

**PERCEPTIONS AND ATTITUDES OF EMPLOYEES
TOWARD VOLUNTARY HIV/AIDS TESTING:
A SOUTH AFRICAN CASE STUDY**

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Clive Lamohr
November 2006

DECLARATION

I declare that this mini thesis is my own work and that all sources consulted have been reported and acknowledged. I further declare that this mini thesis has not been submitted to any other institution of higher learning for any other degree or equivalent qualification.

Signed :

Date:



ABSTRACT

The devastation caused by the Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome (HIV/AIDS) is having a major impact on both the social and economic environment in South Africa. HIV/AIDS hits at the core of the businesses structure - the bottom line. In the absence of a cure for the disease or an effective vaccine, the challenge for all the stakeholders is how to successfully contain and limit the impact of the disease. Intervention programmes such as awareness, knowledge sharing and seroprevalence testing have the potential to limit HIV/AIDS infections and reduce high-risk behaviours. Whilst education and awareness programmes have been relatively successful in highlighting the dangers of HIV infection, perception, attitudes and behaviours of employees towards HIV/AIDS have dampened voluntary HIV screening initiatives. Many South African organisations have commendable HIV/AIDS education and awareness programmes, however, a concerning fact is that employees are reluctant to avail themselves to voluntary HIV/AIDS testing. Stigmatising attitudes toward persons living with HIV/AIDS may reduce people's willingness to have themselves tested for the Human Immunodeficiency Virus (HIV). This may increase the risk of transmission. It may also lead to increased absenteeism in the workplace, and workdays lost resulting from excessive sick.

The aim of the study was to establish what the perceptions and attitudes are of employees at different levels of the organisation with regard to HIV/AIDS testing. A further aim was to identify possible reasons for the poor employee response to voluntary HIV/AIDS testing. It was thus important for this research to gauge employee knowledge, attitude and behaviour toward HIV/AIDS in order for organisations to develop strategies for effective HIV/AIDS counselling and testing programmes.

The data for this study was collected by means of a self report questionnaire. The questionnaire was administered to a sample of employees across all levels of the organisation using the convenient sample approach to identify the respondents. Two hundred and forty six (246) out of a total of 600 questionnaires distributed were returned, making the response rate a credible 41%.

The Statistical Package for Social Science (SPSS) was used to analyse the data obtained from the questionnaire. Both inferential and descriptive statistical approaches were used to analyse the data. The Analyses Of Variance (ANOVA) was used to determine whether differences exist in the perceptions and attitudes of employees at different levels and groupings in the organisation. Additionally post hoc tests (i.e. the Scheffe test) were applied to all comparisons of means after the analysis of variance.

The findings of this research are important for the role of HIV/AIDS testing and awareness/preventions strategies implemented in South Africa. It provides more insight as to why employees resist HIV/AIDS testing. It can furthermore assist organisations in developing strategies for implementing effective HIV/AIDS awareness and/or prevention programmes. More specifically, the findings identified ways in which organisations can redesign their intervention programmes so as to encourage a greater number of employees to submit to voluntary HIV/AIDS testing.

KEY WORDS

- 1. Human Immunodeficiency Virus (HIV)**
- 2. Acquired Immune Deficiency Syndrome**
- 3. Stigmatisation**
- 4. Voluntary HIV/AIDS testing**
- 5. Employee perception and attitudes**
- 6. HIV/AIDS awareness**
- 7. HIV/AIDS preventative strategy**
- 8. HIV/AIDS education programmes**
- 9. Socio-economic impact of HIV/AIDS**
- 10. Absenteeism**



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CHAPTER 1

THE RESEARCH PROBLEM AND ITS SETTING

1.1 INTRODUCTION

The aim of this study is to determine the perceptions and attitudes of employees towards voluntary HIV/AIDS testing.

The Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome (HIV/AIDS) is a medical and social disease that affects global societies (Markus, 2002). The disease disproportionately affects developing countries, placing enormous pressure on both the government and business sectors. This is even more so in Sub-Saharan Africa where the disease has reached epidemic status (Bure, Bishikwobo-Nsarhazo, & Mutangadura, 2000).



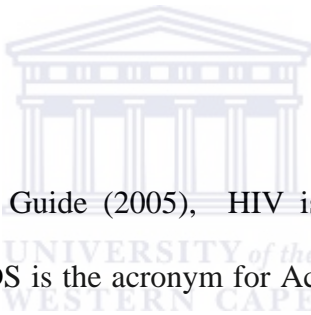
According to Bollinger and Stover (1999), AIDS is having a major impact on both the social and economic environment in South Africa. Dreyer (2003) predicts that by the year 2009 the death rate resulting from AIDS in South Africa will surpass the accumulative deaths from all other causes. As a young democracy, South Africa needs to ensure continued growth in all sectors so that the government could meet its commitment to its people and investors (Walker - Beaumont, 2004).

South African organisations competing globally - are being challenged on a daily basis to improve production outputs and product quality in order to remain competitive. If left unchallenged, HIV/AIDS has the potential to disrupt and destroy

organisational growth. It has therefore become an operational imperative for organisations in South Africa to implement appropriate intervention programmes in an effort to counteract the impact of HIV/AIDS in the workplace. Raising employees' levels of awareness about HIV/AIDS and facilitating positive attitudes and perceptions about voluntary HIV/AIDS testing should form part of such intervention programmes. However, the problems that organisations encounter with negative attitudes towards and perceptions regarding HIV/AIDS testing are hindering these initiatives (Mundy & Dickinson, n.d.).

1.2 BACKGROUND TO THE HIV/AIDS DILEMMA

1.2.1 Definition of HIV/AIDS



According to the Genetic Study Guide (2005), HIV is the acronym for Human Immunodeficiency Virus and AIDS is the acronym for Acquired Immune Deficiency Syndrome. HIV is the virus that attacks the body's immune system and causes AIDS (Polson, 2000). HIV infects cells and tissues of the human immune system by neutralising their effect to fight disease, thereby rendering the person infected with HIV vulnerable to a range of "infections and cancers, called pathogens" (Genetic Study Guide, 2005, p. 2). Pathogens are opportunistic viruses that compromise the immune system of HIV infected people "making them sick and, at times, result in death" (Polson, 2000, p. 3). The Acquired Immune Deficiency Syndrome or AIDS is thus a compilation of diseases that arise because of HIV infection (Genetic Study Guide, 2005).

1.2.2 History of HIV/AIDS

The first media recording of AIDS, according to Whiteside and Sunter (2000), appeared in the Morbidity and Mortality Weekly Report in 1981. Although the initial cases of the disease were among homosexual men, the AIDS virus was soon evident among haemophiliacs and people receiving blood transfusions (Whiteside & Sunter, 2000). According to Polson (2000), the AIDS virus was only classified as a virus in 1984. Polson (2000) also states that the virus was already present in most countries by then, laying the foundation for its present epidemic status. Tests like the “Enzyme–Linked Immuno–Sorbent Assay (ELISA) and the Radio–Immuno–Precipitation Assay (RIPA)” were developed during 1985 to identify the HIV virus (Polson, 2000, p.7). People are diagnosed as HIV positive “when HIV antibodies are detected in their blood – those with a CD4 count of below 200 are regarded as having AIDS” (Whiteside & Sunter, 2000, p.2). To date “there is no cure for AIDS” (Polson, 2000, p.10). Polson (2000) further contends that until such time that a cure for AIDS is discovered, education and awareness programmes, aimed at changing HIV/AIDS risk behaviours and preventing the transmission of the disease are essential (Polson, 2000).

1.2.3 HIV/AIDS Behaviours

Perkel and Streubel (Marcus, 2002, p. 2) state that AIDS “is a disease of attitudes and behaviours.” According to the LGBT Health Channel (2005), there is no cure for AIDS – the disease can at best be contained by medication. In this regard Ladebo and Tanimowo (2002) support the idea of intervention programmes focusing on risk

factors, knowledge and HIV/AIDS prevalence testing being developed and introduced in organisations. This will raise awareness and bring about a change in attitudes and behaviour (Ladebo & Tanimowo, 2002). By introducing intervention programmes in the workplace, organisations can help to address fears, anxiety and prejudice among both infected and non-infected employees and establish a measure of understanding and tolerance among employees (Aggleton, Parker, & Maluwa, 2003). According to Peltzer, Nzewi, and Mohan (2004), testing for HIV antibodies is an important intervention that can be used to counteract the transmission of HIV infection.

Donnelly (2000) asserts that HIV/AIDS is an infectious disease which ultimately cause the death of people infected with the virus. According to him (Donnelly, 2000), the problems associated with the disease are social stigma, discrimination and prejudice. This is normally the result of a lack of understanding regarding the disease - both socially and in the workplace. Peltzer et al. (2004) contend that stigmatisation of people with HIV/AIDS may reduce people's willingness to have themselves tested for HIV. This could only increase the risk of transmission.

As far as South Africa is concerned half of the HIV/AIDS infections are found in people younger than 25 years old (Assessment Solutions Africa, 2002). It is further estimated that that by 2010 fifteen percent (15%) of South Africa's skilled workforce will be HIV positive (Assessment Solutions Africa, 2002). HIV/AIDS is a reality that will decimate at least 20 – 30 % of South Africa's most economically and productive workforce in a short space of time. It could thus be argued that the spread of AIDS has diabolical implications for business – both for its workforce and its customer base (Assessment Solutions Africa, 2002).

1.3 PROBLEM STATEMENT

According to Maritz (2000), HIV/AIDS is a definite workplace issue that affects people at all levels of the organization. Additionally, as an infectious disease, HIV/AIDS has huge cost implications for business organisations in terms of absenteeism, productivity, medical cost, retirement contributions and training (Simon, Whiteside, Vincent, & Thea, 2000). It is therefore of paramount importance and an operational imperative for organisations to formulate HIV/AIDS awareness and education programmes in an effort to reduce the transmission of the disease (Maritz, 2002). Umerah-Udezulu and Williams (2001) contend that organisations should proactively design their HIV/AIDS education initiatives in such a way that they also address the fears and misconceptions that are very often associated with the disease. According to Umerah-Udezulu and Williams (2001), a lack of HIV/AIDS education results in misinformation. This leads to negative attitudes, including fear, mistrust and misunderstanding. Furthermore, organisations should take steps to assess the impact of the pandemic on the future success of the business. This could be achieved, according to Maritz (2002, p. 9), “through voluntary HIV/AIDS testing.” Studies have indicated that voluntary HIV/AIDS testing has been effective in changing the behaviour and attitudes of people (Umerah-Udezulu & Williams, 2001).

Kalichman and Simbayi (2003, p. 2) believe that “stigmatization, beliefs about AIDS and their associated fears can influence decisions to seek HIV testing and HIV testing services.” What emerges is that negative attitudes towards HIV/AIDS testing can be attributed to a lack of awareness to the HIV/AIDS pandemic. Kalichman and Simbayi

(2003) further state that the attitudes of people with less knowledge of HIV testing demonstrated high HIV/AIDS related stigmas: “ascribing greater shame, guilt, and social disapproval to people living with HIV“ (p1). Voluntary HIV/AIDS testing coupled with greater awareness can potentially reduce negative behaviours (Kalichman & Simbayi, 2003). Voluntary HIV/AIDS testing in the workplace can form an important part of such a programme. It not only focuses on promoting knowledge of HIV/AIDS, but it also emphasises the importance of counselling as a means of changing the behaviour of individuals. It is thus quite obvious that many challenges await organisations and/or individuals who are involved in the development and implementation of programmes focusing on HIV/AIDS education and prevention.

This study endeavours to explore the behavioural context that drives people’s attitudes and perception towards HIV/AIDS and HIV/AIDS assessment in the workplace. This study will consequently contextualise the behavioural context of HIV testing to bring about a better understanding of its dynamics from a workplace perspective. It is further envisaged (at the organisation where the study was conducted) that the knowledge derived from this study will enhance the organisation’s human resources understanding of the behaviours and attitudes of people towards HIV/AIDS.

1.4 OBJECTIVE OF THIS RESEARCH

One realises from the preceding argument that HIV/AIDS poses an important challenge to an organisation. It is also evident from the literature (Umerah–Udezulu &

Williams, 2001; Kalichman & Simbayi, 2003) that a lack of HIV/AIDS education often results in fear and misconception regarding this phenomenon; hence the poor response and even reluctance of employees to undergo HIV/AIDS testing. Despite the literature on the implications of the HIV/AIDS pandemic (Umerah–Udezulu & Williams, 2001) and the possible role of HIV/AIDS testing in educating people, very little information exists on why employees are reluctant to submit to voluntary HIV/AIDS testing. It is also not clear what the determinants are of the negative attitudes of people toward such testing. Stigmatisation beliefs about HIV/AIDS and their associated fears can influence people’s decision to undergo voluntary HIV/AIDS testing (Kalichman & Simbayi, 2003).

The organisation where this research was conducted has implemented a comprehensive HIV/AIDS programme. An integral part of the programme is voluntary HIV/AIDS testing. Despite this comprehensive education and preventative programme, little success has been achieved with employees submitting to voluntary HIV/AIDS testing.

It was therefore the primary purpose of this exploratory study to examine the attitudes and perceptions of employees in this organisation, at different organisation levels toward voluntary HIV/AIDS testing.

1.5 RESEARCH QUESTIONS

Based on the research problem, the following research questions were formulated.

- ❑ What are the views and attitudes of people in different groups (cultural, age, gender, years of service etc.) regarding voluntary HIV/AIDS testing?
- ❑ Are there significant differences in knowledge regarding HIV/AIDS based on biographical variables within the different groups?
- ❑ What fears and misconceptions exist regarding HIV/AIDS within the targeted group?
- ❑ Why are people unwilling and reluctant to submit to and undergo voluntary HIV/AIDS testing?
- ❑ What interventions would be required to change the perceptions and attitudes of people towards HIV/AIDS testing?

1.6 RESEARCH OBJECTIVES

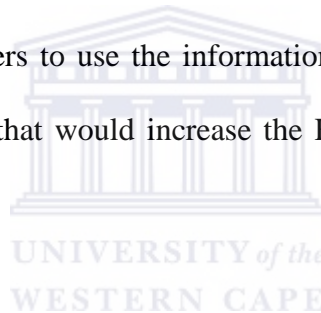
The aim of this research is to determine the perceptions and attitudes of employees toward voluntary HIV/AIDS testing. More specifically, this research aims to address the following:

- ❑ To establish whether differing attitudes and opinions influence behaviour towards HIV/AIDS screening;
- ❑ To determine whether there is a relationship between attitudes of employees and their response to HIV/AIDS testing in the workplace;
- ❑ To determine where people differ from each other in their perceptions and attitudes towards voluntary HIV/AIDS testing based on their population group, marital status, age, gender and tenure with the organisation, and

- To examine the results of the study in the context of a selected workplace with the view of developing and implementing an intervention aimed at improving employee willingness to undergo voluntary HIV/AIDS testing.

1.7 SIGNIFICANCE OF THE STUDY

This study aims to measure the level of understanding that employees have of HIV/AIDS, to establish what fears and anxiety exist among employees that would discourage voluntary HIV/AIDS testing and to gain relevant information and insight on how to structure intervention programmes. The research further endeavours to identify plausible reasons why employees are reluctant to submit to voluntary HIV/AIDS tests and for employers to use the information gained from the study to structure and plan interventions that would increase the HIV/AIDS testing levels at the organisation.



1.8 DEFINING KEY ISSUES

1.8.1 HIV testing

An HIV test is a clinical examination conducted on a sample of human body fluids to determine the prevalence of the HIV virus (De Cock & Johnson, 1998). HIV testing is used as an additional approach in endeavours to reduce HIV transmission. Combined with pre - and posttest counselling, HIV testing is known to improve awareness of HIV transmission.

1.8.2 HIV/AIDS Testing perceptions

Perception is, according to McShane and Travaglione (2003, p.74), “the process of receiving information about, and making sense of the world around us. It involves deciding which information to notice, how to categorise this information and how to interpret the information within the framework of our existing knowledge.” Bergh and Theron (2003, p.104) define perception as “a selective process by which people interpret and give meaning to external factors.” Perception, therefore makes us aware of our environment and determines how we communicate with others - each person’s perception about issues may differ (Bergh & Theron, 2003). Cognizance should be taken of these differences when structuring HIV/AIDS awareness programmes (Bergh & Theron, 2003).

According to Valdiserri, Holtgrave, and West (1999), people’s perceptions about HIV testing are directly linked to testing behaviours and is a reflection on how people view their HIV risks status. People who believe that they are not at risk of contracting HIV may be hesitant to submit to voluntary testing (Valdiserri et al., 1999). Risk perception is thus viewed as a strong indicator of voluntary HIV testing (Holtzman, Bland, Lanky, & Mack, 2001).

1.8.3 HIV/AIDS Testing attitudes

Allan (1990) defines attitude as a settled opinion or a way of thinking. The attitude of people regarding certain issues largely shape their behaviour and the way in which they react towards these issues. According to Feldman (1999, p. 609), “attitude is

learned predisposition that allow people to respond in a favourable or unfavourable manner to a particular person, behaviour or thing.” Attitudes hence influence behaviour (Feldman, 1999).

According to Second and Backman (cited in Arnold, Cooper, and Robertson, 1998, p.191), attitude refers to “certain regularities of a persons feelings, thoughts and predisposition to act towards his/her environment.” These responses are indicative of the way people feel, think or behave towards the object of attitude albeit work method or the behaviour of colleagues (Arnold et al., 1998). Misinformation, misconceptions, fears, anxiousness about confidentiality and prejudice are drivers of HIV test attitudes (Nyanzi & Whitworth, 2001).

1.9 CONCLUSION

This chapter outlined the challenges associated with the HIV AIDS pandemic and how these challenges impact on people within business organisation. This chapter also focused on the research questions, the research objectives and defined and discussed key issues that this study will address.

1.10 OVERVIEW OF THE CHAPTERS

Chapter two provides an overview of the literature reviewed pertaining to the aspects related to the study. Reference is made with regard to the HIV/AIDS dilemma with specific reference to the impact thereof on productivity and the workplace.

Furthermore stigmatization and discrimination based on a persons’ HIV/AIDS status is discussed.

Chapter three focuses on the research methodology used to investigate the research problem. In particular the sample, procedure, research hypotheses, measuring instrument, and the statistical methods used to test the hypotheses are discussed.

Chapter four presents the research results. This chapter also provides an overview of the results based on the statistical analysis.

Chapter five reflects on the findings of the study and the limitations of the research. The chapter concludes with recommendations to the organisation and for future research.



CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome (HIV/AIDS) has devastating political, social and economic consequences (Arndt & Lewis, 2000). This is evident as HIV/AIDS related illnesses and morbidity affect the income and expenditure of households, the government and business organisations (Arndt & Lewis, 2000). The destruction potential of HIV/AIDS is such that the pandemic is classified as being worst than the bubonic plague that decimated more than a third of Europe in the 14th century, and the influenza epidemic early in the 20th century that killed approximately 20 million people globally (Caldwell, 1997). The mortality predictions for HIV/AIDS are greater because, whilst the previously mentioned epidemics lasted between three and four years, the HIV/ADS epidemic spans from 1981 with no sign of abatement (Caldwell, 1997). The disease is not selective as it threatens the lives of people all over the world.

