

**AN HIV/AIDS INTERVENTION PROGRAMME TO CHANGE KNOWLEDGE,  
ATTITUDES, AND BEHAVIOUR OF MEMBERS OF THE SOUTH AFRICAN POLICE  
SERVICE**

**BY**

**LESIBA SAMUEL MAPHOSO**

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MAY 2008

## **DECLARATION**

I hereby declare that this thesis is the result of my independent investigations except where I have indicated my indebtedness to other sources.

I hereby certify that this thesis has not already been accepted in substance for any other degree, and is not submitted concurrently for any other degree.

.....

**Lesiba Samuel Maphoso**

**(Candidate)**

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## ABSTRACT

The purpose of this study was to investigate if there is any change in the HIV/AIDS knowledge, attitude, and behaviour of the South African Police Service's (SAPS) employees after attending the HIV/AIDS intervention programme. One hundred and eight employees who attended the HIV/AIDS awareness workshop participated as experimental group (n=51) while those who attended the suicide prevention and disability workshop participated as control group (n=57). Pre-tests were administered before the workshops to all participants while the post-tests were administered after the workshops. The results were analysed using 2(Group: Experimental versus Control Group) x 2(Time: Pre-test versus Post-test, a repeated measure) Analyses of Variances (ANOVA).

The research findings showed that there was a significant change in HIV/AIDS knowledge after employees have attended the HIV/AIDS awareness workshop. Results also indicated that there was a significant mean score difference in HIV/AIDS knowledge among the rank groups (Administration, Junior, and senior) with administration and junior employees having more HIV/AIDS knowledge than senior employees. There was also a significant mean score difference in HIV/AIDS attitude among ranks with employees in the senior ranks having less positive attitudes than the employees in the administration and junior ranks. There was a significant interaction between the ranks and the time of testing because those in higher ranks had higher gains in knowledge than those in lower ranks.

In terms of HIV/AIDS knowledge among age groups, the study revealed that there was a significant main effect of age group (22-33, 34-43, 44 and over years) with older people having less HIV/AIDS knowledge than younger employees. There was also a significant main effect of age group and attitude, with employees of 44 years and over having less favourable HIV/AIDS attitudes than employees in the 22-33 and 34-43 years groups.

The study also suggested that further study should look in the problems encountered at implementing the HIV/AIDS intervention programmes and also at what is causing the gap in HIV/AIDS knowledge and attitude among age and rank groups.

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## CHAPTER 1

### 1 INTRODUCTORY ORIENTATION

#### 1.1 INTRODUCTION

AIDS is a pandemic that is posing major challenges in the world today (Chinery-Hesse, 2000:1). The South African government, however, strengthened HIV/AIDS intervention programmes and strategies to fight the pandemic after President Thabo Mbeki committed the government to the partnership against HIV/AIDS during a historic speech on the 09 October 1998 (Beukes, 1999:1). According to the Government Communication and Information System (GCIS) (2003:2), strategies that were directed included HIV/AIDS prevention and awareness programmes, care and support programmes, involvement/ participation within HIV structures, and the prevention of mother-to-child transmission of HIV/AIDS through intensified effort towards universal access to Nevirapine. The task of implementing these strategies lies with the government departments.

The Department of Health is tasked with the responsibility of coordinating these strategies to all departments, including non-government institutions (Worldbank, 2001:2). Business institutions also have the duty to implement HIV/AIDS policy in their workplace. According to GCIS (2003:2), all sectors of government and other stake holders in civil society should be involved in combating HIV/AIDS through intervention programmes. The problem facing the stakeholders in the HIV/AIDS fraternity is whether the implementation of these intervention programmes serves their purpose (i.e., combating the spread of HIV/AIDS, providing knowledge necessary to fight the

pandemic, changing employees' attitudes towards infected and affected employees, changing employees' risky behaviour towards sexual behaviour, etc).

The researcher became aware of the problems from the experience he has as an employee in the Employee Assistance Services (EAS). In the researcher's organisation, the EAS was the sub-component of the Human Resource Management that was involved with the implementation of the HIV/AIDS programmes of the government through Social Work Services sub-unit. HIV/AIDS workshops were run regularly by the Social Work Services sub-unit, to educate employees in the organisation about HIV/AIDS. Researchers discovered that there is a relationship between HIV/AIDS interventions and knowledge, attitude, and behaviour (Kennedy, Mizuno, Hoffman, Baune, & Strand, 2000:236; MacNair-Semands, Cody, & Simono, 1997:734; and Sikkema, Winett, & Lombard, 1995:155).

It is not clear whether these interventions can yield the results they are supposed to yield, especially in the South African Police Services (SAPS) of the Limpopo Province. A verbal communication with Beukes, the HIV/AIDS Programme Manager in the SAPS in the Limpopo Province, maintained that there was no statistics or feedback regarding the effect of these HIV/AIDS intervention programmes (HIV/AIDS awareness workshops) on knowledge, attitudes, and behaviour related to HIV/AIDS issues. The studies that were conducted somewhere as reflected in chapter three of this study, cannot be extrapolated to the SAPS in the Limpopo Province because Limpopo Province is predominantly rural with lack of modern facilities and healthcare services as compared to other provinces such as Gauteng, Kwa-Zulu Natal and Eastern Cape. The province is also dominated by many ethnic groups from the amalgamation of three erstwhile provinces of Lebowa, Venda, and Gazankulu, being the Pedi, Venda, and the

Tsonga respectively. It also has the Coloured, Afrikaners, and few Indians who are employed in the SAPS. It was ranked number seven among the nine provinces on the estimated HIV prevalence among the antenatal clinic attendees in 2006 (see Table 1.1).

There are also limited studies which investigated the employees' knowledge, attitude, and behaviour change all in one study with a proper control group after the introduction of HIV/AIDS intervention programmes (See tables 3.1; 3.2; and 3.3). A proper control group is a group which is identical to the treatment group in every single way except that the control group does not get the treatment (Carroll, 2005:1). The experimental group, on the other hand, is the group that gets the treatment, which in this study, is the HIV/AIDS intervention programmes. As such, the experimental group in this study is the group that attended the HIV/AIDS awareness workshop, while the control group is the group that attended the suicide prevention and disability workshops that are not related to HIV/AIDS intervention. This kind of research (with control group and which measured knowledge, attitude, and behaviour all in one study) was never conducted in the SAPS of the Limpopo Province and is something that gives this study its uniqueness.

.  
Do the HIV/AIDS interventions add HIV/AIDS knowledge to the employees in South Africa Police Service in the Limpopo Province? Do they change attitude of the SAPS's employees towards HIV/AIDS related issues? Do these HIV/AIDS interventions change behaviour of SAPS employees towards HIV/AIDS related issues? Would these changes be significantly higher than changes that might occur due to the passage of time?



Based on the fact that not all employees in the workplace had been exposed to HIV/AIDS intervention programme(s), as verbally states by Beukes, this research investigated if there was differences in the HIV/AIDS knowledge, attitude, and behaviour among employees before they were exposed to HIV/AIDS intervention programme(s) and after they were exposed to such programme(s). It also investigate if these HIV/AIDS knowledge, attitude, and behaviour differ significantly among gender, ranks, and age groups.

## **1.2 PREVALENCE**

According to United Nation Programme on HIV/AIDS (UNAIDS) (2003:37), there were between 79000 and 12 million adults and children estimated to be living with Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome (HIV/AIDS) at the end of 2003. In Western Europe and Eastern Europe, the numbers were 520000 to 680000 and 1,2 to 1,8 million, respectively. The numbers were lower in South and East Asia, which were 4,6 to 8,2 million. Australia and the New Zealand had the least population estimated to be living with HIV/AIDS at 12000 to 18000 (UNIAID, 2003:37).

According to the South Africa HIV & AIDS Statistics (2008:1-9), the HIV/AIDS prevalence percentage among antenatal clinic attendees in South Africa for the year 2001 was 24.8%, and it increased to 29.1% in 2006 (see Table 1.1). For the Limpopo Province the prevalence percentage in 2001 was 14.5%, which increased to 20.7% in 2006. The highest prevalence percentage ever recorded was the Kwa-zulu Natal Province at 33.5% in 2001 and 30.1% in 2006.

*Table 1.1 Estimated HIV prevalence among antenatal clinic attendees, by province*

<b>Province</b>	<b>2001 prevalence %</b>	<b>2002 prevalence %</b>	<b>2003 prevalence %</b>	<b>2004 prevalence %</b>	<b>2005 prevalence %</b>	<b>2006 prevalence %</b>
KwaZulu-Natal	33.5	36.5	37.5	40.7	39.1	39.1
Mpumalanga	29.2	28.6	32.6	30.8	34.8	32.1
Free State	30.1	28.8	30.1	29.5	30.3	31.1
Gauteng	29.8	31.6	29.6	33.1	32.4	30.8
North West	25.2	26.2	29.9	26.7	31.8	29.0
Eastern Cape	21.7	23.6	27.1	28.0	29.5	29.0
Limpopo	14.5	15.6	17.5	19.3	21.5	20.7
Northern Cape	15.9	15.1	16.7	17.6	18.5	15.6
Western Cape	8.6	12.4	13.1	15.4	15.7	15.2
National	24.8	26.5	27.9	29.5	30.2	29.1

Table 1.2 indicates that the prevalence percentage for women between 20 and 34 years of age was 28.5% in 2001 which increased to 34.6% in 2006. Between the age of 35 and 39 the prevalence percentage was 19.3% in 2001 and 29.6% in 2006. For the women of 40 years and above the prevalence was at 9.8% in 2001 and 21.3% in 2006. The prevalence implies that women at the middle age (between 20 and 34 years) in South Africa are more infected by HIV/AIDS than younger and older women.

*Table 1.2 Estimated HIV prevalence among antenatal clinic attendees, by age*

<b>Age group (years)</b>	<b>2001 prevalence %</b>	<b>2002 prevalence %</b>	<b>2003 prevalence %</b>	<b>2004 prevalence %</b>	<b>2005 prevalence %</b>	<b>2006 prevalence %</b>
<20	15.4	14.8	15.8	16.1	15.9	13.7
20-24	28.4	29.1	30.3	30.8	30.6	28.0
25-29	31.4	34.5	35.4	38.5	39.5	38.7
30-34	25.6	29.5	30.9	34.4	36.4	37.0
35-39	19.3	19.8	23.4	24.5	28.0	29.6
40+	9.8	17.2	15.8	17.5	19.8	21.3

Table 1.3 shows that males are less infected by HIV/AIDS than women. The prevalence percentage among males is estimated at 8.2% from the total number of 6342 surveyed while women are estimated at 13.3 from the total number of 9509 surveyed.

*Table 1.3 Estimated HIV prevalence among South African by gender*

<b>Sex and Race</b>	<b>Number surveyed</b>	<b>Prevalence %</b>
Male	6,342	8.2
Female	9,509	13.3

With the above prevalence showing an increase in the spread of HIV/AIDS from 2001 to 2006, HIV/AIDS intervention programmes need to be implemented and evaluated to investigate their effectiveness in changing people’s knowledge, attitude, and behaviour towards HIV/AIDS activities.

### **1.3 STATEMENT OF THE PROBLEM**

Strategies for combating HIV/AIDS within SAPS seem to be taking place. While the major objective of these intervention programmes is to combat the spread of HIV/AIDS in the workplace, this objective cannot be achieved if employees’ mindset is not changed. The HIV/AIDS intervention strategy of the government signals very clearly that education about HIV/AIDS is one of the key components in managing the pandemic. Employees need to be educated on HIV/AIDS related issues so they may have more knowledge, which may then change their attitude towards HIV/AIDS matters and people living with HIV/AIDS (Andeki, Klepp, Seha, & Leshabari, 1994:190). The positive attitude can pave the way to behavioural change that is needed to combat the spread of HIV/AIDS, especially in the workplace. That is why, the effectiveness of these

HIV/AIDS intervention programmes in changing the knowledge, attitude, and behaviour of employees needed to be investigated.

The problem statement of this study is: Do HIV/AIDS interventions programmes change HIV/AIDS knowledge, attitude, and behaviour; and do these affective factors (knowledge, attitude, and behaviour) differ significantly among SAPS employees who have attended the HIV/AIDS intervention programme and those who have not?

#### **1.4 AIMS AND OBJECTIVES**

This study has both the aims and objectives, which follow:

##### **1.4.1 Aim**

The primary aim of this study was to investigate whether there was any change in knowledge, attitude, and behaviour of SAPS employees in the Limpopo Province after undergoing training provided by an HIV/AIDS intervention programme.

##### **1.4.2 Objectives**

- (a) To present a comprehensive summary of the HIV/AIDS intervention programmes in the SAPS.
- (b) To find out the level of knowledge, attitude, and behaviour of SAPS members before undergoing HIV/AIDS intervention programme.
- (c) To investigate the change in knowledge, attitude, and behaviour in the SAPS members after the HIV/AIDS intervention programme.
- (d) To find out whether or not there were significant differences in HIV/AIDS knowledge, attitude, and behaviour among the employees of different sexes, age groups and ranks in the SAPS

## **1.5 LITERATURE REVIEW**

The literature review focused on the theoretical background on HIV/AIDS intervention, knowledge, attitudes, and behaviour as well as the studies that were done, both internationally and locally.

### **1.5.1 The theoretical background**

Intervention, knowledge, attitude, and behaviour have their origin from certain theoretical background as illustrated by many researches and psychologists in the behavioural sciences.

#### **1.5.1.1 Intervention**

According to Matsakis (2005:2) an intervention is a deliberate process by which change is introduced into people's thoughts, feelings, and behaviors. It can be seen as the underlying "process outcomes" the consultant is seeking in an intervention (valid and useful information, free choice, and internal commitment). When designing or choosing an intervention, theory can show what factors should be targeted and where to focus interventions? Theories can help define the expected outcome of an intervention for evaluation purposes (Gandelman & Freedman, 2002:1).

Matsakis (2005:2) maintains that there are generally four basic orientations in interventions: simple, crisis, classical, and family system interventions.

Simple intervention takes place when just a simple request from someone who matters can change the person. Simple intervention asks the person to do or not to do a particular thing. When members of the community are told not to have unprotected sex, simple intervention is involved. A crisis intervention is the polar opposite of the simple

intervention. Crisis interventions occur in dangerous situations involving reckless driving, weapons, hospital emergency rooms, violence or threats of violence, or ignorance to HIV/AIDS. A crisis often creates golden opportunities for family members to help someone to accept help. In the *classical intervention*, the immediate goal is for the individual to enter treatment, hopefully soon. People are encouraged to do voluntary counseling and testing (VCT) to know their HIV/AIDS status so that early interventions to them can be undertaken. A family systems intervention focuses on the family. The goal is for everyone in the family to change their ways, at least with regards to the self-destructive behavior, knowing that this changed behavior will have a tremendous influence on the family member.

This study focuses on HIV/AIDS intervention as its independent variable. HIV/AIDS intervention is an intervention directed at HIV/AIDS activities, which in this study takes the form of HIV/AIDS awareness workshop employed by the SAPS.

#### 1.5.1.2 Knowledge, attitude, and behaviour change

According to Klausmeier (1985:35), knowledge calls for the student to learn information and either to recall or to recognize it at a later time. The recall may be of specific facts, methods, or principles. Arends (1988:263) mentioned that there are two types of knowledge: declarative knowledge, which is about something (e.g., HIV/AIDS); and procedural knowledge, which is knowledge on how to do something (e.g., skills and techniques of combating the spread of HIV/AIDS). Declarative knowledge is the verbal information while procedural knowledge is the knowing how (Gagne, 1985:154). Gagne also mentioned that classical conditioning, reinforcement, and human modeling are ways of learning or approaches to knowledge acquisition. According MacNair-Semands *et al.* (1997:735), knowledge can be changed through learning. Knowledge is a reflection of memory. Memory on the other hand, is one way to demonstrate your

knowledge (Wierson & Bright, 1996:263). Knowledge can also be changed by communication (Jenkins, Manopaiboon, Samuel, Jeeyapant, Carey, Kilmarx, Uthaivoravit, & van Grienseven, 2002:33).

On the other hand, attitude is initially learned and subsequently modified in several ways. For example, observing and imitating others, conditioning, or gaining information are all ways to change attitude (Klausmeier, 1985:387). According to Bornstein, Scull, and Chicken (1991:685), the relationship between behaviour and attitude and what occur when they are inconsistent can be addressed by cognitive dissonance theory. Cognitive dissonance is the perception of incompatibility between two cognitions, where "cognition" is defined as any element of knowledge, including attitude, emotion, belief, or behavior. The theory of cognitive dissonance states that contradicting cognitions serve as a driving force that compels the mind to acquire or invent new thoughts or beliefs, or to modify existing beliefs, so as to reduce the amount of conflict between cognitions (Griffin, 1997:16).

Attitude can also be studied from self-perception theory, which focuses on how an individual perceives himself/herself in comparison with his/her environment (Bornstein, *et al.* 1991:686). Attitude varies from positive to negative and it can be organized by learning or knowledge (Gagne, 1985:219). Behr (1983:38) maintained that attitude is highly resistant to change. This may point out how difficult it is to change people's attitude towards HIV/AIDS affected and infected people.

Finally, behavioural theories emphasise the way in which behaviour is changed over time and ways in which individuals modify their behaviour (Slavin, 1994:152). A

meaningful behaviour change is brought about by the ability of a teacher/actor to arrange the proper sequence of reinforcement (Springhall & Springhall, 1981:279).

The HIV/AIDS intervention, which takes the form of HIV/AIDS awareness workshop, is a means of attempting to change knowledge, attitude, and behaviour. This is in line with the problem statement which seeks to find answers as to whether the HIV/AIDS intervention can change HIV/AIDS knowledge, attitude, and behaviour of SAPS employees.

### **1.5.2 Literature review on HIV/AIDS intervention and psychological factors**

Internationally, research on HIV/AIDS interventions in relation to knowledge, attitude, and behaviour had already been done. To obtain information on the students' knowledge, attitudes, beliefs and practices in relation to HIV/AIDS, and to get some insight into the students' attitudes, beliefs, and behaviour regarding sexuality, Parajuli (1996:1) recommended that peer group education approach (type of HIV/AIDS intervention programme) is needed. Parajuli further revealed that qualitative research is needed to investigate the reasons for strong negative attitudes towards people with AIDS. This research was done on 883 students from Pokhara, using the Knowledge, Attitude, and Behaviour Practice Questionnaire (KABPQ) to collect data. Kore, Pandola, Nemade, Putharaya, and Ambiyé (2004:1) found that students' knowledge towards people living with HIV/AIDS was grossly inadequate. Students' attitudes towards people living with HIV/AIDS remained rather negative and this was unexpected (Tebourski & Alaya, 2004:2). They further explained that knowledge was associated with the lower score regarding misconception, but knowledge did not increase students'



positive attitude to people with HIV/AIDS significantly. Thus, knowledge was necessary but not sufficient for attitude change to occur.

In South Africa, the Department of Health, maintained that sound knowledge and positive attitude may be the most powerful weapons one can give to the people affected by HIV/AIDS (Seta, 2003:59). Negative attitudes can encourage the spread of HIV. Negative attitudes manifest in the people who still believe that only those who are gays, promiscuous, prostitutes, black, white, drug users, or young are at risk of HIV/AIDS. This misconception can be the result of lack of knowledge. According to Cherian (2005:36), education and the modification of behaviour is the most hopeful approach to the prevention of AIDS. In developing a workplace HIV/AIDS programme, the company needs to educate all employees on HIV/AIDS to prevent infections and to ensure sustained skill development. People should be trained for behaviour change, and also in attitude. It is important that people do not discriminate against people who are HIV positive, they create environments for people living with AIDS, and they treat women equally. They should not think that it is right to overpower or coerce anyone sexually (Seta, 2003:72). Seta further mentioned that the HIV/AIDS programmes are based on the rationale that HIV/AIDS prevention is most effective when learners have the opportunity to acquire functional knowledge about HIV/AIDS, consider choices that support healthy behaviour related to HIV/AIDS, and develop and practice skills that support those choices.

In government institutions, policy is designed to govern practice, particularly in sensitive or important areas. The South African Department of Labour (DoL) requires that each workplace develops a policy to deal with HIV/AIDS. The discussion below illustrates the

HIV/AIDS interventions programmes in the South African Police services (SAPS), at present, as well as the objectives of these intervention programmes.

#### 1.5.2.1 The HIV/AIDS intervention programmes in the SAPS

The South African Police Services (SAPS) implemented the combating of HIV/AIDS programmes during 1999, by fully acknowledging the need for a comprehensive HIV/AIDS awareness and prevention programme (Beukes, 2003:3). Presently the SAPS is implementing condom distribution and provision, peer education, general awareness on HIV, and the Sexually Transmitted Illnesses (STIs) prevention and occupational transmission of HIV/AIDS programmes as HIV/AIDS intervention programmes (Wayers, 2002:25). Furthermore, there are support groups that have been established in various provinces (including the Limpopo Province) in the SAPS to HIV/AIDS infected and affected employees (Beukes, 2003:3). To show that management cares and supports employees, the SAPS implemented a Voluntary Counseling and Testing (VCT) programme where members make use of clinics, hospitals or nearby VCT sites in the Employees Assistance Services (EAS) in the Department (Wayers, 2002:28). The SAPS also launched Provincial and Area Forums to support and to monitor the implementation of the HIV programme. It also networks with other bodies at National, Provincial, and Area levels. Beukes (2003:3) said that these networking bodies include the Inter-Departmental Committee, South Africa Civil Military Alliance, National Association of People Living with HIV/AIDS (NAPWA), and also the labour unions (e.g., POPCRU and SAPU).

The purpose of these HIV/AIDS intervention programmes is to equip people with skills and knowledge pertaining to HIV/AIDS related issues, to promote and to develop positive attitudes and values, and to introduce effective measures (behaviour change)

to prevent the spread of HIV through behavioural changes (Beukes, 2003:3). Beukes further stated that the effectiveness of these intervention programmes in terms of affecting the above affective factors was, however, never investigated in the SAPS.

## **1.6 RESEARCH QUESTIONS AND HYPOTHESES**

The main research question for this study is:

What are the impacts of HIV/AIDS intervention programmes within the SAPS in Limpopo Province?

The sub-questions, which will be investigated and analysed, are as follow:

- 1.6.1 Will there be a significant change in people's knowledge towards HIV/AIDS related issues after they have attended an HIV/AIDS intervention programme?
- 1.6.2 Will there be a significant change in people's attitude towards HIV/AIDS related issues after they have attended an HIV/AIDS intervention programme?
- 1.6.3 Will there be a significant change in people's behaviour towards HIV/AIDS related issues after they have attended an HIV/AIDS intervention programme?
- 1.6.4 Will there be a significant difference in HIV/AIDS knowledge between males and female employees before and/or after attending the HIV/AIDS intervention programme?
- 1.6.5 Will there be a significant difference in HIV/AIDS attitudes between males and female employees before and/or after attending the HIV/AIDS intervention programme?

- 1.6.6 Will there be a significant difference in HIV/AIDS behaviour between males and female employees before and/or after attending the HIV/AIDS intervention programme?
- 1.6.7 Will there be a significant difference in HIV/AIDS knowledge among employees' ranks before and/or after attending the HIV/AIDS intervention programme?
- 1.6.8 Will there be a significant difference in HIV/AIDS attitudes among employees' ranks before and after/or attending the HIV/AIDS intervention programme?
- 1.6.9 Will there be a significant difference in HIV/AIDS behaviour among employees' ranks before and after/or attending the HIV/AIDS intervention programme?
- 1.6.10 Will there be a significant difference in HIV/AIDS knowledge among employees' age groups before and/or after attending the HIV/AIDS intervention programme?
- 1.6.11 Will there be a significant difference in HIV/AIDS attitudes among employees' age groups before and/or after attending the HIV/AIDS intervention programme?
- 1.6.12 Will there be a significant difference in HIV/AIDS behaviour among employees' age groups before and/or after attending the HIV/AIDS intervention programme?

The above research questions lead to the following research and null hypotheses:

H<sub>1</sub>1 There will be a statistically significant change in HIV/AIDS knowledge after employees have attended an HIV/ADS intervention programme.

H<sub>0</sub>1 There will not be a statistically significant change in HIV/AIDS knowledge after employees have attended an HIV/ADS intervention programme.

H<sub>1</sub>2 There will be a statistically significant change in HIV/AIDS attitudes after employees have attended an HIV/ADS intervention programme.

- H<sub>02</sub> There will not be a statistically significant change in HIV/AIDS attitudes after HIV/ADS intervention programme.
- H<sub>13</sub> There will be a statistically significant change in HIV/AIDS behaviour issues after HIV/ADS intervention programme.
- H<sub>03</sub> There will not be a statistically significant change in HIV/AIDS behaviour after HIV/ADS intervention programme.
- H<sub>14</sub> There will be a statistically significant difference in HIV/AIDS knowledge between male and female employees before and after attending the HIV/AIDS intervention programme.
- H<sub>04</sub> There will not be a statistically significant difference in HIV/AIDS knowledge between male and female employees before and after attending the HIV/AIDS intervention programme.
- H<sub>15</sub> There will be a statistically significant difference in HIV/AIDS attitudes between male and female employees before and after attending the HIV/AIDS intervention programme.
- H<sub>05</sub> There will not be a statistically significant difference in HIV/AIDS attitudes between male and female employees before and after attending the HIV/AIDS intervention programme.
- H<sub>16</sub> There will be a statistically significant difference in HIV/AIDS behaviour between male and female employees before and after attending the HIV/AIDS intervention programme.

