AN ASSESSMENT OF THE IMPACT OF HIV / AIDS ON
THE BUSINESS SECTOR IN SOUTH AFRICA
AND
AN ANALYSIS OF HIV / AIDS WORKPLACE PROGRAMMES

by

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The Graduate School of Business
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Masters of Business Administration
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DECLARATION

This work has not been previously accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

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Date: __________________________

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Signed: __________________________
Date: __________________________

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ACKNOWLEDGEMENTS

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IV

ABSTRACT

HIV / AIDS in the South African present context remains fraught with obstacles and challenges. The previous regime’s willingness to turn a blind eye to the problem, combined with the present government’s confused response has accelerated the disease and it’s devastating impact to pandemic proportions. This has placed additional pressure on other sectors to respond. While civil society challenges government’s delaying tactics and seeks to ease the plight of those living with HIV, the business sector is being called upon to act, in the interests of the stability of the national economy and it’s own survival.

Business is identified, locally and abroad, as the most relevant environment for intervention because of it’s unique capacity to impact on both the workforce and the consumer market simultaneously. Business however exists for the purpose of making a profit. This is in itself an area of study that requires investigation: how does business meet the pressure to ‘do the right thing’ and protect its own best interests? This study will consider how some businesses have shifted the burden of AIDS, while others have prepared to meet the costs associated with implementing any interventions.

The primary objective of this study is to investigate the impact of HIV / AIDS on the business sector with an assessment of the risk faced by business in the immediate and long-term. It further seeks to analyse business’s current response in the context of international best practice standards. Case studies of Workplace HIV / AIDS Programmes are used to identify and analyse successful interventions that may be utilised in the South African context. While there are a few outstanding examples of workplace interventions being implemented in South Africa, there is some concern that too many companies are processing HIV / AIDS as a paper exercise without the commitment and care required for change.

The impact of the disease on a physical level is compounded by stigmatization and fear. Issues of discrimination and intolerance permeate the environment in which employers are required to implement programmes that shift knowledge, attitudes and behaviour around HIV / AIDS. The secondary objective of this
study is to test the emerging hypothesis that the face-to-face or one-on-one intervention is the most effective in successfully changing knowledge and attitudes about HIV / AIDS and can therefore influence a long-term change in behaviour.

This study seeks to provide guidelines and recommendation for companies willing to implement HIV / AIDS workplace interventions by presenting an overview of the options available and indicating where best to invest limited resources. While the nature and scope of the study is by no means conclusive and remains open to ongoing social and medical research, it remains relevant in that it is placed in the context of timeless best practice.
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CHAPTER 1
SCOPE AND OBJECTIVES OF STUDY

1.1 INTRODUCTION

UNAIDS, March 2000

*Estimated worldwide HIV infection status: 33.6 million people.*

Weekly Mail and Guardian, July 11, 2003

*Estimated worldwide HIV infection status: 52.9 million people*

Census South Africa, January 2001

*Total population: 43.6 million people*

Department of Health, South Africa, January 2001

*Estimated infections daily: 1,500*

*Estimated HIV Prevalence: 24.4%*

In Dossier of Education International Magazine, Gudmund Hernes, UNESCO Coordinator on HIV / AIDS wrote “in less than two decades AIDS has evolved from a medical curiosity to an international emergency. No longer can it be viewed as just a health problem. Already a development disaster – it is becoming a security crisis with social impacts as devastating as any war.” (Hernes, 2001:15)

The year 2002 marked 21 years since the first indications of HIV / AIDS were identified. Media and editorials at the time considered the history and rapid growth of the disease. While the origin of the disease remains a controversial topic open to discussion and debate, there is finally agreement that the devastating impact of the disease makes assigning blame for its origin a ludicrous issue. The spread of the disease during the 1970s was silent, insidious and unspoken. By contrast, the 1980s experienced an explosion in AIDS cases in developed western countries where testing was already underway. The rapid spread of the disease raised the alarm, resulting in an unparalleled scientific effort to understand the disease. The 1990s witnessed
huge medical advances in the treatment and management of the disease, albeit in richer first-world countries only. In the developing countries, specifically in Africa and Asia, HIV prevalence reached unprecedented levels and is in the first decade of the new century, the major cause of death. (See Appendix A: Picture of the Human Immune-Deficiency Virus)