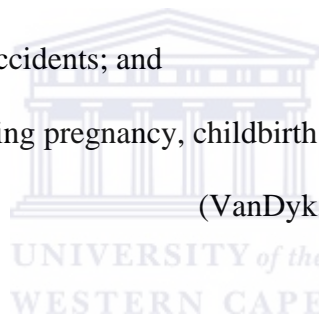
According to Robinson (2003), the infections are much higher in developing countries. This has a severe impact on the social, economic, and business development of these countries (Robinson, 2003).

2.2 NATURE OF HIV/AIDS

According to Van Dyk (1999), HIV/AIDS poses serious consequences to the health of people. The HIV/AIDS virus attacks and destroys the immune system that protects the body against viral, bacterial and parasitic infections. The HIV/AIDS virus has been identified in body fluids such as blood, semen or vaginal secretions, breast milk, urine and saliva. The HIV/AIDS virus can be transmitted from one person to another in the following ways;

- during unprotected sexual contact with an infected partner;
- contact with infected blood (caused by injections with contaminated needles when intravenous drug users share needles or when health care workers are involved in needle prick accidents; and
- from mother-to-child (during pregnancy, childbirth or breastfeeding).

(VanDyk, 1999).



According to O'diaji (2005), the virus can also be transmitted through cultural practices such as the cutting of tribal marks and male and female circumcision.

The HIV virus invades the body's white blood cells, known as CD4+ cells and attaches itself to the genetic material (DNA) of the cell and starts to replicate (Van Dyk, 1999). The CD4+ cells are a type of white blood cell that protects the body against infection (Rowet, 2004). CD4+ cells are also identified as T-lymphocytes, T-cells or T-helper cells (Rowet, 2004). Although the body continues to produce CD4+ cells, the HIV virus gradually destroy CD4+ cells, thereby reducing the effectiveness of body's immune system (Rowet, 2004). As the number of CD4+ cells in the blood is

reduced, the immune system loses its ability to fight and prevent infections (Van Dyk, 1999). This leaves the body's weakened immune system vulnerable to AIDS related opportunistic infections such as cancer, tuberculosis, hepatitis, pneumonia and diarrhoea (O'diaji, 2005). Viewed in this light, AIDS is thus the final stage of HIV infection (O'diaji, 2005).

2.3 THE GLOBAL PERSPECTIVE OF HIV/AIDS

According to Maphosa (2003), the global perception and opinion was that HIV/AIDS was primarily a health problem. As a result of this perception, the initial response by governments all over the world to HIV/AIDS was slow. AIDS was primarily seen as a phenomenon that only affected homosexuals and drug users (Swanepoel, Erasmus, Van Wyk, & Schenk, 2003). Organisations outside the health sector had shown little interest in the pandemic and the disease was viewed as irrelevant and unimportant, according to Maphosa (2003). As the disease began to infect the heterosexual population, the medical, social and economic implications of the disease were realised (Swanepoel et al., 2004). The significance of the problem has become clear and business organisations are now more aware of the major cost and social implications of the disease on the workplace (Maphosa, 2003). Global business organisations are consequently increasingly recognising the influence that HIV infection has on their operations (UNAIDS, 1998).

On a national level, the aim of business organisations is to strive for stability and certainty in order to obtain investment support into new markets (Nattrass, Neilson, Berry, Mistry, & Sievers, 2004). HIV/AIDS is a threat to such initiatives as "it

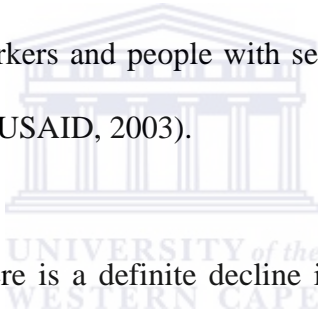
threaten the stability and security of a nation, deter foreign investment and disrupt the flow of goods and capital” (Nattrass et al., 2004, p. 5). The HIV virus transcends countries and communities the world over (Gayle and Hill, 2001). According to Dorrington, Bourne, Bradshaw, Loubser, and Timaeus (2001, p.7), “HIV/AIDS knows no boundaries, of class, status race or sexual preference. Both the powerful and the powerless in every society are targets of this vicious disease.” According to USAID (2003), the HIV pandemic disproportionately affects developing countries; more particularly countries in Sub-Saharan Africa with South Africa being the worst affected by the pandemic.

2.4 HIV/AIDS IN SOUTH AFRICA

South Africa’s response to the threat of HIV/AIDS was also slow (Makgoba, 2000). During the period 1990 – 1995, a critical period in the fight against the HIV pandemic, South Africa was in a political transition (Makgoba, 2000). The South African government was focusing on more immediate political and social concerns resulting in crucial delays in the fight against HIV/AIDS (Makgoba, 2000). South Africa’s HIV/AIDS programme has since improved with international assistance from organisations such as The United Nations and the World Health Organisation (Schrecker & Labonte, 2004). However, the initial slow response to the HIV/AIDS pandemic has had devastating consequences for South Africa’s HIV/AIDS prevalence rate (USAID, 2003).

With an infection rate of more than 5 million people out of a total population of 44.8 million people, South Africa emerges as the country with the highest number of HIV

infections in the world (USAID, 2003). The demographic HIV infection rate recorded by USAID (2003) is higher in informal urban settlements than in rural tribal or urban formal settlements. This bias is as a result of human development disparities in South Africa resulting from the legacy of apartheid – black people in South Africa were politically disenfranchised (Wadee, Gilson, Thiede, Okorafor, & McIntyre, 2003). According to Wadee et al. (2003), greater economic activity in urban areas gives rise to a migration of job seekers from rural areas to urban areas. This migration of people creates housing shortages in the urban areas which - in turn result in a higher concentration of people in informal urban settlements (Wadee et al., 2003). The situation is further exacerbated by the fact that South Africa is host to refugees from surrounding areas creating transmission opportunities among sex workers, tuberculosis patients, migrant workers and people with sexually transmitted diseases which impact on life expectancy (USAID, 2003).



According to USAID (2003), there is a definite decline in life expectancy for both men and women as a result of HIV/AIDS infections. Bloom (2000, p.7) asserts that life expectancy is a global issue as “life expectancies are falling in a growing number of countries reversing key developing gains of the 20th Century.” It is projected that life expectancy in South Africa may decrease to 37 years for women and 38 years for men – a decrease of more than 50 percent in a period of no less than 10 years (USAID, 2003).

HIV/AIDS in South Africa (2001) states that the declining life expectancy has serious implications on business organisations, in terms of operating in South Africa and an increase in costs and loss of profits due to a decline in productivity.

Additionally, the reduced life expectancy resulting from HIV/AIDS impacts significantly on the long-term strategy of business organisations in South Africa (HIV/AIDS in South Africa, 2001).

HIV/AIDS has a major impact on the performance of business organisations globally (Lisk, 2002). Since the emergence of HIV/AIDS as a definite workplace issue early in the 1980's, many business organisations in South Africa have positively responded to the threat of the pandemic on their operations by developing programmes and policies aimed at addressing HIV/AIDS related issues. Examples of such programmes and policies aimed at addressing HIV/AIDS related issues include:

- ❑ Education and awareness programmes;
- ❑ Voluntary counselling and testing programmes;
- ❑ Treatment and support programmes;
- ❑ Treatment for other sexually transmitted diseases, and
- ❑ Protection from victimisation (Finnemore, 2002).

Large organisations in South Africa have introduced antiretroviral therapy in an attempt to increase the life span of employees and to lessen the impact of the disease on the organisation (Finnemore, 2002). However, it remains an organisational imperative to measure the success of programmes initiated in order to support its sustainability. According to Simon, Rosen, Whiteside, Vincent, and Thea (2000, p.7), some interventions have been successful in reducing infections, although “reliable information is scarce.” This implies that evidence of controlled studies aimed at determining the effectiveness of workplace interventions, and that prevents new infections is lacking (Simon et al., 2000). The inference is, according to

Pramualratana and Rau (2004), that HIV/AIDS programmes that have the buy-in of all stakeholders (i.e. managers, employees and employee representatives) within the organisation and programmes that are linked to community projects have a better chance of being successful.

According to Setwe (2005), businesses in South Africa are faced with the challenge of implementing sustainable intervention programmes that would effectively manage HIV/AIDS. This concern by Setwe (2005) is based on the fact that despite years of knowledge and intervention aimed at informing people about the devastation of HIV/AIDS, people continue to succumb to the disease.


2.4.1 HIV/AIDS PROJECTIONS

Rehie and Shisana (2003) assert that the annual number of HIV/AIDS deaths in South Africa is projected to peak at a level of 48,700 deaths by 2008. The South African population is expected to decrease by 23 percent with the life expectancy at birth decreasing dramatically in the period 2005–2010 to 45.6 years (Rehie & Shisana, 2003). Additionally, it is projected that South Africa will have 2.5 million AIDS orphans within the next 10 years.

USAID (2002) asserts that the adult HIV prevalence rate in South Africa is estimated to be at twenty percent (20%) with an infection rate of more than 26.5 percent among pregnant women. USAID (2002) further estimates that twenty three percent (23%) of South Africa's skilled and thirty two percent (32%) of the unskilled workers will be infected with the disease by 2005. Without treatment 5 – 7 million people in South

Africa will die from HIV/AIDS by 2010 (USAID, 2002). Caldwell (1997) postulates that the lengthy incubation period of the disease, estimated to be between 7-8 years, means that the HIV infection rate in South Africa could be much higher than predicted. According to O'diaji (2005, p.1), "early HIV infection is not immediately noticeable." There is a latency period between transmission when symptoms of the disease are developed (O'diaji, 2005). Few people are aware of their HIV status until they develop symptoms (Caldwell, 1997). Many people are able to work normally during the latency period "during which time they are HIV antibody positive and infectious" (Cockcroft, 2002, p.1). The latency period also drastically impacts on intervention programmes aimed at reducing the level of the transmission (Caldwell, 1997).

2.5 HIV/AIDS AND CULTURE



The pivotal role that culture plays in managing the reduction of the HIV transmission is essential when programmes are formulated to deal with the spread of the of the pandemic (Marcus, 2002). It is imperative that organisations involved in rendering HIV/AIDS programmes take into consideration the role of different cultural perceptions in their approach to HIV/AIDS (The Communications Initiative, 2004). It is also important that the HIV/AIDS educational strategy be designed to sensitise people to the pandemic so as to encourage alternative preventative behaviour (The Communications Initiative, 2004). Unesco's Mexico Declaration (1982) as cited in The Communications Initiative (2004, p. 3), defines culture "as a way of life, traditions and beliefs, representations of health and disease, perceptions of life, sexual norms and practices, power and gender relations, family structures, language as well

as arts and creativity.” Bate (2003) postulates that “culture determines the way we see the world, the way we think, the way we live in our world and gives us our beliefs and values and assist us to identify symbols and values.” According to Somma and Bodlang (2003, p. 6), culture is viewed as a medium that “ provides people with a way of perceiving the world at large.” Somma and Bodlang (2003) further believe that culture plays an integral part in HIV/AIDS prevention initiatives as it utilises local knowledge to form part of health programmes and preventative efforts.

According to Bate (2003), people from all cultural and religious groups have differing views, values and beliefs about HIV/AIDS. According to (Bate, 2003), there are cultures that:

- ❑ refute the fact that AIDS is incurable and claim that the disease can be cured with traditional medicine;
- ❑ deny that AIDS exist and call it an invention of scientist and pharmaceutical companies;
- ❑ believe that that AIDS is God’s punishment for evil;
- ❑ hold the opinion that HIV does not cause AIDS;
- ❑ question the controversy that exists about AIDS that does not apply to other sicknesses.

In some African countries such as Swaziland it is forbidden to acknowledge one’s HIV status, which ultimately represses HIV/AIDS education and testing initiatives (Nyathi, 2002).

A study conducted by Izdebeski and Malecka (2003) highlights the influence that culture has on shaping the behaviour of young people and factors that influence false perceptions regarding AIDS. Race, ethnicity and sexual orientation are factors that do not necessarily increase a person's likelihood of being infected with AIDS. According to Izdebeski and Malecka (2003, p.118), it is imperative to "induce changes in awareness and attitudes in order reduce the possibility of HIV/AIDS infection."

Russell (2001) states that the cultural myths present in Sub - Saharan Africa regarding HIV/AIDS stem from the poor treatment of women in African cultures where women are frequently forced to have sex with men in male dominant cultures. Some societies believe that men infected with HIV can be cured by having sex with virgins, resulting in many young girls being infected by the disease (Russell, 2001). In this regard Gupta (2000) referred to women's vulnerability in many societies. Women are expected to conform to a culture of silence around sexual matters and are deemed to be ignorant about sexual matters pertaining to HIV/AIDS. This concern is supported by Somma and Bodlang (2003), who state that AIDS deaths are more prevalent in poorer societies where females play a subservient role.

Robinson (2003) commenting on 'HIV/AIDS testing in the American South', states that HIV/AIDS is more prevalent among the very poor and minority societies. The early African American perception was that HIV/AIDS is a white gay disease. Although Sub-Saharan African countries share this perception, the reality is that HIV/AIDS is not culture selective and can impact on everyone (Robinson, 2003).

The United Nations Fact Sheet (2001) posits that HIV/AIDS does not only impact on the worker and their families, but the pandemic is a real threat to business organisation as well as the social and national economies. HIV/AIDS is a huge challenge to the social and economic development of countries across the globe (The United Nations Fact Sheet, 2001). In badly affected countries, the pandemic has the potential to influence the supply of labour and reduce income (The United Nations Fact Sheet, 2001).

2.6 THE IMPACT OF HIV/AIDS ON THE ECONOMY

HIV/AIDS influences the workplace in many different ways – in countries where the infection rate is high, the pandemic effectively reduces income (The United Nations Fact Sheet, 2001). This fact, according to Mcpherson (2002, p.9), is supported by studies that confirm “the spread of HIV/AIDS lowers growth and reduces income.” Mcpherson (2002) argues that HIV/AIDS undercuts economic growth and reduces human capital, which in turn adversely affect productivity. HIV/AIDS related illnesses force employees to leave their jobs resulting in the lost of valuable skills (United Nations Fact Sheet, 2001). As productivity and profitability decline, tax contribution also declines, thereby increasing the need for public services such as hospitals and social benefits. HIV/AIDS threatens fundamental principles and rights at work and undermine efforts to improve working conditions and job security (United Nations Fact Sheet, 2001). The poor suffer disproportionately as many affected by HIV/AIDS do not have social benefits or medical aid – these are essential human resource issues that must receive the appropriate attention in organisations (United Nations Fact Sheet, 2001).

USAID (2000) states that some organisations view HIV/AIDS as purely a human resource issue. Organisations fail to grasp the devastating impact of HIV/AIDS on markets and production and few business organisations have made provision for or have planned to combat the economic and financial impact caused by HIV/AIDS (USAID, 2000).

The intensity of the social and economic impact of HIV/AIDS becomes apparent when it is considered that the disease essentially affects people in the prime of their productive years (USAID, 2002). Arndt and Lewis (2000) assert that the HIV/AIDS pandemic has progressed beyond its earlier status of merely being a health issue.

Arndt and Lewis (2000) believe that the pandemic has become a development issue enveloping political, social and economic issues. Research conducted by ING Baring (1999), as cited in Arndt and Lewis (2000), state that people affected with HIV/AIDS may have lower levels of productivity and sustain increases in medical costs. The HIV/AIDS pandemic consequently impacts on economic issues such as unemployment, productivity wages and savings rates.

Arndt and Lewis (2000) postulate that the continued proliferation of the HIV/AIDS pandemic has additional implications on economic variables such as:

- Additional spending on AIDS related social issues: An increased number of AIDS sufferers will make use of public health care facilities. In addition, the government will need to make provision for the increased number of AIDS

orphans and foster parents who will apply for government financial assistance.

The higher government spending on health and social services will displace other spending and result in a higher budget deficit,

- A loss of skills resulting from morbidity and which impact on productivity: HIV/AIDS will impact on the labour supply and cause a slower growth in the population as well as a reduction in skilled workers. Effectively the labour input for each skill category will proportionately be reduced.
- A decrease in consumer spending as a result of a loss of income due to absenteeism: Loss of earnings resulting from absenteeism means that the spending pattern of HIV/AIDS affected households shift more to health related expenditures. This results in a dramatic decline in savings.
- Investment in human capital changes as the costs of AIDS care increase: The businesses insurance and retirement benefit payments to employees will increase as a result of HIV/AIDS, placing pressure on labour costs and profits. Furthermore, the high costs of absenteeism and labour turnover could increase the business costs of both skilled and unskilled employees. This may result in the business being more capital intensive.

Viewed from a macro economic perspective, HIV/AIDS consequently impacts on markets, saving rates, investments and consumer spending. According to Good Practice (2002), studies conducted on the economic impact of HIV/AIDS predict a two percent (2%) deficit in Gross Domestic Product (GDP) in countries most severely affected by the pandemic. This projected decline in GDP is attributed mainly to an increase in government spending on health care and lower levels of productivity (SAFAIDS, 2002). HIV/AIDS, hence, has the potential to destabilise

markets and societies, threaten occupational safety, and undermine national investments resulting in loss of productivity and an increase in labour costs (Pramualratana, 2002).

On a micro economic level, the HIV/AIDS pandemic impacts on the workforce. This in turn has negative implications on an organisation's bottom line (Good Practice, 2002). Ogrady (2004) cites examples of the microeconomic impact of HIV/AIDS. These include:

- Increased spending on medical aid benefits, funeral costs and death benefits: Businesses will endure higher expenditure as a result of an increase in medical contributions. The cost to organisation that provide death and funeral benefits will increase as the mortality rate of AIDS increase.
- Higher recruitment and training costs: The cost of recruiting and training new workers may be considerable especially if skilled workers need to be replaced. Employers carry the costs of recruiting new employees, pre-employment education and in service training.
- Loss of revenue as a result of an increase in absenteeism, higher labour turn over and loss of production: Infected employees who are sick will be absent from work more often resulting in reduced work performance and lower productivity. Employees will also request time off from work to attend to family members who are infected with HIV/AIDS. The impact on the business will be considerable in the event of death or retirement of infected employees.

- Waning worker moral and a declining consumer base: HIV/AIDS will negatively affect the moral of employees. Fear of infection and death may lead to suspicion and a lack of tolerance of people infected with HIV/AIDS. Additionally, there will be a reduction in work performance resulting from a lack of teamwork.