- H<sub>0</sub>6 There will not be a statistically significant difference in HIV/AIDS behaviour between male and female employees before and after attending the HIV/AIDS intervention programme.
- H<sub>1</sub>7 There will be a statistically significant difference in HIV/AIDS knowledge among employees' ranks before and after attending the HIV/AIDS intervention programme.
- H<sub>0</sub>7 There will not be a statistically significant difference in HIV/AIDS knowledge among employees' ranks before and after attending the HIV/AIDS intervention programme.
- H<sub>1</sub>8 There will be a statistically significant difference in HIV/AIDS attitudes among employees' ranks before and/or after attending the HIV/AIDS intervention programme.
- H<sub>0</sub>8 There will not be a statistically significant difference in HIV/AIDS attitudes among employees' ranks before and/or after attending the HIV/AIDS intervention programme.
- H<sub>1</sub>9 There will be a statistically significant difference in HIV/AIDS behaviour among employees' ranks before and/or after attending the HIV/AIDS intervention programme.
- H<sub>0</sub>9 There will not be a statistically significant difference in HIV/AIDS behaviour among employees' ranks before and after attending the HIV/AIDS intervention programme.
- H<sub>1</sub>10 There will be a statistically significant difference in HIV/AIDS knowledge among

- employees' age groups before and after attending the HIV/AIDS intervention programme.
- H<sub>0</sub>10 There will not be a statistically significant difference in HIV/AIDS knowledge among employees' age groups before and after attending the HIV/AIDS intervention programme.
- H<sub>1</sub>11 There will be a statistically significant difference in HIV/AIDS attitudes among employees' age groups before and after attending the HIV/AIDS intervention programme.
- H<sub>0</sub>11 There will not be a statistically significant difference in HIV/AIDS attitudes among employees' age groups before and after attending the HIV/AIDS intervention programme.
- H<sub>1</sub>12 There will be a statistically significant difference in HIV/AIDS behaviour among employees' age groups before and after attending the HIV/AIDS intervention programme.
- H<sub>0</sub>12 There will not be a statistically significant difference in HIV/AIDS behaviour among employees' age groups before and after attending the HIV/AIDS intervention programme.

## **1.7 DEFINITION OF CONCEPTS**

Key concepts to be defined and how they are going to be used in this study are HIV/AIDS, knowledge, attitude, behaviour, and intervention. The theoretical exploration of these concepts will be presented in more detail in Chapter 2 while the empirical investigation will be done in Chapter 3.

### **1.7.1 HIV/AIDS**

HIV/AIDS consist of two concepts – HIV (Human Immune-Deficiency Virus) and AIDS (Acquired Immune- Deficiency Syndrome) and according to Nevid, Rathus, and Greene (1997:187), AIDS is a lethal condition caused by the human immune-deficiency virus.

### **1.7.2 Knowledge**

Hornby (2000:658) defines knowledge as the act of acquiring information about a particular fact or situation. The knowledge in this study, referred to the knowledge one had about HIV/AIDS.

### **1.7.3 Attitude**

According to Hilgard, Atkinson, and Atkinson (1979:527) an attitude is a like or dislike, a positive or negative evaluation about some aspect of the world. In this study attitude referred to attitude towards HIV/AIDS.

### **1.7.4 Behaviour**

Behaviour, according to Hornby (2000:92) is the way that people function in a particular situation. Behaviour that is related to HIV/AIDS in this study was examined in terms of what people said about the activities related to HIV/AIDS behaviour.

### **1.7.5 HIV/AIDS Intervention**

An HIV/AIDS intervention is a deliberate process by which HIV/AIDS change is introduced into people's thoughts, feelings and behaviors. Interventions include prevention and awareness programme, care and support programme, involvement/participation within HIV/AIDS structures programme, and prevention of



HIV/AIDS mother-to-child transmission programme. This study investigated the HIV/AIDS awareness workshop as an HIV/AIDS intervention.

## **1.8 DEMARCATION OF THE STUDY**

The study is limited to employees who are employed under the South African Police Services in the Limpopo Province of South Africa. These are employees who have attended the HIV/AIDS awareness workshop, which served as HIV/AIDS intervention programme, or the suicide prevention and the disability workshops. The results can therefore not generalize to all the people of South Africa.

## **1.9 PROGRAMME OF THE STUDY**

The programme of study indicated below summarises what is discussed in each of the remaining chapters, being chapter 2, 3, 4, 5, and 6.

Chapter 2, which is entitled '*The theoretical background on HIV/AIDS intervention, knowledge, attitude and behaviour,*' deals with all the theoretical aspects pertaining to intervention such as the reason, the types, requirements, and evaluation of intervention as well as interventions directed to HIV/AIDS. It also deals with the theoretical approach to the three affective factors, which are knowledge, attitude, and behaviour and how they can be changed through intervention programmes.

Chapter 3 is entitled '*The empirical literature review on HIV/AIDS intervention, knowledge, attitude, and behaviour.*' It deals with the research that was done on these concepts and it also gives the HIV/AIDS intervention programmes that are implemented in the South African Police Services for curbing the spread of HIV/AIDS and how other researchers related them to knowledge, attitude, and behaviour.

Chapter 4, which is entitled '*Research methods and procedure*', contains the hypotheses and discussions of the basic foundation of the study in terms of design, sampling, instrument, data collection, and statistical analysis.

Chapter 5 is called '*Results and discussions*' and it contain what this study intended to establish. In it, research questions and hypotheses are given and supported. Statistical tables and figures are given and are followed by the discussion. Hypotheses of statistical significant are explained in details and are compared with the theoretical and empirical evidence in chapters 2 and 3.

Chapter 6 is presented as '*Summary, conclusions, recommendations, and limitations.*' It contains the summary of this study, how the hypotheses lead to the conclusion, some recommendation derived from the findings, and statistical analysis. The chapter also suggests on future studies that can broaden this research, and it also gives the limitations that may have hampered this study.

## **1.10 CONCLUSION**

This quantitative study, which investigated the present HIV/AIDS intervention programmes implemented by the South African Police Services in the Limpopo province, also investigated whether attending those intervention programmes had any influence on the knowledge, attitude, and behaviour change of employees. This research may trigger other investigations that can contribute to the combat of HIV/AIDS. Results may not only be useful to SAPS employees in Limpopo Province or South Africa, but also to other provincial and national departments and to the international community.

## CHAPTER 2

### **2 THEORETICAL BACKGROUND ON HIV/AIDS INTERVENTION, KNOWLEDGE, ATTITUDE, AND BEHAVIOUR**

#### **2.1 INTRODUCTION**

This chapter deals with the definitions and theories related to HIV/AIDS intervention. This is done by giving the types of intervention, the intervention strategies, requirement of intervention, and the evaluation of intervention. It focuses on the three affective factors, which are knowledge, attitude, and behaviour. Definitions, types, and theoretical approaches are detailed as well as how affective factors are changed. The integration of common learning methods and theories that can change the above affective factors will also be explained.

#### **2.2 HIV/AIDS INTERVENTION**

According to Davis, Schneider, Rapholo & Everett (1998:130), HIV stands for the Human Immune-Deficiency Virus, and it is the cause of Acquired Immune Deficiency Syndrome, which is AIDS. It is one of the Sexually Transmitted Diseases (STD), meaning that it is mostly transmitted through unprotected sexual activities. HIV attacks and slowly destroys the immune system by entering and destroying important cells that control and support response systems called Cluster of differentiation 4 (CD4) (Davis, *et al.* 1998:130). This process makes it difficult for the body to defend itself from many infections and diseases. At this stage we talk about AIDS. The person can easily die from any diseases such as pneumonia, Tuberculosis (TB) or even flu if he/she is at this stage. To prevent the infection, the spread, and the deaths caused by this HIV/AIDS,

the South African government has developed some intervention programmes they hope will help to prevent, control, and monitor the existence of this pandemic.

According to Argyris (1973:15), intervention derives from the word 'intervene,' which is to enter into an ongoing system relationship between or among persons, groups, or objects, for the purpose of helping. HIV/AIDS intervention is therefore an ongoing system relationship aimed at helping people who are infected or affected by HIV/AIDS. Argyris maintains that intervention has a distinctive process, outcome, objectives, and protocol outlining the steps for implementation. HIV/AIDS Intervention is associated with response by stakeholder and the Global Programme on AIDS (GPA), which is the World Health Organisation's (WHO) intervention to the pandemic (HIV/AIDS) from the 1980s (Barnett & Whiteside, 2002:74). Today, international organizations such as WHO and United Nations Programme on HIV/AIDS (UNAIDS) and local ones such as National Association of People living with AIDS (NAPWA) and Khomanane are responding to the effect of HIV/AIDS by developing some interventions that are aimed at preventing the spread of this disease. To manage and control the spread of HIV/AIDS, there is a need for the implementation of HIV/AIDS intervention programmes. Someone may ask this question: "Why the intervention?" The following subsection can shed light on this question.

### **2.2.1 Reasons for intervention**

There are many reasons behind intervention. For instance, Argyris (1973:15) said that intervention programmes help people with their own decisions about the kind of help they need, and they coerce clients to do what the intervener wishes them to do. Argyris further said that the main aim of any intervention is to increase the client autonomy from dependent to independent.

Fisher (1997:5) demonstrated that intervention theories can be associated with the management of Sexually Transmitted Diseases/ Human Immune-Deficiency Virus (STD/HIV). In cases of pandemics such as malaria, polio, cholera, and other life threatening illnesses, intervention in the form of vaccination, medical distributions, and community health awareness workshops are implemented with the purpose of combating the spread and the prevention of the existence of such illnesses. Broadly speaking, intervention acts as a management of change and as a means of teaching and learning.

#### 2.2.1.1 Intervention as management of change

Intervention is essential for the management of change. Intervention means to take action in order to help to change something (Donald, Lazarus, & Lolwana, 2002:28). Intervention, according to Matsakis (2005:2), is a deliberate process by which changes are introduced into people's thoughts, feelings, and behaviour. Ajzen (2002:2) maintained that intervention is designed to change behaviour, and that it can be directed at one or more of its determinants: attitude, subjective norms, or perceptions of behavioural control. It is a specific activity intended to change knowledge, attitude, and behaviour practices of individuals and population to reduce their health risks (Hayes, 2005:4).

#### 2.2.1.2 Intervention as a means of teaching and learning

Intervention can take the form of teaching and learning, as is the case when human knowledge, attitude and behaviour are changed through educational awareness campaign, psychotherapy, hypnosis, counseling, and guiding (Wicks-Nelson & Israel 1984:318). Donald, et al. (2002:280) related intervention with change of people's lives

through learning. This is also shared by Fawcett, Suarez-Balcazar, Balcazar, White, Paine, Blanchard, and Embree (1994:25) who maintained that one important reason for intervention is to create means for improvement of community life, health, and well-being through educational awareness programmes. Most organisations have some employees' awareness programmes as an intervention for promoting healthy employees, especially towards HIV/AIDS related matters (Asmal, 2002:5; Beukes, 2003:3; & Simon-Meyer, 2000:14). These types of interventions are usually given to the psychologists and (or) social work professionals through the programmes known as Employees Assistant Programmes (EAP). In the South African Police Services (SAPS), this programme is called Employee Assistance Services (EAS). It was formally known as Helping Professionals. According to Collins, Cathercole, Conway, and Morris (1993:267), learning is not free from intervention, meaning that learning is affected by intervention.

## **2.2.2 Types of intervention**

As mentioned in chapter one, Matsakis (2005:2) maintained that there are generally four basic intervention orientations: simple, crisis, classical, and family system interventions. In this section, a brief explanation of these interventions will be given.

### **2.2.2.1 Simple intervention**

Simple intervention takes place when just a simple request from someone who matters can turn the tide. Simple intervention asks the person to do or not to do a particular thing. When members of the community are told to have protected sex in the form of condom usage, simple intervention is involved. It encourages members of the community to keep on talking about their health status so that their health is explored and investigated. In this way, people's knowledge, attitude, and behaviour can change.

#### 2.2.2.2 A crisis intervention

A crisis intervention is the polar opposite of the simple intervention. While simple intervention asks the person with problem to get help, crisis interventions occur in dangerous situations where there is no choice. It may involve reckless driving, weapons, hospital emergency rooms, violence or threats of violence, or ignorance to HIV/AIDS. Wick-Nelson and Israel (1984:319) state that crisis intervention is considered by many as an important part of preventive effort. Two kinds of crisis are developmental crisis and accidental crisis. Developmental crisis occurs at the transitions that mark the usual course of growth while accidental crises are precipitated by life hazards – natural disaster, the loss of loved one, and the emergence of the HIV/AIDS pandemic. Wick-Nelson and Israel (1984:319) said that a crisis often creates golden opportunities for family members to help someone to accept help.

#### 2.2.2.3 Classical intervention

The immediate goal of the classical intervention is for the individual to enter treatment soon. People are encouraged to do voluntary counseling and testing (VCT) to know their HIV/AIDS status so that early intervention can be undertaken. The best way to introduce classical intervention in the HIV/AIDS pandemic is to modify people's knowledge, and attitude towards HIV/AIDS related issues. People should be taught about the positive side about knowing their HIV/AIDS status, so that their psychological status should be positively changed.

#### 2.2.2.4 A family systems intervention

A family systems intervention focuses on the family. The goal is for everyone in the family to change their ways, at least in regards to the self-destructive behavior such as

having many sexual partners, knowing that this changed behavior will have a tremendous influence on the family member.

#### 2.2.2.5 Preventative/ prevention intervention

Preventative/ prevention intervention includes the action directed at removing the cause of problem (Donald, *et al.* 2002:28). This kind of intervention takes place during vaccination of diseases such as polio, mumps, and other life threatening diseases. Prevention intervention can also take the form of awareness campaign, peer group education, condom distribution, and workshops that help in combating the diseases such as HIV/AIDS, tuberculosis (TB), and sexually transmitted diseases (STD's).

### **2.2.3 Interventions directed to HIV/AIDS**

Although intervention can take the form of prevention, family, classical, crisis, and simple intervention towards HIV/AIDS pandemic there are intervention programmes that are used in the workplace to help people who are affected or infected by HIV/AIDS called HIV/AIDS intervention programmes. For an intervention to be properly implemented there should be some strategies, which are methods or approaches or strategies consistently used in the course of intervention (Hayes, 2005:4). HIV/AIDS prevention programmes employing a poly-theoretical approach could be effective in increasing talking about safer sex, possessing condoms and ultimately using condoms consistently (Norman & Carr, 2002:145).

National Education Policy Act 27 of 1996 stipulates that the HIV/AIDS management can develop a workshop policy on HIV/AIDS interventions. Other government institutions also developed the HIV/AIDS policy by developing intervention programmes. The SAPS, for instance, employed three intervention programmes to fight the spread of



HIV/AIDS among its members. They are the prevention programme, care and support programme, and involvement/participation within HIV and AIDS structures and organisations (Beukes, 2003:3).

#### 2.2.3.1 Prevention programmes

Under the prevention programme, most institutions, including SAPS, used three strategies to prevent the spread of HIV/AIDS which are the peer education programme, condom distribution, and the HIV/AIDS awareness programme. Each is described in the sections that follow:

##### (a) Peer education programme

A peer education programme is performed when peer educators who are employees (or members of employees' families) provide information and education to fellow workers, their families, or community members (Davis, *et al.* 1998:58). Campbell (2004:197) said that peer education should provide a context in which group of peers can collectively negotiate their peer identities based on the assumption that sexuality is shaped by peer norms and by individual decision. Peer educators need to have the age, language, social, and work status corresponding to some degree with those of co-workers. In most cases they perform on voluntary basis and they should be trained by relevant bodies on HIV/AIDS matters. The syllabus covered in the peer education include how HIV is transmitted, safer sex, condom usage and where to find it, attitudes, myths and misconception about HIV/AIDS, and legal and ethical issues related to HIV/AIDS.

There is evidence that shows that peer education programmes influence knowledge change (Morisky, Nguyen, Ang, & Tiglaio, 2005:57 and Osowole & Oladepo, 2000:93).

Peer education programmes also change attitudes (Ruijter, 2001:1 & Advocate for Youth Fact Sheet, 2002:2). They also demonstrated that they can influence behaviour change (Bhardwaj, Hinds, and Bain, 2004:6 & Richie & Adelaide, 1994:164).

(b) Condom distribution programme

Government organisations employ the condom distribution strategy based on the fact that an increase in the number of condoms distributed, occurring together with the decrease in the incidence of STD and HIV, could indicate that employees are changing their sexual practices as a result of the education programme (Davis, *et al.* 1998:61). In the organisations such as SAPS, condoms are available free of charge in the province, areas, and stations. Employees are encouraged to use condoms effectively and consistently. This can be done by providing education on condom usage, providing accessible condoms, and marketing of both the male and female condoms (Beukes 2005:5).

When a condom is readily available, it can lead an individual to enquire about its purpose, which in turn can lead to knowledge about it. A condom distribution programme, therefore, may bring a significant improvement in the condom knowledge (Dancy, Marcantonio, & Norr, 2000:119). According to Coyle, Kirby, Parcel, Basen-Enguist, Banspach, Ruggs, and Weil (1996:542), condom use promotes positive attitude. It may also promote positive behaviour and safer sex (Jemmott, Jemmott, and Fong, 1989:1529).

(c) HIV and AIDS awareness programme

The awareness programme strategy is employed with the belief that a well informed employee understands clearly how the AIDS virus is transmitted, and what activities

and interactions are safe. Activities included in the awareness campaign are HIV/AIDS workshops, celebrating World AIDS day, celebrating candlelight day, celebrating condom week, and AIDS Memorial Day (Mabusela, 2006:2). There are also workshops on positive living where employees are taught how to live a happy life even if they are infected or affected. They are also taught about the food and activities that are available that can help them cope with the after effect of HIV/AIDS.

Items of HIV/AIDS intervention programmes, according to Kuhn, Steinberg, and Mathews (1994:164), include knowledge about how HIV is transmitted and attitudes towards HIV/AIDS. People can increase protective sexual behaviour and prevention sexual behaviour after attending some HIV/AIDS prevention interventions programmes (Dancy, *et al.* 2000:113).

#### 2.2.3.2 Care and support programmes

Care and support for people with HIV has lagged behind awareness and prevention activities. This was noted by UNAIDS and the Nelson Mandela Foundation in Kerry (2006:7). The Khomanane Brochure on Caring for People with HIV and AIDS mentions that a care and support programme is based on the fact that people need to show love, respect, and support to those who are affected or infected by HIV/AIDS. The services offered by this intervention programme include home nursing care, day care, short term treatment, and counseling and support. The SAPS employs a care and support programme using two strategies, namely, HIV and AIDS support groups for affected SAPS members and voluntary counseling and testing (Beukes, 2003:2). Davis, *et al.* (1998:69) assumed that the provision of 'managed care' for employees with HIV/AIDS includes frequent visits by general practitioners, counselling, appropriate use of

relevant investigations and appropriate preventive, and therapeutic interventions and palliative care.

(a) HIV and AIDS support groups for affected SAPS employees

The care and support programmes aim at keeping the employees as healthy as possible, and therefore, as productive as possible for as long as possible. For those who are infected or affected, there are counseling services which not only provide information, but also enable the person to choose various options while providing a psychologically and emotionally supportive relationship. Girma and Schietinger (1998:5) gave the three themes of care and support as (a) mitigating the effect of the HIV/AIDS pandemic on individuals, families, communities and the nation, (b) helping to prevent further HIV/AIDS transmission by enhancing the effectiveness of prevention efforts, and (c) promoting access to basic health and welfare. In the SAPS, according to Mabusela (2006:6), there is ongoing counselling by Social Workers and referrals to SAPS support groups as well as departmental Health clinics to steer this programme.

To show the relationship between HIV and AIDS support with other psychological factors, O'Malley (2001:1) suggested that care and community support require change to individual attitude and sexual behaviour. The Khomanane Brochure (2005) on Caring for People with HIV and AIDS mentions that the aim of care and support is to add knowledge on facts about HIV/AIDS and to talk openly about them. It also encourages people to get treatment if they are sick. Core knowledge derived from care and support include that HIV can be passed on by having unprotected sex with an infected person, through contact with HIV infected blood, and from an HIV infected mother to her unborn or newborn baby, though not all babies born to infected mother become infected with

HIV. In the sub-Saharan African, 90% of children infected with HIV are as a result of mother-to-child transmission (Clark, 2006:1).

(b) Voluntary counseling and testing (VCT)

Voluntary counseling and testing provides the information necessary to make informed decision about the future and to protect one's own health and that of loved ones (Wilson, 2003:66). The Khomanane Brochure (2005) on voluntary counseling and testing (VCT) explain the VCT as the process that is followed when person wants to find out if he/she is infected with HIV. Voluntary means that persons decide on their own whether or not they will be tested, and they have a chance to discuss the HIV/AIDS test results with a trained counsellor about the HIV/AIDS results and its implications. It is confidential and the results cannot be discussed with anyone else. They are given to the person in private.

Employees in the SAPS are encouraged to do HIV testing by organising a once-off VCT day (mass HIV testing) to know their HIV status (Beukes 2005:15). Employees are then counselled before they go for testing so that they are advised on the consequences of negative and positive results, identify a support system, and learn about referral for further counseling and other resources at their disposal. They are also counseled after they have been tested. The strategy also encourages disclosure of HIV status and how this should be discussed between employees and their counsellors. The provision of VCT at the concentrated stage on a pandemic can retard the rate of transmission of HIV (Girma and Schietinger, 1998:23). Exner, Hoffman, Patrick, Leu, and Ehrhardt (2002:82) made the assumption that HIV test counseling must emphasize that testing is not a prevention strategy in itself and that mutual testing (being tested at

the same time as one's partner), although not without risks, offers the safest possible alternative for monogamous couples who choose to forgo condoms.

According to Khomanane Brochure (2005) on VCT, during pre-test counseling, the individual's knowledge is gained when questions about HIV/AIDS and the test are discussed with the counselor. Ntozi and Kirunga (1997:157) say that positive attitude and behaviour is a willingness to go for an HIV test while the negative attitude and behaviour is the unwillingness to go for an HIV test. HIV counseling and testing can motivate behaviour change (Canadian HIV/AIDS Legal Network, 2000:4).

#### 2.2.3.3 Involvement/participation within HIV and AIDS structures and organisations

The SAPS network with other structures and organisations that have interest in the fight against HIV/AIDS. Partnership was forwarded as a strategy for creating a health-enabling community in context (Gillies, 1998:1). Davis, *et al.* (1998:71) mentioned that external health services that can form partnership with other organizations include public health services, traditional healers, and private practitioners. The structures in the SAPS include the SAPS Provincial and Area forums on HIV/AIDS, Provincial and District IDC bodies (Inter-Departmental Committee on HIV and AIDS), Provincial South African Civil Military Alliance (SACMA), and Networking with organisations such as National Association of People Living With HIV and AIDS. Campbell (2004:199) is of the opinion that partnership approaches have been advocated in the light of the insight that the problem of HIV is too complex and too multi-faceted for any one stakeholder constituency to deal with. It is, as such, essential that members of peer education groups develop links to actors and agencies with political and economic influence to

assist them to meet their goals. This helps in pooling different skills and resources to the fight against the HIV pandemic.

Relationship between participation and partnership within HIV/AIDS structure programmes with knowledge is included in the work of Peacock and Levack (2004:173). They demonstrated that factual knowledge related to HIV/AIDS increases immediately after participation and partnership training, and that knowledge continued to increase three months after the training. Global partnership in the HIV/AIDS, on the other hand, can influence attitude and help save lives worldwide (Van der Schaaf, 2004:49). Okware, Opio, Musinguzi, and Waibale (2001:79) suggested that multi-sectoral strategy which manifest element of partnership and participation influences behaviour.

#### **2.2.4 Requirement of intervention**

As noted above, intervention is aimed at changing people or things for the purpose of helping those people or things. The core requirement of every intervention activity is the person or persons with problems (Loewenberg, 1983:9). In this way, HIV/AIDS intervention strategies were introduced after it was discovered that AIDS is a reality and people are infected and affected by it. Kingman (1994:8) also assumed that unless those who are in the health education know who are mostly at risk of HIV/AIDS infection, it would be impossible or difficult to target health education messages for these groups. Engagement of the participants is always a prerequisite for a successful social intervention. People for whom the intervention is intended to help should be willing to respond to such intervention, otherwise, the purpose of the intervention cannot be accomplished. The peer group education, especially among HIV/AIDS infected and affected people who are sometimes called AIDS activists, is the strategy

that aims at motivating people in combating the spread of AIDS. This is still shared by Loewenberg (1983:164) who also emphasised the engagement by averring that the effective and efficient strategy may not be suitable if the client is not ready to participate appropriately. Therefore, he concluded that motivation to participate is crucial.

Communication is also an important requirement in every phase of the intervention process (Loewenberg, 1983:164). Communication conveys messages from the intervener to the client and in turn the intervener will receive feedback from the client through communication media, be it verbal, written, or other forms of electronic means. Mass media channels of communication are effective in increasing knowledge (Ostrow, 1990:146). Bourne, Jnr. and Russo (1998:442) on the other hand, maintained that communication influences attitude through the credibility or expertness that the communicator has. Without communication, learning can be difficult.

Argyris (1973, 16-17) demonstrated that some of the requirements of intervention activities may also include valid information, free informed choice, and the client's internal commitment to the choice made. Valid information implies useful, true, and unbiased information that can add knowledge to people for whom the intervention strategy is intended. Once the information is valid, and the client is equipped with knowledge, the client is able to make a free choice among alternatives, which in turn changes his/her attitude about such an alternative. Attitude will determine whether the client is committed to the intervention, thereby changing his/her behaviour to satisfy the chosen alternative (intervention).



### **2.2.5 Evaluation of intervention**

Once the intervention is established, strategies and implementation in place; there is a need to find out whether it did serve its purpose. Argyris (1973:3) said that intervention is evaluated by competence and effectiveness. Competence is how well the system accomplishes core activities over time and under different conditions while effectiveness means how well the system accomplished the core activities in any given time. Rothmans and Thomas (1994:267) also pointed out that evaluation of intervention research in the form of empirical enquiries is its effectiveness.

Loewenberg (1993:161) also suggested that evaluation of intervention is based on its effectiveness and efficiency. Argyris (1973:38-47) distinguished evaluation between individual and group. In the individual, the criteria for evaluation included the degree of acceptance of the intervention by the individual, a sense of confirmation, essentiality, and psychological success and failure in the individual. The criteria for evaluating group competence and effectiveness manifest in the high frequency of psychological success, identification of members to the health of the system, and modification of knowledge, attitude, and behaviour through the learning processes. Kingman (1994:8) however, explained that unless we know people who are most at risk (to be affected or infected with HIV/AIDS); it can be impossible to evaluate the effectiveness of the health education campaign.

The HIV/AIDS intervention programme evaluation, according to Davis, *et al.* (1998:76) included the amount of condom distributed, STD prevalence, attendance at STD clinics, absenteeism, deaths in service, number of awareness and education sessions provided, anonymous attitude survey, and acceptance of employees with HIV by their peers. Davis *et al.* further say that the indirect indicators of HIV/AIDS intervention

evaluation are the number of employees volunteering to become peer educators. On the other hand, the number of employees attending/participating in the HIV/AIDS and STD education programmes can be direct indicators.