Glibly described as a pandemic, HIV / AIDS has indiscriminately permeated every level and sector of society, expanding in number and reach, without immediate medical solutions in view. As a result, prevention of sexually transmitted infections and mitigation through education is being recognized as central to strategic management of the disease. Leading international organizations such as the International Labour Organization (ILO), World Economic Forum and UNAIDS have identified that educational interventions across a range of settings should provide the knowledge and encourage the development of an attitude of enlightened self interest and skills that can limit the spread and impact of the epidemic. They have also identified that a comprehensive and coherent response based on agreement about what the issues are and key actions to be taken, helps to increase the speed and effectiveness of the response.

A coherent response in the South African context requires that all major stakeholders including government and business, should agree not just on the scale of the HIV / AIDS problem, but also the various initiatives that should be undertaken in partnership to limit and manage it’s impact. More importantly, a successful coherent response should have a rights-based approach focused on the rights of every citizen with clearly designated responsibilities for all participating stakeholders. It should, as a matter of course, include a framework of monitoring, evaluation and feedback.

Have the major stakeholders in South Africa formulated a coherent response? The quick answer is no! Government’s response has been schizophrenic and confused. Based on media reports and government websites it would appear that while government has been able to acknowledge the need to be proactive in the fight against HIV, they are hesitant to make any long-term commitments. South African civil society has responded by creating support
centres, hospices, orphanages and activist organizations that are dependent on private funding. The areas of conflict and compatibility between these two sectors remain unresolved. This is a summary description of HIV / AIDS in present day South Africa. An in-depth analysis will follow in Chapter 2.

This study will focus on one of the major stakeholders in South Africa, the business sector. It will consider the role of the business, its concerns and obligations and the range of workplace interventions currently in use. It will investigate the nature and success of business's response to HIV / AIDS and the challenges still confronting the private sector.

1.2 BACKGROUND OF THE STUDY

The business sector is at the core of any nation's economic stability. The AIDS epidemic has already served to intensify the discrepancies between developing and industrialised countries. It not only hampers development, but reverses it, by destroying a nation's existing economy and its capacity to sustain itself and grow. Given the above, business becomes one of the most vulnerable sectors and simultaneously strategically positioned sectors to manage the impact of HIV / AIDS. The importance of this sector's vulnerability and intervention was highlighted at an International Labour Organization (ILO) Conference in June 2000. At the time, the ILO estimated that over 23 million workers worldwide in their productive years, between 15 and 49 years of age, were infected with HIV. In South Africa, the mining industry alone has estimated that at least 25% of its workforce is infected by the virus.

The business sector provides the most relevant area of investigation and intervention as it encompasses, either within its' workforce or as its' client base one of the largest "captive audiences". A large majority of the HIV infected and affected population is between the ages of 25 and 49, the age group of the current workforce. The most vulnerable population is between the ages of 15 and 24, namely the future workforce. The client base includes any age that either has spending power or influences demands of any given product. Given its relationship of inter-dependence with and access to a full range of any
population, business has a paradigm-shifting power not easily available to civil society.

Business, however, exists for the purpose of making a profit. Without profit, business has no reason to operate. HIV / AIDS has raised a dilemma for business worldwide: how do they meet the need to continue doing business as usual while managing the impact of HIV / AIDS on business itself. More and more businesses are recognizing that the profit margin, which does depend on the cost of labor, can only be managed if the well being of the workforce is managed. The effect of this change in policy and spending has already been felt in South Africa.