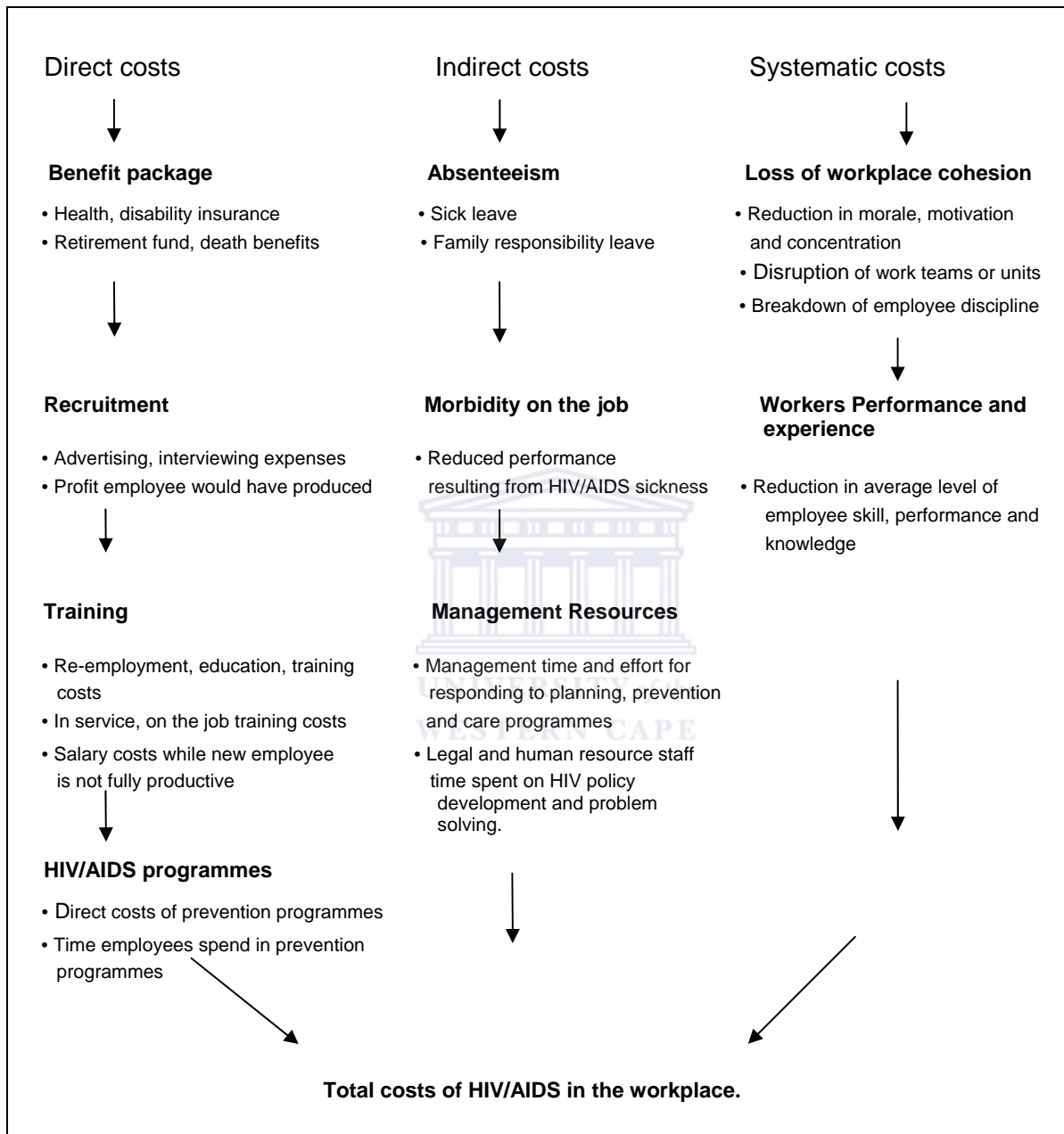
South Africa will experience huge skills losses due to HIV/AIDS which will impact on cost, the quality of labour and the future needs of human resources (Vas, 2003).

2.7 THE COST OF HIV/AIDS TO BUSINESS

According to Simon et al. (2000), the 21st century world economic surge saw Africa emerging as the world's poorest continent, plagued by internal disorder, a lack of investment and poor economic and social development. Simon et al. (2000) believe that Africa should rapidly improve their economies by placing stronger emphasis on production and quality control in order to be globally effective. Additionally Simon et al. (2000) posit that Africa, and more specifically Sub - Saharan African businesses, should realign their business plans to deal more effectively with the devastation that HIV/AIDS will have on production, operational systems, increased absenteeism, worker discipline and morale and the effects of the pandemic on company costs. A study conducted by Rosen, Vincent, MacLeod, Fox, Thea, and Simon (2004) found that HIV/AIDS potentially threatens the competitiveness of the industry. Rosen et al. (2004) stressed the importance of further research on the effectiveness of workplace

interventions. In this regard, Simon et al. (2000) developed the following model to explain the cost to company resulting from HIV/AIDS:

Figure 1: Cost to company resulting from HIV/AIDS



Simon et al. (2000).

According to Figure. 1, a high concentration of human resource issues are identified as the primary cost to companies resulting from HIV/AIDS. Simon et al. (2000) refer to direct costs as the measureable costs obtainable from human resource and the

company financial data. Indirect costs (such as determining production losses incurred by sick workers or the cost of the time that managers dedicate to HIV/AIDS related issues) are not easily measurable. Like wise, it is difficult to determine systematic costs on issues such as employee moral and motivation. However, Simon et al. (2000, p.7), believe that it is important for organisations to determine these costs as it has a major impact on the companies profitability.

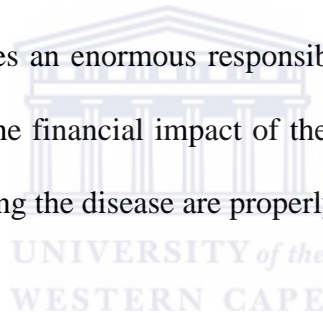
The model further demonstrates how HIV/AIDS diminishes an organisation's competitiveness by increasing labour cost, reducing productivity and profits due to absenteeism and the impact of the disease on worker performance (Simon et al., 2000). According to Rosen et al. (2004), the costs placed on HIV/AIDS filter down to a lack of skills, increased cost of training and ultimately affects the overall economic growth of the country. Additionally, studies have shown that without intervention the HIV/AIDS costs of employee benefits will substantially increase (Rosen & Simon, 2002). The challenge that managers in business organisation have is how to plan and effectively manage the impact of HIV/AIDS on the future of their businesses (Setswe, 2005),

2.8 MANAGING HIV/AIDS

According to Setswe (2005), HIV/AIDS threatens businesses and workers at every level within the organisation. Setswe (2005) supports the argument that HIV/AIDS in the workplace leads to high levels of absenteeism and loss of skills, which in turn results in lower profits and reduces the organisations ability to deliver goods and services. It is therefore imperative for business organisation to do risk assessments to

determine the impact of HIV/AIDS on the overall performance of the business (Niftrik, 2003).

According to Niftrik (2003), the seriousness of business risk resulting from HIV/AIDS to South Africa must be important if international organisations such as UNAID predict a R154 billion loss to the South African economy over the next five years. Niftrik (2003) notes that managers, entrepreneurs and employers should take heed of the insurance industry that minimise financial losses by ensuring that prospective clients get HIV tested. Only clients with HIV negative test results are considered. Likewise investors in South Africa are demanding a HIV audit before they are prepared to invest funds in South African businesses (Niftrik, 2003). The HIV/AIDS pandemic hence places an enormous responsibility on leaders, especially business leaders, to ensure that the financial impact of the disease is minimised, and that approaches aimed at combating the disease are properly managed (Niftrik, 2003).

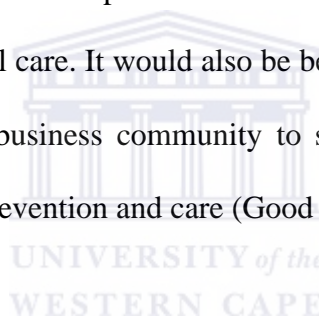


Setswe (2005) states that it is important for business organisations to develop structures that would enable them to improve the management of HIV/AIDS in the workplace. According to Setwe (2005), some measures that can be implemented include;

- Conducting baseline surveys to obtain correct information about the HIV/AIDS situation;
- Protecting worker rights by developing and implementing HIV/AIDS policies;
- Establishing HIV/ADS workplace committees;
- Implementing HIV/AIDS programmes that focus on prevention, treatment and care;

- Designing workplace interventions to deal with all forms of stigma, and
- Ensuring that the effectiveness of programmes dealing with HIV/AIDS is regularly evaluated.

In order for business organisations to remain competitive it is essential that the behavioural and economic determinants of HIV/AIDS are identified, that businesses measure HIV prevalence rates and commit to develop and design interventions to cope with the pandemic (Gaffeo, 2003). Good Practice (2002) states that part of the business objective with its HIV/AIDS programme should be to manage the impact of the existing HIV infection within the business and limit the incidence of new infections. Programmes should be developed and directed at issues such as changing behaviour, and improving medical care. It would also be beneficial to the organisation to work with others within the business community to support social programmes aimed at HIV/AIDS education, prevention and care (Good Practice, 2002).



In a study conducted by Stevens, Blaauw, and Mapolisa (2004) on managing HIV/AIDS in the workplace, it was found that the human resource, in their capacity of training and development, are the main drivers of HIV/AIDS programmes within an organization. Stevens et al. (2004) argue that senior management should show a greater interest in HIV/AIDS programmes. The inference is that if programmes are driven from the top down, its effectiveness would be greater. Pramualratana (2002, p.13) postulates that “HIV/AIDS is a management issue and must be managed just as any other business issue.” The justification for businesses to embark on programmes to combat HIV/AIDS is clear. The pandemic affects social and economic issues in the

workplace such as occupational health and safety, staff moral, worker benefits, productivity and labour cost (Pramualratana, 2002).

2.9 EFFECTS OF HIV/AIDS IN THE WORKPLACE

According to the Business for Social Responsibility (1999), the HIV/AIDS pandemic largely influences strategic plans within organisations as it impacts on growth and profitability. The assumption is that few, if any, global companies will escape the consequences that the pandemics will have on business operations affected by the disease. Business organisations are therefore increasingly seeking more aggressive ways to deal with the impact that HIV/AIDS have on their business and labour force (Business for Social Responsibility, 1999).

2.10 THE IMPACT OF HIV/AIDS ON PRODUCTIVITY

According to Booysen, Geldenhuys, and Marinkov (2003), a major area of concern in business organisation is the loss of critical skills due to the high labour turnover resulting from HIV/AIDS. Booysen et al. (2003) postulate that HIV/AIDS related deaths could lead to a reduction in the skills levels of workers as more inexperienced and less skilled employees have to be employed. Another area of concern is the effect that HIV/AIDS has on the competitiveness of the organisation in ensuring quality goods and services (Booyesen et al., 2003). The loss of production time and critical employee skills will impact on production, quality and outputs and result in the organisation reputation being compromised and ultimately a loss of customers. In a study by Fox, Rosen, Macleod, Wasunna, Bii, Foglia, and Simon (2004) on the

impact of HIV/AIDS on productivity, it was found that workers infected with HIV gradually become less productive. The study by Fox et al. (2004) further reported a marked decline in productivity coincident with HIV/AIDS related absenteeism. Additionally, Fox et al. (2004) raise a concern regarding the loss of critical skills as well as production losses resulting from the disruption in productivity caused by HIV/AIDS deaths, which is further exacerbated by losses in cost to the organisation.

2.10.1 *Productivity and profitability*

According to Sunter (2004), there is a direct link between HIV/AIDS and declining production and profits. A decline in productivity or when the organization is unable to accurately predict or plan productivity, impact on the organisation ability to meet its commitment to its clients. This situation conversely impacts on the reputation of the organisation and affects both the current as well as the future profitability of the business (Sunter, 2004).

Businesses thus need to review the threat of HIV/AIDS to the organisation in terms of the overall cost impact of the pandemic, which require the development, and implementation of a plan of action in line with the required legal framework (Sunter, 2004).

2.11 WORKPLACE HIV/AIDS POLICY

The South African Code Of Good Practice (2000) on the aspects of HIV/AIDS in the workplace is a guide to employers, employees and trade unions and is aimed at

ensuring the fair treatment of people infected with HIV. The code also provide guidelines on how to manage HIV/AIDS in the workplace. These include:

- ❑ Ensuring a safe work environment for all employers and employees;
- ❑ Developing measures to manage occupational incidents and claims for compensation;
- ❑ Introducing procedures to prevent the spread of HIV/AIDS ;
- ❑ Developing strategies to assess and reduce the impact of HIV/AIDS pandemic upon the workplace, and
- ❑ Supporting workers that are infected with HIV/AIDS so that they may continue to be productive.

The purpose of these prohibitions and limitations is aimed at preventing employers from discriminating against employees and aspirant job applicants on the basis of their HIV status. The Code Of Good Practice (2000) also provide employers with guidelines on how to develop a workplace HIV/AIDS policy which can be used as a measure to deal with HIV/AIDS in the workplace.

Many organisations develop and align workplace HIV/AIDS policies with that of national guidelines such as The Code Of Good Practice on HIV/AIDS as the first step in combating the disease in the workplace (Grant, Gorgens, & Kinghorn, 2004). Successful workplace policies are those that are effective in role clarification and where there is a commitment from managers to support and implement the workplace programmes (Grant et al., 2004). It is important for business organisations to have a long-term workplace policy to deal with the catastrophic consequences of HIV/AIDS in the workplace (Hussey, 2003). A HIV/AIDS policy creates cooperation and trust

between employers, workers and worker representatives (Hussey, 2003). According to Pramualratana (2002), a workplace policy aims to manage the sensitive issues associated with the HIV pandemic. A workplace policy is important to the success of HIV/AIDS programmes in the workplace as it provides formal authority to people responsible for the implementation of intervention programmes. Hussey (2003) states that workplace HIV/AIDS policies could be structured through cooperation between organisation. According to Hussey (2003), the policy should also make provision for other life threatening illnesses and should ensure that;

- Workers with HIV/AIDS are allowed to continue working as long as they are able and as long as they do not endanger their own health or the health of their colleagues.
- Workers with HIV/AIDS are protected from discrimination and treated with compassion and understanding.
- Employers provide reasonable accommodation for HIV infected employees.
- All medical information is kept confidential.
- Employee benefits are modified to accommodate the needs of HIV infected employees.
- In line with legislation, testing for HIV/AIDS infections should be performed on a voluntary rather than a mandatory basis.

(Hussey, 2003).

According to UNAIDS (1998, p.2), “the effectiveness and sustainability of a workplace HIV/AIDS workplace policies are enhanced if they are periodically monitored and evaluated.” Due to the sensitive nature of the disease, businesses are reluctant to address HIV/AIDS in the workplace (Pramualratana, 2002). By accepting

the challenge to change perceptions in the workplace, businesses can prevent the transmission of the disease, improve staff moral, prevent stigma and discrimination and enhance a positive response to HIV testing initiatives (Pramualratana, 2002).

2.12 ATTITUDES AND PERCEPTIONS TOWARD HIV/AIDS TESTING IN THE WORKPLACE

2.12.1 HIV Antibody Tests

With the latest improved technology, different types of HIV antibody tests are available such as saliva, urine and blood tests which can be done at home using the medically approved test equipment (Sowadsky, 1999). The tests differ in the body fluids used for the testing and the way in which the samples are collected. All the antibody tests are based on the ELISA and Western Blot techniques and are subject to the same window period of 6 months (Sowadsky, 1999).

According to Mylonakis, Paliou, Lally, Flanigan, and Rich (2000), The Elisa and Western Blot are key tests for the diagnosis and affirmation of HIV infection. Whilst primary test methods focus on blood samples, other test methods such as “oral mucosal transudate” (saliva) and urine are non-invasive and can be utilised in anonymous testing programmes in the workplace and elsewhere for quick assessment of HIV prevalent rates (Mylonakis et al., 2000).

Whilst HIV/AIDS testing in the workplace is largely controlled by legislation, not knowing the HIV/AIDS status of employees or how the disease will affect the future of the organisation can have serious consequences for the business as the pandemic

impact on important areas within the organization (Sowadsky, 1999). Booysen and Bachman (2002) assert that it is imperative that business organisations realign their HIV/AIDS strategies to increase their emphasis on developing HIV awareness programmes and measuring HIV prevalence rates.

Such programmes must include the importance of non-coerced / voluntary testing (Sowadsky, 1999). A study conducted by the South African Business Coalition, cited in Vas (2003), shows that only a small number of companies in South Africa has conducted risk assessment to measure the impact of HIV/AIDS on their business. The study also reported that less than ten percent (10%) of South African companies have conducted HIV/AIDS prevalence surveys.

Employees' attitude towards voluntary HIV testing hinge on the workplace issues that emerge if people test positive. In this regard, Reece (2005, p.1) says that "employers will have to contend with the reaction of employees' co-workers." The worker who test positive for HIV face numerous complex issues albeit as a result false perception, negative attitudes of fellow workers, misinformation and ignorance . These are:

- ❑ The fact that self disclosure may endanger future development and promotional opportunities;
- ❑ Fear that disclosure of the test results may jeopardise his/her employment, and
- ❑ Colleagues may wrongfully believe that they are in danger of being infected

(Reece, 2005).

Although HIV positive employees may still be able to perform their normal duties, he/she may still be perceived by management and fellow workers as having an impairment and of being unable to work (Reece, 2005). This negative perception, derived from misconception and discrimination, impairs the employees from fulfilling their normal responsibilities (Reece, 2005).

2.12.2 Addressing stigma and discrimination

A major challenge to the implementation of HIV/AIDS programmes in the workplace is stigma and discrimination. Steward, Pulerwitz and Williams (2002, p.1), define stigma as “a social process that marginalizes and labels those who are different.” They define discrimination as “negative practices that stem from stigma or enacted stigma” p.1. Employees in the workplace may suffer from HIV/AIDS related stigma perpetrated by co-workers and supervisors. According to Steward et al. (2002), HIV/AIDS stigma in the workplace may include dimensions such as social isolation and ridicule, whilst discriminatory practices could include dismissal. Negative reactions from colleagues and employers resulting from HIV related stigma in the workplace may influence the employees’ attitude and behaviour towards voluntary counselling and testing. It may also influence employee behaviour towards participating in preventative and care programmes (Steward et al., 2002). According to Umerah - Udezulu and Williams (2001), the barriers to effective HIV/AIDS education in the workplace are cultural differences, inadequate health care, misconception and discrimination and stigma. Misconceived beliefs about stigma and discrimination can therefore influence the employee’s attitudes, behaviours and decisions regarding HIV testing and treatment services (Kelichman & Simbayi, 2003).

In their research Steward et al. (2002) reported that employees expressed concern regarding HIV/AIDS stigma from colleagues and co-workers. Some workers believed that they would lose their jobs if the company were aware of their HIV status. Employees were also concerned that should their test results prove positive they would be isolated and ridiculed. Beside common categories of stigma, the research further highlighted additional dimensions of stigma, which include blame being directed towards people who have contracted HIV/AIDS, concerns regarding social isolation and stigma and support for discriminatory behaviour from fellow workers.

HIV/AIDS related stigma and discrimination have a definitive effect on attitudes and behaviours in the workplace. The belief that the introduction of non-discriminatory HIV/AIDS workplace policies will contribute to a more positive inter worker relationship which equally address social isolation and stigma if coupled with stigma reduction activities such as training for managers, peers and counsellors and developing strategies to address secondary stigma (Steward et al., 2002).

