > 20 , 17-18 and 19-20 were made during the sampling process. The group includes 66 females and 84 males.

There was a statistically significant main effect for gender [$F(1,144) = 15,123, p=0,00$], however the effect size small ($\eta^2=0,09$), meaning only 9% of the variance in the perception that to participate in high risk sexual behaviour can lead to HIV-infection can be explained by gender.

There was also a statistically significant main effect for age [$F(2,144) = 3,128, p=0,04$], however the effect size small ($\eta^2=0,04$), meaning only 4% of the variance in the perception that to participate in high risk sexual behaviour can lead to HIV infection can be explained by age.

Post-hoc comparisons using the Turkey HSD test indicated that the mean score for the 19-20 group ($\underline{M}=2.1, \underline{SD}=1.5$) and the 17-18 group ($\underline{M}=1.67, \underline{SD}=1.4$) showed a significant difference ($p= 0.011$), meaning the null hypothesis could be rejected.

The other groups, >20 ($\underline{M}=2.7, \underline{SD}=1.9$) and 17-18 groups ($\underline{M}=1.67, \underline{SD}=1.4$) as well as the 19-12 group ($\underline{M}=2.1, \underline{SD}=1.5$) and the >20 group ($\underline{M}=2.7, \underline{SD}=1.9$) showed no significant difference ($p= 0,073$ and $0,98$ respectively).

The interaction between gender and age is significant (Gender* Age: $p= 0.03$). This indicates that there is a significant difference in the effect of age on the perception that the intention to participate in high-risk sexual behaviour can lead to HIV-infection for males and females.

6. Discussion

Referring to the *intention to participate in high-risk sexual behaviour* variable according to age, the results seem to suggest more variability exist among the higher age groups. This could indicate that the higher age group show more intention to participate in high-risk sexual behaviour.

Secondly, referring to the same variable according to gender, more variability exists with the females than the males. This can be an indication that females are more aware of the risks of high-risk sexual behaviour than males.

Referring to the variable that the perception to participate in high-risk sexual behaviour can lead to HIV infection according to age, the results suggested more variability exists among the lower age group. This could mean that the lower age groups are more vulnerable and are uninformed about the consequences of high-risk sexual behaviour.

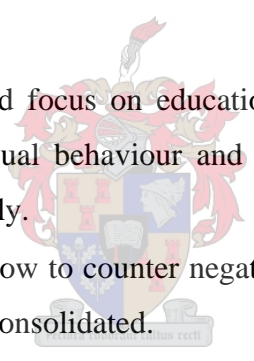
Secondly, referring to the same variable according to gender, the results suggests there are more variability among the males than the females suggesting that males are more vulnerable regarding the perception that high risk sexual behaviour can lead to HIV infection.

7. Conclusions and Recommendations

The results derived from the descriptive statistics indicate clearly that age and gender are important factors that need to be considered when planning and strategizing intervention programs and awareness campaigns with regard to the dangers of high risk sexual behaviour as well as the adverse effects and consequences that can become a reality, like HIV-infection or sexual transmitted diseases. It is important to take cognisance of the fact that the sample was derived from the Xhosa youth group and that the results therefore impacts only on that specific group. In order to get a more comprehensive and informative statistics, it is recommended that future studies should involve other population groups. Although the new curriculum at schools makes

provision for life skills training on issues such as HIV-infection, there is still a vacuum that needs to be filled. There is not enough guidance and leadership from educators that focus specifically on the problems that the adolescents experience. Secondly, there is a lack of multi-disciplinary teams at the secondary schools that includes psychologists, social workers, medical care assistants that can form a formidable team to address the challenges and problems that adolescents face.

It is also imperative to be aware that the higher age group 18-> 20 filter into Universities or the work fields without support and educational exposure on issues such as high-risk behaviour and HIV infection. Some workplaces lack structured educational facilities to make vital provision for clear guidance and information sessions that will equip young adults adequately. Some of the important recommendations that can be considered as important and need serious consideration, are the following:

- 
- Secondary schools should focus on educational programs that highlight the dangers of high risk sexual behaviour and HIV-infection and implement it vigorously and consistently.
 - Life-skills programs on how to counter negative peer pressure on these issues should be increased and consolidated.
 - Universities and work fields should have more structured newcomer programmes on high-risk sexual behaviour and the dangers of HIV-infection in order to make them more responsible employees.
 - Safety and wellness programs must be enforced as specially for the young employees. Companies must invest in human capital in order for their businesses to be sustained
 - Faith-based organisations must play a more leading role in educating young adults so that they can contribute to uplifting their peers in the fight against HIV-infection.

Lastly, it is also of utmost importance to recognize the fact that our focus must shift to changing the attitudes of our adolescent grouping. The educational information should

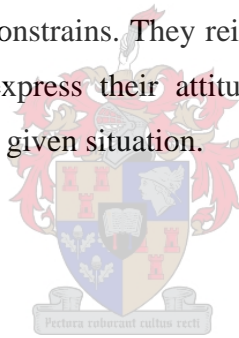
be designed to focus on methods on how to change the attitudes of this vulnerable group to an earlier age so that individuals will be able to stand firm and steadfast against social pressures such as peer group pressure and other influences when they are confronted with life changing decisions.

Through skill-based education, the primary objective should be to change the adolescents level of knowledge and also to enhance his or hers ability to translate that knowledge into specific attitudes that will lead to positive behaviours.

It is also imperative to identify and highlight different factors that impacts on attitudinal aspects in order to make way for positive intervention.

Ajzen and Fishbein identify the following aspect:

1. The issue of situational constrains. They reiterate the fact that it is sometimes difficult for people to express their attitudes because doing so would be contrary to the norms in a given situation.



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ADDENDUM A

This questionnaire forms part of a survey conducted in order to gather information as part of a research proposal prepared for M.Phil degree. The contents of the questionnaire will be treated as highly confidential and no names, places or schools for that matter will be attached to the outcome of results in any circumstances. Participation is voluntary and students have the option to decide whether they want to participate.

1. Tick the appropriate block when filling in the following details .As mentioned, the information is confidential and you remain anonymous as no names are attached. As far as possible, give an honest opinion.

- | | | | | | |
|-------------------|---------|-----------|---------------|-------|-------|
| a. Age: | 17-18 | 19-20 | Older than 20 | | |
| b. Gender: | Male | Female | | | |
| c. Race: | White | Black | Coloured | Asian | |
| d. Ethnic group: | Xhosa | Zulu | other | | |
| e. Home language: | English | Afrikaans | Xhosa | Zulu | other |

2. We live in a modern society where we are bombarded by information and education on the HIV/Aids pandemic, sex, condom use and other important issues. Tick according to your honest opinion, **ONLY ONE** answer that immediately comes to mind after reading these statements.

The intention to participate in high-risk sexual behaviour without condom use can be considered as:

1. Extremely high-risk behaviour that will have a tremendous neg. consequence on a person's life.
2. Fairly high-risk behav. that can have a neg. consequence on a persons life
3. Risky behaviour that is not so dangerous.
4. Normal behaviour that is okay.
5. Behaviour that will cause minimum negative consequences.
6. Behaviour that will have absolutely no neg. consequence on a persons life.
7. Behaviour that will not dent a person's image in society.

The intention to participate in high risk sexual behaviour can lead to:

1. a 100% chance of HIV-infection.
2. a 80% chance of HIV-infection
3. a 60% chance of HIV infection
4. a 50% chance of HIV infection
5. a 40% chance of HIV infection
6. a 20% chance of HIV infection
7. a 0% chance of HIV infection

Thanks for your participation in this research project, it is greatly appreciated.