As business begins to focus its’ corporate social investment in more immediate outreach programmes that meet the needs of their workers and surrounding communities, the future of civil sector organizations, currently dependent on business for survival, looks bleak. Where previously the civil sector supported government and business by implementing much needed social programmes, the absence of those services will now add pressure on an already overloaded system. Some businesses have sought to address the issue by creating partnerships with the civil sector, but the shortage of funds to organizations is already evident.

Current surveys and research shows that HIV / AIDS already has a growing impact on every level of business and that this trend is set to continue unless business is able to demystify the issues and allay the inherent fears and suspicions of both its workforce and its target markets. The nature of business HIV / AIDS workplace programmes needs to be focused on changing knowledge and attitudes to the extent that it influences and changes behavior. The cost to business, should it fail to implement effective strategies, will be included in the analysis of the impact of HIV / AIDS presented in Chapter 2.
1.3 OBJECTIVES OF THE STUDY

The primary objective of this study is to analyze and assess the business sectors response to HIV / AIDS in South Africa.

The secondary objective is to test the emerging hypothesis that of the range of interventions currently in use, the face-to-face interactive intervention is the most effective in successfully changing knowledge and attitudes about HIV/ AIDS and therefore can influence a positive change in behavior.

1.4 RELEVANCE OF THE STUDY

As already stated, HIV / AIDS is a global concern. So too is business. Both business and AIDS are here to stay and the better prepared we are to meet the challenges of both, the greater a nation's potential for growth. In the South African context particularly, an understanding of HIV / AIDS, its impact and means of management are vital for a developing democracy. This study will serve as a comprehensive overview for business; AIDS policy makers and any other sector interested in the issues surrounding HIV / AIDS.

It will also serve to:

- Highlight the impact of HIV / AIDS on the business sector and general environment
- Provide business with examples of possible interventions in terms of best practice looking at case studies in South Africa and abroad;
- Provide a practical and user-friendly guide to initiatives that work, why they work and some direction on where best to invest limited resources;
- Inform and educate present and future training and human resource practitioners within the business sector.
1.5 PROBLEM STATEMENT

HIV / AIDS has reached pandemic status in South Africa. Fear, denial and suspicion compound the nature of the disease. Our history of racial discrimination, cultural diversity and challenges of this infant democracy, further complicate the South African response. The pressure to create economic stability, manage and overcome extreme levels of unemployment and poverty and redress the educational and social imbalances of the previous regime are aggravated by the devastation of HIV / AIDS.

The business sector in South Africa is crucial to the management of the disease even as it escalates into a national state of emergency.

1.6 RESEARCH METHODOLOGY

This study employs a quasi experimental research design within a case study.

In the first instance, the case study approach and literature review was undertaken to explore the nature of the business sector's response to the HIV / AIDS, the environment, the range of interventions currently in use and the impact of the actual interventions. This analytical research method allows for a greater in-depth investigation and understanding of human knowledge, attitudes and behavior.

Based on the analysis, and emerging trends, a questionnaire was designed to test interactive HIV / AIDS training as a specific business intervention. A Separate Sample Pretest-Posttest Study was conducted to measure knowledge and attitudes before and after a training intervention.
1.7 LIMITATIONS OF THE STUDY

The topic requires ongoing research, assessment and evaluation. The matrix of inter-related issues prevents any study from being definitive.

The quasi experimental research undertaken in this study is limited in that it has focused on a convenient, uncontrolled, voluntary sample within a short period. This raises the possibility that participants unwilling to confront, or be trained on, the issues of HIV / AIDS may already have been voluntarily excluded from the sample at the time of the study.

The extent of this study is limited by time constraints. Any training and evaluation that focuses on knowledge and attitudes change should include an evaluation of resulting behavior change.

Any study utilizing the survey or questionnaire method may have some degree of weakness in the questionnaire itself. The length of the questionnaire and the use of English as the only language raise concerns about the participants' ability to digest the meaning or nature of the question. Participants who preferred to respond in terms of a perceived "right" or politically correct response instead of their true feelings may have introduced additional bias.