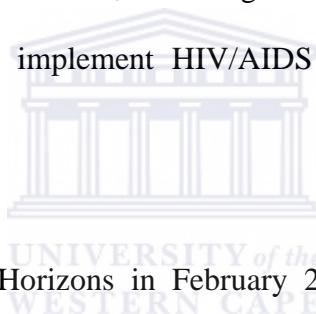
Researchers (Pulerwitz, Green, Williams, & Steward, 2004) noted that managers and staff of workplace programmes need a clear understanding of the worker perception and experiences related to HIV stigma and discrimination in order to develop suitable responses. They mention three categories of workplace interaction that may influence HIV/AIDS related stigma and discrimination. These include:

- Institutional level: company wide communication which will explain company HIV/AIDS policy and programmes;
- Employee interaction: focus on the physical interaction between workers, such as possible stigma deriving from fellow workers who question the ability of

HIV positive employees to continue working, including the risk of casual contact on the job, and

- Social interactions: interaction that occur at the workplace during periods of downtime, i.e. lunch and teal breaks. The objective is to correct the behaviour of uninformed employees who promotes misinformation (Pulerwitz et al., 2004).

According to Hutchinson (2003), there is a definite need to increase efforts in the workplace to reduce stigma and to create support for workers who are HIV positive. HIV related stigma is recognised as one of the main reasons why companies are slow to recognise HIV/AIDS as a business issue, and it is given as one of the prime reasons why businesses are reluctant to implement HIV/AIDS policies and programmes (Hussey, 2003).



In a programme conducted by Horizons in February 2000, which was aimed at addressing the effects of stigma in the workplace, the importance of creating a favourable environment to encourage the acceptance of people living with AIDS was identified. Additionally, participants contracted that intervention programmes should be linked to community HIV/AIDS stigma and discrimination approaches (Hutchinson, 2003). The following concerns in this regard were raised:

- Fellow workers were more concerned with attitudes regarding stigma than workplace discrimination;
- Comments by fellow workers were of a personal nature and was most damaging, and

- Both male and female HIV positive employees were subjected to the same treatment by fellow workers with females being at a greater risks of being stigmatised (Hutchinson, 2003).

Fear of social isolation and ridicule from fellow workers discouraged workers from disclosing their HIV status and from utilising available services (Hutchinson, 2003). Peltzer et al. (2004) highlighted the fact that stigma and negative perceptions and attitudes towards people infected with the HIV virus may influence people's willingness to submit to a HIV test, which perpetually increase the risk of further HIV transmission. Hussey (2003) considers stigma and discrimination as barriers in the development and implementation of effective workplace HIV/AIDS programmes. Hussey (2003) further states that HIV related stigma have the capacity to jeopardise voluntary counselling and testing initiatives.



2. 12.3 Voluntary counselling and testing

Mariano (2005) posits that HIV/AIDS interventions must focus on key issues such as testing and counselling as the entry point to both treatment and prevention. It is within the interest of all organisation to have monitoring and preventative measures in place aimed at reducing the impact of the pandemic (Mariano, 2005). Antibody testing is imperative in the fight against HIV transmission and plays an integral part in designing HIV/AIDS prevention and intervention programmes. Combined with pre-test and post-test counselling, HIV testing leads to intervention opportunities which could modify high risk behaviour (Peltzer et al., 2004). The additional benefit of detecting the disease at an early stage is that people who test positive could start

treatment at the earliest stage. “The most effective treatment results occur in the early stage of HIV” (Peltzer et al., 2004, p. 2.). New improve developments in HIV /AIDS treatment and care, coupled with programmes such as voluntary counselling and testing, mean that early detection is beneficial to people infected with HIV.

The challenging aspect of voluntary counselling and testing is that people learn their HIV status and depending on the awareness of the employee regarding HIV/AIDS, voluntary counselling and testing can be viewed as unpopular (Stevens et al., 2004). The process requires a level of trust between the employer and the employee. The employee would want the assurance that he/she would not be marginalised if he/she tested positive. Additionally voluntary counselling and testing creates an expectation – people’s interest would be greater if treatment is made accessible.

According to Van Dyk and Van Dyk (2003), voluntary counselling and testing programmes are important in the management of the HIV/AIDS pandemic. However, the implementation of voluntary counselling and testing programmes is at times restricted due to misconception that influences people’s attitudes toward participating in voluntary counselling and testing programmes.

A major determinant of voluntary counselling and testing programmes is that potential participants fear that their confidentiality may be compromised, their HIV status may be indiscriminately disclosed and they fear rejection by family friends and colleagues at work (Van Dyk & Van Dyk, 2003).

Another area of concern that can affect voluntary counselling and testing programmes is that women in male dominant relationships, those who are socially and sexually disempowered, may fear the consequences of disclosing their HIV positive status to their partners. This status invariably leads to further HIV transmission, which restricts health care support and is a barrier to voluntary counselling and testing programmes (Van Dyk & Van Dyk, 2003).

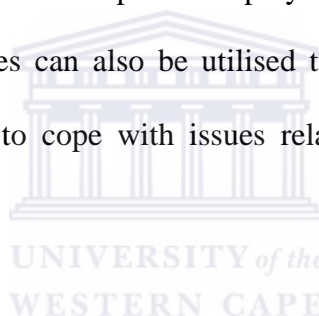
The belief is that that if voluntary counselling and testing programmes are properly planned and managed, it could lead to a reduction in HIV transmission. Furthermore, properly planned voluntary counselling and testing programmes can bring about a change in people's perception and attitudes towards HIV/AIDS as well as a change in behaviour (Van Dyk & Van Dyk, 2003). Studies have shown a reduction in unprotected sexual intercourse resulting from voluntary counselling and testing intervention programmes (Van Dyk & Van Dyk, 2003). A study by Killewo et al. (1998) on voluntary HIV testing found that people who believed that they were unlikely to be HIV positive did not volunteer to test. This highlights the false perception that people have about the likelihood of being infected with the HIV virus.

According to Cartoux, Mselati, Meda, Welfens – Ekra, Mandelbrot, Leroy, de Perre, and Dabis (1998), self perception of HIV risk is a barrier to voluntary HIV testing. Cartoux et al. (1998) further posit that people with some knowledge of HIV infections and those who have good access to HIV transmission knowledge are more likely to submit to voluntary HIV testing. Additionally, people who believed that they are already infected are more likely to develop negative perceptions towards testing. Killewo, et al. (1998) believe that it is essential to develop innovative ways to

enhance the acceptability of voluntary HIV testing. What is apparent from the study is that it is important for people to know their HIV status, as it may influence future behaviours and attitudes towards HIV/AIDS and it may reduce HIV transmission. Consequently, Killewo et al. (1998) believe that HIV testing is an integral component that must be considered when developing HIV/AIDS programmes.

2.13 EMPLOYEE ASSISTANCE PROGRAMME

Employee Assistance Programmes are essential tools, which can assist organisation to meet the needs of HIV, infected employees. It provides confidential counselling, information, and referral services to help the employee with personal problems. Employee Assistance Programmes can also be utilised to assist caregivers of HIV infected workers or co-workers to cope with issues related to working with HIV positive individuals (Gore, n.d.).



2.14 HIV/AIDS TREATMENT AND CARE

2.14.1 Treatment

According to Smith (2005, p. 61), AIDS “treatment cannot happen if people do not get tested.” Studies show that if the disease is detected early and treated, life expectancy is greatly increased. According to the ILO (2001, p. 4)v “solidarity, care and support should guide the response to HIV/AIDS in the world of work. All workers, including workers with HIV, are entitled to affordable health services. There should be no discrimination against them and their dependants in access to and receipt

of benefits from statutory social programmes and occupational schemes.” Rosen and Simon (2002) postulate that the business involvement in preventing the spread of HIV/AIDS can include prevention programmes, treatment and care and the restructuring of benefit policies and recruitment processes to reduce HIV/AIDS related costs.

2.14.2 Antiretrovirals

Although the costs of antiretroviral drugs such as Nevirapine, cannot be discounted, studies have shown ARV to be effective in reducing the transmission of the HIV virus from mothers to their babies (Berry, 2004). Studies show that ARV drugs are effective in the treatment and improving the quality of life of people infected with HIV (Berry, 2004). South Africa has implemented a policy whereby antiretroviral drugs will be provided as part of a HIV/AIDS treatment campaign. However, training programmes to ensure that health care professional have the necessary skills and knowledge are causing delays in the roll out of the antiretroviral treatment (Berry, 2004).

According to Berry (2004), the challenges facing South Africa in the introduction of ARV treatment to pregnant women are:

- The social stigma associated with being HIV positive may deter pregnant women from submitting to voluntary HIV testing.
- Women who know that they are HIV positive may not admit their status to healthcare workers for fear of being stigmatised;
- Poor healthcare infrastructure, especially in rural areas, means that pregnant women may not make use of health care services, and

- Shortages of drugs means that the required medication does not reach areas where it is required.

Additionally, concern is raised regarding the negative consequences of medical advances with HIV/AIDS medication. The false perception by people with high risk such as sex workers and truck drivers is, according to De Cock and Johnson (1998), that prevention therapy may be reduced because HIV/AIDS is now treatable. De Cock and Johnson (1998) further warn against the impact that advancement in new therapies and test strategies on peoples perception regarding HIV/AIDS transmission.

Pramualratana and Rau (2004) posit that consultation between the community and business sectors is imperative in the fight against HIV/AIDS transmission. Issues that can be addressed at these forums include the cost and availability of HIV/AIDS drugs, the concern of businesses regarding the availability of labour and plans to align business projects aimed at reducing HIV transmission with local and national prevention programmes.

2.14.3 Community based projects.

Pramualratana and Rau (2004) believe that businesses can play an interactive role in community based projects to combat the spread of HIV/AIDS. This can be achieved by using company resources, organisational structures and investment initiatives to assist HIV/AIDS prevention. Pramualratana and Rau (2004) state that business organisations in developing countries lag behind in the development of comprehensive workplace programmes and or community or national HIV/AIDS preventative initiatives. In essence, businesses must protect their investments in their employees and training and avoid legal implications. The inference is that the

business responses to the HIV/AIDS dilemma should be linked to and or motivated by the organisation's interest in the welfare of its infected employees (Pramualratana, 2000).

2.17 CONCLUSION

In view of the seriousness of the HIV/AIDS pandemic, it is of paramount importance that all the role players (i.e. government, industry, worker representatives, but also individual employees) engage in a concerted effort to combat the negative social economic consequences of this phenomenon. General consensus seems to exist that interventions aimed at raising the awareness level of people could facilitate a change in both people's behaviour as well as attitudes and perceptions toward HIV/AIDS. One of the major stumbling blocks that would need to be overcome in this debate is the whole concept of stigmatisation. Voluntary HIV/AIDS testing has been regarded as an important strategy in the management of the HIV/AIDS pandemic internationally (Van Dyk & Van Dyk 2003). However, only limited success with such programs has been reported due to various problems such as the existence of negative attitudes, beliefs and perceptions of people. Peltzer et al. (2003) concur by saying that one of the main interventions in the fight against HIV/AIDS pandemic is HIV/AIDS testing.

In summary, the aim of this study was to determine the perceptions and attitudes of people towards voluntary HIV/AIDS testing in a South African based organization. Business organisations have a key role to play in the fight against the HIV/AIDS pandemic in the workplace because of the impact of the disease on core business

performance indicators such as productivity and profitability. It is therefore imperative that HIV/AIDS receives the same attention and status as other important elements within the business. Whilst there are numerous complexities surrounding sero-prevalence testing in the workplace, it remains the business organisation's prerogative to ensure that their HIV/AIDS procedures and preventative initiatives are aimed at combating the negative attitudes and behaviour towards HIV/AIDS. It is also important that the organisation ensures that interventions are clear, regularly reinforced and that employees have a clear understanding of them.



CHAPTER 3

RESEARCH METHODOLOGY AND DESIGN

3.1 INTRODUCTION

This chapter provides an outline of the research methodology and the procedures that will be used to examine the research problem. The primary purpose of this study is to investigate employees perception and attitudes toward voluntary HIV/AIDS testing in the workplace.

According to Leedy and Ormrod (2001, p. 4), “research is a systematic process of collecting data in order to measure understanding of the phenomenon with which we are concerned or interested in.” Research methodology essentially controls all the details of the study; the design, the decisions regarding population, methods employed to collect data and the procedures used to analyse the data (Kumar, 1999). The prime objective with research methodology is to find scientific meaning of that which lies below the surface and to issue conclusions that expand knowledge (Leedy, 1997). Based on above mentioned aspects, the methodologies applied in this study are pertinent to understanding employees behaviours, perceptions and attitudes with regard to the HIV/AIDS epidemic in the workplace.

3.2 RESEARCH DESIGN

3.2.1 Nature of the research design

According to Kerlinger and Lee (2000), the research design of any study has two basic purposes, namely (a) to provide answers to the research question, and (b) to control the variance. Kerlinger and Lee (2000) further contend that the research design enables a researcher to answer specific research questions as validly, objectively and accurately as possible. The research plan is therefore deliberately and specifically planned and executed to generate empirical evidence to bring to bear on the research problem. Bless and Higson-Smith (2000, p. 63) state that “a research design relates directly to the testing of the hypothesis” – it is a measure of the most adequate way to test a particular hypothesis.

Terre Blanch and Durrheim (1999, p.29) define a research design as “a strategic framework that serves as a bridge between research questions and the execution or implementation of the research.” It is a planned nature of observation – how researchers draw conclusions from their observations.

Cooper and Schindler (2003, p. 81) state that the “research design is a plan for meeting objectives and answering questions.”

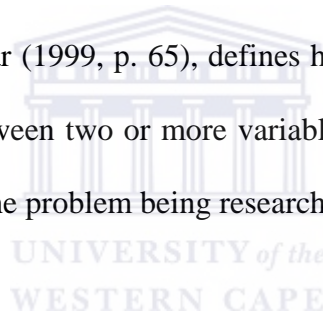
According to Rubin and Babbie in Marcus (2002), there are two basic research approaches namely quantitative methods and qualitative research methods. Quantitative research methods accentuate the production of specific and generalisable statistical findings and are used to determine whether a cause

produces an effect. Quantitative methods are used to emphasise depth of understanding and assist the researcher to tap deeper theoretical meaning which is not simply reduced to numbers (Marcus, 2000).

Due to the nature of the research problem a quantitative approach was used in this study.

3.3 RESEARCH HYPOTHESES

The research hypothesis, according to Leedy (1997), is indicative of a feeling, theory, suspicion, assertion or an idea about an occurrence, relationship or truth of what you do not know. Kerlinger, in Kumar (1999, p. 65), defines hypothesis as “a conjectural statement of the relationship between two or more variables.” The hypothesis brings “clarity, specialty and focus” to the problem being researched (Kumar, 1999, p. 64).



3.4 RESEARCH PROBLEM /HYPOTHESES

3.4.1 Research problem

The object of this study is linked to the problem that the study wishes to examine which is; **“Do employees at different levels of the organisation have different opinions and attitudes towards voluntary HIV/AIDS testing in the workplace?”**

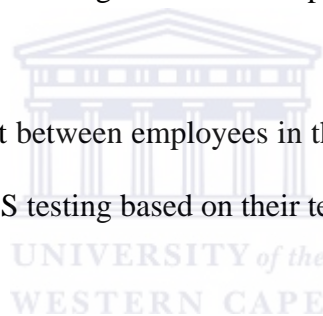
With this study the researcher wishes to determine whether employees at different levels of the organisation have different opinions, perceptions and fears that influence their attitudes and behaviour towards voluntary HIV/AIDS testing.

3.4.2 Research hypotheses

The hypotheses established are;

1. There is a significant positive relationship between people's attitude towards voluntary HIV/AIDS testing and their HIV/AIDS testing behaviour;
2. There is a positive relationship between people's knowledge of HIV/AIDS and their testing behaviour.
3. There is a significant relationship between people's knowledge and attitude of HIV/AIDS and voluntary HIV/AIDS testing.
4. Significant differences exist between employees in their perception and attitude towards voluntary HIV/AIDS testing based on their gender.
5. Significant differences exist between employees in their perception and attitude towards voluntary HIV/AIDS testing based on their age.
6. Significant differences exist between employees in their perception and attitude towards voluntary HIV/AIDS testing based on their marital status.

7. Significant differences exist between employees in their perception and attitude towards voluntary HIV/AIDS testing based on their home language.
8. Significant differences exist between employees in their perception and attitude towards voluntary HIV/AIDS testing based on their qualification.
9. Significant differences exist between employees in their perception and attitude towards voluntary HIV/AIDS testing based on their occupational category.
10. Significant differences exist between employees in their perception and attitude towards voluntary HIV/AIDS testing based on their population group.
11. Significant differences exist between employees in their perception and attitude towards voluntary HIV/AIDS testing based on their tenure.



3.5 ASSUMPTIONS

The assumptions on which the research rests are that :

- People have different views on sensitive issues such as HIV/AIDS;
- All employees irrespective of their position in the organisation have a fundamental right to privacy;
- The perceptions and attitudes of employees largely influence their willingness to submit to HIV testing.

3.6 POPULATION AND SAMPLE

According to Tredoux and Durheim (2002, p.14), a population can be defined as “an entire collection of elements or individuals.” Goddard and Melville (2001, p. 34) define a sample “as a subset of the population.” An important fact is that the sample must be representative of the population being studied in terms of size and bias (Goddard & Melville, 2001).

Sampling, according to Sekaran (2003, p.266), is “ the process of selecting a justifiable number of elements from the population so that the study of the sample and an understanding of its properties or characteristics would make it possible for us to generalise such properties or characteristics to the population elements.”

3.6.1 Population



The target population for this study consisted of all the employees working for a fibre manufacturing company in the Western Cape. This organisation incorporates different operating departments, namely accounting, sales production, technical, maintenance and human resources. The population

from which the sample was drawn included employees at different levels of authority in the organisation, i.e. management, supervisors support staff and clock employees (various positions combined to form identifiable employee categories). This organisation employs a total of one thousand three hundred and eighty three employees (N = 1383). The composition of the population is presented in table 1:

Table 1: Profile of the population used for this study

Employee Category	Employee Numbers
Manager/ Supervisor	119
Support Staff	240
General Staff	1024
Total	1383

The sample used in this study included employees selected from all employee categories within the participating organisation. Every effort was made to encourage prospective respondents to participate in the research. Data of 246 respondents constituted the sample for this study.



3.6.2 Sampling design

According to Cooper and Schindler (2003), the two traditional sampling methods used are probability and non-probability sampling. In probability sampling each participant has an equal chance of being selected. In non- probability sampling it is not possible to make inference regarding the target population and the sampling error cannot be estimated (Hair, Babin, Money, & Samouel, 2003).

For the purpose of this study non-probability sampling was used. Hair et al. (2003) state that this mean that the probability of any element of the population being chosen is not known. Cooper and Schindler (2001) contend that the non-probability sampling method is appropriate when there is no need to generalise to a population parameter.

Additional considerations favouring non-probability sampling is that the method is inexpensive, easy to conduct, and is less time consuming (Cooper & Schindler, 2003).

3.6.3 Convenient sampling

The non-probability sampling method that was employed in this study is convenient sampling. According to Hair et al. (2003), convenient sampling is the most commonly used non-probability sampling method. The convenient sampling method is used in explorative research methods where the researcher focuses on acquiring an inexpensive estimate of the truth (Sekaran, 2003).

3.6.4 Sample selection

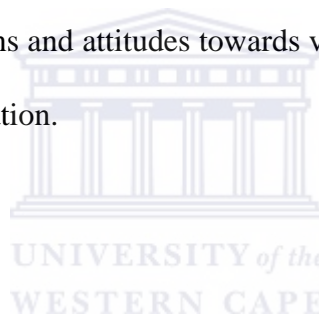
In the present study, a sample of organisational employees at different levels (i.e., employee categories) within the participating organisation was drawn. The sample contained both genders and no discrimination was made on the basis of race, age and ethnic origin. Information on the following demographic variables of respondents was obtained and is described in more detail in chapter 4:

- Gender of respondents;
- Age of respondents;
- Marital status of respondents;
- Home language of respondents;
- Highest qualifications;
- Occupation of respondents;
- Population group of respondents; and

- Tenure of respondents.