On the negative side, the psychological evaluation of the ineffective intervention is manifested in the increase in defensive behaviour; decrease in the use of appropriate coping mechanisms; increase need for competence, which lead to compulsion for success like increase in psychological tiredness, decrease in tolerance for stress and anxiety; increase in unrealistic level of aspiration; and increase in need for inclusion with, and confirmation from client (Argyris 1973:175).

According to Loewenberg (1983:325) intervention strategies may be effective with one organisation and not at all with another organisation, although the problem and the goal appear to be identical. This suggests that the HIV/AIDS intervention programme that has positive results in the Department of Education of the public sector may not guarantee success of positive results in another department (e.g., in the SAPS or in the private sector). Economic, cultural, religious, political and social factors may play an important part in the difference of the effectiveness of a particular intervention in different countries.

Finally, this section defines intervention in terms of HIV/AIDS. The reason for intervention is learning and helping people with their own decision to manage change. Communication, valid information, motivation, and commitment are basic requirements for intervention which can be evaluated by competency and efficiency. The HIV/AIDS intervention programmes by various organisations in South Africa, including SAPS, include prevention programmes, care and support programmes and

involvement/participation within HIV and AIDS structures and organisations. HIV/AIDS were associated with what were first called knowledge, attitude, and practice (KAP) (Barnett & Whiteside, 2002:75). Many works support Barnett and Whiteside that intervention has a relationship with knowledge and attitude. But instead of including practice, studies relate intervention with behaviour change (Forrest, Levine, & McCulloh, 1998:1; Kennedy, *et al.* 2000:236; Klepp, Ndeki, Seha, Hanna, Lyimo, Msuya, Irema, & Schreiner, 1994:1160; Kuhn, *et al.* 1994:163; MacNair-Semands, *et al.* 1997:734; and Turner, Garrison, Korpita, Waller, Addy, Hill, & Mohn, 1994:270.

In this study, the focus is also on whether the HIV/AIDS intervention programmes employed by the SAPS can result in any change in knowledge, attitude, and behaviour related to HIV/AIDS issues. The theoretical approach to these three affective factors in relation to the intervention, will therefore, be discussed in the following section.

### **2.3 KNOWLEDGE**

The Health Belief Model was developed in 1950 and explains behaviour decision by reference to individual knowledge (Barnett & Whiteside, 2002: 75). Reber (2001:380) defines knowledge as the body of information possessed by a person, or by a group of persons or culture. It is the mental components that result from processes, be they innately given or experientially acquired. Knowledge is the remembering of previously learned material, which involves the recall of a wide range of material from specific fact to complete theories, and it represents one of the levels of the learning outcome in the cognitive domain (Grinhund & Linn, 1990:506).

Knowledge forms part of memory and also influence memory (Louw, Van Ede & Louw, 1998:242). If you already know something about a particular topic, you can associate the new incoming information with what is stored in the memory. This theory is also supported by Gellatly (1986:24) who suggested that knowledge is stored in the memory and may be inaccessible until the circumstances occur, which demand its use. Knowledge in memory helps you to understand and to interpret incoming information, and if you know information, you remember it better (Louw, *et al.* 1998:242). According to Jacobs, Vikalisa, and Gawe (2004:152), knowledge, if acquired, leads to better life although this statement seems to be a bit overstated.

Knowledge representation revolves within a network of semantic associations as a principal issue in cognitive psychology. Knowledge representation is all contents or information in the memory that make up knowledge. According to Solso (1979:255), cognitive psychology is confronted with the problem of representation of knowledge a person has, how are they to be concatenated and constructed into larger knowledge structures, and how they are to be accessed, searched, and utilized in solving the problems of daily living. Grinhund and Linn (1990:506) further said that all that is required of knowledge is to bring to mind the appropriate information. The information must be appropriate and true because according to Gazzaniga (1994:4) knowledge must be true, as that which is not true, is not knowledge. A true knowledge about HIV/AIDS related matter can lead to the problem solving of HIV/AIDS related matters, while false knowledge can lead to frustration and long-term sufferings.

### **2.3.1 Knowledge change**

Knowledge can be changed through various ways. Many theorists define and explain knowledge through learning. Kellog (1993:400) on the other hand, said that knowledge

is the acquisition of components that mediate learning and memory. Kellogg went further to say that learning can be greatly enhanced by transferring already available knowledge and skill to the problem at hand. This means that, while knowledge can be changed through learning, learning is also influenced by knowledge.

#### 2.3.1.1 Learning and knowledge change

Learning, as explained above, is one of the important methods in which knowledge can be changed, modified or transformed through the process of knowledge modification (Leahey & Harries, 1993:431). According to these authors, change is abetted by performance monitors that detect inconsistencies to be eliminated such as believing that condoms kill desire for sex while knowing that sex begins in the mind. Learning is any process that adds to or alter existing knowledge and its processes include imprinting, learning by communication, one shot aversion learning, learning mathematics, place learning, learning to lower blood pressure, and also operant conditioning (Howard, 1995:68).

Conceptual knowledge, which is knowledge about something and procedural knowledge, which is knowledge about how to do something, as stated by Simon and Halford (1995:82), originated from learning. Conceptual knowledge is knowledge of concepts such as HIV, AIDS, STD, or TB, while procedural knowledge is knowledge of processes for implementing that knowledge, like how to use a condom or how to avoid risky behaviour. They assume that the compilation of knowledge process is to create efficient domain-specific production that have as condition (conceptual), the specific problem information; and as action (procedural), the appropriate steps to be taken, based on that information. Learning is associated with intervention and, as such, the

HIV/AIDS intervention can also change the HIV/AIDS knowledge through HIV/AIDS awareness programmes.

#### 2.3.1.2 Memory and knowledge change

Memory is often used as a virtual synonym of knowledge (Reber, 2001:381). The difference emanates from the fact that knowledge is stored in memory through learning. Memory can be referred to as a storage or knowledge base. Furth (1968:262) for instance, defined memory as the acquisition of knowledge due to some particular information provided by the environment. Knowledge base is one's existing information about a topic or context area; significant for its influence on the material allow us to process it faster (Schaffer, 1996:320). Knowledge base helps people to interpret and classify information. It plays a role in how information is understood, and subsequently, how it will be remembered (Louw, *et al.* 247:1998). People store HIV/AIDS information they gained from workshops and other awareness campaigns and remember it when they are to be engaged in sexual activities. According to Peters and Jarvis (1991:66), knowledge base also includes types of knowledge that is derived from experience.

#### 2.3.1.3 Conditioning and knowledge change

Thorndike is one of the behaviourists who emphasised the work of conditioning, especially operant conditioning. Thorndike believed that individuals learn according to the law of effect, that subjects tend to repeat a behaviour that is followed by good effect. Skinner furthered Thorndike theory in 1938 and believed that the operant conditioning is a process whereby behaviour is learned when a desired response is reinforced (Gupta. Sharma, & Hsu, 2004:4). The previous section demonstrated that conditioning is one of the intervention strategies, especially in HIV/AIDS related issues. Maintaining a well balanced life to AIDS sufferers after following HIV/AIDS intervention

programmes in the form of Positive Living Workshop can condition one to keep on following those programmes.

Howard (1985:68) is of the opinion that knowledge is altered by an operant conditioning process. Operant conditioning is a type of conditioning in which any behaviour that is emitted by an organism is brought under stimulus control (Reber, 2001:483). The operation through which such conditioning occurs is the presentation of reinforcement contingent upon an organism emitting the response. People's knowledge may change as they learn to associate certain behaviours with positive rewards while other behaviours are associated with punishment.

#### 2.3.1.4 Cognition and knowledge change

Cognition is one of the psychological concepts that have a relationship with knowledge via learning. According to Honderich (1995:139), cognition can be a mental representation of linguistic knowledge, and any change in one's cognition can affect his or her knowledge. Foreman and Sigel (1979:4) mentioned that cognitive development of knowledge takes place through learning and that specific cognitive change of an individual is called learning.

#### 2.3.1.5 Communication and other agents of knowledge change

Communication can change the knowledge of an individual. Ostrow (1990:146) said that educational programmes, which include mass media channels of communication, are effective in increasing knowledge. HIV/AIDS educational programmes include posters, brochures, pamphlets and workshops or courses that aim to increase an individual's knowledge of HIV/AIDS related issues. Knowledge can also be transformed or modified through writing of material that will be learned by learners through the

process of knowledge transformation. Learners will also tell what they know through knowledge telling (Kellog, 1995:302). The broad communication system of conveying message from the sender to the receiver through various communication media, also transfers knowledge. Communication is one of the requirements of intervention, and therefore, HIV/AIDS intervention has the ability to change knowledge of HIV/AIDS related issues.

## **2.4 ATTITUDE**

According to McClintock (1972:108), Social Science is equated with the study of attitude, and that is the core concept of the study of psychology. The study of attitude and attitude change started to emerge in the 1940's. There are many definitions, components, and other related theories of attitude change.

Attitude is a tendency to respond in a particular way, in a particular situation to a particular object (Cattell, 1965:444). It is a mental predisposition to act that is expressed by evaluating a particular entity with some degree of favour or disfavour. An individual's attitude usually focuses on objects, people, or institutions. According to Saal & Knight (1995:61) an attitude is a relatively stable affective or evaluative disposition towards a specific person, situation, or other activities. Schlebusch (1990:44) mentioned that attitude implies the general predisposition in which people respond either positively or negatively towards objects, a person, or a situation. This definition is expanded further by Ajzen (2002:1) who also maintained that attitude has both affective and belief components which should be consistent with behaviour (i.e., people with positive attitudes should behave positively towards the attitude object). The attitudes that



people have towards HIV/AIDS affected and infected people imply that the HIV/AIDS affected and infected people are attitude objects.

In terms of personality, Jung (1906-1913) distinguished two major attitudes or orientations, being attitude extroversion or attitude introversion. Attitude extroversion is an attitude oriented individual towards the external objective world. On the other hand, attitude introvert is attitude oriented towards the inner subjective world. When you blame the pandemic of HIV/AIDS on the Western countries, God, or bad sexual behaviour by ignorant people, you have attitude extrovert. But when your blame lies with your own knowledge or behaviour, you have attitude introvert.

#### **2.4.1 Attitude change**

Attitude may be initially learned and subsequently modified in several ways like observing and imitating others, being conditioned by others, by specific facts, methods or principles (Klausmeier, 1985:379). It can also be changed by vicarious learning, communication, and other changing agents such as knowledge or cognitive processes.

##### 2.4.1.1 Learning and attitude change

Klausmeier's (1985:379) statement on the attitude change implies that attitude is a learning outcome. Feldman (1995:122) maintained that basic learning processes describe how attitude is formed. Health promotions, broadly conceived, require change in attitude, belief, and action area of personal hygiene for diagnosis and care (Knutson, 1965:307). Learning theories are probably most directly related to attitude change, while also on the other hand, the effect of some educative efforts is directed towards attitude change (Allport, 1959:84). Attitude has a relationship with intervention, as stated by Blair, Jones, and Simpson (1968:202) who maintained that attitudes are

learned and are acquired through experience, which have pronounced affective (feeling) components, behaviour modeling, and identification within peer groups. Attitude towards HIV/AIDS activities can be changed through teaching and learning. When a researcher or a teacher gets a person into the laboratory, classroom, or interview situation, he/she has already achieved a major triumph in attitude change (Sherif & Sherif, 1969:481). The previous section explains that HIV/AIDS intervention takes the form of learning and teaching, and as such, it can change the HIV/AIDS attitudes of people.

#### 2.4.1.2 Vicarious learning and attitude change

Vicarious learning is another way to change attitude. Vicarious learning includes observing the rewards or punishments that others get from their espousal of those attitudes (Feldman, 1985:124). Attitude may also develop from watching our own behaviour. For example, playing music for several times until one decides to like that music can make one to continue expressing positive attitude to that music. The same applies to attitude towards HIV/AIDS infected and affected people. If we keep on hearing about positive things that these members of our community do, we are likely to change our negative attitudes towards them, and as such, stop all negative comments about them.

#### 2.4.1.3 Conditioning and attitude change

Attitude is the equivalent of conditioned response – something that can be elicited by the introduction of a conditional response (Feldman, 1995:122). Many authors, like those mentioned above, believe that conditioning is one of the methods of changing attitude. There are two types of conditioning, being classical conditioning and operant conditioning. Classical conditioning takes place when one stimulus frequently precedes

another, and the two stimuli become associated. Operant conditioning, which is very relevant to this study, takes place when you express certain attitudes that are reinforced. Life-loving people tend to like a life-style that is free from injuries and illnesses. In this case, they are likely to continue expressing that attitude for as long as they are reinforced by a healthy life. Insko (1967:25) said that reinforcement, instrumentally, depends upon performance of attitudinal response. If people express an attitude, and others agree with that person, that can reinforce the attitude.

#### 2.4.1.4 Communication and other agents of attitude change

Communication is an important requirement for intervention, and it can give rise to attitude change through the production of a related opinion change (Insko, 1967:12). Sherif and Sherif (1969:468) averred that communication campaigns are designed to change attitude via mass media. According to Bourne and Russo (1998:442), what we read in newspapers and magazines and what we see on television influence our attitude, and this depends on the communication, message, situation, and cognitive process. Attitude is also based primarily upon knowledge, and the information from knowledge can evoke attitude change (Knutson, 1965:308). Most people change their HIV/AIDS attitude through the information they receive from the communication media on HIV/AIDS related issues or from HIV/AIDS awareness campaigns.

## 2.5 BEHAVIOUR

Behaviour derives from the word behave, which is to do things in a particular way (Hornby, 2000:92). Behaviour as such, is the way a person, animal or plants behave or function in a particular situation. Reber (2001:82) defined behaviour as a generic term covering acts, activities, responses, reaction, movements, processes, operation, or any

measurable response of an organism. According to the World Book (1992:201), behaviour is the way human beings and other organisms act, and in Psychology and other behavioural sciences, behaviour is how a person's actions fit society's idea of right or wrong. It results from a combination of many factors. Learning theories, as emphasized by McKenney, Lorion, and Zax (1976:161), provide many useful concepts with which to understand the etiology and maintenance of behaviour. Hjelle and Ziegler (1981:10) as such averred that learning becomes the central focus of interest for a behaviourist.

A family of doctrines united by metaphysical worries about dualism and epistemic worries about the status of mental term is called behaviourism (Honderich, 1995:81). Behaviourism is the approach to psychology, which argues that the only appropriate subject matter for scientific psychological investigation is observable and measurable behaviour (Reber, 2001:84). Behaviourists believe that behaviour is observable and can be differentiated. Klein (1991:497) defined it as a school of thought that emphasise the role of experience in determining action.

### **2.5.1 Behaviour and change**

Scientists and psychologists usually associate behaviour change with behaviour modification or behaviour therapy. Reber (2001:85), for example, defined behaviour modification as the process of changing a person's behaviour and that the term is generally used synonymously with behaviour therapy. Behaviour change according to Klein (1991:497), is a behavioural treatment to alter inappropriate behaviour. Behaviour therapy can be defined as a group of therapeutic techniques aimed at the modification of maladaptive behaviour via application of learning principles (Hjelle & Ziegler,

1987:24). Behaviour can be changed through learning, conditioning, and communication.

#### 2.5.1.1 Learning and behavioural change

Learning is the process by which behaviour is changed as a result of experience and practice (The World Book, 1996:202). This means that learning can change behaviour. Behaviour theory maintains that most behaviour can be learned, given the appropriate environmental circumstances (Wicks-Nelson & Israel, 1984:10). Wicks-Nelson and Israel also maintained that most behaviour can be learned. Behaviour that is having a satisfying effect such as satisfaction of desires, escapes from punishment and relief from fear, according to Hamachek (1995:19), are learned. Educational objective at any level indicate student behaviour and also the content of what is to be learned (Klausmeier, 1985:45). This means that behaviour, as with knowledge and attitude, can be changed through education or learning. Education and learning are types of intervention and as such, this implies that intervention can change behaviour. That is why Klausmeier (1985:49) said that whether a student has learned, can be inferred only from observing a change in that student's behaviour.

#### 2.5.1.2 Conditioning and behaviour change

Hamachek (1995:19) maintained that conditioning and reinforcement modify behaviour. Behaviour change strategies useful for understanding micro-level interventions are cognitive restructuring, modeling, operant conditioning, counter conditioning and stimulus control. Thus, like knowledge and attitude, behaviour modification occurs through conditioning and reinforcement. HIV/AIDS behaviour can therefore be modified by HIV/AIDS intervention as conditioning is one of the strategies in the intervention process.

Hamachek (1995:20) theorised that operant conditioning involves a selection from any responses of the one that habitually will be given to a stimulus situation. Operant behaviour, initially, is under control of behaviour-reinforcer belief and with more training, stimulus-response (S-R) habit will develop (Klein, 1991:272). A behaviour-reinforcer expectancy is a representation in propositional form that maintains that action (behaviour) A causes the occurrence of reinforcer B. Reinforcement is the operation of strengthening, supporting, or solidifying something or the event that so strengthens or supports it (Reber, 2001:615). Reinforcement contingencies emerged as an effective way of altering human behaviour as it increases the frequency of appropriate behaviour and eliminates or reduces inappropriate behaviour (Klein, 1991:161). On the other hand, the pairing of behaviour and punishment as a consequence is also learned. Punishment decreases the frequency of the behaviour occurring.

#### 2.5.1.3 Communication and other agents of behaviour change

Communication is an educational programme, which provides information about the need to change behaviour to avoid HIV/AIDS and a “means” programme, which provides the actual means for behaviour change as advocated by Ostrow (1990:146-149). These educational programmes include mass education campaign in the form of posters and pamphlets. An Educational objective at any level indicates student behaviour and also contents of what is to be learned (Klausmeier, 1985:45). Communication as seen from the previous sections is the type of intervention providing information that changes knowledge, that in turn change attitude, that finally lead to individual behavioural change. This process is also applicable in the HIV/AIDS related issues, when HIV/AIDS communication is used as HIV/AIDS intervention strategy.

Behaviour can be changed, given the appropriate environmental circumstances as stated by Wicks-Nelson and Israel (1984:10). This means that environment in itself has the capacity to change behaviour of the individual. Because of the HIV/AIDS pandemic, people turn to use condoms in sexual activities to avoid HIV infection. They adapt to their environment for safety and survival. People need to adapt to the environment so that they are in harmony with their environment (equilibrium). Sensory and empirical information which we get from the world are also most important agents for gaining or changing behaviour (Jacobs, *et al.* 2004:150). We know the pain of gonorrhoea after we have been infected, while the weekly burial of people dying of HIV/AIDS related illnesses provide us with the empirical information about HIV/AIDS, which can make us change our behaviour. Behaviour change is also influenced by attitude (Knutson, 1965:308). By knowing the attitude of people, it is possible to do something about prediction and control of their behaviour.

## **2.6 SUMMARY**

From this chapter it seems that methods to change knowledge, attitude, and behaviour are nearly the same - learning, conditioning, and communication. Cognition is the core approach to knowledge and knowledge change. It was indicated that these methods of changing knowledge, attitude, and behaviour form part of intervention programmes or strategies. The theoretical study therefore, suggests that intervention can change knowledge, attitude, and behaviour of individuals. In this case, it can be concluded that the HIV/AIDS intervention programme can change the individual's knowledge, attitude, and behaviour on HIV/AIDS related issues. The chapter that follows will demonstrate the empirical studies on the relationship between the HIV/AIDS intervention

programmes as independent variables and knowledge, attitude, and behaviour on HIV/AIDS related issues as dependent variables.



## **CHAPTER 3**

### **3 THE EMPIRICAL LITERATURE REVIEW ON HIV/AIDS INTERVENTIONS, KNOWLEDGE, ATTITUDE, AND BEHAVIOUR.**

#### **3.1 INTRODUCTION**

In the previous chapter, it was explained that the purpose of implementing the HIV/AIDS intervention programme is to change people's knowledge, attitude, and behaviour about HIV/AIDS. The South African Police services is implementing the HIV/AIDS awareness programme, care and support programme, and partnership with other stakeholders as HIV/AIDS intervention programmes with the purpose of, among other things, changing people's knowledge, attitude, and behaviour on HIV/AIDS related issues.

This chapter will examine the research that has been conducted (both internationally and locally), on HIV/AIDS intervention programmes and HIV/AIDS related issues. It will also present the works of researchers who investigated how HIV/AIDS knowledge, attitude, and behaviour can be changed through the following HIV/AIDS intervention programmes: HIV/AIDS education programmes (courses, workshops, and classes), voluntary testing and counseling, communication, HIV/AIDS reduction programmes, and condom distribution. Communication through mass media, like films and television is an effective vehicle for supporting the maintenance of awareness of the continued existence and subsequent threat of HIV in the population (Sixsmith, Kelleher, & Grangle, 2000:46) and is included in this study as an HIV/AIDS intervention programme.

### 3.2 HIV/AIDS INTERVENTION PROGRAMMES

The purpose of an intervention programme is to change something in order to help. Both international and local studies reveal that HIV/AIDS intervention programmes are aimed at changing the spread and the consequences of HIV/AIDS. Results from Swanepoel (2005:151) indicated that individuals who have received HIV/AIDS prevention information are more likely to use protections (condoms) during sexual intercourse, ask their partners about their HIV status, be tested for HIV themselves, and know where to go for help regarding HIV issues. Swanepoel also concluded that HIV/AIDS prevention information therefore contributed positively to HIV/AIDS prevention behaviour.

The HIV/AIDS intervention programme can help in reducing the unprotected sex and HIV/AIDS risk related behaviour among people. Using a Prevention Marketing Initiative (PMI) in a HIV risk-reduction workshop as an intervention in controlling the spread of HIV/AIDS in five United States sites (Nashville, Tennessee; Newark, New Jersey; Northern Virginia; Phoenix, Arizona; and Sacramento, California), Kennedy, *et al.* (2000:236) found the reduced likelihood of unprotected sex among participants. In terms of risk related behaviour, Sikkema, *et al.* (1995:155) discovered that there were encouraging results regarding the effectiveness of a behavioural skills training program in increasing knowledge, belief, and skill related to HIV risk behaviour reduction.

There appears to be an effect of HIV/AIDS intervention programmes on knowledge, attitude, and behaviour. Psychologically, the HIV/AIDS intervention programmes can impact the knowledge, attitude, and behaviour of people towards HIV/AIDS related matters. McNeil and Hole (1998:99) reviewed 320 research abstracts, 591 project abstracts, and on-line literature in peer-reviewed literature in 19 developing countries.

These are some of those who demonstrated that HIV prevention or intervention changed knowledge, attitude, and behaviour in target groups.

Kuhn, *et al.* (1994:163) used classroom based activities such as information sessions on HIV/AIDS, open discussion on HIV/AIDS, and integration of AIDS contents as HIV/AIDS awareness programme to 276 students whose ages ranged from 12 to 30 years in their study of the effect of an HIV/AIDS programme. A questionnaire which was translated from English to Xhosa was used to investigate the effect of the program on knowledge, attitude, and behaviour. The results also confirmed the relationship between the HIV/AIDS intervention programme and the three affective factors. They showed that the programme greatly improved students' knowledge of HIV transmission and prevention; increased level of acceptance of people with AIDS (attitude), and had a small impact on behavioural intention.

Turner, *et al.* (1994:270) maintained that the knowledge, attitude, and behaviour scores for all students in the university were significantly higher than those not enrolled in the seminar aimed at promoting responsible sexual behaviour. Between pre- and post-intervention, there was a notable significant increase in knowledge and behaviour score for all students enrolled and not for students who did not enroll. Seven hundred and eighty-six students completed anonymous, self reported questionnaires that focused on sexual behaviour, as well as knowledge, and attitude regarding sexual behaviour. The questionnaire consisted of sixty nine items and Chi-square tests were used to assess differences in demographic variables, while t-tests were used to assess differences in mean knowledge, attitude, and behaviour score at pre-intervention and post-intervention.

The HIV/AIDS intervention can bolster the person's intention to change. This is evidenced in the work of MacNair-Semands, *et.al.* (1997:734) when they investigated the effect of intervention on knowledge, attitude, and behaviour. They found that HIV courses on college campus increased condom usage, the ability to discuss safer sex with partners, selection of sexual partners, and learning about HIV/AIDS. The majority of students reported making minor attempts at change prior to the course, and enrolled students made increased and more significant attempts to change in the duration of the HIV course.

HIV/AIDS intervention programmes can expose the individual to HIV/AIDS information and can encourage discussion on HIV/AIDS related issues. This was revealed after a six month implementation of the Non-Government Organisation (NGO) HIV/AIDS educational program in primary school children in Tanzania, where pupils from the HIV/AIDS intervention school reported exposure to AIDS information and discussing HIV/AIDS related issues significantly more frequently than pupils from the comparison school (Klepp, *et al.* 1994:1160). Basen-Engquist (1994:412) also found that students in the Safer Sex Efficacy Workshop (SSE workshop) and those in the lecture on HIV (HIV lecture) improved more from pre-test to post-test in the intention to use condoms than participants in the unrelated topic - family violence lecture (FV lecture). After two months follow up, participants in the SSE workshop increased their frequency of condom use from pre-test to post-test more than those in the HIV lecture and FV lecture.

### **3.2.1 Setbacks on HIV/AIDS intervention programme**

Other researchers found failures of the HIV/AIDS programmes. Failure of HIV/AIDS prevention programmes lies in the over-optimism of those who believe that peer

education programmes can change behaviour in marginalized communities in the absence of appropriate HIV/AIDS partnerships (Campbell, 2004:197). This stresses the importance of partnership as a strategy in curbing the spread of HIV/AIDS. Campbell also maintained that HIV/AIDS prevention's success is unlikely without parallel efforts to create a supportive social environment, through building alliances between peer educators and influential groups. Lack of opportunity to communicate about sex with peers and sexual partners leads to inability of peers to transfer HIV/AIDS learning from peer education sessions into their daily social and sexual lives. This undermines the HIV/AIDS prevention's success (Campbell, 2004:189).

To conclude, it can be pointed out that the intervention programmes ranged from HIV/AIDS awareness, peer education, condom distribution, care and support, and partnership to communication. There are many studies on how these intervention programmes can affect knowledge, attitude, and behaviour.