The timing of the "AFTER" sample also raises concerns about the integrity of the responses. By late afternoon participants were exhausted from a full day of training and eager to return home.

1.8 STRUCTURE OF THE STUDY

Chapter 2 will present some literature review with an analysis of business from the perspective of projected impact and risk assessment in the context of HIV / AIDS. Chapter 3 seeks to analyze the key components of the business sectors response to HIV / AIDS using the ILO document on best practice and relevant case studies of current interventions. It will also consider the vital connection between effective interventions and the communication, evaluation and
monitoring techniques necessary. The research methodology is presented in Chapter 4 while the research results, data analysis and findings are discussed in Chapter 5 together with a presentation of relevant tables and figures. Chapter 6 presents the conclusions and recommendations of this study.

1.9 SUMMARY

HIV / AIDS is not a topic that lends itself to summary. There are no simple, one-dimensional explanations or solutions. The literature review and case study approach was therefore the most compatible research methodology for this topic. The overriding human factor, the loss of dignity and life, the physical and emotional pain of a nation cannot be ignored. These factors remind us of the urgency with which we need to respond.

In writing, the need to unravel the complexities of HIV / AIDS into a purposeful, relevant and user-friendly document remained uppermost. Finally, despite the complexities and the overwhelming nature of the disease... given an appropriate, strategic response, HIV / AIDS can be beaten.
CHAPTER 2
LITERATURE REVIEW AND ASSESSMENT OF THE IMPACT OF HIV / AIDS ON BUSINESS

2.1 INTRODUCTION

This chapter seeks to review the relevant literature and provide an analysis of the context within which the business sectors' current response to HIV / AIDS is being formulated. It will explore some of the historical factors of the past two decades and take an in-depth look at the key external factors influencing business today. It will also attempt to portray some of the inherent conflicts and dualities that exist within the present environment and more specifically, within the business sector.

2.2 HIV / AIDS AS A BUSINESS ISSUE

HIV / AIDS is a business issue. Or is it? The business sector's general response to HIV / AIDS varies. While some businesses take the view that HIV / AIDS is essentially an employee's private life and is therefore not their concern, others have been proactively working to combat the impact of the disease on their workforce. Yet a third group has sought to be seen to be doing the right thing, but with a 'check-list' approach.


_The HIV/AIDS epidemic is the greatest social challenge facing our generation and the worst public health disaster in at least six hundred (600) years. Business not only has a responsibility to act, but an opportunity to play a crucial role in the global fight against the epidemic, particularly within their own workplace. In many countries workplace awareness and prevention programs will be the only source of accurate information employees will have about HIV/AIDS._
In addition, companies have an unparalleled opportunity to tackle head on the stigma and discrimination that has enabled this virus to spread, often unchecked, over the last twenty years.

Written by Bill Rau, *Workplace HIV / AIDS Programmes: an Action Guide for Managers*, emphasizes that HIV / AIDS is a business issue. Based on extensive case studies undertaken in Kenya, Indonesia, Côte d’Ivoire, Namibia, South Africa and Vietnam the guide analyses the common experiences and lessons to be shared regardless of the location, size and nature of the industry or the prevalence rate in the country.

### 2.3 PROFIT VERSUS PEOPLE?

At the core of the business sectors response is the inherent conflict between the purpose of business and the pressure to plan for yet another market variable. Profit can only be generated when the business has strategically planned to manage the macro and micro variables influencing its success. Although in addition, the long-term cost of caring for AIDS orphans and the provision of education cannot be ignored by business. Actuarial studies may be able to project the impact of HIV / AIDS in the workplace over a period of time, the human factor, experimental nature of treatment and interventions and the behaviour of the disease itself, challenges attempts to formulate a clear solution and management strategy.