The employees in the participating organisation were given an equal chance of participating in this study. During the initial communication stage of the research, employees were informed of the absolute voluntary basis on which their participation would be based. Respondents were randomly selected from the various operating departments within the organisation, resulting in a total of six hundred (600) questionnaires being distributed.

A descriptive survey was used to collect the data required for this study. The design focused on quantitative research methods, which was linked to the objective of the study i.e. to determine the opinions and attitudes towards voluntary HIV/AIDS testing of different groups at the organisation.



3.7 DATA GATHERING

3.7.1 Procedure

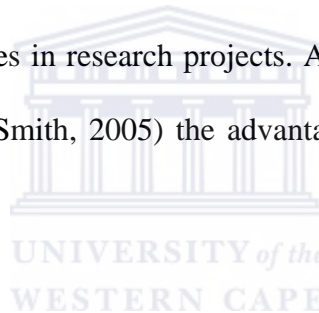
Permission to conduct this research was obtained in a meeting between the researcher and the Human Resource manager at the organisation where the research was conducted. The following detail was discussed:

- The reason for the proposed research;
- The aims and objective of the study;
- The processes that will be involved in conducting the study;
- The methods and techniques that will be used to evaluate the research results,
and

- The benefits of the research to the organisation.

Familiarity with the company policies and procedures by the researcher facilitated effective communication and cooperation between the organisation and the participants.

This study used questionnaires as the main measuring instrument. Goddard and Melville (2001) define a research questionnaire as a printed list that respondents are requested to complete. According to Kumar (1999), questionnaires are ideal research tools because it is inexpensive, it saves time and labour and offer greater anonymity. Rosouw and Rosenthal (1996, as cited in Smith, 2005) concur by stating that there are advantages of using questionnaires in research projects. According to them (Rosouw & Rosenthal, 1996, as cited by Smith, 2005) the advantage of using questionnaires are:



- It can be administered to large numbers of participants;
- The method allows for anonymity, and
- It is relatively more economical to use.

However the disadvantages of a questionnaire, according to Kumar (1999), are that;

- Questionnaires are limited to people that can read and write;
- The response rate of questionnaires may be low;
- Questionnaires may not be representative of the population
- The researcher may not be able to clarify issues;

- Respondents are able to consult others, and
- Questionnaires differ from the interview in that responses cannot be supplemented with additional information.

Of the six hundred (600) questionnaires that were distributed, two hundred and forty six (246) responded, hence achieving a response rate of forty one percent (41%), According to Sekaran 2003), a response rate of thirty percent (30%) is acceptable for most research purposes.

Every effort was made by the researcher to ensure a high rate of response rate. The anonymity of the respondents was guaranteed and conveyed to the potential respondents in the covering letter. The covering letter explained to potential participants the reason for the study as well as ensuring the confidentiality of the information provided. Additionally, respondents were not required to write their names or employee numbers on the questionnaires. The questions were structured in a manner that was non – threatening, the object being to illicit optimum response levels.

3.7.2 Measuring instrument

Data for this study was collected by means of a self –constructed questionnaire. The questionnaires were specifically designed to elicit employee's attitudes and perception regarding voluntary HIV/AIDS testing in the workplace. The respondents were requested to complete the questionnaires independently.

Self-administration was chosen as the delivery option as it is relatively cheap and concise, enabling quick completion, minimise interview bias and allows for

anonymous and honest responses from respondents (Babble & Mouton, 2002; Newman, 1997). Some disadvantages of this approach might have had an impact on this study: Firstly, there is potential for obtaining shallow data that does not provide a “feel” for the phenomenon under study. Secondly, the researcher had no opportunity for asking clarification questions and probing for more information. The researcher also did not have an opportunity to observe how the respondents reacted towards questions and the research setting.

The questionnaires consisted of five (5) sections comprising a total of sixty nine (69) items. (See Annexure A). The different sections included in the questionnaire were:

Section A: Biographical information (Items 1 - 8): This section required the respondents to provide personal information regarding their gender, marital status, home language highest qualifications obtained, tenure and population group.

Section B: General Knowledge (Items 9 - 33): This section contained questions to determine respondents current level of general knowledge regarding HIV/AOIDS.

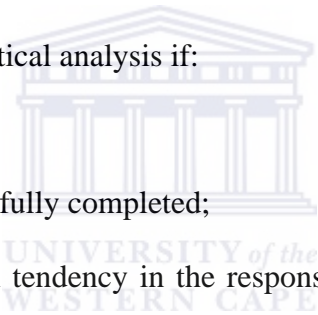
Section C: Attitudes towards Voluntary HIV testing (34 – 62): This section focused on the respondents’ general attitude towards voluntary HIV/AIDS testing.

Section D: HIV test behaviour (Items 63 – 65): This section contained questions about the respondents’ HIV test behaviour under certain conditions.

Section E: HIV testing intentions (Items 66 – 69): This section contained pertinent questions about the respondents' HIV testing intentions.

Respondents were requested to place their completed questionnaires in a sealed envelope and to return the envelope and its contents to the researcher. The absolute confidentiality of the respondent's responses to the questionnaire as well as his/her anonymity were guaranteed in that the respondents were not required to provide any personal detail such as their names and/or their employee numbers; hence rendering any form of traceability of the respondents not possible.

Only completed questionnaires were included in the analysis. A questionnaire was excluded from the study and statistical analysis if:

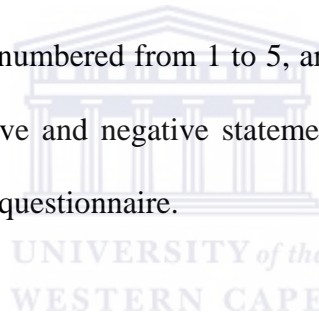
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- ❑ The questionnaire was not fully completed;
 - ❑ A definite trend of central tendency in the responses of the respondents was observed;
 - ❑ A clear trend of response set in the responses of the respondents was identified (- where the respondent only selected the highest alternative on a given scale's items, or where the respondent only selected the middle or lowest alternative on a given scale's items).

Only two questionnaires were excluded from the study due to incomplete information.

2.7.2.1 Scoring of the questionnaire

A Likert scale was utilised with the range of 1 to 5 (1 – strongly disagree, 2-disagree, 3-unsure, 4-agree, 5-strongly agree). Statements were formulated in both positive and negative forms so as to avoid the acquiescent response set. The response set, also variously referred to as response style and response bias, is the tendency of some people to answer a large number of items in the same way (Sekaran, 2003).

Researchers concur that wording statements in this way (that is, in alternative directions) provides an indication as to the inconsistency of responses from survey respondents (Newman, 2000). To this effect, in order to reverse the scoring of the questions, some items which are numbered from 1 to 5, are recoded from 5 to 1. The rationale for utilising both positive and negative statements is to encourage critical engagement with the items in the questionnaire.



For example, on the “attitudes towards HIV testing” scale, it is important to note that the attitude towards HIV/AIDS testing were negatively worded. This means that a high to average score indicates some endorsement (Agree category) of negative attitudes towards HIV/AIDS testing.

3.7.3 Reliability of the measuring instrument

Rubin and Babbie (2001, P.189) state that “a measure is deemed reliable if it yields the same result repeatedly when applied to the same object”. Reliability is thus associated with the amount of random error in a measurement. Furthermore reliability

imply, according to Goddard and Melville (2001, p. 41), “that the measurements are consistent, assuming that the experiment and the conditions remain the same”.

3.7.3.1 Reliability Analysis (Cronbach coefficient Alpha)

Cronbach’s Coefficient Alpha is a reliability coefficient that is used to indicate how well the items in a set were positively correlated to each other. The closer Cronbach’s Alpha is to 1.0, the higher the internal consistency reliability. Reliabilities less than 0.60 are considered to be poor, those in the 0.70 range acceptable and those over 0.80 good (Sekaran, 2001). The Cronbach Alpha is thus a statistical method that is used to test internal consistency (Sekaran, 2001). This method was used to calculate the reliability of the measuring instrument that was used in this study. The reliability of the survey instrument is reflected upon in Chapter 4, paragraph 4.2.4.

3.8 DATA ANALYSIS

The Statistical Package for Social Sciences (SPSS) (Version 13) was used to analyse the data obtained from the questionnaires. The data were coded prior to selecting the descriptive analysis. The prime statistical methods that were employed to draw conclusions of the data collected are inferential and descriptive statistics.

Terre Blanche and Durrheim (1999, p.117) describe inferential statistics as a statistical method that allow researchers to use “information obtained from samples to draw conclusions about populations”. Descriptive statistics in turn, enable the researcher to “arrange numerical data in an orderly and readable manner” and to

present the data in numerical or graphical form (Terre Blanche & Durrheim, 1999, p.117).

For the purpose of this research, the Pearson Product-Moment Correlation, Multiple Regression, Analysis of variance, Scheffe's Post Hoc Multiple Comparison, and the Reliability Analysis (Cronbach coefficient Alpha) were computed.

3.8.1 Pearson Product - Moment Correlation

Tredoux and Durrheim (2002, p. 183) posit that the "Pearson correlation coefficient is calculated on the basis of how far the points lie from the regression line. According to Tredoux and Durrheim (2002), the procedure is used to determine the relationship between two variables. In this study, the method was used to determine whether a significant difference exists between employee's attitudes and perceptions and their behaviour towards HIV/AIDS testing based on biographical variables.

3.8.2 Multiple Regression

According to Goodwin (2002, p.166), "regression refers to the fact that if score 1 is an extreme score then score 2 will be closer to whatever the mean for the larger set of scores is". This occurrence is referred to as the regression to the mean because, for the larger set of scores most will form around the mean and only a few will be far away from the mean (Goodwin, 2002). Additionally the variables of interest can be used to predict the criterion score. Assuming that there is a high positive score between the measure and the criterion, "the criterion score can be predicted by fitting a straight

linear line (the regression line) through the data points on the scatter diagram” (Foxcroft & Roodt, 2001, p. 56). A stepwise regression analysis was computed in this study to compare the independent variables (Knowledge of HIV/AIDS and attitudes towards HIV/AIDS) against HIV testing behaviour.

3.8.3 Analysis Of Variance

This study concentrated on the differences in perceptions and attitudes towards voluntary HIV/AIDS testing between various groups of respondents and has therefore employed the Analysis of Variance (ANOVA) to determine these differences based on their biographical characteristics. According to Terre Blanche and Durrheim (1999), the ANOVA is used to determine whether the mean scores of two or more groups are significantly different.

3.8.4 Scheffe’s Multiple Comparison Procedure

Hinkle, Wiersma and Jurs (1982, p. 266) state that “when a statistically significant F ratio is obtained in an ANOVA, and the null hypothesis is rejected, we conclude that at least one population is different from the other”. They add that all population means could differ or that any combination differs and therefore in order to establish which pairs of means differ it is necessary to do follow - up analysis like the Scheffe’ Multiple Comparison Procedure. This procedure involves computing an F value for each combination of two means. This statistical method was used to determine where differences between groups lie with respect to their knowledge and attitudes towards voluntary testing for HIV/AIDS.

3.9 CONCLUSION

This chapter explained the research design, sampling method, data capturing procedure, and the statistical methods and process that were used to analyse the data. The analysed data obtained from the above method is supplied in the following chapter.

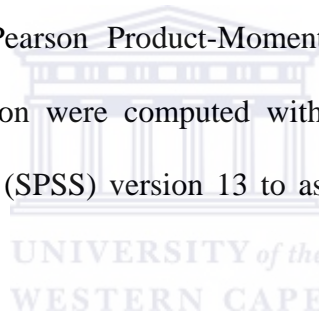


CHAPTER 4

PRESENTATION OF RESULTS

4.1 INTRODUCTION

This chapter presents the findings based on the empirical analyses. The chapter firstly provides an overview of the research findings obtained based on the descriptive statistics for the measuring instruments, which were utilised. Thereafter, the analyses of knowledge, attitudes towards voluntary testing behaviour amongst the sample of employees are presented with the aid of inferential statistical procedures. For the purpose of this research, the Pearson Product-Moment Correlation, Analysis of variance, and Multiple Regression were computed with the aid of the Statistical Package for the Social Sciences (SPSS) version 13 to assess the hypotheses of the study.



4.2. RESULTS

4.2.1 Descriptive statistics

The descriptive statistics calculated for the sample are provided in the sections that follow. In this manner, the properties of the observed data clearly emerge and a feel for the data can be established (Sekaran, 2003).

4.2.1.1 Results of the biographical questionnaire

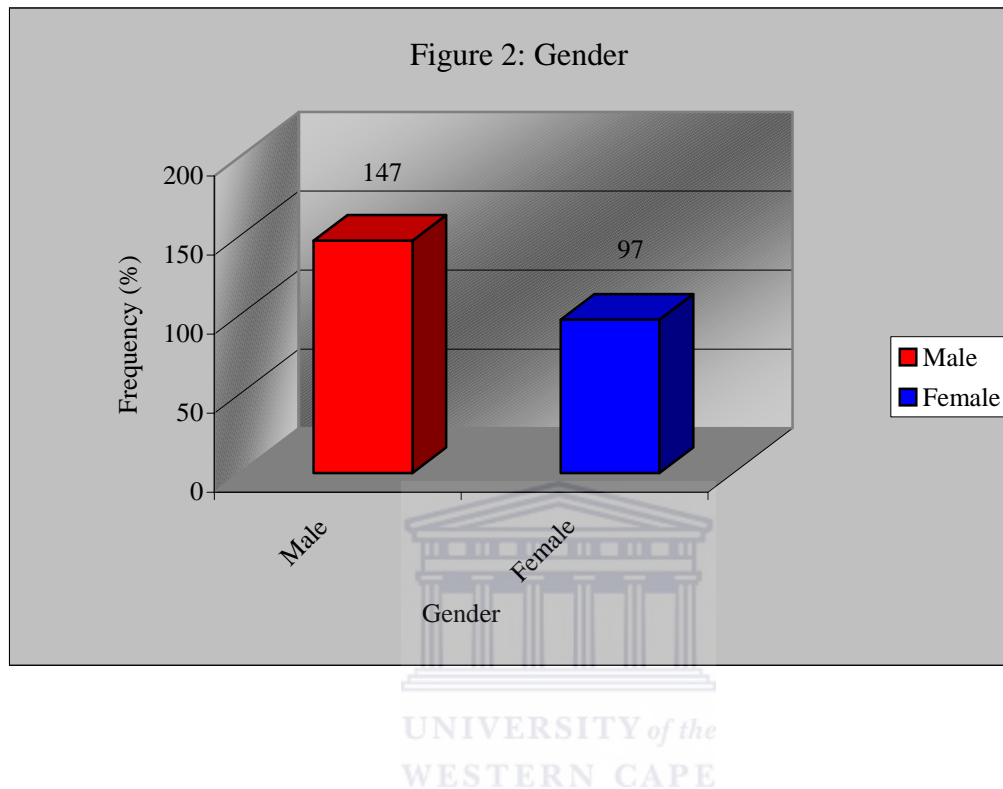
Descriptive statistics in the form of frequencies and percentages are subsequently graphically presented for the variables included in the biographical questionnaire.

These include:

- ❑ gender of the respondents
- ❑ age of the respondents
- ❑ marital status of the respondents
- ❑ home language of the respondents
- ❑ highest qualification of the respondents
- ❑ occupation of the respondents
- ❑ population group of the respondents
- ❑ tenure of the respondents

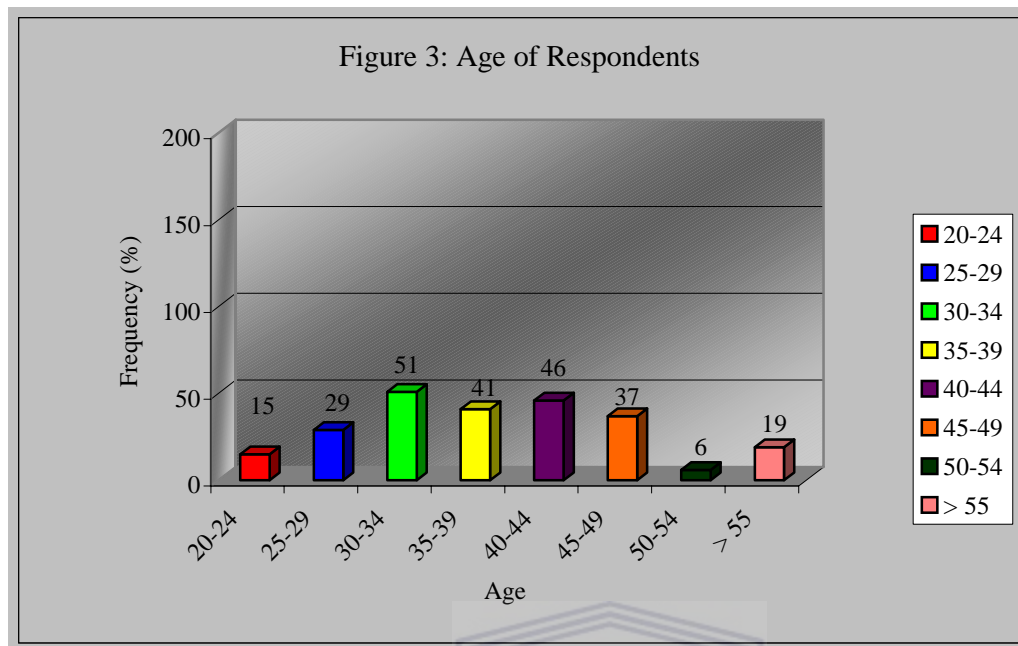


Figure 2: Gender distribution of the selected sample



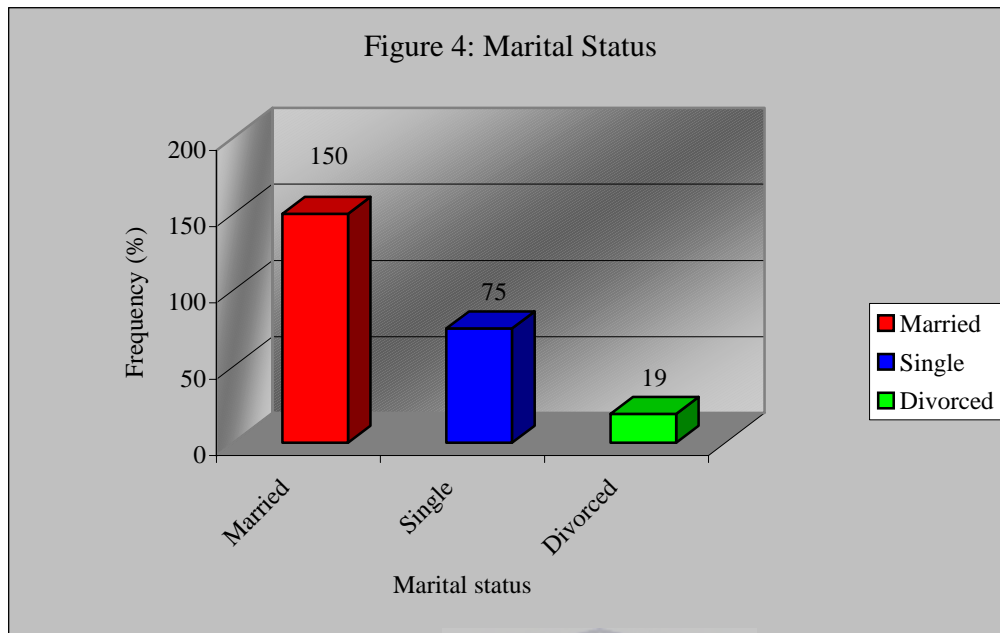
The results depicted in Figure 2 indicate the gender distribution of the sample of employees that participated in the research. In terms of Figure 4.1, the majority of respondents was male (n=147) or 60%, while females (n=97) constituted 40% of the sample.