### **3.3 KNOWLEDGE**

HIV/AIDS knowledge items include knowledge of sexual transmission, curability, and stereotype of HIV/AIDS, fear of HIV/AIDS, and how HIV/AIDS can be transmitted (Ratliff-Crain, Donald, and Dalton, 1999:630). MacNair-Semands, *et al.* (1997:731) in their College Student Behaviour Questionnaire (CSBQ), which assesses HIV/AIDS knowledge, attitude, and behaviour, included knowledge of the HIV/AIDS virus, its contraction, testing, risk groups, and prevention as items related to HIV/AIDS knowledge. According to Jemmott (1989:1532), HIV/AIDS reduction knowledge items include transmission and consequences of AIDS and STD. Kuhn, *et al.* (1994:164), for instance, included how HIV is transmitted, how it is not transmitted, whether there is a

cure for AIDS, and how AIDS can be prevented as items related to HIV/AIDS knowledge. The mode of HIV transmission, disease progression, prevalence, risk behaviour, epidemiological data, testing, risk reduction behaviour, incidence, and symptom development of other STDs such as herpes and syphilis are also items of HIV/AIDS knowledge (Sikkema, *et al.*, 1995:150).

The determinants of knowledge of AIDS are related more strongly to attitudinal and behavioural variables than demographic ones (Akande, 1994:285). Andeki, *et al.* (1994:190) discovered that people who had HIV/AIDS knowledge believed that AIDS was a very severe disease, believed that they were less susceptible to AIDS, and did not believe that AIDS was caused by witchcraft or angry ancestors.

HIV/AIDS intervention programmes that are related to HIV/AIDS knowledge in this study include HIV/AIDS awareness, condom distribution, care and support, peer education, and HIV/AIDS partnership. Communication is a means of conveying the message of HIV/AIDS through formal and informal media, and is included in this section as it can also be used to effect change of HIV/AIDS knowledge.

### **3.3.1 HIV/AIDS awareness programmes and knowledge change**

Researchers believe that HIV/AIDS intervention can improve one's knowledge related to HIV/AIDS. The components of HIV/AIDS awareness programmes include exhibitions and theatre productions on HIV/AIDS and STD themes, campaigns linked to World AIDS Days, National Condom Week, or AIDS Memorial Day (Davis, *et al.* 1998:55). Kuhn *et al.* (1994:164), in their investigation of HIV/AIDS program on knowledge, found that students' level of knowledge about HIV transmission, prevention, and the course of the disease improved following the AIDS awareness programme as compared to the

neighbouring schools in which no specific HIV/AIDS intervention programme took place.

Educational programmes in the United States do a better job of increasing absolute levels of knowledge (Wierson & Bright, 1996:261). This is also shared by Wierson and Bright (1996:262); and MacNair-Semands (1997:735) when they averred that the goals of AIDS educational programmes are to increase knowledge. It was also found that higher AIDS risk knowledge levels significantly predict more condom use in Zimbabwe, whereas this relationship was only marginally significant for the U.S. college students (Wierson & Bright, 1996:263).

Having an HIV/AIDS risk reduction programme is another prevention strategy that can change knowledge. To control or to curb the spread of HIV/AIDS, people need to have knowledge about HIV/AIDS. Jemmott, *et al.* (1989:1535) reported that the HIV prevention group scored significantly higher in HIV reduction knowledge than the control group. HIV/AIDS reduction knowledge can also help in reducing risk related to HIV/AIDS issues. Using 157 inner city African American male adolescents from Philadelphia, Jemmott (1996:138) found that adolescents who received the HIV risk-reduction intervention subsequently had greater AIDS knowledge as compared with the adolescents in the control group. Instruments used in this research included questionnaires which were completed before, immediately afterwards and three months after the intervention. Interventions included videotapes, games, and exercises designed to influence AIDS related knowledge, supportive of safer sex practices.

Shapiro, Radeckie, Charchian, and Josephson (1999:24) observed that an HIV/AIDS high-risk individual has a greater knowledge about HIV/AIDS disease and is more likely

to have been tested for HIV, and is more self confident. Using 319 college students in Orange County, California, the researchers found that participants who were concerned about the disease and who had taken an AIDS education class had more knowledge of HIV/AIDS related issues than those who did not.

### **3.3.2 Peer education programme and knowledge change**

Peer education was found to be able to change knowledge of individuals. Morisky, *et al.* (2005:57), using peer education programmes for taxicab and tricycle drivers in the Philippines, discovered that peer education intervention was an effective means of HIV/AIDS prevention by changing knowledge of participants about the HIV/AIDS from baseline to post-test and from post-test to follow-up.

According to UNESCO (2003:25), peer-to-peer approach or peer-assisted intervention is natural and effective, especially in increasing levels of knowledge and decreasing risk behaviour. One good example of prevention programmes in Zimbabwe is peer education (Ruijter, 2001:1). Ruijter further mentioned that in Zimbabwe, the Matabeleland AIDS Council runs a peer education programme where young people can learn the technical facts about STDs and HIV/AIDS, and also about how to communicate with peers about these sensitive subjects. They also receive life skills training. They displayed the acquired HIV knowledge by informal talks or by organising activities in the community or in schools. In the study to evaluate the effect of peer education on deaf secondary school students' HIV/AIDS knowledge, Osowole and Oladepo (2000:93) observed the influence of peer education on health knowledge of youths. The peer educators in the above study received a four weeks training before they provide HIV/AIDS intervention to participants in their studies.



### **3.3.3 Condom distribution programme and knowledge change**

Condoms play an important role in the fight against HIV/AIDS. People who know where and how to use them, stand a better chance of not being infected with HIV. That is why condom distribution is regarded as an important HIV/AIDS intervention programme in the fight against the spread of this pandemic (Beukes, 2005:5 & Davies, et al. 1998:61). A sample of 280 women had participated in the Health Maintenance Intervention by filling a 16 items Health Questionnaire in the work of Dancy, *et al.* (2000:119). These women manifested a significant improvement in condom knowledge and they sustained that HIV/ADS knowledge improvement throughout subsequent assessments.

### **3.3.4 Care and social support programme and knowledge change**

Giving care and support can help those infected and affected by HIV/AIDS to increase their knowledge about HIV/AIDS related issues. According to Morisky *et al.* (2005:65), social support is able to change knowledge, especially the one related to HIV/AIDS issues. Carter in Health and Welfare Ministry (2006:16) also stressed the importance of support on the effect of knowledge by saying that the knowledge gained through support is far too important.

On the other hand, Coleman and Toledo (2002:67-72) used the sample of 304 child care providers attending care conference and Child Care HIV/AIDS Survey as instrument to reveal that different types of information source are associated with different aspects of providers of HIV/AIDS knowledge. These researchers however concluded that it was important to note that the correlations were small.

### **3.3.5 Voluntary counselling and testing (VCT) programme and knowledge change**

Voluntary Testing and Counselling programmes are implemented in the SAPS. The importance of the implementation of this programme seems to be based on research that relates it with the knowledge change. To assess the knowledge of the community of Kebele in Ethiopia about knowledge of VCT, Alemu, Abseno, Degu, Wondmikun, and Amsalau (2004:82) used a cross-sectional study to reveal that there was satisfactory knowledge (89,9%) from respondents who were aware that they could check their HIV/AIDS status through testing. However fewer of them (73,8%) knew about the availability of VCT services. They concluded that the knowledge about HIV/AIDS seems to be high among the study community of Kebele in Ethiopia.

However, the shortfall to the success of the VCT derives from some men who view such knowledge as a burden (Pembrey, 2006: 4). Most people fear that if they know that they are HIV positive, their future will be doomed, as they will know that they are going to die from AIDS. The fact that there is no cure for the illness at present can be the contributing factor.

### **3.3.6 Partnership programme and knowledge change**

Partnership with stakeholders or interested parties in HIV/AIDS can increase knowledge regarding HIV/AIDS related issues. Likalimba (2005:1) discovered that the engagement with the district and local AIDS councils has the following advantages:

- (a) strengthening capacities in the areas that are instrumental in overcoming the problems related to lack of HIV/AIDS capacity;
- (b) planning, evaluation, and monitoring of HIV/AIDS activities; and

(c) building political leadership and increasing knowledge about HIV and AIDS.

Okware, *et al.* (2001:1113) found that repeat knowledge studies have shown positive changes in priority prevention indicators, suggesting that a comprehensive national response supported by strong political commitment may be responsible for an observed decline of the HIV/AIDS infection. The above researcher also suggested that other countries in Sub-Saharan Africa can achieve similar results by these partnership means.

Peacock and Levack (2004:173) used the Men as Partners Program (MAP) as a multifaceted intervention designed to engage men in reducing gender based violence. The study also aimed at promoting men's constructive role in sexual and reproductive health, including HIV/AIDS. The main aim was to investigate the impact of partnership towards knowledge of HIV/AIDS related issues. Their results indicated that factual knowledge related to HIV/AIDS increased immediately after training and that knowledge generally continued to increase three months after training. There were twenty six percent of men who could successfully respond to the questions related to how HIV/AIDS could be transmitted before the workshop, and forty five percent could successfully respond to such questions after three months. Other organisations in South Africa, including the SAPS, also use partnership as HIV/AIDS intervention programme to improve workers' knowledge on HIV/AIDS related issues.

### **3.3.7 Communication and knowledge change**

Communication has a positive effect on knowledge change (Norman & Carr, 2002:145). The two researchers also found that it was not only HIV/AIDS knowledge that was associated with consistent use of condom, but with both communication and condom

possession, which together, were associated with HIV/AIDS knowledge. Intervention that results in exchange of information and discussion of AIDS-related issues can increase knowledge of HIV/AIDS related issues. It was found that women who participated in these kinds of interventions enhanced their knowledge about HIV/AIDS more than those who did not (Jenkins, *et al.* 2002:33).

Andeki, *et al.* (1994:190) investigated the exposure to HIV/AIDS information, AIDS knowledge, and perceived risk to a sample consisted of 2026 students in Northern Tanzania. They found that students who reported having been exposed to AIDS information the most, or who had talked to others about AIDS the most, than those who were not, were more knowledgeable regarding AIDS related issues than those who were not.

Knowledge of those who are communicating the message to the audience is important in the conveying of information. Providers' knowledge of HIV/AIDS was found to be consistently associated with the use of media sources of HIV/AIDS information, including the use of educational pamphlets, newspapers and magazine articles, TV, and radio programmes (Coleman & Toledo, 2002:70).

### **3.3.8 Negating researches**

Although at first glance, it seems as if many studies confirm the positive influence of HIV/AIDS interventions on HIV/AIDS knowledge, some researchers found negative consequences. Zellner (2003:41) for instance, found that accuracy of knowledge about AIDS does not always significantly predict condom use. Guth, Hewitt-Gervais, Smith, and Fisher (2000:509) who used HIV/AIDS Knowledge Inventory (HAKI) to assess knowledge claimed that there was no significant difference between the experimental

group and the control group's level of knowledge. Initially, the control group reported higher level of knowledge when compared with the treatment group, but neither group increased knowledge throughout the study.

In the Limpopo Province, Peltzer (2002:259) maintained that self rated HIV knowledge is not associated with barriers of HIV testing. HIV/AIDS knowledge was found to be very high but was accounted for 1% of the variance in risky behaviour, meaning that, at least for college students, increasing education about the modes of HIV transmission does not appear to be the answer for curbing risky behaviour towards HIV/AIDS infection (Ratcliff-Crain, *et al.* 1999:638).

### **3.3.9. Summary on HIV/AIDS intervention programmes and knowledge change**

Table 3.1 gives the summary of finding on HIV/AIDS intervention programme and knowledge change. Only four of the fourteen studies that showed significant positive knowledge change had proper control groups. Only one of the six studies that had no significant knowledge change had a proper control group. However none of the studies showed negative knowledge change.

Table 3.1 Summary of findings on HIV/AIDS intervention programme and knowledge change

Variable	Significant positive change	No significant change	Negative change
<b>Knowledge</b>	<p>Alemu, Abseno, Degu, Wondmikun, &amp; Amsalau (2004);</p> <p>Andeki, Klepp, Seha, &amp; Leshabari (1994);</p> <p>Coleman &amp; Toledo (2002);</p> <p>Dancy, Marcantonio, &amp; Norr (2000);</p> <p>Jemmott (1996)*;</p> <p>Jemmott, Jemmott, &amp; Fog (1989)*;</p> <p>Jenkins, Manopaiboon (2002).</p> <p>Kuhn, Steinberg, &amp; Mathews (1994)*;</p> <p>Morisky, Nguyen, Ang, &amp; Tiglao (2005);</p> <p>Norman &amp; Carr (2002);</p> <p>Okware (2001);</p> <p>Osohole &amp; Oladepo (2000);</p> <p>Peacock &amp; Levack (2004);</p> <p>Shapiro, Radeckie, Charchian, &amp; Josephson (1999)*;</p>	<p>Davis, Schneider, Rapholo, &amp; Everett (1998);</p> <p>Guth, Hewitt-Gervais, Smith, &amp; Fisher (2000);</p> <p>Guth, Hewitt-Gervais, Smith, &amp; Fisher; Zellner (2003)*;</p> <p>Peltzer (2002);</p> <p>Pembrey (2006)</p> <p>Ratcliff-Crain, Donald, &amp; Dalton (1999);</p>	

Note: \* indicates that researchers used control group(s)

### 3.4 ATTITUDE

Andeki *et al.* (1994:188) maintained that attitude items included determining whether one agreed or disagreed to have a friend with AIDS virus, whether a person felt that children with AIDS should be allowed to attend school with other children, and whether the person reported willingness to look after someone with AIDS. They also suggested that people who had HIV/AIDS knowledge believed that AIDS was a very severe disease, believed that they were less susceptible to AIDS, and did not believe that

AIDS was caused by witchcraft or angry ancestors. HIV/AIDS attitude, like HIV/AIDS knowledge, can be changed by HIV/AIDS awareness, condom distribution, peer education, care and support, voluntary testing and counseling, partnership with HIV/AIDS organisations and communication. HIV/AIDS intervention programmes also have setbacks towards influencing attitude on HIV/AIDS related matters or issues.

#### **3.4.1 HIV/AIDS awareness programme and attitude change**

HIV/AIDS awareness programmes that take the form of educational programmes and HIV/AIDS workshops and courses can have an effect on the attitude of individuals regarding HIV/AIDS related issues. Klepp, *et al.* (1994:1161) found that following the educational program, pupils attending intervention schools reported much more restrictive attitudes towards engaging in sexual intercourse than at baseline. Kuhn, *et al.* (1994:164) also found that attitudes of acceptance of people who are HIV positive improved due to HIV awareness programmes. The above findings are also supported by Wilry, Edwards, and Dilworth (1991:411) who found that the attitude of the experimental group improved after attending an HIV/AIDS issues course while the control group's attitude about AIDS became more negative.

As indicated by Kuhn, *et al.* (1994:164), whether students can accept someone with AIDS into their class is an item that tests attitude towards HIV/AIDS. In their study, they maintained that although negative attitudes persisted following the programme, some students recognised that HIV could not be spread by being in a classroom with someone with HIV/AIDS, showing how positively HIV/AIDS intervention programme can affect attitude towards infected and affected people. The neighbouring school of which the HIV/AIDS education programmes were not available did not experience the improvement. On the other hand, the use of facilitators who are HIV positive in the

workshop can increase the positive attitudes towards people with HIV/AIDS (Walters, 1997:17). Andeki, *et al.* (1994:190) claimed that people who had HIV/AIDS knowledge had positive attitudes towards spending time with and taking care of people with AIDS than were less knowledgeable people. The above highlights the interdependence of the affective factors (e.g. knowledge and attitude) on HIV/AIDS related issues.

### **3.4.2 Condom distribution programmes and attitude change**

According to Ntozi and Kirunga (1997:157), positive attitudes include willingness to use condoms. Condom distribution programmes help to encourage people to have positive attitudes towards the use of them, and encourage their use to fight the pandemic. Condom user's intention is determined by attitude towards condoms, subjective norms towards condoms, and perceived behavioural control over condoms (Jermott, 1996:135). Condom distribution encourages people to view the use of condom in a positive way. According to Coyle, *et al.* (1996:542), consistent condoms users had more positive attitudes towards condom use and more favourable perceived norms about condom use than inconsistent users. Six hundred and fifty nine (659) African American adolescents in the study of Jemmott, *et al.* (1989:1534) indicated that after the intervention, the adolescents in the safer-sex workshop group believed more strongly that condoms could prevent pregnancy than the control group. The adolescent in the safer-sex workshop group also believed that using condom would not interfere with sexual enjoyment than those in the control group. Social support can also change an individual's attitude towards condom use (Morisky, *et al.* 2005:65).

Using African, Afrikaans, and English speaking females (n=1114) and males (n=838) (N=1952) at a historically black university, Nicholas (1998:893) maintained that many women disagreed and more men agreed that using condom makes sex less enjoyable.



Forty two percent (42%) of respondents also believed that too many condoms are required for many rounds of sex, condom purchase is unpleasant (24,8%), condoms can break (23,3%), and condoms are a source of injury to the vagina (20,6%). Based on the above percentages, Nicholas suggested that the majority of people had a positive attitude towards condoms.

Other researchers however, found the opposite results about the attitude towards condoms use. Ratcliff-Crainet, *et al.* (1999:639) for instance, found that attitude about condoms, specifically the desire to avoid them “if at all possible,” were independently related to condom use. Davis, *et al.* (1998:51) also, maintained that condom distribution will fail dismally if it is not accompanied by rising awareness and the use of education to change attitudes towards existing sexual practices.

### **3.4.3 Care and support programme and attitude change**

There is a relationship between HIV/AIDS care and support programmes, and HIV/AIDS attitude. O'Malley (2001:1) maintains that care and community support programmes require change to individual attitudes and sexual behaviour which can only be brought about by a sustained and massive mobilization of communities. If people living with HIV/AIDS can expect to be accepted and supported, they need no longer keep their diagnosis a close secret. They need to feel that they are not going to be blamed for having become infected in the first place (Davis, *et al.* 1998:55).

Other researchers however, found different results about the influence of HIV/AIDS attitude. Chang, Bendel, McGarvey, and Caternbury (2003:223), for instance, discovered that perceived social support from the family was not related to a safe sex attitude.

#### **3.4.4 Peer education programmes and attitude change**

According to Morisky, *et al.* (2005:57), there is a significant change of attitude about condom use from baseline to post-test and from post-test to follow-up among taxicab and tricycle drivers in the Philippines after the people attended a peer education programme. A UNESCO (2003:32) study reported that in Kenya, the target group of out-of-school youth displayed more positive attitudes towards STD/HIV prevention following a peer-to-peer educational intervention. UNESCO mentioned that one important benefit of peer education efforts relating to adolescent reproductive health issues is the reported change in attitude and values of both the participants and the peer educators. According to Advocate for Youth Fact Sheet (2002:2), peer counselors produced the greatest attitude changes related to the adolescents' perception of personal risk of HIV infection and improved their inclination to help prevent transmission. If young people have HIV knowledge through their peer educators, and if they adopted a safe attitude, then they should also be able to carry out safe sex (Ruijter, 2001:1). Ruijter also maintained that instead of negative peer pressure, peer education can lead to positive peer pressure among young people, which can lead to safer sexual behaviour.

#### **3.4.5 Voluntary Counseling and Testing (VCT) programme and attitude change**

Voluntary Counseling and Testing can have a significant relationship with attitude towards HIV/AIDS related issues. VCT involves people self-presenting for testing at their local medical facilities if they believe that they have been exposed to HIV (Rennie & Behets, 2006:6). Ntozi and Kirunga (1997:157) maintain that positive attitudes include willingness to go for HIV tests. Testing is associated with the early intervention towards the prevention of the spread of HIV/AIDS and people should be encouraged to test so that they can take early preventive measures. VCT can help to change peoples'

attitudes especially when they know their status. A study by Guth, *et al.* (2000:509) found that participants in the experimental group viewed people with HIV/AIDS in a more positive manner after receiving the HIV/AIDS intervention workshop while the opposite was true for the control group who viewed people with HIV/AIDS in a more negative manner at the conclusion of the study.

According to Exner, *et al.* (2002:76), the predominant reason for not being tested was anxiety about the result. People are afraid to test because they fear that the results may be positive. Using a sample of 300 Black people between the age of 18 to 49 from urban Limpopo Province in South Africa, Peltzer (2002:259) found that stronger barriers to HIV testing attitude were associated with not having had an HIV test, likelihood to intend to have an HIV test in the future, and more susceptible to get HIV infection. Exner, *et al.* (2002:76) said that forty percent of women who attended a Voluntary Counseling and Testing intervention programme believe that getting tested was a good way to prevent acquiring HIV, which was interpreted to suggest that they had positive attitudes after the programme.

#### **3.4.6 Partnership programme and attitude change**

Partnership against HIV/AIDS can help in changing people's attitude towards HIV/AIDS related issues. Okware, *et al.* (2001:1113) found that repeated attitude studies have shown positive changes in priority prevention indicators, suggesting that a comprehensive national response, supported by strong political commitment, may be responsible for an observed decline in negative attitude. Van der Schaaf (2004:49) also maintains that global partnerships in HIV/AIDS education influence attitude and help save lives worldwide.

The Gauteng Provincial Government (2003:2) quoted the provincial premier, Sam Shilowa as saying the '*achievements of the Gauteng Partnership Against Aids in the past year reaffirms our belief that if we work together as government, civil society organisations, workers, business, professionals, community organisations, traditional healers, faith organisations and other sectoral groups, we can overcome the challenges posed by HIV/AIDS*'. The premier stressed the importance of partnership on HIV/AIDS attitude change.

One local study was conducted by Peacock and Levack (2004:173) to investigate the effect of partnership on attitude related to HIV/AIDS issues. The group studied "Men as Partners Programme" in South Africa. It was found that participants demonstrated some attitudinal changes related to HIV/AIDS issues after training. Before the workshop, fifty seven percent (57%) of men thought it was okay for a woman to refuse to have sex without a condom, and three months after the workshop, seventy percent (70%) of men thought it was okay for a woman to refuse to have sex without a condom. This marked a significant HIV/AIDS intervention effect on attitude.

#### **3.4.7 Communication and attitude change**

Communication probably has a relationship with attitude. Coleman and Toledo (2002:70) found that providers' attitudes towards child related HIV/AIDS policies failed to show a definitive relationship with any one category of HIV/AIDS information, but instead there were significant correlations between providers' agreement with HIV/AIDS child care policies and their acquisition of HIV/AIDS information from the AIDS organisation ( $r=1.5$ ,  $p<.01$ ) as well as their personal contacts with HIV infected individuals ( $r=.17$ ,  $p<.01$ ). On the other hand Andeki, *et al.* (1994:190) discovered that

people who had been exposed to AIDS information the most, or who had talked to others about AIDS, were having more positive attitudes regarding AIDS related issues.

#### **3.4.8 Setbacks related to HIV/AIDS attitude change**

Some studies show failures of HIV/AIDS programmes in changing attitudes of individuals. Klepp, *et al.* (1994:1161) found no HIV/AIDS attitude change among people attending the comparison schools and those who did not, making no significant program effect with respect to attitude. The high risk individual, according to Shapiro, *et al.* (1999:39), is sexually active, has a more permissive attitude towards sexuality, and was usually not religious.

Campbell (2004:198) investigated the failure of most HIV Programmes in South Africa and found that negative learners' attitude to the programme, within the context of the heavy stigmatization of HIV/AIDS related issues, greatly undermined programmes' efforts. Lim and Loo (2000:137) maintained that there was an adverse effect of HIV/AIDS attitude in the workplace. They reported that HIV/AIDS knowledgeable people viewed hiring people with HIV/AIDS as having adverse organisational consequences to the organisation. They believe that people who are HIV positive cannot perform well, can spread HIV/AIDS among other workers, and can die at any time. The implication is that these people should not be hired. This can be viewed as a discrimination against people who are infected with HIV.

#### **3.4.9. Summary on HIV/AIDS intervention programmes and attitude change**

Table 3.2 gives a summary of the findings on HIV/AIDS intervention programmes and attitude change. Only five of the sixteen studies that showed significant positive attitude change in attitudes had proper control groups. Only one of the four studies that had

negative attitude change had a proper control group. Although one study showed no significant attitude change, it did not have a proper control group. Thus, there were mixed results in the previous literature with regard to attitude change as a result of an intervention programme.

*Table 3.2 Summary of findings on HIV/AIDS intervention programme and attitude change*

<b>Variable</b>	<b>Significant change</b>	<b>No significant change</b>	<b>Negative change</b>
<b>Attitudes</b>	Andeki, Klepp, Seha, & Leshabari (1994); Catherine's (2004); Coleman & Toledo (2002); Coyle, Kirby, Parcel; Basen-Enguist, Banspach, Ruggs, & Weil (1996)*; Exner, Hoffman, Patrick, Leu, & Ehrhardt (2002); Guth, Hewitt-Gervais, Smith, & Fisher (2000); Jemmott (1996)*; Jemmott, Jemmott, & Fong (1989)* Kuhn, Steinberg, & Mathews (1994)*; Morisky, Nguyen, Ang, & Tiglao (2005); Peacock & Levack (2004); Peltzer (2002); Ratcliff-Crainet, Donald, & Dalton (1999); UNESCO (2003); Van der Schaaf (2004); Wilry, Edwards, & Dilworth* (1991)*;	Chang, Bendel, McGarvey, & Caternbury (2003);	Klepp, Ndeki, Seha, Hanna, Lyimo, Msuya, Irema, & Schreiner (1994)*; Lim & Loo (2000); Ratcliff-Crain, J., Donald, K.M., & Dalton, J. (1999); Chang, V.Y., Bendel, T.L., McGarvey, E.L., & Caternbury, R.J. (2003)

Note: \* indicates that researchers used control group(s)

### **3.5 BEHAVIOUR**

Behaviour variables or items that are usually related to HIV/AIDS or STD include sex with multiple partners, single time partners, or condom usage (past, present, future)

during sex (Ratcliff-Crain, *et al.* 1999:634). MacNair-Semands, *et al.* (1997:731) added additional items: discussing safe sex with a potential partner, becoming more selective about partners, beginning to use condoms for the first time, and learning more about HIV/AIDS as factors of HIV/AIDS behaviour. Intention to use a condom and other plans in response to AIDS, also form a basis for HIV/AIDS behaviour or behaviour change (Kuhn, *et al.* 1994:164). According to Sikkema, *et al.* (1995:149), HIV behaviour items can include low risk and high risk behaviours.