On the global scale, the World Bank study on The Long-run Economic Cost of AIDS (Business Day, July 2003) warns that countries like South Africa can expect a 50% decline in their per capita Gross Domestic Product (GDP) over three generations. Using decades of South African data as its basis, the report concludes that HIV / AIDS has sufficient power to destroy the South African economy. It also states that previous forecasts of a 1.5% GDP decline per annum were seriously flawed because they overlooked the effect of HIV / AIDS on the capacity of the next generation of workers. Business must also consider declining investor interest in an unstable economy.
2.3.1 Cost of Labour

Whether a business consciously chooses to respond to the crisis not, every business is impacted by the cost of HIV / AIDS. In assessing the risks and impacts of HIV / AIDS on companies, Bill Rau (2002:22) writes that there is extensive evidence that HIV / AIDS among workers directly affects the cost of doing business. For example, an increase in the cost of health, life and safety insurance coverage means increased labour costs. Other increases include the cost of providing medical assistance and death benefits. A shorter accumulation period for retirement funds requires additional funding from companies while the need for new employees and loss of skilled labour increases recruitment, training and retraining costs. This is compounded by decreased productivity due to increased absenteeism; declining morale and team work; the loss of technical skills and experiential knowledge; and increased staff turnover.

2.3.2 Declining Markets

On the other extreme is the impact of HIV / AIDS on a business's target market. While the disease can and will reduce the absolute number of potential customers, it will also create disproportionate supply and demand patterns. As households succumb to a weakening economy and reduced household income their spending patterns shift from consumption and savings to medical care and insurance. The higher incidence of unpaid debt and increased need for credit transactions is already taking its toll. In a report to the Micro Finance Regulatory Council of South Africa, ECI Africa (2003:i) warns that as a cash based economy with limited saving capacity and high indebtedness, South Africa is vulnerable to the additional financial pressures of HIV / AIDS. The over 700 000 AIDS related deaths by the end of 2002 and projections of three times that number over the next four years, makes financial recovery dependent on immediate strategic action.
Table 1: HIV / AIDS Statistics in South Africa

<table>
<thead>
<tr>
<th>Year</th>
<th>Population (million)</th>
<th>Total HIV+ ('000)</th>
<th>Cumulative AIDS Deaths</th>
<th>Total sick with AIDS</th>
</tr>
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<tr>
<td>1</td>
<td>35.8</td>
<td>49</td>
<td>242</td>
<td>394</td>
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<td>2</td>
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<td>1,203</td>
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<td>5</td>
<td>47.4</td>
<td>7,252</td>
<td>5,237,867</td>
<td>1,393,926</td>
</tr>
</tbody>
</table>

Source: Medical Research Council, 2002.

Figure 2.1 Progression of Total HIV+ Cases in South Africa from 1990 to 2010

since 1990, as well projections to 2010. They indicate that the present impact is still relatively minor by comparison to the cumulative effect of HIV by 2010. The implications of this are that the worst of the AIDS pandemic is still ahead of us.

Businesses repositioning themselves to accommodate these changes in the consumer market incur the cost of new product development, diversification of both product and services, change in marketing and advertising strategies and expansion into new and preferably less ‘risky’ markets. Finally, to replace lost
customers and maintaining existing customer loyalty and sales, the company must manage its' brand image in the market place.

In an AIDS Analysis Africa article, "How firms should hedge against the risk of HIV / AIDS", Veni Naidu (2002:7) reports that a majority of the 100 companies surveyed had not calculated the cost impact of HIV / AIDS on their specific companies even as they recognized the need for business in general to reassess its position. The study is clear in its advice to take a multi-faceted, proactive approach by tackling the productivity, labour and sales issues simultaneously. In a list of possible "hedging" techniques, Naidu suggests, for example, that:

- Companies contribute to industry specific research to understand the consumer needs and how their specific products and services are impacted;
- Companies make an effort to understand the needs of customers living with HIV / AIDS;
- Companies reassess their dependencies on supplier partnerships in terms of delivery.

In "hedging" their bets, business is forced to recognize that even the planning is a gamble with no guarantees.