Figure 3: Age distribution of the selected sample



Based on the frequency distribution presented in Figure 3, it can be deduced that the majority of the respondents ($n=51$) or 21% of the sample is in the age category 30-34 years. Respondents in the age category 40-44 years constituted the second largest group of respondents ($n=46$), thereby comprising 19% of the sample. Fifteen respondents (6%) were in the age group 20-24, 29 (12%) were in the age group 25-29, and 37 respondents (15%) were in the age group 45-49 years. Six (6) respondents or (2.5%) of the sample represented the age categories 50-54 years.

Figure 4: Distribution of the selected sample based on marital status



In terms of Figure 4 the majority of respondents was married ($n=150$), comprising 61.5% of the sample. Single respondents ($n=75$) represent a further 30.7% of the sample and divorced respondents ($n=19$) comprise 7.8% of the sample.

Figure 5: Home language distributions of the selected sample

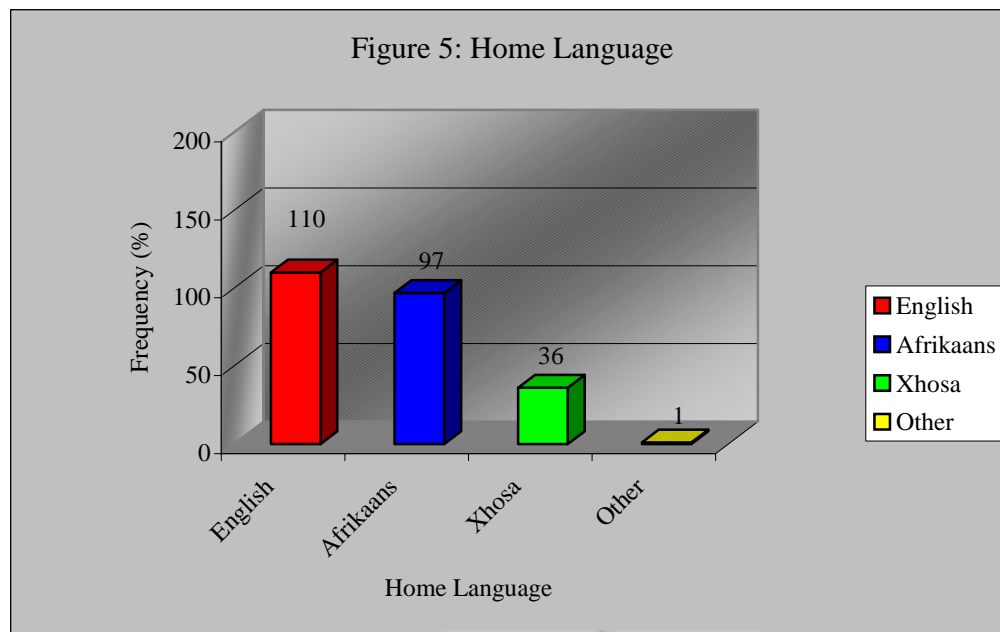
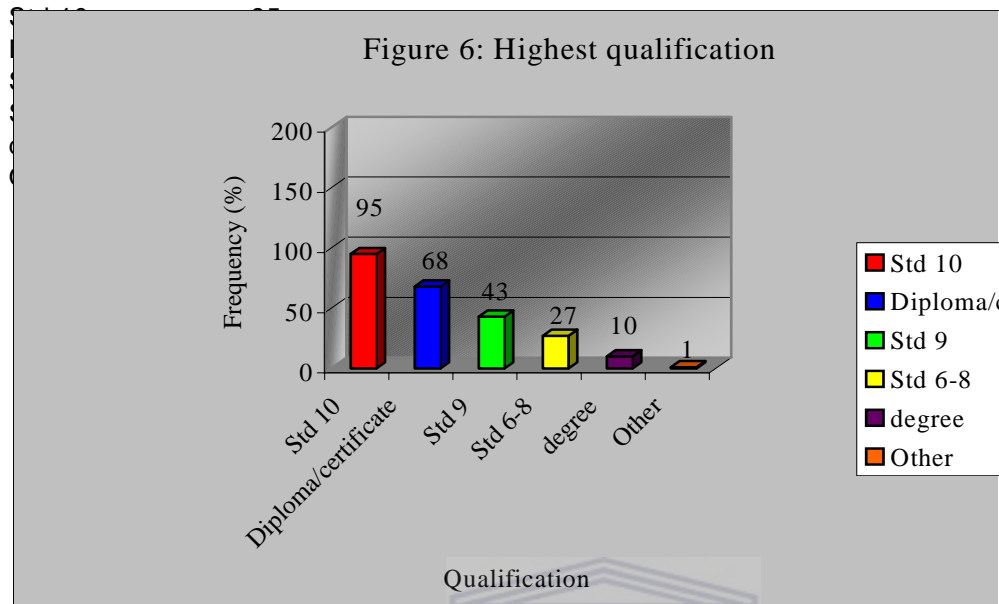


Figure 5 indicates that the majority of the sample (n=110) or 45% of the sample is English speaking, while a further 39.8% of the respondents (n=97) indicated that they are Afrikaans speaking. Thirty-six (36) respondents, that is 14.8%, indicated that they are Xhosa-speaking, while only 1 respondent spoke another language.

Figure 6: Graphical distribution of the selected sample based qualifications.



In terms of Figure 6 it can be seen that the majority of the respondents ($n=95$), or 38.9% of the respondents has matric as their highest qualification, while 68 (27.9%) has completed a diploma or certificate. A further twenty-seven (27) respondents, or 11.1% of the sample, have standard 6 to 8 as their highest educational level and 43 respondents (17.6%) indicated their highest qualification to be standard nine. Ten (10) respondents or 4.1% of the sample have completed a degree, while 1 respondent (0.4%) has completed a doctorate degree.

Figure 7: Occupation level of Participants/Respondents

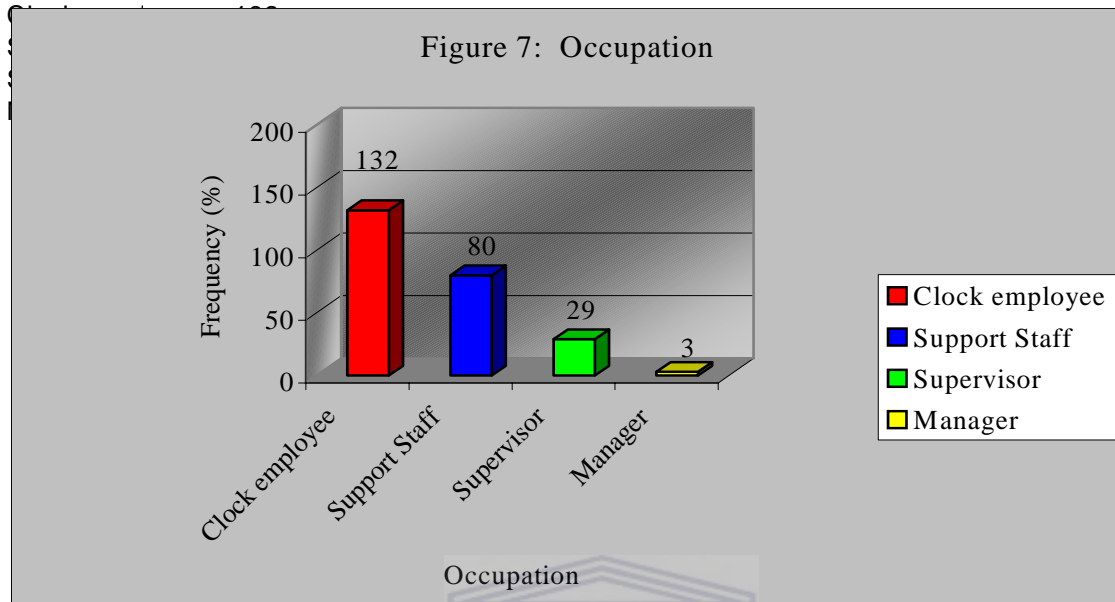
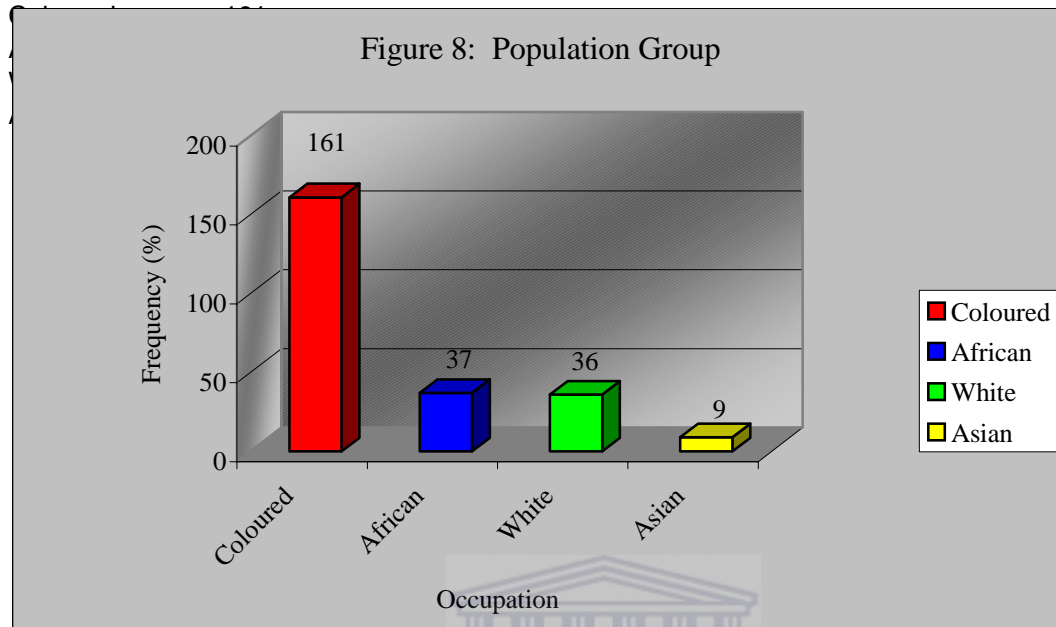


Figure 7 indicates that the majority of the sample (n=132) or 54.1% of the sample is clock employees, while 32.8% of the respondents (n=80) indicated that they are support staff. Twenty-nine (29) respondents, that is 11.9%, indicated that they are supervisors, while those who are managers accounted for only 1.2% (n=3) of the respondents.

Figure 8: Graphical distribution of the selected sample based on population group



In terms of Figure 8 it can be seen that the majority (66%) of the respondents (n=161), was Coloured, while 37 (15.2%) are African. Thirty-six (14.8%) of the respondents are white, while Asians constituted the smallest proportion of the sample (n=9) or 3.7%.

Figure 9: Tenure of the participants/Respondents

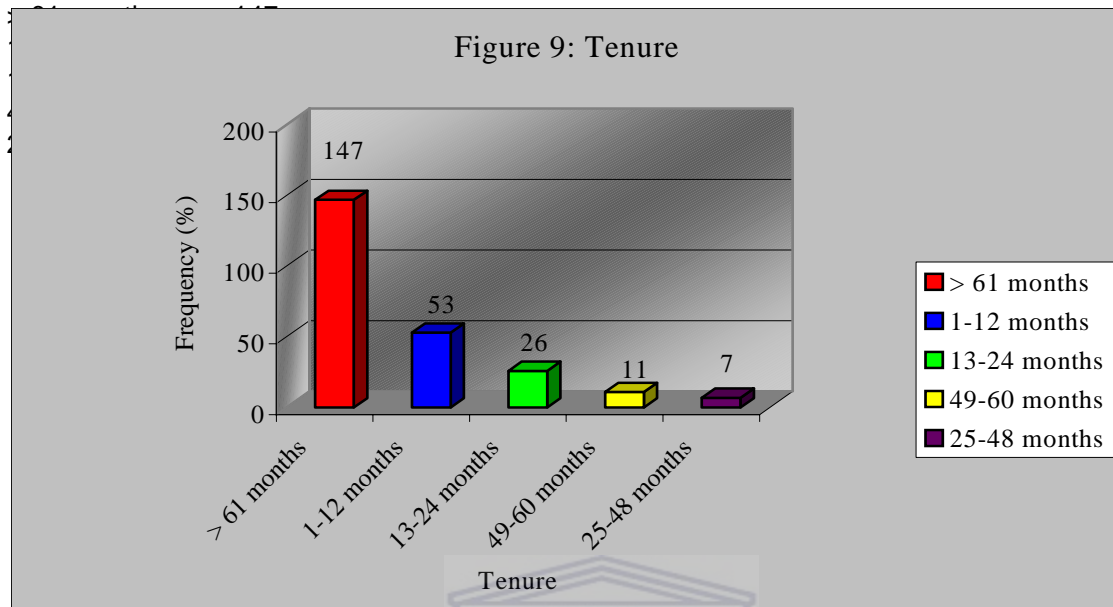
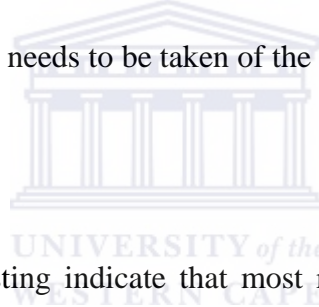


Figure 9 indicates that the majority of the sample (n=147) or 60.2% of the sample has been with the organisation for more than 61 months, while a further 11 respondents, that is 4.5%, have been with the organisation for between 49-60 months. Fifty-three (53) respondents or 21.7% of the sample have served the organisation for between 1-12 months, with 26 respondents (10.7%) having been in the company for between 13-24 months. Those who have been in the organisation for between 25-48 months, constitute the minority, that is seven respondents, representing 2.9% of the respondents.

Table 2: Descriptive Statistics for Knowledge, attitudes and voluntary HIV/AIDS testing behaviour

	Mean	S
Knowledge of HIV/AIDS	3.73	.38
Attitudes towards HIV/AIDS testing	3.28	.34
Voluntary Testing behaviour	2.26	.56

The results for the various sub-dimensions of the survey questionnaire assessing knowledge, attitudes and behaviour towards voluntary HIV/AIDS testing are outlined in Table 2. Results indicate that knowledge of HIV/AIDS is quite high with most respondents agreeing or strongly agreeing with the statements contained in the questionnaire (mean = 3.73, s = .38). With respect to the scoring of the “attitudes towards HIV testing”, cognisance needs to be taken of the fact that the responses were reverse scored.



Attitudes towards HIV/AIDS testing indicate that most respondents either strongly agreed or agreed with the statements (mean = 3.28, s = .34). It is important to note that the attitude towards HIV/AIDS testing were negatively worded. This means that a mean of 3.28 indicates that the average score indicated some endorsement (Agree category) of negative attitudes towards HIV/AIDS testing.

Moreover, employees' HIV/AIDS testing behaviour scores were lowest (mean = 2.26, s = .56). The mean of 2.26 for the testing behaviour scores indicates that respondents are unlikely to agree to HIV testing even when confidentiality is assured, when colleagues also agree and if they have guarantees of remaining anonymous.

4.2.2 Pearson Correlation Coefficient

In order to ascertain whether there is a significant relationship between the dimensions of the questionnaire, the Pearson product moment correlation coefficient was computed.

Table 3: Correlation between Knowledge of HIV/AIDS, Attitudes towards voluntary HIV/AIDS testing and HIV/AIDS testing behaviour

	Knowledge of HIV/AIDS	Attitudes towards voluntary HIV/AIDS testing	HIV/AIDS testing behaviour
Knowledge of HIV/AIDS	1.0		
Attitudes towards voluntary HIV/AIDS testing	0.38**	1.0	
HIV/AIDS testing behaviour	0.15	0.29*	1.0

* Correlation is significant at the 0.05 level (2-tailed)

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

According to Table 3, there is a statistically significant relationship between knowledge of HIV/AIDS and attitudes towards voluntary HIV/AIDS testing ($r = 0.38$, $p < 0.01$). The results also indicate that there is a positive, albeit weak relationship between knowledge of HIV/AIDS and HIV/AIDS testing behaviour ($r = 0.15$, $p > 0.05$).

There is also a significant relationship between Attitudes towards voluntary HIV/AIDS testing and testing behaviour ($r = 0.29$, $p < 0.05$). Hence, this supports the hypothesis that there is a statistically significant (albeit negligible) relationship between attitudes towards voluntary HIV/AIDS testing and testing behaviour. While knowledge of HIV/AIDS is positively associated with attitudes towards voluntary HIV/AIDS testing, this attitude does not necessarily strongly relate to actual testing behaviour.

4.2.3 Multiple Regression Analysis

Table 4: Stepwise regression: Dependent variable (Voluntary HIV/AIDS testing behaviour)

Multiple Regression	0.483			
R squared (R^2)	0.233			
R squared (Adjusted R^2)	0.221			
Standard error	0.132			
			F = 5.301	Significant F = 0.00**
Variables in the equation	B	Standard Error for B	T	P
Knowledge of HIV/AIDS	0.50	1.23	-3.26	0.017*
Attitudes towards voluntary HIV/AIDS testing	0.021	.038	5.22	0.000**

* Significant at the 0.05 level (2-tailed)

** Significant at the 0.01 level (2-tailed)

Table 4 summarises the results of regressing the independent variables (Knowledge of HIV/AIDS and Attitudes towards voluntary testing) against Testing behaviour. The results shown in Table 4 suggest a moderate percentage of the variation in Testing

Behaviour explained by the variables entered in the equation ($R^2 = 23.3\%$; R^2 (adjusted) = 22.10%). Thus 22% of the variance in Testing Behaviour can be explained by Knowledge of HIV/AIDS and Attitudes towards Voluntary testing. The F-ratio of 5.301 ($p < 0.01$) indicates the regression of testing behaviour, expressed through the adjusted squared multiple (R^2 (adj.) = 22.1%) is statistically significant. These variables account for 22.1% of the variance in HIV/AIDS testing behaviour, and suggest that other unexplored variables could explain the variance in testing behaviour. The null hypothesis is rejected indicating that knowledge of HIV/AIDS and attitudes towards voluntary testing are significant predictors of voluntary HIV/AIDS testing behaviour.

4.2.4. ANALYSIS OF VARIANCE

A series of one-way ANOVA's was carried out to determine whether the employees differed with respect to knowledge of HIV/AIDS, Attitudes towards voluntary testing and testing behaviour on demographic variables.