As with the other two affective factors mentioned from the previous sections, HIV/AIDS awareness programmes, condom distribution, care and support, peer education, voluntary counseling and testing, partnership with other HIV/AIDS organisations and communication form part of the intervention programme that aim at changing behaviour towards HIV/AIDS related behaviour.

### **3.5.1 HIV/AIDS awareness programme and behaviour change**

MacNair-Semands, *et al.* (1997:736) maintained that an important aim of HIV course or intervention is not only to help students reduce risk behaviour, but also to help them to maintain safer sex behaviour they may already have initiated and making these part of a daily pattern. The goals of the health education intervention are to (a) to provide factual information regarding STD and AIDS as well as prevention strategies including abstinence and safer sexual techniques; (b) to desensitize students regarding condoms, (c) to present practice communication skill and assertiveness techniques relative to potential sexual situations and relationships (Turner, *et al.* 1994:267). Davis *et al.* (1998:61) reiterated that an increase in the number of condoms distributed, occurring together with the decrease in the incidence of STD, could indicate that employees were changing their sexual behaviour as a result of education programmes.

Compared with the control women, the treatment women significantly increased self-efficacy, protective sexual behaviour, and prevention sexual behaviour after attending a HIV Prevention Intervention for low income African American women (Dancy, *et al.* 2000:113). HIV/AIDS reduction programmes can also have an effect on the HIV/AIDS related behaviour. The results of a study by Jemmott (1996:138) revealed that adolescents who received the HIV risk-reduction intervention subsequently had reduced intention for HIV risk-associated behaviour as compared with the adolescents in the control condition.

However, Davis, *et al.* (1998:78) mentioned that information alone will not result in any behaviour changes required for reducing the risk of HIV transmission. People's skills and confidence need to develop, so that they can behaviourally protect themselves. They should be educated to take charge of their own life and destiny.

### **3.5.2 Peer educators programme and behaviour change**

In their investigation into the effectiveness of an elder versus same age peers in the school setting, Bhardwaj, *et al.* (2004:6) found that peer education programmes influence behaviour change in the school setting. Using AIDS peer education programme (APEP) at Florida Atlantic University to determine the change of the 200 first-year college students' behaviour, Richie and Adelaide (1994:164) found that those who attended an APEP during their first year college were more likely to change HIV/AIDS behaviour than those who had not done so. They reported that they:

- (a) had an HIV antibody test during the school year



- (b) did not use condoms at the start of the school year, but did use them at the end of the school year.

The students from the above research also had the intention of behaviour change by asking new sexual partners about their previous partners, asking new or first sexual partners to be tested for HIV antibodies before having sex, asking a first or new sexual partner to have sex only with them, and asking the first or new partner to avoid using drugs or alcohol if the partner thought he or she might be having sex later. The research further mentioned that drugs or alcohol can influence sexual behaviour and can also cause a person to make irrational decisions towards sex.

Jemmott, *et al.* (1989:1535) found that the intervention group expressed greater confidence that they could have condoms available when they needed them than did those in the control group. The intervention group also reported greater confidence that they could exercise sufficient impulse control to use condoms.

### **3.5.3 Condom distribution programmes and behaviour change**

Ntozi and Kirunga (1997:157) suggested that positive behaviours included willingness to use condoms. On the other hand, Jemmott, *et al.* (1989:1529) maintained that safer-sex behaviour stressed condom use. The importance of a condom distribution programme towards behavioural change emanates from the fact that possession of condoms leads to a consistent use of condoms (Norman & Carr, 2002:145). According to Sikkema, *et al.* (1995:149) low HIV/AIDS risk behaviour on the other hand, includes sexual intercourse with a condom, oral-genital sex with a condom, mutual masturbation to orgasm and other sexual activities such as fondling and massage without having

intercourse. High risk behaviours included sexual intercourse without a condom, oral-genital sex without a condom, and sexual intercourse without birth control.

Students who had been given free condoms tended to use condoms more frequently and were significantly more likely to engage in anal intercourse (Akande, 1994:290). This was revealed by using Zimbabwean (n=587) and Nigerian (n=857) university students aged 17 and over, and AIDS/HIV Avoidance Questionnaires (AAQ) as a measuring instrument where people frequently used condoms after they had been distributed in the university campus. Davis, *et al.* (1998:61) reiterated that an increase in the number of condoms distributed, occurring together with the decrease in the incidence of STD, indicates the success of condom distribution.

Consistent condom use with casual partners was related to “never been pregnant” (self or partner). Having used condoms at first sex was also associated with number of social and psychological factors and as such condom use should remain an important focus for HIV prevention activities (Jenkins, *et al.* 2002:242).

Intention to use condoms with the next new partner was not associated with barriers of HIV testing attitude (Peltzer, 2002:250). Kuhn *et al.* (1994:164) avers that there was a small, but statistically insignificant change in students’ intention to use condoms in the future following the HIV/AIDS programme, and those who indicated that they may use condoms, explained this on the basis of condoms providing protection against diseases which included HIV/AIDS.

Females not participating in the responsible sexual behaviour intervention reported increased frequency of “never” using condoms and decreased frequency of condom use at last intercourse (Turner, *et al.* 1994:266).

#### **3.5.4 Care and support programme and behaviour change**

Organisations that are involved with caring and supportive people who are affected or infected with HIV promote positive HIV/AIDS related behaviour. Care and community support programmes require changes to individual sexual behaviour which, like an attitude, can only be brought about by a sustained and massive mobilisation of communities which, though small individually, together add up to a large-scale response (O’Malley, 2001:1). Morisky *et al.* (2005:65) maintain that social support is able to change condom use behaviour as well as the display of subjective norms that allow peer educators to influence or change group behaviour.

#### **3.5.5 Voluntary Counseling and Testing (VCT) programme and behaviour change**

Voluntary Counseling and Testing is an important part of South Africa’s HIV prevention strategy (Pembrey, 2006: 4). Ntozi and Kirunga (1997:157) claim that positive behaviour includes willingness to go for HIV tests. VCT is potentially effective intervention to prevent transmission of HIV by changing sexual behaviour (Alemu, *et al.* (2004:82).

Alemu, *et al.* (2004:82) further found that urban dwellers were found to be more willing than rural villagers to undergo testing for HIV. One of the objectives of VCT is to encourage people to go for testing so that they can know their status of HIV. This can help in early prevention of the spread of HIV and its further impact on the individual.

Pembrey (2006: 4) maintained that once individuals know that they are HIV positive, they can modify their sexual behaviour to prevent further infections occurring, and they can be directed towards treatment.

Exner, *et al.* (2002:76) said that women who attended intervention programmes were more likely to initiate HIV testing by the one-month follow-up than women who did not attend the intervention programme. They also found that the rate of mutual testing (being tested at the same time as one's partner) were significantly greater among women who participated in an intervention than among control women at the one-month and six month interview. That is why the Canadian HIV/AIDS Legal Network (2000:4) also emphasizes that HIV counseling and testing can and does motivate behaviour change in some individuals.

### **3.5.6 Partnership programme and behaviour change**

Peacock and Levack (2004:178) found that Men as Partners (MAP) uses programmatic strategies at many levels to effect changes in men's practices. These include using workshops that aimed at changing behaviour and collaborating closely with other non-governmental organisations to build their capacity and advocating for government commitment to promoting positive male involvement. Okware, *et al.* (2001:79) suggested that the multi-sectoral partnership strategy can significantly influence behaviour and dent prevalence as well as HIV/AIDS incidence rates. They also maintained that the mechanism for the coordination of a multi-sectoral partnership must be an integral part of the national HIV/AIDS policy within each country. They suggested that by working together, we can make a difference now and in the future.

### **3.5.7 Communication and behaviour change**

Behaviour interventions include information and education while communication programmes encourage people to reduce the number of sexual partners, thereby bringing reduction in high-risk sexual behaviour (Swanepoel, 2000:153). The mass media effects really reflect the fact that people who know of AIDS or who are contemplating changing their sexual behaviour as a result of exposure to other sources, are more likely to hear of the disease from the mass media (Benefo and Takyi, 2002:96). This is also supported by Harrison, Smit, and Myer (2000:10) who claim that in South Africa, public education through mass media has contributed to high levels of awareness about HIV/AIDS, which can lead to behaviour change.

### **3.3.9. Summary on HIV/AIDS intervention programmes and behaviour change**

Table 3.1 gives a summary of the findings on HIV/AIDS intervention programmes and behaviour change. Only four of the twelve studies that showed significant positive behaviour change had proper control groups. However, two of the studies had no significant behaviour change, but none of them had a proper control group. There were no studies that showed negative behaviour change.

Table 3.3 Summary of findings on HIV/AIDS intervention programme and behaviour change

Variable	Significant change	No significant change	Negative change
<b>Behaviour</b>	Akande (1994); Alemu, Abseno, Degu, Wondmikun, & Amsalau (2004); Bhardwaj, Ramsay, Hinds, & Bain (2004)*; Dancy, Marcantonio, & Norr (2000)*; Davis, Schneider, Rapholo, & Everett (1998); Exner, Hoffman, Patrick, Leu, & Ehrhardt (2002); Jemmott (1996)*; Norman & Carr (2002) Okware, Opio, Musinguzi, & Waibale (2001); Peacock & Levack (2004); Richie & Adelaide (1994)*; Turner, Garrison, Korpita, Waller, Addy, Hill, & Mohn (1994);	Kuhn, Steinberg, & Mathews (1994)*; Peltzer, (2002);	

Note: \* indicates that researchers used control group(s)

### 3.6 SUMMARY

This chapter highlighted the investigations that have already been done on the effect of HIV/AIDS intervention programmes on the knowledge, attitudes, and behaviour related to HIV/AIDS issues. The chapter demonstrated that most studies reported a relationship between many aspects of HIV/AIDS intervention programmes. (i.e., HIV/AIDS education programmes, which include workshops, classes, courses, seminars; condom distribution; care and support; partnerships; and communication programmes) and knowledge, attitudes, and behaviour of individuals. However, most studies did not include proper control groups. Without a proper control group, it is difficult to say whether the observed changes were due only to the intervention programme or to other factors.

The South African Police Services implemented these programmes with the purpose of, among others, changing people's knowledge, attitude, and behaviour towards HIV/AIDS related issues. Because the purpose of this work is to investigate the effects of these HIV/AIDS intervention programmes on knowledge, attitude, and behaviour of the South African Police Services in the Limpopo Province, the following chapter will detail the method and how the data were collected from the participants.

## **CHAPTER 4**

### **4 RESEARCH METHODS AND PROCEDURE**

#### **4.1 INTRODUCTION**

This section describes the approach to the investigation of the change in knowledge, attitude and behaviour after attending the HIV/AIDS intervention programme. It discusses the statement of the problem, aims of the study, research questions, hypotheses, population sample, research design, questionnaire and its validity and reliability, the pilot study, data collection, and the statistical analysis.

#### **4.2 STATEMENT OF THE PROBLEM**

The problem statement of this study as stated in Chapter 1 was:

Is there any change in knowledge, attitudes, and behaviour after attending HIV/AIDS intervention programmes in the SAPS of the Limpopo Province?

#### **4.3 AIMS OF THE STUDY**

This research had a general aim and specific objectives.

##### **4.3.1 Aim**

The primary aim of this study was to investigate whether or not there was any change in knowledge, attitudes, and behaviour of SAPS employees in the Limpopo Province after undergoing an HIV/AIDS intervention programme.



### 4.3.2 Specific objectives

There were four specific objectives in this study, which were discussed under Section 1.3 in Chapter 1.

## 4.4 RESEARCH QUESTIONS

The research questions were discussed under Section 1.5 in Chapter 1.

## 4.5 HYPOTHESES

A hypothesis is a tentative assumption or preliminary statement about the relationship between two or more variables that need to be examined (Wellman & Kruger 1999:11). It is a tentative solution or explanation of the research problem and the task of a researcher is to investigate it. The two kinds of hypotheses are the null hypotheses and the research/alternative/scientific hypotheses. The null hypothesis is a hypothesis that suggests that there is no relationship between the variables of the total population (Babbie, 1989:460). The research hypothesis is a hypothesis that suggests that there is a relationship between the variables of the total population. It is the opposite of the null hypothesis. The null hypothesis is marked by  $H_0$  while the research hypothesis is marked by  $H_1$ .

The research questions lead to the research hypotheses (see Section 1.5 in Chapter 1)

## 4.6 POPULATION

The study population included the SAPS employees in the Limpopo Province. In 2006 the SAPS in the Limpopo Province had the population of approximately eight thousand six hundred and sixty five (8665) sworn officers (Police Act) and approximately one thousand nine hundred and sixty (1960) civilian officers (Administration), totaling to ten thousand six hundred and twenty five (10625) employees. A minimum number of one hundred and twenty five (125) employees were expected to attend the HIV/AIDS awareness workshop for the year 2006. However, not all of the employees who were expected managed to attend the workshop. Shortages of staff in the components, sick leaves, and special duties were some of the reasons given as apologies for absenteeism in the workshop.

The sample size of approximately fifty one (51) employees who attended the HIV/AIDS awareness workshops comprised the experimental group. The experimental group, according to Pearson (1994:300), is the group of participants who receive the treatment condition. The HIV/AIDS awareness workshop in this case, was the treatment condition. They were male (n=25) and female (n=26) employees between the ages of 20-55 (20-33 years - n=18, 34-43 years - n=22, and 44 and above years - n=11). The participants' ranks ranged from administration, who were grouped as Public Service Act employees (PSA Act) (n=30), and the sworn officials who were grouped as Police Act (n=21). Employees in the Police Act were grouped into constables (n=3), Sergeant (n=2), inspector (n=7), Captain (6), and Superintendent (n=3). From the Constable to Sergeant levels, the employees, according to Police Act and this study, were grouped as the junior rank (n=5), while from Captain to Superintendent were grouped as the senior rank (n=16).

Those who attended suicide prevention and disability workshops comprised the control group. The control group is the group of participants that serves as a standard of comparison for determining if the treatment condition produced any effect. Out of one hundred and twenty employees who were expected to attend the suicide prevention and disability workshops for the year 2006, there were a total of 57 employees with male (n=38) and female (n=19) employees between the ages of 20-55 (20-33 years - n=17, 34-43 years - n=22, and 44 and above years – n=18). Like the experimental group, the participants ranks ranged from administration, which were grouped as Public Service Act employees (PSA Act) (n=14) and the sworn officials, which were grouped as Police Act (n=42). Employees in the Police Act had constables (n=13), Sergeant (n=0), inspector (n=30), Captain (n=2), and Superintendent (n=1). The junior ranks consisted of 13 employees, while the senior ranks had 33 employees.

#### **4.6.1 Representativeness and the characteristics of the sample**

To ensure that the sample represented the whole population of the SAPS, all employees who attended the HIV/AIDS awareness, suicide prevention, and disability workshops participated in this study. A total number of one hundred and eight (108) employees participated in this research, with fifty one (51) as an experimental group and fifty seven (57) as a control group.

The sampling process used here was opportunistic because data could only be collected from the participants when there was HIV/AIDS awareness workshop or suicide prevention or disability workshops.

In the experimental group, twenty five percent (25%) of the employees were from the Provincial Office (n=13), fifteen percent (15%) were from Capricorn Area (n=8), twenty three percent (23%) were from Waterberg Area (n=12), thirty five percent (35%) were from Mopani Area (n=18), while Vhembe Area did not have any representation (n=0) in 2006. These employees were selected by the Social Work Service section of the EAS in their respective areas to attend the workshops. Each workshop session was expected to host a minimum number of eight and a maximum number of thirty employees. All these areas held their workshops and the questionnaires were administered prior to and after the workshop (see Table 4.1).

In the control group, the Provincial Office had approximately two percent (1.8%, n=1), the Capricorn Area had ten percent (10%, n=6), the Mopani Area had forty nine percent (49%, n=28), the Vhembe Area had thirty eight percent (38%, n=22), while the Waterberg Area had none (n=0) (see Table 4.1). Each workshop was expected to host a minimum number of eight to thirty employees per session, which could represent approximately one hundred and twenty employees per year. In this group, questionnaires were also given prior to and after the workshop.

Table 4.1 Sample distribution

		HIV/AIDS awareness workshop	Suicide prevention & disability workshop	Total
		Count	Count	
Gender	Male	25	38	63
	Female	26	19	45
Rank	Admin	30	11	41
	Constable	3	13	16
	Sergeant	2	-	2
	Inspector	7	30	37
	Captain	6	2	8
	Superintendent	3	1	4
Rank	Admin	30	11	41
	Junior	5	13	18
	Senior	16	33	49
Section	Support	29	23	52
	Detective	9	7	16
	Operation	13	26	39
Area	Provincial	13	1	14
	Capricorn	8	6	14
	Mopani	18	28	46
	Vhembe	-	22	22
	Waterberg	12	-	12
Age	20-33	18	17	35
	34-43	22	22	44
	44 and above	11	18	29
<b>TOTAL GROUP</b>	<b>NUMBER OF</b>	<b>51</b>	<b>57</b>	<b>108</b>

#### 4.6.2 Variables

A variable is any characteristic or phenomenon that can vary across organisms, situations, or environments (Pearson, 1994:175). It is a concept-“a” noun that stands for variations within a class of objects, such as family background, gender, and classroom environment (Cherian, 1996:126). This research used two kinds of variables, namely independent variables and dependent variables.

#### 4.6.2.1 Independent variables

Independent variables are variables that the experimenter changes within a defined range (Pearson, 1994:175). They are the variables that can be manipulated by the experimenter, which the experimenter or investigator is interested in its possible effect (Pearson, 1994:175).

In the experiment group, the HIV/AIDS intervention programme (HIV/AIDS awareness workshop) was an independent variable. In the control group, the intervention was suicide prevention and disability workshops. The two interventions differ because of contents of the workshop. The content of the HIV/AIDS awareness workshop focused mainly on HIV/AIDS activities. The suicide prevention workshop focused on the prevention of suicide while the disability workshop concentrated on the people who are physically and mentally challenged. There were several HIV/AIDS interventions that the SAPS implemented such as HIV/AIDS awareness, peer education, condom distribution, care and social support, VCT, and partnership programmes.

##### (a) HIV/AIDS awareness workshop

In the HIV/AIDS awareness programme, the SAPS used the HIV/AIDS awareness workshop as a means of educating employees about HIV/AIDS so that employees' knowledge, attitudes, and behaviour were empowered. Contents of HIV/AIDS awareness workshops were structured along the abovementioned affective factors as reflected in the following chapters:

- Chapters 1 and 2, consisted of exercises of HIV/AIDS related matters that acted as ice breakers of the workshop;

- Chapter 3, which was entitled ‘*What are HIV and AIDS?*’ targeted at the knowledge of employees towards HIV/AIDS related items;
- Chapters 4, 5, 6, 7, 8, and 9 were targeted at both knowledge and attitudes of employees towards HIV/AIDS related issues; and
- Chapters 10, 11, 12, and 13 targeted at employees behaviour related to HIV/AIDS.

*NB: see Appendix D*

#### 4.6.2.2 Dependent variables

Dependent variables are variables that measure the influence of the independent variable (Pearson, 1994:175). To investigate if there was a significant change in knowledge, attitudes, and behaviour after attending the HIV/AIDS intervention programme, the measures of knowledge, attitudes, and behaviour were the dependent variables. It was hypothesised that their change depended on the HIV/AIDS intervention programme. Chapter 2 gave assumptions of how these variables can be changed, while Chapter 3 reported on the research that was conducted about these variable changes in relation to independent variables. A dependent variable depends on the characteristics of the independent variable. It is measured. This study measured knowledge, attitudes, and behaviour of SAPS employees who attended the HIV/AIDS awareness workshop that the organisation organised as an intervention programme toward HIV/AIDS.

#### **4.6.3 Ethical measures**

In all research, ethical issues are important. In view of this, the following ethical issues received particular attention by the researcher: informed consent, no violation of privacy, statement of cooperation with collaboration, release of publication of findings,

and restoration of subjects or respondents wherever possible and necessary. Permission from the Ethics Committee of the University of Limpopo was also obtained.

#### **4.7 RESEARCH DESIGN**

This was a quantitative research. A quantitative research study is the one that emphasises the quantification of constructs, where the researcher believes that the duly way of measuring the properties of phenomena is through quantitative measurement (Babbie & Mouton, 2001:49).

The study was a comparative cross-sectional survey where all data were collected at the same time. It was causal comparative because participants were not randomly assigned to the experimental and control conditions. Instead existing groups were compared. This design is ideally suited for a descriptive and predictive research associated with correlative studies (Steyn & Maphoso, 2006:245). Employees in the SAPS, who attended the HIV/AIDS awareness, suicide prevention and disability workshops, regardless of their HIV status, gender, and race were requested to fill in the pre- and post-test on knowledge, attitudes, and behaviour towards HIV/AIDS related issues. McMillan and Schumacher (1997:281) maintained that descriptive results can be used to investigate relationships.

#### **4.8 QUESTIONNAIRE**

To gather information from the sample, various methods can be used. The instrument used in this study was a questionnaire called HIV/AIDS Knowledge, Attitude, and Behaviour Questionnaire (see *Appendix A*). The HIV/AIDS Knowledge, Attitude, and



Behaviour Questionnaire (HAKABQ) was adopted, and it consisted of items related to HIV/AIDS knowledge, attitudes, and behaviour. The knowledge and attitude items were adopted from Carey and Schroder (1997:174-184) HIV Knowledge Questionnaire (HIV-KQ-18). The original questionnaire consisted of 27 items with the item total correlation ranging from .24 to .57 and an internal consistency across samples of .57 - .89. It also has the test-retest stability across several intervals ( $r_s = .93 - .97$ ). The questionnaire is suitable for low income men and women and is internally consistent, stable, sensitive to the change resulting from intervention, and also suitable for low literacy groups. The knowledge and attitude questionnaire was adopted by the University of Limpopo, Health Behaviour Research Unit during the Development and Evaluation of an HIV-Risk Programme for the First Entering Students in the university in 2001. The behaviour items were adopted from Wayers (2002:9) HIV/AIDS Behaviour Questionnaire. The HAKABQ was used to assess SAPS members who attended the HIV/AIDS workshops (before and after the workshop sessions) (see Annexure 1).

#### **4.8.1 The HIV/AIDS Knowledge, Attitude, and Behaviour Questionnaire (HAKABQ)**

The HIV/AIDS Knowledge, Attitude, and Behaviour Questionnaire (HAKABQ) had two sections, a pre-test and post-test.

##### **4.8.1.1 Pre-test**

The pre-test of the HAKABQ consisted of closed-ended questions. Closed-ended questions are items that require the respondents to choose from a limited number of predetermined responses (Pearson, 1994:63). The questionnaire consisted of four sections (Section 1-4). Section 1 contained items of biographical information of the participants; section two contained items of HIV/AIDS knowledge; section 3 contained

items of HIV/AIDS attitude; and section 4 contained items of HIV/AIDS behaviour. The purpose of the pre-test was to investigate the participants' level of knowledge, attitudes, and behaviour before attending the HIV/AIDS awareness workshop. The HIV/AIDS awareness workshop was one of the HIV/AIDS intervention programmes in the SAPS of the Limpopo Province. It was also used in the suicide prevention and disability workshops, which were the control group of this research.

(a) Biographical information

The purpose of this section was to get the biographical information of the participants. Table 4.2 gives the structure of how the biographical information looked like.

*Table 4.2 Biographical information of the HAKABQ*

<b>(Confidential)</b>		
<b>SECTION 1</b>		
<b>BIOGRAPHICAL INFORMATION</b>		
ATTENDANT NO: .....	AGE: .....	
RANK: .....	GENDER: .....	
.....		
PSA Act	Police Act	
Support Services	Detective Services	Operational Services

(b) HIV/AIDS knowledge

The aim of this section was to collect the participants' information regarding knowledge on HIV/AIDS related issues. It was characterised by eleven close ended questions which gave statements that the participants selected whether each statement was true, false, or whether they did not know the answer. The correct answers for this section were: K1, K4, K8, K9, K10, and K11. The wrong answers were: K2, K3, K5, K6, and K7

(see Table 4.3). Correct answers are bolded in the Table. A mark was awarded for the correct answer while zero was awarded for the wrong answer, including the ‘don’t know’ choice.

Table 4.3 HIV/AIDS Knowledge items of the HAKABQ

<b>Section 2</b>				
<b>HIV/AIDS Knowledge</b>				
For each of the following statements, please circle True, False, or Don't know				
<b>Item No.</b>	<b>Statement</b>	<b>Response</b>		
K1	Coughing and sneezing do not spread HIV	<b>True</b>	<i>False</i>	<i>Don't Know</i>
K2	A person can contract HIV virus by sharing a glass of water with someone who is HIV positive	<i>True</i>	<b>False</b>	<i>Don't Know</i>
K3	Withdrawing the penis before a climax (ejaculates) prevents a woman from contracting HIV during sex	<i>True</i>	<b>False</b>	<i>Don't Know</i>
K4	A man can contract HIV if he has anal sex with a man	<b>True</b>	<i>False</i>	<i>Don't Know</i>
K5	Condoms are less than fifty percent safe for the prevention of HIV/AIDS infection	<i>True</i>	<b>False</b>	<i>Don't Know</i>
K6	All pregnant women infected with HIV will have babies born HIV positive	<i>True</i>	<b>False</b>	<i>Don't Know</i>
K7	Showering and washing your genitals after sex can reduce the chances of being infected with HIV	<i>True</i>	<b>False</b>	<i>Don't Know</i>
K8	Fruits, vegetables, and Mopani worms can help a patient living with HIV/ADS	<b>True</b>	<i>False</i>	<i>Don't Know</i>
K9	I know of where and how I can do HIV testing and counseling, and the consequences of my testing	<b>True</b>	<i>False</i>	<i>Don't Know</i>
K10	I know about peer educators in my component	<b>True</b>	<i>False</i>	<i>Don't Know</i>
K11	People are likely to contract HIV by deep kissing (putting their tongue in their partners' mouth) if their partners are HIV positive.	<b>True</b>	<i>False</i>	<i>Don't Know</i>

NB: Bolded answers are considered the “correct” answers for each question

(c) HIV/AIDS attitude

This section consisted of twelve open ended questions which gave statements that are related to HIV/AIDS attitude. The participants were given statement wherein they had to choose whether they agree with it or not. If they strongly agree with the statement they will choose capital letter Y (definitely yes), and if they do not strongly agree, they had to choose small letter y (probably yes). If they strongly disagree, they had to choose

capital letter N (definitely no), and if they do not strongly disagree they had to choose small letter n (probably no). Positive attitude referred to when participants answered in the following pattern: 1-N, 2-N, 3-N, 4-N, 5-Y, 6-Y, 7-N, 8-Y, 9-N, 10-Y, 11-Y, 12-N. The opposite responses to the above were regarded as negative attitude towards HIV/AIDS related issues (see Table 4.4). Correct answers are bolded.