2.3.3 Accelerating Markets

Not all businesses are affected by HIV / AIDS in the same way. Some, such as pharmaceutical companies; health care providers and funeral service providers, are experiencing an increased demand for their services and profit as the disease spreads. Anglo American, for example, estimates that the cost of providing 3000 mineworkers with antiretroviral treatment for a period of one year at a cost of R8,700 per worker will be R26.1 million. New funeral service businesses are being opened in response to the huge demand as communities in South Africa attend 5 or more funerals each weekend. In this instance, HIV / AIDS is not just a business issue, it is BIG business.

2.4 THE IMPACT MATRIX
Based on the broad spectrum of tables available in the literature review, Table 2 lists some of the more important impacts of the AIDS epidemic in South Africa as they are interconnected in a matrix of cause and effect.

Table 2: The Impact Matrix of HIV / AIDS

| HEALTHCARE SYSTEMS          | • Parallel TB Epidemic  
|                            | • Social protection systems overloaded  
|                            | • Health services under pressure  
|                            | • Competition for access  
|                            | • Lower health care workers morale  
|                            | • Loss of health care workers  
|                            | • Increased costs  
| EMPLOYEE BENEFIT SCHEMES   | • Increased benefit payouts  
|                            | • Financial risk  
|                            | • Increased contributions to medical schemes  
|                            | • Decreased benefits available  
|                            | • Early retirement  
|                            | • Restructuring of schemes  
|                            | • Increased cost of health, life and safety insurance  
|                            | • Shorter accumulation period for retirement funds  
|                            | • Increase in costs of death benefits  
|                            | • Increased recruitment, training and retraining costs.  
| PRODUCTIVITY               | • Absenteeism (sickness & funerals)  
|                            | • Increase in job-related accidents  
|                            | • Loss of labour  
|                            | • Stigmatization of and discrimination against workers  
|                            | • Employee morale  
|                            | • Decreased productivity & increased costs  
| MARKET INSTABILITY         | • Reduced supply and quality of labour;  
|                            | • Reduced GDP growth rate;  
|                            | • Disproportionate supply and demand patterns;  
|                            | • Reduced disposable income and savings capacity;  
|                            | • Changing product needs;  
|                            | • Higher incidence of unpaid debt;  
|                            | • Shifts in market perception of the brand and company;  
|                            | • Investment discouraged and development undermined.  
| SURROUNDING COMMUNITIES    | • Increased loss of life  
|                            | • Decrease in life expectancy  
|                            | • Loss of breadwinners and dispersion of families  
|                            | • Increased poverty  
|                            | • Increased unemployment  
|                            | • Income diverted to medical and funeral costs  
|                            | • Decreased spending power  
|                            | • Pressure on females to survive through sexual favours  
|                            | • Increase in orphans – child headed households  
|                            | • Early entry of children into active employment  
|                            | • More street children / crime  
|                            | • Increased drop out from schools.  

2.5 THE BURDEN SHIFT STRATEGY

The loss of productivity due to illness is devastating, especially where business is dependent of skilled labour instead of machinery. In a study of the impact of HIV / AIDS on business in Zambia, Guinness and Walker (2003), determined that the main causes of illness were TB (46.8%), diarrhea (12.9%) and STIs (5.8%), all illnesses most commonly associated with HIV. Further reductions in productivity resulted from caring for sick family members, attending funerals. Some companies have already revised their funeral leave policy to restrict compassionate leave to immediate family only.

Already South Africa is experiencing a parallel tuberculosis (TB) epidemic. South Africa’s average TB infection rate of 311 per 100 000 people far exceeds the 250 per 100 000 found in other areas of high prevalence. In specific provinces, the picture is more alarming. Rates in the Western and Eastern Cape, for example, are already soaring to 490 and 430 per 100 000 respectively.

A survey of seven companies in Zambia shows an average death HIV-related death rate of 39 employees per annum. Guinness and Walker concluded that “in Zambia, companies have to train four people for each skilled job in the knowledge that three will die”.