Table 5: T-test: Voluntary HIV/AIDS Testing Behaviour based on gender

	Mean	S	Std error	T	P
Males	2.18	1.16	2.72	3.573	0.004*
Females	3.27	1.34	3.45		

* $p < 0.01$

Table 5 summarises the results of the one-way ANOVA with respect to voluntary HIV/AIDS testing behaviour based on the gender of respondents. The results indicate

that there are statistically significant differences, $t = 3.573$; $p < 0.01$, in the voluntary HIV/AIDS testing behaviour of employees based on their gender, with males indicating significantly lower voluntary HIV/AIDS testing behaviour (Mean = 2.18, $s = 1.16$) compared to females (Mean = 3.27, $s = 1.34$). Hence, the null hypothesis is rejected with respect to differences in voluntary HIV/AIDS testing of employees based on gender.

Table 6 : ANOVA: Voluntary HIV/AIDS Testing Behaviour based on age

	Sum of squares	Mean square	F	P	Scheffe's Post hoc
Between groups	18.7888	6.263	.581	0.001**	Those in the age group 30-34 differed significantly from the other groups
Within groups	614.458	10.780			
Total	633.246				

** $p < 0.01$

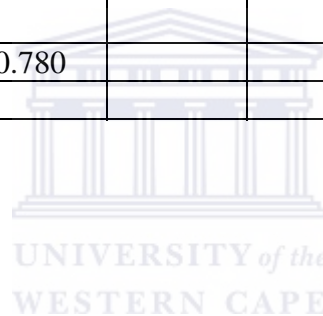


Table 6 summarises the ANOVA with respect to voluntary HIV/AIDS testing based on the age of respondents. The results indicate that there are statistically significant differences ($F = 0.581$; $p < 0.01$), in the voluntary HIV/AIDS testing of employees based on their age. Hence, the null hypothesis, is rejected with respect to differences in voluntary HIV/AIDS testing behaviour based on age.

Scheffe's post hoc multiple comparison method was used to determine whether there were any statistically significant differences between voluntary HIV/AIDS testing behaviour based on age. The results indicate that those in the age group 30-34 differed

significantly from the other age categories in the sense that they were less inclined to submit to voluntary HIV/AIDS testing relative to the other age categories.

Table 7: ANOVA: Voluntary HIV/AIDS Testing Behaviour based on marital status

	Sum of squares	Mean square	F	P	Scheffe's Post hoc
Between groups	25.729	8.576	.954	0.04*	Those who are single differed significantly from the other groups
Within groups	512.533	8.992			
Total	538.262				

* $p < 0.05$

The results with respect to voluntary HIV/AIDS testing behaviour based on the marital status of respondents are shown in Table 7. The results clearly indicate that there is a statistically significant difference in the voluntary HIV/AIDS testing behaviour based on their marital status ($F = .954$, $p < 0.05$). Hence, the null hypothesis is rejected with respect to differences in HIV/AIDS testing behaviour based on their marital status.

Scheffe's post hoc multiple comparison method was used to determine where the statistical significant difference in voluntary HIV/AIDS testing behaviour was located in the marital status groups. The results indicate that those that are single differed significantly from the other categories in the sense that they were less inclined to submit to voluntary HIV/AIDS testing.

Table 8: ANOVA: Voluntary HIV/AIDS Testing Behaviour based on home language

	Sum of squares	Mean square	F	P
Between groups	15.977	5.326	.271	0.46
Within groups	348.383	6.112		
Total	364.361			

Table 8 shows the ANOVA results with respect to voluntary HIV/AIDS testing behaviour based on the home language of employees. The results indicate that there are no statistically significant differences, ($F = 0.271$, $p > 0.05$), in the voluntary HIV/AIDS testing behaviour of employees based on their home language.

Table 9: ANOVA: Voluntary HIV/AIDS Testing Behaviour based on qualifications

	Sum of squares	Mean square	F	P	Scheffe's Post hoc
Between groups	109.826	36.609	4.389	0.008**	Those who have Std. 10 qualifications differed significantly from the other groups
Within groups	475.420	8.341			
Total	585.246				

** $p < 0.01$

Table 9 summarises the ANOVA with respect to voluntary HIV/AIDS testing behaviour based on the qualifications of employees. The results indicate that there are statistically significant differences, ($F = 4.389$; $p < 0.01$), in the voluntary HIV/AIDS testing behaviour of employees based on their qualifications.

Scheffe's post hoc multiple comparison method was used to determine whether there were any statistically significant differences in voluntary HIV/AIDS testing behaviour based on qualifications. Results indicate that those with Standard 10 qualifications (that is, those with the lowest qualification) differed significantly from the other categories in the sense that they were less inclined to submit to voluntary HIV/AIDS testing.

Table 10: ANOVA: Voluntary HIV/AIDS Testing Behaviour based on occupation

	Sum of squares	Mean square	F	P	Scheffe's Post hoc
Between groups	78.857	26.286	5.248	0.003**	Those who are Clock Employees differed significantly from the other groups
Within groups	285.504	5.009			
Total	364.361				

** p < 0.01

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Table 10 summarises the ANOVA with respect to voluntary HIV/AIDS testing behaviour based on occupation. The results indicate that there are statistically significant differences, ($F = 5.248$; $p < 0.01$), in the voluntary HIV/AIDS testing behaviour of employees based on their occupation.

Scheffe's post hoc multiple comparison method was used to determine whether there were any statistically significant differences in voluntary HIV/AIDS testing behaviour based on occupational group. The results indicate that those that are Clock Employees

differed significantly from the categories in the sense that they were less inclined to submit to voluntary HIV/AIDS testing.

Table 11: ANOVA: Voluntary HIV/AIDS Testing Behaviour based on population group

	Sum of squares	Mean square	F	P	Scheffe's Post hoc
Between groups	61.693	20.564	3.873	0.014*	Those who are Clock Employees differed significantly from the other groups
Within groups	302.668	5.310			
Total	364.361				

* $p < 0.05$

Table 11 summarises the ANOVA with respect to voluntary HIV/AIDS testing behaviour based on population group of employees. The results indicate that there are statistically significant differences, ($F = 3.873$; $p < 0.05$), in the voluntary HIV/AIDS testing behaviour of employees based on their population group.

Scheffe's post hoc multiple comparison method was used to determine whether there were any statistically significant differences in voluntary HIV/AIDS testing behaviour based on population group. The results indicate that Coloured employees differed significantly from the categories in the sense that they were less inclined to submit to voluntary HIV/AIDS testing.

Table 12: ANOVA: Voluntary HIV/AIDS Testing Behaviour based on tenure

	Sum of squares	Mean square	F	P	Scheffe's Post hoc
Between groups	1324.934	220.822	0.574	0.000**	Those who with tenure > 61 months differed significantly from the other groups
Within groups	34231.354	384.622			
Total	35556.288				

** $p < 0.01$

Table 12 summarises the ANOVA with respect to voluntary HIV/AIDS testing behaviour based on the tenure of employees. The results indicate that there are statistically significant differences, ($F = 0.574$; $p < 0.01$), in the voluntary HIV/AIDS testing behaviour of employees based on their tenure.

Scheffe's post hoc multiple comparison method was used to determine whether there were any statistically significant differences in voluntary HIV/AIDS testing behaviour based on employee tenure. The results indicate that employees who have been in the organisation for more than 61 months differed significantly from the categories in the sense that they were less inclined to submit to voluntary HIV/AIDS testing.

4.2.5 Reliability of the Survey Instrument

Reliability is concerned with the extent to which the survey instrument is capable of returning an accurate result despite the presence of factors which may have an influence on the outcome (Dyer, 1995). The reliability of the questionnaire was

calculated, using a test of internal consistency, namely Cronbach's Alpha. The questionnaire's reliability figures are presented in Table 13, which summarises the internal consistency of the sub-scales.

Table 13: Reliability Analysis – Scale (Alpha)

Dimension	Cronbach's Alpha
Knowledge of HIV/AIDS	0.79
Attitudes towards voluntary HIV/AIDS testing	0.82
HIV/AIDS testing behaviour	0.58

The summed scales in Table 13 refer to the sub-items of each of the three areas identified in the questionnaire (that is knowledge of HIV/AIDS, attitudes towards voluntary HIV/AIDS testing, and HIV/AIDS testing behaviour). The Cronbach coefficient Alpha with respect to the Knowledge of HIV/AIDS dimension of the questionnaire was 0.80, which is indicative of an above average reliability for this dimension. With respect to the Attitudes towards voluntary HIV/AIDS testing, the Cronbach coefficient Alpha indicated a reliability value of 0.83, while that for HIV/AIDS testing behaviour evidenced a somewhat lower reliability coefficient alpha of 0.59. This is likely attributable to the small number of items on this sub scale. The overall Cronbach coefficient alpha was 0.71, which is above the threshold value of 0.7 which, according to Sekaran (2001) is sufficient evidence of the reliability of the applicable scale scores.

4.3. CONCLUSION

This chapter focused on the presentation of results obtained from the analysis of the descriptive and inferential data that was generated based on the sample of employees who participated in the survey. Both descriptive and inferential statistical techniques were applied. With respect to the inferential techniques, Pearson's product moment correlation, multiple regression analysis and analysis of variance and chi-square were used to indicate relationships and differences in the voluntary HIV/AIDS testing behaviour of employees.

The results indicate that there is a significant (albeit weak) relationship between knowledge of HIV/AIDS and attitudes towards voluntary HIV/AIDS testing. Moreover, there was also a significant relationship between attitudes towards voluntary HIV/AIDS testing and HIV/AIDS testing. However, the relationship between knowledge of HIV/AIDS and actual HIV/AIDS testing behaviour was not significant.

The results of the regression analysis indicate that both knowledge of HIV/AIDS and attitudes towards voluntary HIV/AIDS testing significantly explained the variance in voluntary HIV/AIDS testing behaviour. However, only 22.10% of the variance in voluntary HIV/AIDS testing behaviour can be attributed to knowledge of HIV/AIDS and attitudes towards voluntary HIV/AIDS testing.

The results of a t-test to investigate gender differences in voluntary HIV/AIDS testing behaviour indicate that males indicated significantly lower voluntary HIV/AIDS

testing behaviour. There were also significant differences in voluntary HIV/AIDS testing behaviour based on age, marital status, qualifications, occupation, population group and tenure.

In the following chapter, the results arising from the empirical data analysis will be discussed and contextualised based on previous research within the field.



CHAPTER 5

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

“The key issue hindering the HIV/AIDS pandemic is to achieve changes in awareness and attitudes, and also changes in behaviour, which would reduce the probability of HIV infection. Testing is currently the only known method of acknowledging or excluding the infection” (Izdebski, 2003, p. 5).

According to Varga (1999), the HIV/AIDS infection rate in South Africa is estimated to increase on an annual basis. Young people, especially those in the 15 – 25 year age group, are particularly vulnerable to HIV infection. HIV /AIDS testing is believed to increase knowledge about the disease, change peoples attitudes and social behaviours as well as creating the basis to initiate treatment of people infected with HIV (Peltzer, Esther, & Mohan, 2004).

This study focused on the HIV/AIDS testing attitudes and perception of people in a work environment from a South African perspective. The aim of this study was to explore the attitudes and perception of people at different levels of an organisation toward voluntary HIV/AIDS testing.

Questionnaires were distributed to 245 employees at the organisation where the research was conducted. The questionnaires were designed in accordance with the following objectives;

- To ascertain the biographical information of the respondents.
- To determine the level of knowledge, awareness and understanding regarding HIV/AIDS in the sample group.
- To determine the sample groups attitude towards voluntary HIV/AIDS testing.
- To explore the possible HIV/AIDS test behaviours of the respondents.
- To establish what the respondent's future HIV/AIDS testing intentions are.

5.2 DISCUSSION OF RESULTS OF DESCRIPTIVE ANALYSIS



5.2.1 Knowledge and attitudes towards HIV /AIDS testing

The results of this study indicate that the respondents are knowledgeable about HIV/ADS as most respondents strongly agreed with the statements contained in the questionnaire (mean =3.73, s =.38). In the segment attitudes toward “HIV/AIDS testing” most respondents either strongly agreed or agreed with the negatively recorded statements (mean=3.28, s=.34), while the respondents HIV/AIDS testing behaviour scores were lowest (mean=2.26, s=. 56). From the results of this study it is clear that a significant relationship ($r=0,38$, $p=0.01$) exists between knowledge of HIV/AIDS and attitudes towards voluntary HIV/AIDS testing. From this response it

can be deduced that the more knowledgeable people are about HIV/AIDS, the more positive people would be towards HIV/AIDS testing.

A study conducted by Kalitchman and Simbayi (2003) similarly found that people's knowledge of HIV/AIDS and HIV test attitudes did not differ significantly. The study was conducted on people living in a black township in Cape Town South Africa. The study focused on examining the relationship between HIV testing history, attitudes towards testing and AIDS stigmas. Participants in the study were young black men ($n = 224$) and women ($n = 276$) with an average age range of 21 – 25 years. Respondents in the study by Kalitchman and Simbayi (2003) had high-test scores for AIDS knowledge, with the mean test score for the knowledge segment recorded at eighty three percent (83%). Research results (Kalitchman & Simbayi, 2003) indicate that people who knew their HIV test results demonstrated significantly more positive attitudes towards HIV testing. The results also indicate that people in the lower age groups (21 – 25 years) are more informed about HIV/AIDS than people in the higher age groups, implying that they were more knowledgeable about the HIV/AIDS phenomenon.

5.2.2 Knowledge and behaviour towards HIV/AIDS testing

According to the results of this study, there is a slight positive relationship between knowledge of HIV/AIDS and HIV/AIDS testing behaviour ($r= 0.15$, $p <.0.05$). Thus the null hypothesis, which indicates that there is no statistically significant relationship between knowledge of HIV/AIDS and behaviour towards voluntary HIV/AIDS testing, is rejected.

In a study conducted by Van Dyk and Van Dyk (2003) on the psychosocial barriers to HIV/AIDS voluntary counselling and testing programmes in South Africa, a similar behaviour pattern was identified. The study, reported a significant relationship between knowledge of HIV/AIDS and HIV/AIDS testing behaviour. Seventy three percent (73%) out of a total of 1422 respondents indicated that increased knowledge of their HIV/AIDS status would influence their sexual behaviour. Stein and Nyamathi (2000) support the fact that an increase in HIV/AIDS knowledge potentially raises risk awareness and encourages positive HIV/AIDS testing behaviours.

5.2.3 Attitudes and behaviour towards HIV/AIDS testing

The results of this study depict a significant relationship between attitudes towards voluntary HIV/AIDS testing and HIV/AIDS testing behaviour ($r=0.29$, $p < 0.05$). This result supports the hypothesis that there is a statistically significant relationship between attitudes towards voluntary HIV/AIDS and testing behaviour. This implies that the more positive a person's attitude towards HIV/AIDS, the higher the likelihood that the person could also adopt a more positive HIV/AIDS testing behaviour .

Studies conducted by Phanuphak, Miller, Sarangbin, and Sittirai (1994) emphasised the importance of voluntary counselling and testing as an approach to reduce high-risk sexual behaviours. The study noted a caring attitude among respondents towards people infected with HIV. The study further reported a significant positive

relationship between the respondents' attitude towards voluntary HIV testing and their behaviour towards people infected with the disease.

Uwakwe (2000) asserts that a positive link exist between knowledge and attitude towards of HIV/AIDS. The study, by Uwakwe (2000), which focused on the impact that HIV/AIDS has on student nurses, found that programmes aimed at improving education, communication and information enhanced the perception and attitude of respondents towards HIV/AIDS sufferers.

5.2.4 Knowledge of HIV/AIDS and gender of respondents

The results of this study indicate that there are statistically significant differences, ($t=3.573$; $p < 0.01$), in voluntary HIV/AIDS testing behaviour based on the gender of respondents. Males indicate a significantly lower voluntary HIV/AIDS testing behaviour (mean = 2.18, $s = 1.16$), compared to females (mean= 3.27, $s=1.34$); thereby rejecting the null hypothesis (i.e. there is no significant difference among employees between voluntary HIV/AIDS testing behaviours based on gender) with respect to differences in voluntary HIV/AIDS testing of employees based on gender.

This finding is different from the research results reported by Kalitchman and Simbayi (2003). The study reported no significant differences between knowledge of HIV/AIDS and HIV/AIDS testing attitudes between the participants. In contrast, a study by Van Dyk and Van Dyk (2003) reported differences in HIV/AIDS testing behaviour between male and female participants. This behaviour was mostly evident among male married participants who reported that they would not share their HIV

test results with their partners. Both male and female participants in the study cited fear of rejection as the main determinant for not disclosing their HIV status (Van Dyk & Van Dyk, 2003).

Maman, Mbawambo, Hogan, Kilonzo Sweat, and Weis (2001) raised concern in their research finding of the unequal role that women play in a relationship when decisions are made regarding HIV testing. Female participants in the study reported that women had to seek permission from their partners prior to testing, whilst males, on the contrary, made the decision without prior consent. The study focused on the implications for voluntary counselling and testing programmes in Dar es Salaam, Tanzania. An important goal of the study was to encourage participants to inform their partners of their test results, the inference being that disclosure may;

- Encourage more people who are at risk to submit to HIV testing
- Lead to an increase in voluntary HIV testing, a reduction in high-risk sexual behaviour and a decrease in HIV transmission.
- Facilitate a change in behaviour, which may improve the overall management of HIV infection.

Mamam et al. (2001) maintain that the power imbalance that prevails between male and female partners in their study influenced respondents' behaviour towards HIV testing.

Cultural research studies conducted in black societies highlight the minority role that black women play in relationships. According to Gupta (2000), women are expected

to be ignorant about sexual matters hence the more dominant male role regarding HIV/AIDS. More males (147) than females (97) participated in the present study. It could be argued that the reticent behaviour of males is culture related.

These findings are inconclusive and need to be further explored as empirical results (Kalitchman & Simbayi, 2003) indicate inconclusive results in this regard.

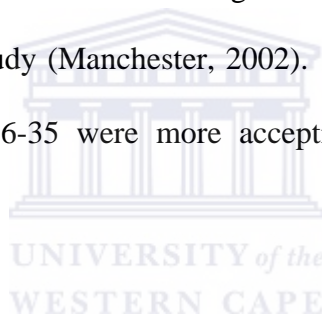
5.2.5 Voluntary HIV/AIDS testing behaviour based on age

The results of this study depict statistically significant differences in voluntary HIV/AIDS testing of respondents based on age. According to this finding the null hypothesis is rejected with respect to differences in voluntary HIV/AIDS test behaviour based on age. The results indicate that those in the age group 30-34 differed significantly from the other age categories in the sense that they were less inclined to submit to voluntary HIV/AIDS testing relative to the other age categories.

The study conducted by Van Dyk and Van Dyk (2003) reported the mean age of the 1422 participants as 32.3 years (SD = 10.2 years) ranging from <20 years (8.2%) and > 40 years (24.7%). Whilst most of the respondents (66.7%) believed that it was important to know one's HIV status, differences in HIV test behaviour among the different age groups were reported. Respondents in the age group <25 years mostly cited fear, fatalism and feelings of rejection as barriers to disclosing their HIV/AIDS. The impact of awareness programmes is aimed at the current working population whilst the study by Van Dyk and Van Dyk (2003) focused on the overall population.