Table 4.4 HIV/AIDS Attitude items of the HAKABQ

<b>Section 3</b>						
<b>HIV/AIDS Attitude</b>						
For the following questions please answer on 4-point scale with:						
Y	=	Definitely Yes	y	=	Probably yes	
N	=	Definitely No	n	=	Probably no	
<b>Item No.</b>	<b>ATTITUDE</b>				<b>RATING</b>	
A1	Using a condom takes the “wonder” of sex				Y	<b>N</b>
A2	If I do HIV testing, people will discriminate me if they found that I am HIV positive				Y	<b>N</b>
A3	A condom is not necessary when you and your partner agree to have sex with anyone else				Y	<b>N</b>
A4	I do not want to do testing because the person who conduct the testing will make my results known to my colleagues				Y	<b>N</b>
A5	I like attending HIV/AIDS meetings, workshops, and seminars				Y	N
A6	Using a condom shows my partner that I care about him/her				Y	N
A7	People who use condoms sleep around a lot				Y	<b>N</b>
A8	I can use the same toilet facilities with the HIV positive people				Y	N
A9	Traditional medicines are a waste of time in the HIV/AIDS intervention				Y	<b>N</b>
A10	I think peer educators can improve HIV/AIDS awareness				Y	N
A11	People who are HIV positive should mix with other people				Y	N
A12	I can die earlier if I know that I am HIV positive, than if I do not know my HIV status				Y	<b>N</b>

NB: Bolded answers are considered the “correct” answers for each question

(d) HIV/AIDS behaviour

This section consisted of eleven items which were related to HIV/AIDS behaviour. The section gave statements where the participant had to indicate if those statements portrayed his/her behaviour. The participant could choose ‘not at all’ if the statement did

not reflect his/her behaviour, 'sometimes' if the statement occasionally reflected his/her behaviour, or 'always' if statement really reflects his/her behaviour. The respondent was said to have positive behaviour towards HIV/AIDS related issues if he/she responded by choosing 'always' for all the items except in item three where 'not at all' was regarded as the positive response (see Table 4.5). Two marks were awarded for positive response, one for 'sometimes', while the last one (either 'always' or 'not at all') were awarded zero.

Table 4.5 HIV/AIDS Behaviour items of the HAKABQ

Section 4 HIV/AIDS Behaviour Tick how you will rate yourself in the following activities				
Item No	Behaviour	Rating		
B1	I use condom during sex	<i>not at all</i>	<i>sometimes</i>	<b>always</b>
B2	I have done HIV test in the past year	<i>not at all</i>	<i>sometimes</i>	<b>always</b>
B3	I have many sexual partners	<b>not at all</b>	<i>sometimes</i>	<i>always</i>
B4	I usually attend HIV/AIDS meetings, workshops, and seminars	<i>not at all</i>	<i>sometimes</i>	<b>always</b>
B5	I avoid risky sexual partners	<i>not at all</i>	<i>sometimes</i>	<b>always</b>
B6	I only have sex with an HIV negative partner who only will have sex with me	<i>not at all</i>	<i>sometimes</i>	<b>always</b>
B7	I talk with my sexual partner about HIV/IDS before having sex with him/her	<i>not at all</i>	<i>sometimes</i>	<b>always</b>
B8	I always withdraw and wash my genitals (private parts) after climaxing (ejaculation)	<i>not at all</i>	<i>sometimes</i>	<b>always</b>
B9	I want to be involved with HIV/AIDS activities	<i>not at all</i>	<i>sometimes</i>	<b>always</b>
B10	I only have sex with people who had an HIV test	<i>not at all</i>	<i>sometimes</i>	<b>always</b>
B11	I eat fruits and vegetables regularly	<i>not at all</i>	<i>sometimes</i>	<b>always</b>

NB: Bolded answers are considered the "correct" answers for each question

#### 4.8.1.2 Post-test

The post-test of the HAKABQ contained all items that were in the pre-test, except that the post-test was a written post-test and the section of HIV/AIDS behaviour was written in the future tense. It represented the participants' intended behaviour after attending

the workshop. The purpose of the post-test questionnaire was to investigate if there was any change in HIV/AIDS knowledge, attitudes, and behaviour after attending the HIV/AIDS awareness, suicide prevention, or disability workshops. If the respondent significantly gave different answers in the pre and post-test, it means the HIV/AIDS awareness workshop had an effect on the respondent.

#### **4.8.2 Validity and reliability of the HABAKQ**

Validity is the extent to which you are measuring what you want to measure (Pearson, 1994:201). According to Huysamen (1995:35), validity of the test scores refers to the extent to which they satisfy their intended purpose. The original Brief HIV-18-KQ was sensitive to knowledge and attitude resulting from risk reduction interventions that contained educational components (Carey & Schroder, 2002:176). These authors maintain that the questionnaire was brief, easy-to-administer and easy-to-measure HIV/AIDS related knowledge and attitude. Two kinds of validity that were found in the HAKABQ were content and face validity.

The content validity refers to the extent to which the tasks contained are representative of the total universe of instructional objectives of the course (Huysamen, 1995:41). The questionnaire were sent to peer educators, HIV/AIDS coordinators, the section head of the Social Work Services and the commander in the EAS of the SAPS who confirm that the questionnaire contained items of HIV/AIDS knowledge, attitude, and behaviour related issues. Face validity is the degree to which it appears, on the basis of subjective evaluation, whether the test serves its purpose (Huysamen, 1995:42). It is ultimately a matter of judgement (Cherian, 1996:138). Specialists in the HIV/AIDS issues, researchers, and peer educators confirm that the HAKABQ seemed to be relevant in collecting data related to HIV/AIDS knowledge, attitude, and behaviour.

Reliability refers to the consistency of the measuring instrument. According to Rosnow and Rosenthal (1996:122) reliability is the consistency or stability where something can be repeated and be confirmed by further competent measurements. The HIV-KQ-18 provided strong levels of internal consistency and test-retest reliability. The internal consistencies across samples ranged from .75 to .89, easily exceeding the .70 standard recommended (Rosnow & Rosenthal, 1996:122). It has the alpha = .91 and is stable over one ( $r=.83$ ), two ( $r = .91$ ), and twelve-week ( $r = .90$ ) intervals. The test-retest correlation was .83, which provided evidence of stability (Carey and Schroder, 1997:176).

#### **4.9. PILOT STUDY**

A pilot study is an experiment that is conducted on a few subjects prior to the actual collection of data (Pearson, 1994:404). It provides an opportunity to assess the appropriateness and practicality of the data collection instrument, which was a questionnaire in the present study (Cherian, 1996:136). It also helps in developing interest from respondents (Haralambos & Holbom, 2000:998). The pilot study was conducted on five HIV/AIDS coordinators of the Social Work Service from the provincial and four areas offices who attended the HIV/AIDS coordinators workshop. These were the employees who would coordinate the HIV/AIDS awareness workshops in their respective areas (see Table 4.12).

Table 4.6. Sample of members attended the coordinators workshops

NAME OF AREA	COORDINATORS ATTENDED	COORDINATORS PARTICIPATED	PARTICIPATION %
Capricorn	1	1	100
Mopani	1	1	100
Provincial	1	1	100
Vhembe	1	1	100
Waterberg	1	1	100
Total	5	5	100

#### 4.9.1 The outcomes of the pilot study

One of the advantages of a pilot study is that it gives some indication of the questionnaire's tenability. It also gives suggested areas where refinements are needed (Cherian, 1996:133). It helps to determine whether or not the research should continue (Haralambos & Holborn, 2000:998).

From the pilot study, it was found that items that read '*Traditional medicines are a waste of time in the HIV/AIDS intervention*' was categorised under HIV/AIDS behaviour. It was then put in the HIV/AIDS attitude section, as it seeks the judgement of the participant, and not his/her behaviour.

There was an item in the HIV/AIDS knowledge section that read '*a man can contract HIV if he has sex with a man*'. This question was found to be wide and as such anal was added before sex and the items read as follow: '*a man can contract HIV if he has anal sex with a man.*'

#### 4.10. DATA COLLECTION

Before the pilot study and the actual data collection took place, permission had been requested from the SAPS in the Limpopo Province to conduct research on all the



selected workshops. The letter was written on the 19 April 2006 and was addressed to the Senior Superintendent (Dr) Steyn who was the head of the provincial EAS (see *Appendix B*). The SAPS granted permission on the 26 April 2006 on condition that the questionnaire be edited and the final draft be approved by the superintendent; all arrangements for administering the survey be made with the head of the Social Work Service, Superintendent Mabusela; and that it was not the duty of the Social Work Services to act as administrators of the process (see *Appendix C*).

It was requested that the head of Social Works present to the HIV/AIDS coordinators at the meeting. The intention was to conduct the research in the HIV/AIDS awareness workshops to be held in 2006. It was in that meeting that dates for the HIV/AIDS awareness workshops were obtained.

A verbal request to the Psychological Services section was made, on the date, time, and venues of the workshops (suicide prevention) to be held in 2006, for the purpose of collecting data in those workshops. The Social Works service was also requested to grant the opportunity to also collect data in the disability workshop for use as the control group.

On the date of the workshops (HIV/AIDS awareness, suicide prevention, and disability), the coordinators of the workshop gave the researcher an opportunity to administer the questionnaire. The researcher explained to the participants the purpose of the questionnaire and all that was required of them. Participants were informed that participation was voluntary, and that the results would only be used for the study purpose and nothing else. The participants were told about the confidentiality of the process, and that anyone could withdraw from participating at any time if he/she

desired. They were told that they would be given the pre-test before the workshop, and the post-test after the workshop. The participants were helped on how to fill in the biographical information before answering sections two to four. They were given chances to ask some questions pertaining to the questionnaires. When the participants completed the questionnaires, they gave them to the researcher. The coordinators and the workshop attendees were thanked for participating. The same procedure followed at the end of the workshop, when the post-tests were administered.

#### **4.11 STATISTICAL ANALYSIS**

Statistical analysis provides an objective tool for researchers to use in measuring findings and comparing them with their previous expectations and is also a defensible method of analysis subject to accurate replication that can test the null hypotheses (Cherian, 1996:139).

This research study used an Analysis of Variance (ANOVA) to analyse if there were statistically significant changes in knowledge, attitudes, and behaviour before and after members attended the HIV/AIDS awareness, suicide prevention, and disability workshops. It was also used to analyse if there were significant differences between members who attended the HIV/AIDS workshop as a research group, and those who attended suicide prevention and disability workshops as a control group. The ANOVA also analysed difference in HIV/AIDS knowledge, attitudes, and behaviour among groups of employees in the SAPS. Those groups were by gender (male and female); ranks (administrative, junior, and senior); and age (22-33 years, 34-43 years, and 44 and above years).

#### **4.12 SUMMARY**

This chapter covered all methods and procedures of the research used to investigate if there were statistically significant changes in knowledge, attitudes, and behaviour among SAPS employees in the Limpopo Province after attending HIV/AIDS awareness, suicide prevention, and disability workshops. Statement of the problem, aims of the study, research questions, and hypotheses were explain in details. This chapter also gave a description of the questionnaire, its validity and reliability and how the pilot study was done. It finally explained how data were collected from the targeted group. The next chapter will report the results, as well as the interpretation and discussion of those results.

## CHAPTER 5

### 5 RESULTS AND DISCUSSION

#### 5.1. INTRODUCTION

This section explains the analysis of data using Analysis of Variance (ANOVA) to determine if there was any statistically significant changes in knowledge, attitudes, and behaviour after the HIV/AIDS intervention programme (HIV/AIDS awareness workshop). The ANOVA helped in rejecting or failing to reject the null hypotheses. The ANOVA was also used to analyse the mean difference score in HIV/AIDS knowledge, attitudes, and behaviour among groups, before and after attending the HIV/AIDS awareness workshop as experimental group; and suicide prevention and disability workshops as the control group. Then the results were analysed by group: gender (males and females), rank (administrative, junior, and senior) and age (22-33, 34-43, and 43 and above years).

#### 5.2 RESULTS

The results were presented by first, stating the hypothesis, reporting the analyses of the data, and then reporting the results using Tables. This was followed by a discussion and the tabling of percentage response figures from each section. Codes were used in the following ways to represent items in the HAKABQ:

K = Knowledge (pre)

PK = Knowledge (post)

A = Attitude (pre)

- PA = Attitude (post)  
B = Behaviour (pre)  
PB = Behaviour (post)

The p value was used to determine the probability of obtaining the actual mean scores if the null hypothesis were true. The p-value is the probability of getting the results you got if the groups were the same. An alpha level, which is a priori criterion for the probability of rejecting the null hypothesis, was set to .05. Therefore, if p-value is less than 0.5 percent, it means that there are less than five percent chances of getting the differences obtained if it had been the same group. The total scores for each were computed by summing the items scores.

### **5.2.1 Pre-test and Post-test of HIV/AIDS knowledge, attitudes, and behaviour for experimental and control groups**

In order to investigate possible differences in HIV/AIDS knowledge, attitudes, and behaviour on pre-test and post-test between experimental and control groups, ANOVAs were computed. Each ANOVA had group (2: experimental versus control group) as a between-subjects variable and time (2: pre-test versus post-test) as a within subjects-variable. Separate ANOVAs were computed

#### 5.2.1.1 HIV/AIDS knowledge and HIV/AIDS intervention programme

HI1 There will be a statistically significant change in HIV/AIDS knowledge after employees have attended HIV/ADS intervention programme.

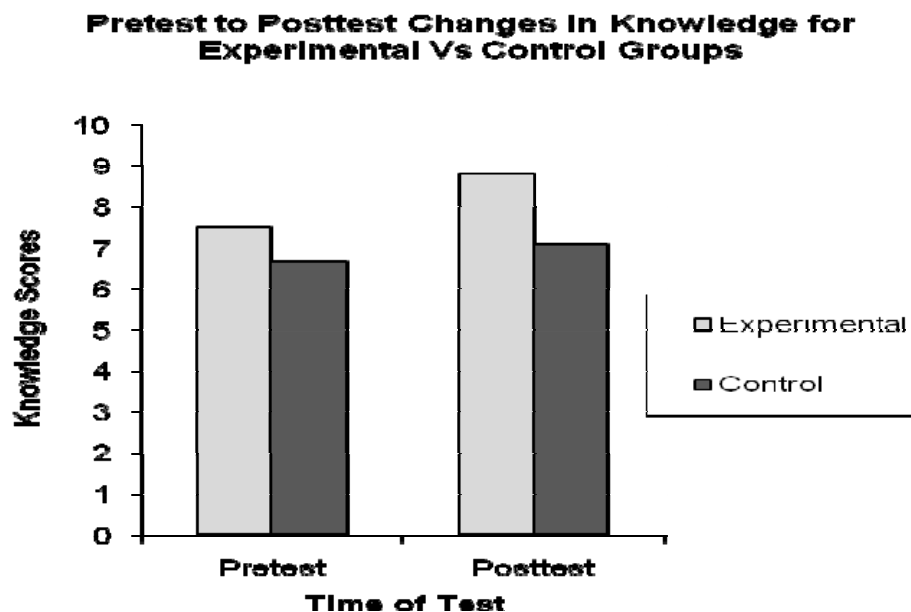
Ho1 There will not be a statistically significant change in HIV/AIDS knowledge after employees have attended HIV/ADS intervention programme.

The 2 (Group: Experimental versus Control) x 2 (Time: Pre-test versus post-test, a repeated measure) Analysis of Variance (ANOVA) was computed on knowledge scores. There was a significant main effect of time,  $F(1,105) = 21.73, p = .000$ . There also was a significant main effect of group,  $F(1,105) = 14.07, p = .000$ . The experimental group scored higher than the control group, and knowledge scores were significantly higher on the post-test than the pre-test (see Table 5.1). There also was a significant interaction between time and group,  $F(1,105) = 5.03, p = .027$ . The null hypothesis was therefore, rejected. Figure 5.1 shows that the experimental group's knowledge changed significantly more from the pre-test to the post-test than the control group.

Table 5.1 Pre-test and post-test of HIV/AIDS Knowledge scores for experimental and control groups

	Pre-test			Post-test		
	N	Mean	SD	N	Mean	SD
Experimental Group	51	7.51	2.26	51	8.78	1.79
Control Group	56	6.67	2.02	56	7.09	1.92

Figure 5.1 Pre-test to post-test change in knowledge for experimental and control groups



The results imply that the HIV/AIDS knowledge of employees who attended the HIV/AIDS awareness workshop improved significantly more than what would be expected by chance after attending the workshop. Table 5.2 shows correct answers in bold. The Table shows that the percentage knowledge of SAPS employees before attending the workshop was 68% and after the workshop, the knowledge improved to 80%. This is an improvement of about 12%. In the suicide prevention and disability groups, it was also found that the HIV/AIDS knowledge had improved after the workshop, although however, the improvement was significantly lower than in the HIV/AIDS awareness workshop, which improved from 61% to 64% making only a 3% improvement. This amount of change could be expected by chance.

This finding concurs with the literature review, especially the findings by Jemmott (1996:138); Jemmott, *et al.* (1989:1535); Kuhn, *et al.* (1994:163); Turner, *et al.* (12994:270); and Wierson and Bright (1996; 261). Before the HIV/AIDS workshop, 62% of employees believed that coughing and sneezing do not spread the HIV, and this knowledge improved to 80% after the HIV/AIDS intervention. There were 62% of people who believed that people are not likely to contract HIV by deep kissing, and after the workshop only 41% still adhered to that belief. The saliva in the mouth does not easily transmit the HIV/AIDS virus if one had to swallow it unless the two partners are bleeding in their mouths. HIV virus is transported mostly through blood and this can be communicated to the employees through educational interventions such as HIV/AIDS awareness workshops.

This 21% improvement shows that the HIV/AIDS awareness intervention can change people's knowledge. 84% and 76% of employees knew where and how to do HIV

testing and counseling, and about the knowledge of peer educators in their components, until the HIV/AIDS awareness workshop improve these percentages to 94% and 90% respectively.

Employees who thought that coughing and sneezing spread HIV can isolate HIV/AIDS positive employees especially when these infected employees are coughing or sneezing. This isolation, besides being against the basic human rights, can impact negatively on these infected and affected employees. On the other hand, people who do not know where to do the testing and counseling may not even bother to do testing to know their status, for early intervention to take place. When employees know where to do testing, and the consequences of their results, stake holders in the HIV/AIDS fraternity, can have hopes that most of their employees can voluntarily go for testing.

Testing is done in government institutions, especially in health institutions such as hospitals. Most workplaces these days have dates and places where testing and counseling can be done for their employees. If other institutions adopt this approach, the fight against HIV/AIDS can be enhanced.

Employees should know that there are other employees, like them, who are also in the same or lower rank as them, who can assist them in their hours of need. Knowing about the peer educators in their place of work, employees are sure of where to get social, psychological, and spiritual helps and support in case they are infected and affected by the pandemic. Knowledge of this may help employees to also utilise their services when the needs arise. Some of the works offered by the peer educators can be to educate fellow colleagues on the activities surrounding the HIV/AIDS activities, to offer support when colleagues are tormented by the effect of HIV/AIDS, either in their



families or in themselves. They also educate their colleagues on legal and moral advices towards HIV/AIDS related issues. Peer educators also sensitize their fellow workers on their constitutional rights, and other human rights that may affect them at their place of work and towards the general public as member of their communities.

*Table 5.2 Percentage response on HIV/AIDS knowledge, before and after HIV/AIDS awareness workshop.*

No	Statement	True	False	D/know
K1	Coughing and sneezing do not spread HIV	<b>62.7</b>	25.5	11.8
		<b>80.4</b>	15.7	3.9
K2	A person can contract HIV virus by sharing a glass of water with someone who is HIV positive	9.8	<b>84.3</b>	5.9
		8.0	<b>90.0</b>	2.0
K3	Withdrawing the penis before a climax (ejaculates) prevents a woman from contracting HIV during sex	15.7	<b>72.5</b>	11.8
		9.8	<b>82.4</b>	7.8
K4	A man can contract HIV if he has anal sex with a man	<b>70.6</b>	17.6	11.8
		<b>80.4</b>	15.7	3.9
K5	Condoms are less than fifty percent safe for the prevention of HIV/AIDS infection	31.4	<b>58.8</b>	9.8
		31.4	<b>62.7</b>	5.9
K6	All pregnant women infected with HIV will have babies born HIV positive	33.3	<b>58.8</b>	7.9
		31.3	<b>66.7</b>	2.0
K7	Showering and washing your genitals after sex can reduce the chances of being infected with HIV	15.7	<b>70.6</b>	13.7
		3.9	<b>90.2</b>	5.9
K8	Fruits, vegetable, and Mopani worms can help a patient living with HIV/ADS	<b>80.4</b>	11.8	7.8
		<b>86.3</b>	9.8	3.9
K9	I know of where and how I can do HIV testing and counseling, and the consequences of my testing	<b>84.3</b>	3.9	11.8
		<b>94.1</b>		5.9
K10	I know about peer educators in my educators	<b>76.5</b>	5.9	17.6
		<b>90.2</b>		21.4
K11	People are likely to contract HIV by deep kissing (putting their tongue in their partners' mouth) if their partners are HIV positive.	<b>32.0</b>	62.0	6.0
		<b>56.8</b>	41.2	2.0
	Total (pre) Total (post)	<b>Correct</b>	Wrong	D/know
		<b>68.3</b>	21.1	10.5
		<b>80</b>	15.1	5.8

NB: Bolded answers are considered the “correct” answers for each question

The employees' knowledge can also change after attending the suicide prevention and disability workshops (see Table 5.3). The chapters covered in the suicide prevention workshop include all factors that depressed people, such as death of the loved ones, witnessing gruesome events, stress, and other chronic illnesses such as HIV/AIDS. This can be some of the factors that improved one's knowledge regarding HIV/AIDS related issues. The improvement however is significantly lower than in the HIV/AIDS awareness workshop to conclude that the improvement of HIV/AIDS knowledge of employees in the SAPS can be due to the HIV/AIDS intervention programme. There was an improvement of nearly 3%. The highest percentage improvement in HIV/AIDS knowledge for the experimental group was found in item 11, which asked whether deep kissing spread HIV/AIDS. This is 24% improvement

Table 5.3 Percentage response on HIV/AIDS knowledge before and after suicide prevention and disability workshops

No	Statement	True	False	D/know
PK1	Coughing and sneezing do not spread HIV	<b>75.4</b>	22.8	1.8
		<b>76.8</b>	19.6	3.6
PK2	A person can contract HIV/AIDS by sharing a glass of water with someone who is HIV positive.	12.3	<b>82.5</b>	5.2
		12.5	<b>82.1</b>	5.4
PK3	Withdrawing the penis before a climaxes/ (ejaculates) prevents a woman from contracting HIV during sex.	25.0	<b>60.7</b>	14.3
		25.0	<b>60.7</b>	14.3
PK4	A man can contract HIV if he has anal sex with a man.	<b>47.4</b>	38.6	14.0
		<b>51.8</b>	30.4	17.9
PK5	Condoms are less than fifty percent safe for the prevention of HIV/AIDS infection.	38.2	<b>52.7</b>	9.1
		33.9	<b>55.4</b>	10.7
PK6	All pregnant women infected with HIV will have babies born HIV positive.	64.9	<b>33.3</b>	1.8
		62.5	<b>33.9</b>	3.6
PK7	Showering your genitals after sex reduced the chances of being infected with HIV.	18.2	<b>78.2</b>	3.6
		19.6	<b>73.2</b>	7.2
PK8	Fruits, Vegetables, and Mopani worms can help people living with HIV/AIDS.	<b>82.5</b>	14.0	3.5
		<b>83.9</b>	8.9	7.2
PK9	I know where and how I can do HIV testing and counseling, and the consequences of my testing	<b>77.2</b>	7.0	15.8
		<b>81.8</b>	5.5	12.7
9K10	I know about peer educators in my component	<b>56.1</b>	10.5	33.4
		<b>78.6</b>		21.4
PK11	People are likely to contract HIV by deep kissing (putting their tongue in their partner's mouth) if their partners are HIV positive	<b>26.3</b>	66.7	7.0
		<b>32.1</b>	60.7	7.2
	Total (pre) Total (post)	<b>Correct</b> <b>61.1</b> <b>64.6</b>	Wrong 28.9 25.3	D/know 10 10.1

NB: Bolded answers are considered the "correct" answers for each question

#### 5.2.1.2 HIV/AIDS attitudes and HIV/AIDS intervention programme

HI2 There will be a statistically significant change in HIV/AIDS attitudes after employees have attended HIV/ADS intervention programme.

Ho2 There will not be a statistically significant change in HIV/AIDS attitudes after employees have attended HIV/ADS intervention programme.

The 2 (Group: Experimental versus Control) x 2 (Time: Pre-test versus post-test, a repeated measure) ANOVA was computed on attitude scores. There was not a significant main effect of time,  $F(1,105) = 2.05, p = .156$ . There also was not a significant main effect of group,  $F(1,105) = 2.24, p = .137$ . There was not a significant interaction between time and group.  $F(1,105) = 0.06, p = .802$ . Therefore, there was not sufficient evidence that the null hypothesis could be rejected (see Table 5.4).