The UNAIDS (2003) survey on HIV/AIDS infection reports a growing trend in the HIV infection rate of both young people and adults. According to the report, although the basic knowledge of HIV/AIDS has increased in young people, knowledge about the disease among all age groups is still relatively low in many countries (UNAIDS, 2003).

In a study conducted by Manchester (2002) regarding the attitudes of people towards HIV/AIDS in China, it was found that knowledge of HIV/AIDS differs significantly between older people and the younger generation. While older people in towns had some knowledge of HIV/AIDS, they were less likely to be aware of the dangers of infection and the subsequent preventative knowledge compared to the younger aged groups that participated in the study (Manchester, 2002). The study further reported that people in the age group 26-35 were more accepting towards HIV positive colleagues.



The majority of the respondents in the present study were older than 50 years of age with 51 respondents in the age group category 30 – 34 years. People in this age group are presumed to be in more stable relationships and are more likely to believe that they are at a low risk to HIV/AIDS infection and would be less inclined to submit to voluntary testing.

5.2.6 Voluntary HIV/AIDS test behaviour based on marital status

According to the results of this study there are statistically significant differences in the voluntary HIV/AIDS testing behaviour based on marital status ($F=.954$, $p < 0.05$).

The results indicate that those that are single differed significantly from the other categories in the sense that they were less inclined to submit to voluntary HIV/AIDS testing.

A study conducted by Ayiga, Ntozi, Alumbisibwe, Odwee, and Okurut (1999) similarly found that married people had a more positive attitude towards HIV testing than single or separated people. According to Ayiga et al. (1999, p.8), married respondents displayed a greater willingness to “ascertain their serostatus” whilst people who were single or separated believed that it was not necessary to have themselves tested for HIV. The study also reported a greater resistance to sexual behavioural change among unmarried or separated respondents (Ayiga et al., 1999). In the study by Van Dyk and Van Dyk (2003) the majority of married couples indicated that they would keep their HIV/AIDS status a secret. Fear of reprisal from partners and feelings of rejection were mostly quoted as the reason for this behaviour.

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5.2.7 Voluntary HIV/AIDS test behaviour based on home language

According to the results of this study, there are no statistically significant differences ($F=0.271$, $p < 0.05$), in the voluntary HIV/AIDS testing behaviour of the respondents based on their home language.

In a study conducted by Entwisle (n.d.) on the issue of HIV/AIDS and immigrants, it was reported that group behaviours differ significantly as a result of language barriers. The study, which was conducted in Canada, focused on whether language and cultural differences create barriers to AIDS information. Respondents in the study were people

from different cultural backgrounds who entered Canada as immigrants. The study reported that ethnicity and cross cultural issues have an impact on attitudes towards sexuality, hence it influences behaviours towards HIV prevention and transmission. The reported result of the study by Entwisle (n.d.) is different to the findings of this study.

The results obtained in the present study is indicative of the extensive public awareness programmes on HIV/AIDS in South Africa that gets the message to most citizens regardless of language barriers.

5.2.8 Voluntary HIV/AIDS test behaviour based on population group

The results of this study indicate that there are statistically significant differences ($F = 3.873$; $p \leq 0.05$) in voluntary HIV/AIDS testing behaviour of respondents based on their population group. The results indicate that Coloured employees differed significantly from the categories in the sense that they were less inclined to submit to voluntary HIV/AIDS testing.

The study conducted by Peltzer et al. (2004, p.18) focusing on attitudes towards HIV – antibody testing and people living with AIDS among university students in India , South Africa and the United States of America reported “country differences regarding HIV testing and attitudes”. Whilst the different groups of students had high intentions to change attitudes, their behaviours were inconsistent. The result of the study by Peltzer et al. (2004) is consistent with the results of this study.

It could be debated that the results of the present study are influenced by the fact that the Coloured group has always been the “in between group” in terms of the political dispensation in the country and hence feel more prone to victimisation or discrimination. They would thus be less inclined to submit to voluntary “HIV/AIDS testing.

The researcher of the current study could not find any empirical results that support or reject the notion that different population groups differ from each other in terms of perception towards HIV/AIDS. This notion requires further exploration and research.

5.2.9 Voluntary HIV /AIDS test behaviour based on occupation

The results of this study depict statistically significant differences ($F= 5.248$; $p < 0.01$) in the voluntary HIV/AIDS test behaviour of employees based on their occupation. The results indicate that those that are Clock Employees differed significantly from the categories in the sense that they were less inclined to submit to voluntary HIV/AIDS testing.

Clock employees fall in the lower pay categories at the organisation and are more likely to be from poorer socio economic backgrounds and to have lower levels of qualification. There is also the likelihood that they would be suspicious of programmes initiated by management. Additionally, it could be argued that Clock employees are more likely to be subjected to stigmatisation from colleagues.

Little information regarding the HIV testing attitudes in the workplace has thus far been published. The researcher of this study had difficulty locating studies which focus on voluntary HIV/AIDS test behaviour based on the occupation of employees. This is an approach, which the researcher believe could be adopted on further studies to explore attitudes and behaviour of employees towards voluntary HIV/AIDS testing in the workplace.

5.2.10 Voluntary HIV /AIDS test behaviour based on tenure

According to the results of this study there are statistically significant differences ($f = 0.574$; $p < 0.01$), in the voluntary HIV/AIDS testing behaviour of the respondents based on their tenure. The results indicate that employees who have been in the organisation for more than 61 months differed significantly from the categories in the sense that they were less inclined to submit to voluntary HIV/AIDS testing.

A study by Thompson and Marquart (1998) focused on the occupational risks and responses of law enforcement personnel to the HIV/AIDS epidemic in Huntsville Texas. The objective of the study was to determine how work related risks affected respondents behaviour towards HIV/AIDS. Respondents had a mean tenure of 8.5 years and their work position ranged from patrol officers, patrol supervisors and corporals. This study (Thompson and Marquart,1998) found that all respondents, irrespective of risks, age, gender and tenure were equally experiencing psychological traumas to any form of HIV/AIDS exposure.

A study by Engel (2002) focused on the effect of HIV/AIDS on human capital versus training costs in Sub-Saharan Africa. Engel (2002) reported that training needs in organisation are failing because of a decrease in tenure caused by HIV/AIDS infections. Engel (2002) states that there is an increase in the attrition rates of skilled employees as a result of HIV/AIDS infection. Engel (2002) further argues that the expected tenure of workers and the benefit of training, especially in small firms, are constrained by the HIV pandemic. Similar to older respondents, longer tenured workers are likely to be older, in stable (long term) relationships and hence may not see the need for HIV/AIDS testing.

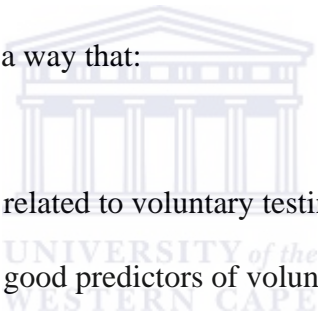
5.3 CONCLUSION

This chapter conceptualised and discussed the research findings in the light of previous research on HIV/AIDS testing. The changing of high-risk behaviours is a definitive approach in the fight to reduce HIV/AIDS infections (Peltzer et al., 2004). The impact of the disease on business organisation can thus be greatly reduced through the introduction of voluntary HIV/AIDS testing programmes.

HIV/AIDS testing programmes remain a strong indicator of the impact of the pandemic on business organisation in terms of cost, the overall effect of the disease on human capital, and the intervention programmes required to reduce infections and change high risk behaviour. Peltzer et al. (2004) assert that the implementation of comprehensive HIV/AIDS interventions is imperative to prevent HIV infections and the spread of the disease.

According to Inungu (2000), there is a significant percentage of working class adults who - after two decades of the disease - are still unwilling to undergo HIV/AIDS testing. This underscores the need to review approaches to curb the spread of the disease. Additionally, according to DeCock and Weise (2000), the impact of HIV/AIDS in the 21st Century is enormous and until a vaccine for AIDS is developed, an integrated response across all sections of society is imperative in the fight against the pandemic.

In summary, the results of this study have highlighted issues that affect HIV/AIDS testing initiatives in the workplace. This study has also identified how people's perception and attitudes towards HIV/AIDS contribute to knowledge about HIV/AIDS testing programmes in a way that:

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1. Knowledge and attitudes are related to voluntary testing;
 2. Knowledge and attitudes are good predictors of voluntary testing;
 3. Males are less inclined than females to go for voluntary testing;
 4. Older and longer tenured workers are less inclined to submit to voluntary testing;
 5. Married people and people in long-term relationships are more receptive toward voluntary testing than those who are single or separated.
 6. Language is not a barrier to voluntary testing

5.4 LIMITATIONS OF THE RESEARCH

- This research was conducted within a single organisation. The results can therefore not be generalised to other organisations.

- Based on the fact that HIV/AIDS is a very emotive topic in the South African social environment, and the reality of stigmatization in this regard, the response rate of respondents could have been detrimentally influenced.

- Due to the lack of previous empirical results regarding voluntary HIV/AIDS testing in the workplace and the resultant lack of standardised measuring instruments, this study used a self constructed questionnaire. This questionnaire was aimed at measuring employees' attitudes and perceptions towards voluntary HIV/AIDS testing in the workplace. However the validity of this self constructed questionnaire was not determined in this research.

5.3 RECOMMENDATIONS

The following recommendations that could be utilised for interventions and further research, are based on the limitations of this study. It is also based on the experience and the insight that the researcher acquired from the present study.

Proposed recommendations are :

1. This exploratory study was concentrated only on one specific workplace. It is recommended that a larger study, based on several organisations and in which a larger sample is utilised, be considered.
2. It is essential that the results of this study be used to design intervention programmes aimed at encouraging a greater number of employees to submit to voluntary HIV/AIDS testing.
3. Voluntary HIV/AIDS testing must be pursued in the organisation as a means to combat the spread of the HIV virus and to encourage changes in behaviour.
4. Management involvement in HIV/AIDS prevention is paramount at all levels of the organisation in prevention and education initiatives in order to facilitate the success of voluntary HIV/AIDS testing programmes.
5. A large number of respondents in this study indicated their willingness to participate in voluntary HIV/AIDS testing programmes. It is recommended

that the organisation pursue non-invasive HIV/AIDS testing methods in order to encourage greater employee participation.

6. Perception and attitudes of employees regarding HIV/AIDS have social and economic consequences. It is recommended that the results of this study be used for further studies to determine the cost and value of voluntary HIV/AIDS testing to business organisation.

7. The researcher strongly recommends that further research on perceptions and attitudes of employees towards voluntary HIV/AIDS testing be conducted in South Africa in order to broaden the understanding of voluntary HIV/AIDS testing behaviours.



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Annexure. (A) Research Questionnaire

Dear Colleague

Re:RESEARCH FOR MASTERS DEGREE

I am currently enrolled for the Masters Programme in Industrial Psychology at UWC and am busy with my thesis. The aim of the study is to determine the perceptions and attitudes of employees towards voluntary HIV/AIDS testing in this organization.

While permission has been granted for doing the research, I am dependent on your input and participation to complete the study successfully.

Please be assured that all the information will be treated as **STRICTLY CONFIDENTIAL** and will only be used for purposes of this study. You are not required to write your name or any other personal information on the questionnaire. All data will be kept completely anonymous and will be directed to me. Please note that your participation is voluntary.

I would like to take this opportunity to thank you for your co-operation.

Sincerely

.....
CLIVE LAMOHR



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INSTRUCTION (S)

- ❖ Please read through the following questionnaire and respond to all the Questions/statements by indicating to what extent you agree or disagree with each of the statements. “Indicate your response by putting an “x” in the appropriate space”.
- ❖ This should not take you more than 20 minutes to complete.
- ❖ Please make sure that you respond to all the questions / statements. There are no right or wrong answers as each person is entitled to his/her own opinion.

PLEASE RESPOND TO EACH ITEM IN THIS QUESTIONNAIRE BY PUTTING AN “X” IN THE APPROPRIATE SPACE.

Biographical information1. Gender

Male	Female
1	2

1

2. Age Category

-19	1
20 - 24	2
25 - 29	3
30 - 34	4
35 - 39	5
40 - 44	6
45 - 49	7
50 - 54	8
+ 55	9

2

3. Marital Status

Married	Single	Divorced
1	2	3

3

4. Home language

English	Afrikaans	Xhosa	Other
1	2	3	4

4

5. Highest qualification obtained

Std 6 - 8	Std 9	Std 10	Diploma/ Cert.	Degree	Other
1	2	3	4	5	6

5

If "Other", please specify:

6. Occupation

Manager	Supervisor	Support staff	Clock employee
1	2	3	4

6

7. Population group

White	Coloured	Black	Asian
1	2	3	4

7

8. Years service within organization

1 - 12 Months	13 - 24 Months	25 - 48 Months	49 - 60 Months	61 + Months
1	2	3	4	5

8

Please indicate to what extent you agree or disagree with each of the following statements by putting a "x" in the appropriate space.

B. General knowledge

		STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE		
		1	2	3	4	5		
9	AIDS is an incurable disease.	1	2	3	4	5	9	
10	Using condoms during sex is safe way of protecting oneself from being infected with HIV/AIDS.	1	2	3	4	5	10	
11	HIV/AIDS can be contracted by casual sex	1	2	3	4	5	11	
12	A pregnant woman who has AIDS may infect her unborn child.	1	2	3	4	5	12	
13	The HIV/AIDS virus is present in body fluids such as blood, semen, vaginal secretions and breast milk.	1	2	3	4	5	13	
14	People in all age groups are at risk of being infected with AIDS.	1	2	3	4	5	14	
15	The AIDS virus is spread by mosquitoes.	1	2	3	4	5	15	
16	Safe or one partner sexual relationship is one way of preventing AIDS.	1	2	3	4	5	16	
17	The AIDS virus reduces the body's natural protection against disease.	1	2	3	4	5	17	
18	Having sex under the influence of alcohol is high-risk behaviour.	1	2	3	4	5	18	
19	Aids is caused by HIV.	1	2	3	4	5	19	
20	When a person has HIV he or she has AIDS.	1	2	3	4	5	20	
21	The disease has been known for 95 years.	1	2	3	4	5	21	
22	The illness is not serious.	1	2	3	4	5	22	

General knowledge

		STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE		
		1	2	3	4	5		
23	In Aids there are different symptoms such as cancers, pneumonia and weight loss which are not present in all cases.	1	2	3	4	5	23	
24	The AIDS virus has little chance of living outside the body.	1	2	3	4	5	24	
25	When infected with HIV outside signs of the illness are visible.	1	2	3	4	5	25	
26	The body's immune system cannot fight the virus.	1	2	3	4	5	26	
27	The disease affects both homosexual and straight people.	1	2	3	4	5	27	
28	Chronic diarrhoea is one of the symptoms of a person infected with AIDS.	1	2	3	4	5	28	
29	The disease is spread through contaminated blood either through open sores, needles or blood transfusion.	1	2	3	4	5	29	
30	Sexual contact is one of the major routes of transmission of the virus from one individual to another.	1	2	3	4	5	30	
31	The disease can be contracted by using toilet seats, swimming pools and shaking hands.	1	2	3	4	5	31	
32	The spread of AIDS <u>can</u> be prevented.	1	2	3	4	5	32	
33	The drug AZT is a cure for the spread of AIDS.	1	2	3	4	5	33	

SECTION C

Instruction: Please indicate your response to each of the following statements by putting a "x" in the appropriate space. Please make sure that you respond to each question/statement.

Attitudes towards voluntary HIV/AIDS testing

		STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE		
		1	2	3	4	5		
34	I am afraid to find out whether I am HIV positive or not.	1	2	3	4	5	34	
35	I am not sure what voluntary testing entail.	1	2	3	4	5	35	
36	I do not like needles and will therefore not go for HIV testing.	1	2	3	4	5	36	
37	I am going to lose my position, house, friends and family if people know that I am HIV positive.	1	2	3	4	5	37	
38	I do not know if my employer will treat my HIV/AIDS test results as confidential.	1	2	3	4	5	38	
39	My employer cannot force me to submit to HIV/AIDS testing because the Constitution of South Africa protects my privacy.	1	2	3	4	5	39	
40	HIV /AIDS testing is an intrusion of my privacy.	1	2	3	4	5	40	
41	There is no value in submitting to a HIV/AIDS test.	1	2	3	4	5	41	
42	I am afraid of what my colleagues will say if I test positive.	1	2	3	4	5	42	
43	I am not sexually active and therefore see no reason why I should submit to a HIV/AIDS test.	1	2	3	4	5	43	
44	Nobody in my organization has explained to me the value and/or benefits of HIV/AIDS testing.	1	2	3	4	5	44	
45	I do not know what to expect when I submit to HIV/AIDS testing.	1	2	3	4	5	45	
46	I refuse to submit to HIV/AIDS testing on religious grounds.	1	2	3	4	5	46	
47	The law protects me; there is no reason to undergo an HIV/AIDS test.	1	2	3	4	5	47	

Attitudes towards voluntary HIV/AIDS testing

		STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE	
		1	2	3	4	5	
48	HIV positive employees are unfit to work.	1	2	3	4	5	48
49	Employers have the right to disclose an employees HIV status.	1	2	3	4	5	49
50	HIV/AIDS infected employees should not be allowed to work.	1	2	3	4	5	50
51	I do not know what our company's HIV/AIDS policy is.	1	2	3	4	5	51
52	My colleagues will refuse to work with me if they know that I am HIV positive.	1	2	3	4	5	52
53	I will be discriminated against if my employer finds out that I am HIV positive.	1	2	3	4	5	53
54	Testing for HIV/AIDS will not help preventing the HIV/AIDS virus to spread.	1	2	3	4	5	54
55	A employee who tests positive in this organization will be dismissed.	1	2	3	4	5	55
56	HIV/AIDS infected employees are viewed with scepticism by the employer as well as co – workers.	1	2	3	4	5	56
57	I would rather enjoy my life not knowing whether I am HIV positive.	1	2	3	4	5	57
58	My employer does not offer any incentive to employees to submit to HIV testing, hence my reluctance to test.	1	2	3	4	5	58
59	My working hours do not allow me to take off to go for an HIV test.	1	2	3	4	5	59
60	The management of this organization actively supports the idea of voluntary HIV testing.	1	2	3	4	5	60
61	The managers of this organization is reluctant to test – why should I.	1	2	3	4	5	61
62	There is no real encouragement from managers and supervisors for employees to undergo HIV testing	1	2	3	4	5	62

SECTION D:**HIV Test Behaviour**

STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE
1	2	3	4	5

Would you agree to HIV testing if the following conditions apply.

63	Your confidentiality is assured.	1	2	3	4	5	63
64	Your colleagues also agree to test.	1	2	3	4	5	64
65	You remain anonymous.	1	2	3	4	5	65

SECTION E:**HIV testing intentions**

66.	Do you know a friend or relative with HIV/AIDS	Yes	No	66
		1	2	
67.	Have you recently had a HIV/AIDS test?			67
	Yes last 12 months		1	
	Yes last 6 months		2	
	Yes last 3 months		3	
	No never tested		4	
68.	How is your knowledge of HIV/AIDS?	Very good	Very poor	68
		1	2	
69.	What are your intentions regarding a HIV test?	Very likely	Very unlikely	69
		1	2	

THANK YOU FOR COMPLETING THE QUESTIONNAIRE



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