*Table 5.4 Pre-test and post-test of HIV/AIDS attitudes scores for experimental and control groups*

	Pre-test			Post-test		
	N	Mean	SD	N	Mean	SD
Experimental Group	51	37.90	5.01	51	38.67	5.17
Control Group	57	36.47	5.63	56	37.07	6.45

This finding maintains that the attitude of employees did not improve after the HIV/AIDS intervention programmes. Table 5.5 displayed that before the HIV/AIDS awareness workshop, 80% of employees rated that peer educators can improve HIV/AIDS awareness. Even after the workshop 80% still belief in that. Generally, 59% of employees who attended the workshop had positive attitudes towards HIV/AIDS related issues and after the workshop, the percentage improved to 63%, which according to the ANOVA, is not statistically significant to conclude that the change was caused by the HIV/AIDS awareness workshop. This finding differs with most researches such as those from Klepp, Ndeki, Seha, Hanna, Lyimo, Msuya, Irema, and Schreiner (1994:1161) and Wilry, Edwards, and Dilworth (1991:411) who found that attitude can change after HIV/AIDS intervention.

Table 5.5 Percentage on attitude before and after HIV/AIDS awareness workshop

Item No.	ATTITUDE	RATING			
		Y	y	n	N
A1	Using a condom takes the “wonder” of sex	19.6 22.0	15.2 10.0	19.6 20.0	<b>45.8</b> <b>48.0</b>
A2	If I do HIV testing, people will discriminate me if they found that I am HIV positive	8.0 22.0	34.0 18.0	16.0 10.0	<b>42.0</b> <b>50.0</b>
A3	A condom is not necessary when you and your partner agree to have sex with anyone else	36.0 45.1	18.0 17.6	14.0 7.8	<b>32.0</b> <b>29.5</b>
A4	I do not want to do testing because the person who conduct the testing will make my results known to my colleagues	7.8 10.0	11.8 6.0	21.6 22.0	<b>58.8</b> <b>62.0</b>
A5	I like attending HIV/AIDS meetings, workshops and seminars	<b>76.4</b> <b>80.4</b>	19.6 15.6	2.0 2.0	2.0 2.0
A6	Using a condom show my partner that I care about him/her	<b>76.0</b> <b>78.4</b>	16.0 11.8	4.0 5.9	4.0 3.9
A7	People who use condoms sleep around a lot	29.4 19.6	9.8 11.8	13.7 13.7	<b>47.1</b> <b>54.9</b>
A8	I can use the same toilet facilities with the HIV positive people	<b>74.0</b> <b>84.3</b>	12.0 11.7	2.0 2.0	14.0 2.0
A9	Traditional medicines are a waste of time in the HIV/AIDS intervention	31.4 35.3	13.7 19.6	19.6 7.8	<b>35.3</b> <b>37.3</b>
A10	Do you think peer educators can improve HIV/AIDS awareness	<b>80.4</b> <b>80.4</b>	17.6 13.7	3.9 3.9	2.0 2.0
A11	People who are HIV positive should mix with other people	<b>86.0</b> <b>88.2</b>	10.0 7.8	2.0 2.0	2.0 2.0
A12	I can die earlier if I know that I am HIV positive, than if I do not know my HIV status	17.6 19.6	9.8 7.9	7.9 3.9	<b>64.7</b> <b>68.6</b>
	Total (pre) Total (post)	<b>59.9</b> <b>63.5</b>	<b>Strongly positive</b>	<b>Strongly negative</b> 14.5 15.5	

NB: Bolded answers are considered the “correct” answers for each question

According to Table 5.8, there is an improvement from 59% to 61% in attitude toward HIV/AIDS related issues after employees attended the suicide prevention and disability workshop. This was probably only due to chance fluctuations in scores. Roughly, 20% of employees in the SAPS had negative attitudes towards HIV/AIDS related issues, and after the suicide prevention and disability workshops, this percentage increased slightly by one percentage point to 21%. In both HIV/AIDS awareness workshop and suicide prevention and disability workshops, employees had attitude scores of approximately

59, but they increased after the HIV/AIDS intervention programme, with HIV/AIDS awareness workshop attendees being slightly higher but not statistically significant. Thus, neither group changed significantly as a result of either HIV/AIDS workshop or suicide prevention and disability workshops.

*Table 5.6 Percentage response on HIV/AIDS attitude between suicide prevention and disability workshop*

Item No.	ATTITUDE	RATING			
		Y	y	n	N
A1	Using a condom takes the “wonder” of sex	43.6 36.4	10.9 10.9	12.8 9.1	<b>32.7</b> <b>43.6</b>
A2	If I do HIV testing, people will discriminate me if they found that I am HIV positive	17.9 23.6	28.6 20.1	8.9 12.7	<b>44.6</b> <b>43.6</b>
A3	A condom is not necessary when you and your partner agree to have sex with anyone else	51.8 50.0	10.7 8.9	14.3 7.1	<b>23.2</b> <b>33.9</b>
A4	I do not want to do testing because the person who conduct the testing will make my results known to my colleagues	16.1 17.9	5.4 5.4	17.9 16.1	<b>60.7</b> <b>60.7</b>
A5	I like attending HIV/AIDS meetings, workshops and seminars	<b>87.7</b> <b>82.1</b>	3.5 12.5	1.8 1.8	7.0 3.6
A6	Using a condom show my partner that I care about him/her	<b>87.3</b> <b>82.1</b>	5.5 5.4	3.6	3.6 12.5
A7	People who use condoms sleep around a lot	25.0 29.6	10.7 11.1	21.4 11.1	<b>42.9</b> <b>48.1</b>
A8	I can use the same toilet facilities with the HIV positive people	<b>73.2</b> <b>82.1</b>	8.9 7.1	10.7 5.4	7.1 5.4
A9	Traditional medicines are a waste of time in the HIV/AIDS intervention	29.1 35.2	12.7 11.1	14.5 9.3	<b>43.6</b> <b>44.4</b>
A10	Do you think peer educators can improve HIV/AIDS awareness	<b>82.1</b> <b>74.5</b>	7.1 18.2	5.4 1.8	5.4 5.5
A11	People who are HIV positive should mix with other people	<b>73.2</b> <b>83.6</b>	14.3 3.6	1.8 3.6	10.7 9.1
A12	I can die earlier if I know that I am HIV positive, than if I do not know my HIV status	21.4 21.4	10.7 8.9	7.1 10.7	<b>60.7</b> <b>58.9</b>
	Total (pre) Total (post)	<b>Strongly positive</b> <b>59.3</b> <b>61.5</b>		<b>Strongly negative</b> 19.9 20.9	

NB: Bolded answers are considered the “correct” answers for each question

### 5.2.1.3 HIV/AIDS behaviour and HIV/AIDS intervention programme

HI3 There will be a statistically significant change in HIV/AIDS behaviour after employees have attended HIV/ADS intervention programme.

Ho3 There will not be a statistically significant change in HIV/AIDS behaviour after employees have attended HIV/ADS intervention programme.

The 2 (Group: Experimental versus Control) x 2 (Time: Pre-test versus post-test, a repeated measure) ANOVA was computed on behaviour scores. There was a significant main effect of time,  $F(1,104) = 62.86, p = .000$ . Participants got higher behaviour scores on the post-test than the pre-test. There was no significant main effect of group,  $F(1,104) = 0.51, p = .478$  (see Table 5.7), and no significant interaction between time and group,  $F(1,104) = 0.53, p = .468$ . Therefore, there was not sufficient evidence that the null hypothesis could be rejected.

*Table 5.7 Pre-test and post-test of HIV/AIDS behaviour scores for experimental and control groups*

	Pre-test			Post-test		
	N	Mean	SD	N	Mean	SD
Experimental Group	51	23.59	3.88	51	26.25	2.74
Control Group	57	23.44	3.68	55	25.58	3.93

Table 5.8 demonstrates that 54% of employees who attended the HIV/AIDS awareness workshop had positive behaviour related to HIV/AIDS issues, while 19% of them had negative behaviour. After the workshop, 77% of employees stated that they will practice positive behaviour towards HIV/AIDS related issues. Those who had negative behaviours towards HIV/AIDS related issues dropped from 19% to 9%.

There was an increase in the percentage of employees who used condoms before the HIV/AIDS workshop from 60% to 80% after the HIV/AIDS workshop. This increase of 20% is small as compared to those who had sex only with people who had been HIV tested. There was a rise of 38% in this regard (pre = 26% and post = 64%). There are

also other increases that proved that the HIV/AIDS workshop had improved the employee's intention to improve - from negative to positive behaviour. After attending the workshop, 85% of employees claimed that they will attend HIV/AIDS meetings, workshops and seminars as compared to 39% before they attended the workshop. There was also an increase of 33% in the employees who intended to do HIV testing, from 39% to 85%.

The HIV/AIDS workshops also improved HIV/AIDS behaviour, especially in terms of eating habits. 75% of employees ate fruits and vegetables regularly while after the workshop 86% of these intended to eat them regularly. The improvement is also evidenced in the intention to talk with the sexual partner before engaging in sexual activities (66% to 80%).



Table 5.8 Percentage response on HIV/AIDS behaviour before and after attending HIV/AIDS awareness workshop

ITEM NO.	BEHAVIOUR	RATING		
		Not at all	Sometimes	Always
B1	I use condom during sex	8.0 3.9	32.0 15.7	60.0 80.4
B2	I have done HIV test in the past year	37.3 12.0	37.3 30.0	25.5 58.0
B3	I have many sexual partners	85.4 94.0	10.4 -	4.2 6.0
B4	I usually attend HIV/AIDS meetings, workshops and seminars	19.6 2.0	41.2 12.2	39.2 85.7
B5	I avoid risky sexual partners	14.0 6.1	14.0 2.0	72.0 91.8
B6	I only have sex with an HIV negative partner who only has sex with me	29.8 18.0	17.0 16.0	53.2 66.0
B7	I talk with my sexual partner about HIV/IDS before having sex with him/her	10.0 5.7	24.0 13.7	66.0 80.4
B8	I always withdraw and wash my genitals (private parts) after climaxing (ejaculation)	36.0 33.3	26.0 11.8	38.0 54.9
B9	I want to be involved with HIV/AIDS activities	15.7 6.0	25.5 8.0	58.8 86.0
B10	I only have sex with people who had an HIV test	40.0 20.0	34.0 16.0	26.0 64.0
B11	I eat fruits and vegetables regularly	2.0 2.0	22.4 11.8	75.5 86.3
	Total (pre)	<b>Positive behaviour</b> 54.5	Sometimes p/n 25.8	Negative behaviour 19.7
	Total (post)	<b>77.1</b>	12.5	9.9

NB: Bolded answers are considered the “correct” answers for each question

There is also evidence that suicide prevention and disability workshops can help in improving behaviour of employees towards HIV/AIDS related issues (see Table 5.9). Although in the control group the HIV/AIDS issues are not the main concern of the presentation, there was a change in the employees’ behaviour related to HIV/AIDS. 30% of employees usually attended the HIV/AIDS meeting, workshops, and seminars, but after attending the suicide prevention and disability workshops, their intention to attend such meetings improved to 74%. This is a change of 44%. Employees’ intention to do HIV testing improved (31% - 55%), while an improvement of employees intended to be involved with HIV/AIDS activities improved by 20%. From these workshops,

people also intended to eat a balanced food (75% - 88%) as a way to fight HIV/AIDS, to have sex only with people who had HIV test (30% – 53%) in order to avoid infection, and also intended to talk with their partners about HIV/AIDS before engaging in sexual activities (52% - 70%) as a means of practicing safe sex.

The intention in behaviour change from the suicide prevention and disability workshop is less than that in the HIV/AIDS awareness workshop. In the HIV/AIDS awareness workshops there was an improvement of 23% (54% - 77%), while in the suicide prevention and disability workshop, the improvement was 17% (51% - 68%). According to the ANOVA the difference between the two groups is not significant to conclude that the difference in the intention to change HIV/AIDS behaviour was as a result of the HIV/AIDS awareness workshop only.

This finding is not in line with the finding by Jemmott (1996:138) who maintained that adolescents who received the HIV risk reduction intervention, subsequently reduced intention for HIV risk-association behaviour as compared to the adolescents in the control group. The intention to do something, as was the case in this study is probably not the same as whether someone actually did something. This will be discussed in Chapter 6.

Table 5.9 Percentage response on HIV/AIDS behaviour before and after suicide prevention and disability workshop

ITEM NO.	BEHAVIOUR	RATING		
		Not at all	Sometimes	Always
B1	I use condom during sex	14.0 12.7	21.1 18.2	<b>64.9</b> <b>69.1</b>
B2	I have done HIV test in the past year	42.6 16.7	25.9 27.8	<b>31.5</b> <b>55.6</b>
B3	I have many sexual partners	<b>75.0</b> <b>88.7</b>	17.9 5.7	7.1 5.7
B4	I usually attend HIV/AIDS meetings, workshops and seminars	19.6 9.3	50.0 16.7	<b>30.4</b> <b>74.1</b>
B5	I avoid risky sexual partners	20.0 11.5	12.7 3.8	<b>67.3</b> <b>84.6</b>
B6	I only have sex with an HIV negative partner who only has sex with me	45.5 50.0	7.3 3.7	<b>47.3</b> <b>46.3</b>
B7	I talk with my sexual partner about HIV/IDS before having sex with him/her	17.5 12.7	29.8 16.4	<b>52.6</b> <b>70.9</b>
B8	I always withdraw and wash my genitals (private parts) after climaxing (ejaculation)	28.6 27.8	17.9 16.7	<b>53.6</b> <b>55.6</b>
B9	I want to be involved with HIV/AIDS activities	32.7 17.0	25.5 20.8	<b>41.8</b> <b>62.3</b>
B10	I only have sex with people who had an HIV test	50.0 35.2	19.6 11.1	<b>30.4</b> <b>53.7</b>
B11	I eat fruits and vegetables regularly	5.3 1.9	19.3 9.3	<b>75.4</b> <b>88.9</b>
	Total (pre) Post (post)	<b>51.8</b> <b>68.2</b>	Sometimes n/p 22.5 13.7	Negative behaviour 25.5 18.1

NB: Bolded answers are considered the “correct” answers for each question

### 5.2.2 Pre-test and post-test of HIV/AIDS knowledge, attitude, and behaviour scores by groups (gender, ranks, and age)

In order to investigate possible differences in HIV/AIDS knowledge, attitudes, and behaviour between gender, age groups, and ranks, additional ANOVA were computed. Each ANOVA still had group as a between-subjects variables and time as a within subjects-variable. However these were already reported. Thus, only any significant main effect of the new variables and any significant interactions with those new variables are reported in the following sections:

### 5.2.2.1 HIV/AIDS knowledge between male and female employees

HI4 There will be a statistically significant difference in HIV/AIDS knowledge between male and female employees before and after attending the HIV/AIDS intervention programme.

Ho4 There will not be a statistically significant difference in HIV/AIDS knowledge between males and female employees before and after attending the HIV/AIDS intervention programme

A 2 (Group) x 2 (Gender: male versus female) x 2 (Time) ANOVA was computed on HIV/AIDS knowledge scores. There was no significant main effect of gender,  $F(1,103) = 0.62$ ,  $p = .433$ . There also were no significant interactions between gender and any other variables (see Table 5.10). The null hypothesis could therefore, not be rejected.

*Table 5.10 Pre-test and post-test of HIV/AIDS knowledge scores by gender*

	Pre-test			Post-test		
	N	Mean	SD	N	Mean	SD
Males	63	6.97	1.97	63	7.57	2.11
Females	45	7.20	2.44	44	8.36	1.86

### 5.2.2.2 HIV/AIDS attitudes between male and female employees

HI5 There will be a statistically significant difference in HIV/AIDS attitudes between male and female employees before and after attending the HIV/AIDS intervention programme.

Ho5 There will not be a statistically significant difference in HIV/AIDS attitudes between male and female employees before and after attending the HIV/AIDS intervention programme.

A 2 (Group) x 2 (Gender: male versus female) x 2 (Time) ANOVA was computed on HIV/AIDS attitudes scores. There was no significant main effect of gender,  $F(1,103) = 0.31$ ,  $p = .579$ . There also were no significant interactions between genders and either time or group (see Table 5.11). Therefore, there was not sufficient evidence that the null hypothesis could be rejected.

*Table 5.11 Pre-test and post-test of HIV/AIDS attitude scores by gender*

	Pre-test			Post-test		
	N	Mean	SD	N	Mean	SD
Males	63	36.76	5.57	63	37.57	6.51
Females	45	37.69	5.09	44	38.20	4.96

#### 5.2.2.3 HIV/AIDS behaviour between males and female employees

HI6 There will be a statistically significant difference in HIV/AIDS behaviour between males and female employees before and after attending the HIV/AIDS intervention programme.

Ho6 There will not be a statistically significant difference in HIV/AIDS behaviour between males and female employees before and after attending the HIV/AIDS intervention programme.

A 2 (Group) x 2 (Gender: male versus female) x 2 (Time) ANOVA was computed on HIV/AIDS behaviour scores. There was no significant main effect of gender,  $F(1,102) = 3.43$ ,  $p = .067$ . There also were no significant interactions between genders and either time or group (see Table 5.12). Therefore, there was not sufficient evidence that the null hypothesis could be rejected.

The findings on gender suggest that there is no significant difference in knowledge, attitude, and behaviour between males and female employees in the SAPS. These findings differ with the prevalence percentages given in Chapter 1.

*Table 5.12 Pre-test and post-test of HIV/AIDS behaviour scores by gender*

	Pre-test			Post-test		
	N	Mean	SD	N	Mean	SD
Male	63	222.76	4.01	62	25.61	3.86
Females	45	24.56	3.13	44	26.32	2.65

#### 5.2.2.4 HIV/AIDS knowledge among the ranks of employees

HI7 There will be a statistically significant difference in HIV/AIDS knowledge among employees' ranks before and after attending the HIV/AIDS intervention programme.

Ho7 There will not be a statistically significant difference in HIV/AIDS knowledge among employees' ranks before and after attending the HIV/AIDS intervention programme.

A 2 (Group) x 3 (Ranks: administration, junior, senior) x 2 (Time) ANOVA was computed on HIV/AIDS knowledge scores. There was a significant main effect of rank,  $F(2,101) = 4.15, p = .019$ . The null hypothesis was therefore, rejected. Administrators and juniors had higher HIV/AIDS knowledge scores than senior employees. There however, were no significant interactions between age group and either time or group (see Table 5.13). This implied that the differences in HIV/AIDS knowledge among employees' ranks were not due to either the HIV/AIDS awareness workshop or suicide prevention and disability workshops and that these differences were still evident after the intervention took place.

*Table 5.13 Pre-test and post-test of HIV/AIDS knowledge scores by rank*

	Pre-test			Post-test		
	N	Mean	SD	N	Mean	SD
Administration	41	7.27	2.35	40	8.65	1.75
Junior	18	7.89	1.37	18	8.33	1.41
Senior	49	6.59	2.17	49	7.12	2.20

It was shown that there was a statistically significant difference in HIV/AIDS knowledge among ranks of employees, with administrators and juniors performing better than senior employees in the SAPS employees who attended the three workshops. The difference may be caused by the fact that in the administration ranks, employees are employed according to their academic qualifications while in the senior ranks appointments are based on experience and police training.

That put the employees in the administrative ranks as more knowledgeable. The junior ranks of the SAPS as was explained in Chapter 4, were characterized by constables, sergeant, and inspectors, and are mostly characterized by younger employees who are mostly new in the department and are still sexually active. Perhaps they were still fascinated by exploring sexual activities and practices. Perhaps they wanted to know most of the things that could affect their sexual lives. On the other hand, employees in the senior ranks are mostly older generation who had been in the organisation for years and possess life experiences with little academic qualifications. Most of them were employed on condition they had former junior certificates (Standard 8/ Grade 10) or Grade 12 with a six months to one or two year certificates obtained from police training institutions. Perhaps they thought they had more knowledge than the young employees, and as such tended to refuse the new information from the new generation to mess-up with their stable experience.

### 5.2.2.5 HIV/AIDS attitudes among the ranks of employees

HI8 There will be a statistically significant difference in HIV/AIDS attitudes among employees' ranks before and after attending the HIV/AIDS intervention programme.

Ho8 There will not be a statistically significant difference in HIV/AIDS attitudes among employees' ranks before and after attending the HIV/AIDS intervention programme.

A 2 (Group) x 3 (Ranks: administration, junior, senior) x 2 (Time) ANOVA was computed on HIV/AIDS attitude scores. There was a significant main effect of rank,  $F(2,101) = 9.89, p = .000$ . The null hypothesis was therefore, rejected. There also were no significant interactions between ranks and either time or group (see Table 5.14).

*Table 5.14 Pre-test and post-test HIV/AIDS attitude scores by rank*

	Pre-test			Post-test		
	N	Mean	SD	N	Mean	SD
Administration	41	37.85	4.94	40	39.10	4.74
Junior	18	41.61	3.55	18	41.78	3.21
Senior	49	34.92	5.14	49	35.35	6.45

Employees in the administration and junior ranks had higher HIV/AIDS attitude scores than employees in the senior ranks. Employees at senior ranks in the SAPS might be interpreting the HIV/AIDS issues as something that only affects the lower employees of the organisation, and this can be one of the contributing factors that made them score lower in HIV/AIDS attitudes.



### 5.2.2.6 HIV/AIDS behaviour among the ranks of employees

HI9 There will be a statistically significant difference in HIV/AIDS behaviour among employees' ranks before and after attending the HIV/AIDS intervention programme.

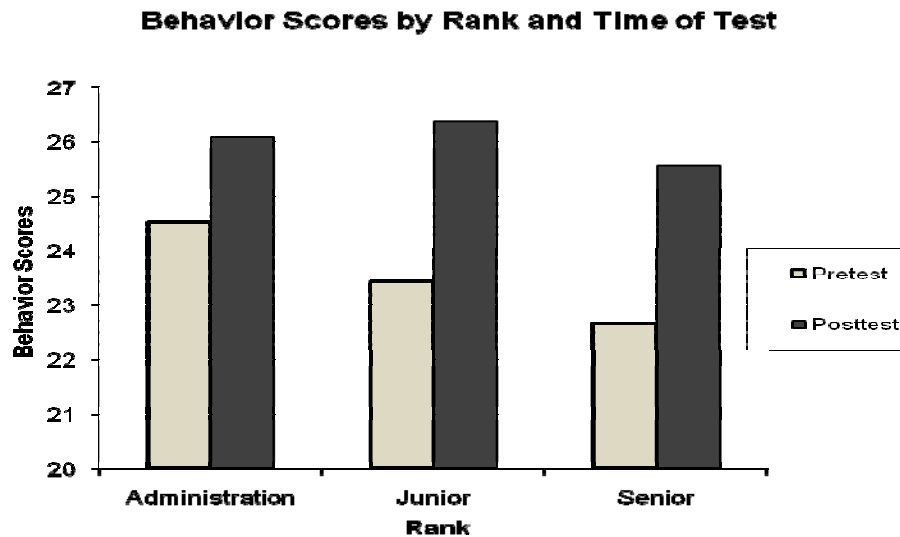
Ho9 There will not be a statistically significant difference in HIV/AIDS behaviour among employees' ranks before and after attending the HIV/AIDS intervention programme.

A 2 (Group) x 3 (Ranks: administration, junior, senior) x 2 (Time) ANOVA was computed on HIV/AIDS behaviour scores. There was not a significant main effect of rank,  $F(2,100) = 1.20$ ,  $p = .306$ . Therefore, there was not sufficient evidence that the null hypothesis could be rejected. There was however, a significant interaction between rank and time,  $F(2,100) = 4.40$ ,  $p = .015$ . Table 5.15 shows the overall means by rank and time of testing. Figure 5.2 shows the interaction more clearly. Employees in all ranks scored higher in behaviour in the post-test than in the pre-test, but those in junior and senior positions had higher gains than those in administrative positions. Those in administrative ranks already had higher scores initially, and the others scores improved to their level.

*Table 5.15 Pre-test and post-test of HIV/AIDS behaviour scores by rank*

	Pre-test			Post-test		
	N	Mean	SD	N	Mean	SD
Administration	41	24.54	3.74	40	26.08	2.43
Junior	18	23.44	3.03	18	26.39	2.57
Senior	49	22.67	3.86	48	25.58	4.30

Figure 5.2 Behaviour score by rank and time of test



The fact that presenters in all the workshops were from the Employees Assistance Services, who were employed under the same act as those in the junior and the senior ranks, may have influenced the results. Administrative employees may have despised the employees who were employed under the PA and regarded them as uneducated, stereotypical police types who only implement what they were being instructed to do without questioning. Yet the requirements for employment in the EAS were Grade 12, plus three or more year's degree, plus a professional registration (i.e., psychometrists, psychologists, counselors, social workers, etc).

#### 5.2.2.7 HIV/AIDS knowledge among age groups of employees

HI10 There will be a statistically significant difference in HIV/AIDS knowledge among employees' age groups before and after attending the HIV/AIDS intervention programme.

Ho10 There will not be a statistically significant difference in HIV/AIDS knowledge among employees' age groups before and after attending the HIV/AIDS intervention programme.

A 2 (Group) x 3 (Age groups: 20-33, 34-43, 44 and over) x 2 (Time) ANOVA was computed on HIV/AIDS knowledge scores. There was a significant main effect of age group,  $F(2,101) = 8.09, p = .001$ . The null hypothesis was rejected on these grounds. There also were no significant interactions between age group and either time or group. Older people had less HIV/AIDS knowledge than younger people (see Table 5.16). Employees between the age of 20-33 and 34-43 had more knowledge on HIV/AIDS related issues than those employees between 44 years and over.

*Table 5.16 Pre-test and post-test of HIV/AIDS knowledge scores by age group*

	Pre-test			Post-test		
	N	Mean	SD	N	Mean	SD
20-33	35	7.91	1.81	35	8.34	1.77
34-43	44	7.23	2.10	43	8.19	2.17
44 and over	29	5.79	2.14	29	6.93	1.87

The finding suggests that the differences exist between these age groups in the pre-test and in the post-test. In the post-test the great difference existed between the age groups of 22-33 and 44 and above. Those differences may be brought by the fact that younger and older generation approached sexual activities differently.

In the older section, there was a belief that HIV was not for older people as they were responsible. However, the younger generation fell in love with older people who called them “*sweet mamas*” or “*sweet daddies*,” and during that process they may be involved in sexual activities. The fact that older employees did not have adequate knowledge related to HIV/AIDS before and after the HIV/AIDS awareness workshop is a point of concern. Perhaps the younger employees are still eager to know much about HIV/AIDS activities as the pandemic is threatening their future

### 5.2.2.8 HIV/AIDS attitude among age groups of employees

HI11 There will be a statistically significant difference in HIV/AIDS attitudes among employees' age groups before and after attending the HIV/AIDS intervention programme.

Ho11 There will not be a statistically significant difference in HIV/AIDS attitudes among employees' age groups before and after attending the HIV/AIDS intervention programme.

A 2 (Group) x 3 (Age groups: 20-33, 34-43, 44 and over) x 2 (Time) ANOVA was computed on HIV/AIDS attitude scores. There was a significant main effect of age group,  $F(2,101) = 9.83, p = .000$ . On these grounds, the null hypothesis was rejected. There were no significant interactions between age group and either time or group. Older employees had less favourable attitudes than younger employees for both the pre-test and the post-test (see Table 5.17).

*Table 5.17 Pre-test and post-test of HIV/AIDS attitude scores by age group*

	Pre-test			Post-test		
	N	Mean	SD	N	Mean	SD
20-33	35	38.86	5.24	35	40.69	4.41
34-43	44	37.39	5.25	43	37.91	6.03
44 and over	29	34.72	4.96	29	34.28	5.52

Perhaps the experience and the cultural background of older employees, especially in the African population, can be a retarding factor for older employees to display positive attitudes towards HIV/AIDS related activities. Most of the older people still have the attitude that it is immoral, unethical, and a taboo to discuss sexual issues in the public, especially in front of employees so young to be their children or grand children.

### 5.2.2.9 HIV/AIDS behaviour among age groups of employees

HI12 There will be a statistically significant difference in HIV/AIDS behaviour among employees' age groups before and after attending the HIV/AIDS intervention programme.

Ho12 There will not be a statistically significant difference in HIV/AIDS behaviour among employees' age groups before and after attending the HIV/AIDS intervention programme.

A 2 (Group) x 3 (Age groups: 20-33, 34-43, 44 and over) x 2 (Time) ANOVA was computed on HIV/AIDS behaviour scores. There was no significant main effect of age group,  $F(2,100) = 0.29, p = .747$ . Therefore, there was not sufficient evidence that the null hypothesis could be rejected. There also were no significant interactions between age group and either time or group (see Table 5.18).

*Table 5.18 Pre-test and post-test of HIV/AIDS behaviour scores by age group*

	Pre-test			Post-test		
	N	Mean	SD	N	Mean	SD
20-33	35	23.54	3.58	35	26.03	2.51
34-43	44	23.95	4.15	42	25.81	4.20
44 and over	29	22.79	3.33	29	25.90	3.18

## 5.3 SUMMARY

This chapter dealt with the hypotheses, which seek to give answers to the research questions of this study. The chapter revealed that there was a significant change in HIV/AIDS knowledge among employees in the SAPS after attending the HIV/AIDS awareness workshops. The difference in HIV/AIDS knowledge in the pre-test and post-test between the experimental and the control groups was significant to conclude that

the HIV/AIDS awareness workshop changed the knowledge of employees related to HIV/AIDS activities. There was also a significant change in behaviour but both the experimental and the control groups changed after their respective interventions. It was revealed that administrators and juniors in both experimental and control groups had higher HIV/AIDS knowledge score than senior employees in both pre-test and post-test. Results also indicated that older employees who attended HIV/AIDS awareness, suicide prevention and disability workshops had less favourable attitudes towards HIV/AIDS related issues than younger employees. Employees in all age groups, scored higher in HIV/AIDS behaviour on the post-test than in the pre-test.

The next chapter will deal with the summary, the discussion, and recommendations pertaining to the findings. It also deals with areas that need further research and factors that might have limited the findings of this research.

## **CHAPTER 6**

### **6 CONCLUSIONS, RECOMMENDATIONS, LIMITATIONS, AND FUTURE RESEARCH**

#### **6.1 INTRODUCTION**

This chapter concludes the research findings in terms of the essence of the study and then makes recommendations on the strength of the interpretation of the results. It indicates some shortcomings that may have influenced the findings of this investigation. The chapter furthermore, highlights further research studies that are needed to add to research knowledge in Educational Psychology.

#### **6.2 THE ESSENCE OF THE FINDING**

The problem that was investigated in this research was to find out whether there were any changes in HIV/AIDS knowledge, attitudes and behaviour that could result after employees attended the HIV/AIDS intervention programme. The HIV/AIDS intervention programme in this study was the HIV/AIDS awareness workshop held by the SAPS in the Limpopo Province in 2006. The general aim of this research, therefore, was to investigate whether there were any significant changes in knowledge, attitudes, and behaviour after attending the HIV/AIDS awareness workshop. It also investigated whether there were any significant differences in knowledge, attitudes, and behaviour among employees in the SAPS of the Limpopo Province. These differences were investigated in terms of gender, age groups, and ranks.

### 6.3 CONCLUSIONS

The summary of the literature review in Chapter 3 showed mixed results with regard to changes in knowledge, attitudes, and behaviour. In fact the results for attitude were mixed because it had both positive and negative changes. Table 6.1 summarises the findings of the present study with regard to changes in knowledge, attitudes, and behaviour. Each of these is discussed in the sections that follow.

Table 6.1 Summary of findings

<b>Depended Variable</b>	<b>Independent variables</b>	<b>Results</b>
Knowledge	Time (Pre & Post) tests	Post-test > Pre-test (significantly more change for the experimental group than the control group)
	Groups (Experimental & Control)	Experimental > control
	Gender (Males & Females)	No significant difference
	Ranks (Administration, Junior & Senior)	Admin & Junior > Senior
	Age (20-33, 34-43, & 44 and over)	20-33 & 34-43 > 44 and over
Attitude	Time (Pre & Post) tests	No significant difference
	Groups (Experimental & Control)	No significant difference
	Gender (Males & Females)	No significant difference
	Ranks (Administration, Junior & Senior)	Admin & Junior > Senior
	Age (20-33, 34-43, & 44 and over)	20-33 & 34-43 > 44 and over
Behaviour	Time (Pre & Post) tests	Post-test > Pre-test
	Groups (Experimental & Control)	No significant difference (Both groups improved)
	Gender (Males & Females)	No significant difference
	Ranks (Administration, Junior & Senior)	Significant interaction between rank and time (junior & senior improved more than administrative)
	Age (20-33, 34-43, & 44 and over)	No significant difference



### **6.3.1 Knowledge change**

The literature review demonstrated that there was some evidence of a significant change in knowledge after HIV/AIDS awareness, peer education, condom distribution, care and social support, VCT, partnership, and communication intervention programmes. However, only four of the fourteen studies that showed significant positive knowledge changes had proper control groups (see section 3.3). In the present research, it was discovered that knowledge changed in relation to the actual intervention as indicated by post-test being greater than pre-test. It appeared that the one day HIV/AIDS awareness workshop was effective in changing knowledge and that the experimental groups also had higher scores than the control group.

### **6.3.2 Attitude change**

The literature review revealed that most of the previous research found a change in attitude after HIV/AIDS intervention programmes. However, because only five of the sixteen studies that showed significant positive attitude changes in attitudes had proper control groups, conclusions about the change became improper (see section 3.4). In the present study, attitude did not change after the HIV/AIDS awareness workshop. Whatever differences there were in attitude initially were the differences later, and the workshop appeared to have little to no effect in changing people's attitudes.

### **6.3.3 Behaviour change**

It was also found in the review that most studies revealed a change in HIV/AIDS behaviour after HIV/AIDS intervention programmes. However, once again, only four of the twelve studies that showed significant positive behaviour changes had a proper control groups, making the conclusion about the change improper (see section 3.5). But in the present study, both the experimental and the control groups said their behaviour

had changed after the HIV/AIDS intervention. This was indicated by the score of the post-test being greater than the pre-test. Therefore concluding that the HIV/AIDS awareness workshop changed the HIV/AIDS behaviour was also improper.

#### **6.4 RECOMMENDATIONS**

The purpose of intervention is to cause change. The study demonstrated that these changes can be manifested in people's knowledge. However, the study did not find the effect of this HIV/AIDS intervention programme on HIV/AIDS attitude, although a portion of studies in the literature review demonstrated attitude changes for those who attended an HIV/AIDS intervention programme.

Government institutions should employ HIV/AIDS intervention programmes in the form of HIV/AIDS awareness workshops, where they educate fellow employees on other strategies that were created to change their knowledge towards the pandemic's related issues. These strategies include peer educators, condom distribution, partnership with other stakeholders, and also various forms of communications that are at the employees exposure. Perhaps it takes much more than a one day workshop to impact people's attitudes and behaviour.

The Department of Health, in its work of Broad Framework for HIV & AIDS and STI Strategic Plan for South Africa, came up with some recommendations that included a need for a revision of the HIV/AIDS behavioural change approach. This means that the present HIV/AIDS intervention programmes need to be revisited and evaluated as they have been implemented since 1993. Many changes have taken place since the establishment of these HIV/AIDS intervention programmes, and as such, they should

be improved to cope with the ever changing techniques and challenges facing the world today.

Another recommendation is consolidating and building existing partnerships towards HIV/AIDS. In the past, the president of the Republic of South Africa denied that HIV caused AIDS, and that no one ever died of AIDS as far as the president knew. That led to the government failing to form partnerships with unions such as NAPWA, which aims to fight the pandemic and its consequences. Partnerships are important because they reflect a collective fight against the pandemic.

The final recommendation of the Broad Framework for HIV & AIDS and STI Strategic Plan was increasing of the contributions of the business sector in the fight against the spread of HIV/AIDS, especially regarding small, medium, and micro enterprises. Without businesses to fund HIV/AIDS programmes in both government and private sectors, winning the battle against the pandemic will be more difficult. Business sectors need to fund projects that aim at fighting HIV/AIDS by paying peer educators, funding places where AIDS patients and orphans are kept, paying the care-givers, etc. These projects aim at supporting the psychological and the social needs of the HIV/AIDS infected and affected people through care and education.

The above recommendations are also supported by this research since during the time of conducting it, it was realized that not all government institutions had well defined HIV/AIDS programmes. For instance, in the Department of Education, HIV/AIDS programmes were only active in the classroom for pupils as they were included in the curriculum, while most employees (teachers, clerks, etc.) did not know that such programmes existed for them. Even in the SAPS, the programmes did not seem to be

accessible to all employees. People with disabilities were never identified in all the HIV/AIDS workshops sampled for this study although they were employed.

It was also discovered that the government's HIV/AIDS strategic programmes did not end with only those that were being implemented by the SAPS. Others include prevention of mother-to-child transmission (PMTCT) and the administration of antiretroviral therapy (ART), which the SAPS did not implement. These programmes are recommended to be included in the SAPS and other workplaces because most employees in the SAPS are mothers whose pregnancies can affect their unborn babies in one way or another. On the other hand, the administration of the ART is not only recommended by the HIV/AIDS concern organizations and lobbyists, but research shows that they help a great deal in the fight against the aggression of the pandemic.

Presentations of HIV/AIDS workshops should focus on promoting maximum benefit for young employees. Youth are the future of the country. They should be encouraged to take HIV/AIDS presentations seriously, as this could help them in living a healthy lifestyle. The use of incentives such as certificates and giving of points to those who perform better in the HIV/AIDS workshops could perhaps be used to motivate employees in terms of HIV/AIDS activities.

It can also be recommended that the future workshops should focus more on the older citizens so that they can also benefit and learn more from the workshop so as to change their knowledge towards HIV/AIDS related issues. Older people learn more by experience, or put in the other way, by simulating real life events. If the syllabus of such awareness workshops can have more practical chapters, then both young and old employees can benefit nearly equally from them. These chapters may include

demonstrations on how the condom is inserted into reproductive organs (males and females), how to handle bleeding colleagues in the workplace, and also how to counsel someone who was traumatized by HIV/AIDS (infected or affected).

Perhaps using senior employees can stimulate interest in the senior ranks employees in terms of HIV/AIDS activities so that their knowledge can be enhanced. It is also encouraging to find the employees at the lower ranks to have such knowledge in terms of HIV/AIDS activities. They are the future senior employees and future leaders. Their HIV/AIDS knowledge could be profitably used to educate those who will be entering the police services in the future.

Utilising commissioners and directors can make senior employees to take the workshop seriously. These commissioners and directors can encourage HIV/AIDS peer education among senior employees so that they could discuss with their peer groups how best they can handle HIV/AIDS among employees. They can also share among themselves, on matters relating to the legal and human rights aspects of HIV/AIDS and how to handle and treat employees infected and affected by HIV/AIDS. In Chapters 2 and 3 it was explained that attitude is related to judgment, and as such, labeling, discriminating, victimizing, prejudicing, and traumatizing employees who are infected or affected by HIV/AIDS can be avoided and discouraged, especially by senior rank employees who make decisions.

One other thing that can help in fostering positive attitudes among older employees can be to employ social figures of the same age group to present in the HIV/AIDS awareness workshops as guest speakers or to give keynote addresses in these workshops. These may include celebrities in the form of radio presenters; politicians;

professionals; sports stars; HIV/AIDS activists; motivational speakers; teachers; nurses; doctors; and even cultural heads of the community such as chiefs, members of the royal's kraals, traditional healers, etc. This would make the workshops more appealing to the older employees.

Prior counseling to senior and administrative employees is recommended. Special skills possessed by the social workers, psychologists, and chaplains, who are presenters of these workshops, can be used to change the attitude of these senior employees in order to motivate them and to make the workshop fruitful for them. They may be taught that HIV/AIDS does not discriminate between people in terms of seniority in the workplace, and that being in the higher hierarchy and being more educated does not make one immune from contracting the HIV virus or from being affected by the consequences of HIV/AIDS. They can also be taught that being a junior in the workplace does not mean that one does not possess the information that can help those in the senior positions. Education is not a one way channel where only the elders can teach the young, but it is also true that the young can teach the elders as well.

Finally, It is recommended that the management of the SAPS revisits the approach of presenting these workshops to make it conducive to all organizational ranks. Perhaps in the future, mentioning the qualifications of the presenters during the introduction could help the administrative employees.

## **6.5 LIMITATIONS OF THE STUDY**

The researcher did not manage to get responses from some of the targeted workshops. The HIV/AIDS awareness workshop in the Vhembe District did not take place and as

such they were not included in this study. The Vhembe District is predominantly Venda speaking employees. The Venda population is one of the official ethnic groups in the Limpopo Province. The exclusion of this ethnic group may mean that the results of this study's findings may not generalise to all ethnic groups in the South African Police Service of the Limpopo Province.

The researcher did not include all aspects of the HIV/AIDS knowledge, attitudes, and behaviour in the HIV/AIDS Knowledge, Attitude, and Behaviour Questionnaire. These include, as given in the recommendations, the Antiretroviral (ART) items and those that are related to mother-to-child transmission (MTCT). The omitted aspects might have shed more light on or changed the results of the study. That could have helped in investigating if employees in the SAP know about drugs that are available to help managing HIV/AIDS medically, and also what an HIV employee who is pregnant can do in order to avoid transmitting the virus to her unborn baby. It could have helped in finding out the attitude of SAPS employees in relation to the ART and MTCT.

Attitude is not something that develops in one day. It is made up of events, views, and judgments that develop over time and as such it is not easy to change it in a one day workshop like the HIV/AIDS awareness workshop. Attitude can be changed by intervention that lasts for weeks or months, and the impact of such intervention would need to be evaluated continuously.

The time frame between the pre-test and post-test of this study was quite short. That was another limitation of the study.

Behaviour change in this study was represented by what the employees did previously and the intention of the participants to change what they had been doing, and not the employees' actual behaviour. The actual behaviour could manifest after weeks, months, or years. It would have been better to give people the very same questionnaire as in the pre-test. Due to time constraints and financial limitations, these follow ups could not materialise.

## **6.6 SUGGESTIONS FOR FURTHER RESEARCH**

Intention to do something probably overestimates people's actual behaviour. The research could investigate whether the members were behaving the way they had claimed they intended to behave by conducting delayed post-tests (i.e., one month after the workshop). This would make the pre-test and post-test more similar and might be the indicator of the actual behaviour change. A follow up on the members of the SAPS who attended these HIV/AIDS workshops and who were sampled for this study could be conducted to investigate whether these members actually did those things they intended to do. The follow up also could investigate whether participants still held the increased knowledge they had displayed at the end of the workshop.

Future research also should look at other problems that can be derived from the implementation of the HIV/AIDS intervention programmes. These intervention programmes may not only affect the individuals' knowledge, attitude, and behaviour, but they can also affect the employees' family, economic, and social situations. Further research into the influence of HIV/AIDS awareness workshops or other intervention programmes into the family life is therefore suggested.



It was discovered from this study that there was a great difference in knowledge and attitude among age groups and ranks before and after attending the HIV/AIDS awareness workshop. These differences can also be investigated so that future HIV/AIDS intervention strategies should focus on these differences. Things such as what causes the difference; why the difference occurred; and what the other departments, countries, and continents do to close the differences are some of the things the future researches can investigate

## **6.7 SUMMARY**

The prevalence percentage among the antenatal clinic attendees in South Africa is a wakeup call to the government and to all those who are involved with public health. The prevalence demonstrates that the number of people infected by HIV/AIDS from 2001 to 2006 took an upward climb. The prevalence showed that women were more infected than men, while the middle age people were more infected than any other age group. The government required that every working institution should have a programme that deals with HIV/AIDS. The HIV/AIDS awareness workshop as the SAPS's intervention programme showed that the employer was caring for the health of their employees.

This study showed that the HIV/AIDS awareness workshop helped in changing the employees' knowledge. It demonstrated that changing knowledge is probably easier than changing attitude and behaviour. Many recommendations were given for future HIV/AIDS intervention programmes so that they are structured for the benefit of all employees. Research on the effectiveness of these interventions was also highlighted. It was also observed from this study that great effort is required by all stakeholders in the HIV/AIDS fraternity for a permanent change in attitude and behaviour. However, it

is critical that employers in South Africa give the effort to make that happen. It is truly a life and death situation.

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Appendix A

**HIV/AIDS KNOWLEDGE, ATTITUDE, AND BEHAVIOUR QUESTIONNAIRE  
(HAKABQ)  
PRE TEST**

**NB:**

- 1 This questionnaire is confidential**
- 2 The questionnaire is for research purposes only**
- 3 Answer as honest as you can**
- 4 Mark the answer with X**

**(Confidential)**

**SECTION 1**

**BIOGRAPHICAL INFORMATION**

ATTENDANT NO: .....

AGE: .....

RANK: .....

GENDER: .....

PSA Act	Police Act
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Support Services	Detective Services	Operational Services
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**SECTION 2**

**HIV/AIDS KNOWLEDGE**

<i>Item NO.</i>	<i>STATEMENT</i>	<i>RESPONSE</i>		
		<i>True</i>	<i>False</i>	<i>Don't know</i>
1	Coughing and sneezing do not spread HIV.	<i>True</i>	<i>False</i>	<i>Don't know</i>
2	A person can contract HIV by sharing a glass of water with someone who is HIV positive.	<i>True</i>	<i>False</i>	<i>Don't know</i>
3	Withdrawing the penis before a climax (ejaculates) prevents a woman from contracting HIV during sex.	<i>True</i>	<i>False</i>	<i>Don't know</i>
4	A man can contract HIV if he has anal sex with a man.	<i>True</i>	<i>False</i>	<i>Don't know</i>
5	Condoms are less than fifty percent safe for the prevention of HIV/AIDS infection.	<i>True</i>	<i>False</i>	<i>Don't know</i>
6	All pregnant women infected with HIV will have babies infected with HIV.	<i>True</i>	<i>False</i>	<i>Don't know</i>
7	Showering and washing your genitals after sex can reduce the chances of being infected with HIV.	<i>True</i>	<i>False</i>	<i>Don't know</i>
8	Fruits, vegetable, and Mopani worms can help people living with HIV/AIDS.	<i>True</i>	<i>False</i>	<i>Don't know</i>
9	I know where and how I can do HIV testing and counseling, and the consequences of my testing.	<i>True</i>	<i>False</i>	<i>Don't know</i>
10	I know about peer educators in my component.	<i>True</i>	<i>False</i>	<i>Don't know</i>

11	People are likely to contract HIV by deep kissing (putting their tongues in their partners' mouth) if their partners are HIV positive.	<i>True</i>	<i>False</i>	<i>Don't know</i>
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### SECTION 3

#### HIV/AIDS ATTITUDE

Answer on a four point scale with:

**Y** = Definitely Yes

**N** = Definitely No

**y** = Probably Yes

**n** = Probably No

Item No.	ATTITUDE	RATING			
		Y	y	n	N
1	Using a condom takes the "wonder" of sex	Y	y	n	N
2	If I do HIV testing, people will discriminate against me if they find that I am HIV positive.	Y	y	n	N
3	A condom is not necessary when you and your partner agree not to have sex with anyone else.	Y	y	n	N
4	I do not want to do testing because the person who conducts the testing will make my results known to my colleagues.	Y	y	n	N
5	I like attending HIV/AIDS meetings, workshops and seminars.	Y	y	n	N
6	Using a condom shows my partner that I care about him/her.	Y	y	n	N
7	People who use condoms sleep around a lot.	Y	y	n	N
8	I can use the same toilet facilities with HIV positive people.	Y	y	n	N
9	Traditional medicines are a waste of time in the HIV/AIDS intervention.	Y	y	n	N
10	Do you think peer educators can improve HIV/AIDS awareness?	Y	y	n	N
11	People who are HIV positive should mix with other people.	Y	y	n	N
12	I can die earlier if I know that I am HIV positive, than if I do not know my HIV status	Y	y	n	N

### SECTION 4

#### HIV/AIDS BEHAVIOUR

Tick how you will rate yourself

ITEM NO.	BEHAVIOUR	RATING		
		Not at all	Sometimes	Always
1	I use condom during sex.	Not at all	Sometimes	Always
2	I have done an HIV test in the past year.	Not at all	Sometimes	Always
3	I have many sexual partners.	Not at all	Sometimes	Always
4	I usually attend HIV/AIDS meetings, workshops and seminars.	Not at all	Sometimes	Always
5	I avoid risky sexual partners.	Not at all	Sometimes	Always
6	I only have sex with an HIV negative partner, who only has sex with me.	Not at all	Sometimes	Always



7	I talk with my sexual partner about HIV/AIDS before having sex with him/her.	<b><i>Not at all</i></b>	<b><i>Sometimes</i></b>	<b><i>Always</i></b>
8	I always withdraw and wash my genitals (private parts) after climaxing (ejaculation).	<b><i>Not at all</i></b>	<b><i>Sometimes</i></b>	<b><i>Always</i></b>
9	I want to be involved with HIV/AIDS activities.	<b><i>Not at all</i></b>	<b><i>sometimes</i></b>	<b><i>Always</i></b>
10	I only have sex with people who had an HIV test.	<b><i>Not at all</i></b>	<b><i>Sometimes</i></b>	<b><i>Always</i></b>
11	I eat fruits and vegetable regularly.	<b><i>Not at all</i></b>	<b><i>Sometimes</i></b>	<b><i>Always</i></b>

End of questionnaire

Thanks for your time.

Box 2116  
GROOTHOEK  
0628

19 April 2006

Attention: Sen. Supt. Dr. Renier Steyn

The Provincial Commissioner  
South African Police Services  
POLOKWANE  
0700

**APPLICATION TO CONDUCT A RESEARCH.**

Kindly receive my letter of application to conduct research in your institution.

The topic of my research is "The effect of HIV/AIDS intervention programme on knowledge, attitude, and behaviour change in the SAPS employees in the Limpopo province".

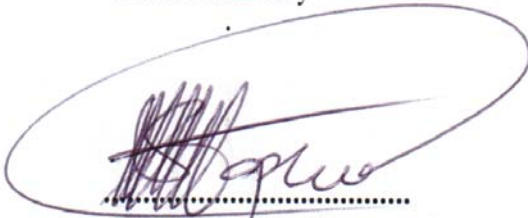
Members of the SAPS who will be attending the HIV/AIDS workshop will be requested to fill in the questionnaire before the workshop and also after the workshop scheduled in the following ways:

15 minutes pre test  
15 minutes post test  
*Total minutes = 30*

Attached please find the H/AKABQ

Banking on your positive response.

Yours Faithfully



Maphoso L.S. (Sergeant)  
81270208

Appendix C

SUID-AFRIKAANSE POLISIEDIENS



SOUTH AFRICAN POLICE SERVICE

Privaatsak/Private Bag 9428

Verwysing Reference	81270208 LS Maphoso
Navrae Enquiries	Sen/Supt (Dr) R Steyn
Telefoon Telephone	(015) 293 7282
Faksnommer Fax number	(015) 293 7297

THE SECTION HEAD  
EMPLOYEE ASSISTANCE SERVICES  
LIMPOPO  
POLOKWANE  
0700

26 APRIL 2006

7 A LS MAPHOSO  
PO BOX 2116  
GROOTHOEK  
0628

B THE SUBSECTION HEAD: SOCIAL WORK SERVICES  
LIMPOPO  
POLOKWANE  
0700

ATT: SUPT MABUSELA

RE: APPLICATION TO CONDUCT A SURVEY  
FOR RESEARCH PURPOSES IN THE SAPS

- A-B 1 Your letter dated 2006-04-16 refers.
- 2 Hereby permission is granted to conduct the survey as proposed in the letter.
- 3 The following restrictions / requirements however applies:
- That the questionnaire be edited and the final draft approved by myself before administering it.
  - That all arrangements for administering the surveys be made with Supt Mabusela from Social Work Services.
  - That it is not the duty of Social Work Services to act as administrators of the process, but that they can assist wherever possible - after consultation with Supt Mabusela.
- B 1 Our discussion of 2006-04-26 refers.
- 2 Please assist the member where possible.

  
SEN/SUPT  
SECTION HEAD: EMPLOYEE ASSISTANCE SERVICES  
DR R STEYN

**Course Code: PSWS417**

## **HIV AWARENESS TRAINING: THE WORKBOOK**

### **A word to all SAPS personnel**

Welcome to this HIV Awareness Program. May you find it a thought provoking and enriching learning experience and, above all, may it empower you to face the challenges of life that lies ahead with success.

This Workbook has been written to function as a tool in the HIV Awareness Programme that you are now a part of. It contains various exercises, fact sheets and questionnaires that will be used in the course that you will be undertaking.

This information – especially the fact sheets – is however not only of importance for the course. It is important for life itself.

Use this Workbook wisely – it is now your property.

Good luck with the course!

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