Attempts to evade the impact of HIV / AIDS in the workplace by defining it as a ‘social’ or ‘health’ issue, arguing that these are the responsibilities of the government or medical establishment does not reduce the impact on business. In an article in AIDS Analysis Africa, Rosen and Simon (2002:4) describe companies’ attempts to reduce their exposure to the cost of AIDS as “the burden-shift” strategy. Evidence of the strategy being implemented includes:

- Illegal pre-employment testing of job applicants and screening;
- Exclusion of HIV / AIDS related conditions from medical benefits;
- Decreasing of, or capping contributions towards, death and disability benefits;
• Change in annual, sick and compassionate leave policy to reduce and restrict the employees benefits;
• Shift to more capital intensive production technologies;
• Restructuring of the workforce.

In the South African context, it is difficult to ascertain the true cause of many business decisions. For example, one large South African company dissolved it's shipping department in favour of an 'independent owner driver' scheme on the stated premise of supporting the formation of a black entrepreneurial class. While this is a legislated priority of the South African government and is regarded as a social investment, it also relieves the company of the burden of providing staff benefits to a recognized high-risk group.

2.6 THE LEGAL FRAMEWORK

Acceptance of HIV / AIDS as a business issue is considerably hindered by the South African governments limited legislation protecting the rights of workers living with HIV / AIDS. While there are several labor and occupational safety acts acting in conjunction with medical and prevention of unfair discrimination legislation, the constitution does not seek to mainstream AIDS in the workplace. There is no mandatory requirement for companies to formulate and implement a workplace policy, provide interventions and training or even, support workers diagnosed as HIV positive. This omission is in direct conflict with existing job creation, reconstruction and development programmes in that the business trend to downsize, restructure and automate escalates unemployment and poverty. It allows both government and business flexibility in containing and avoiding costs, leaving individuals to bear the brunt.

2.7 MEASURING IMPACT

In the absence of HIV / AIDS Workplace Programmes being mandatory, South African companies retain the option to do nothing. Companies are however, forced to weigh the costs of doing nothing in the short term against the long
term costs of actual impact. Measuring the immediate, medium and long-term effect is a vital part of the decision making and planning process.

The best technique to measure the impact of HIV / AIDS on a business would be to establish the HIV prevalence in the company. Due to the culture of stigmatism and discrimination, testing for HIV and disclosure of one's HIV status remains voluntary. David Whitehead Textiles was informed that 21% of their workforce was HIV positive, due to testing conducted on blood donor samples by the South African Blood Transfusion Service. It must be noted here that tests on blood donated during the six-month window period are not definitive. While receiving a blood transfusion remains risky, (South Africa has had five cases of HIV infected blood provided in a blood transfusion and the number is set to treble), the prevalence statistics provided for the company's use are probably closer to the truth than any of the other obvious key indicators companies use to analyze risk and impact.

While in-house methods of measuring absenteeism or increased medical costs are cost effective, there are significant drawbacks that make this method of measurement dubious. The absence of valid baseline data and the need for regular monitoring together with the collection of data over a long period, questions the validity of any definitive conclusions.

2.8 THE RISK OF DOING NOTHING

In the article *Workplace HIV / AIDS programmes: costlier to do nothing*, Susan Hyde (2001:9) states that the "barriers to progress" are primarily attitudinal, indicating a state of denial and abdication of responsibility:

- Managers feel helpless about setting up a workplace programme;
- Managers claim that they do not have the financial or human resources to offer a workplace programme;
- Managers claim that HIV rates are not as high in their company as it is in the general population;
- Companies see HIV as a purely medical problem to be managed by medical, health care and training staff.
In addition, present day performance appraisals that measure managers on their contribution to profit or base remuneration systems on performance, pressurize managers into meeting a 'bottom line', often by sacrificing education and training that take time and get in the way of team performance.

Hyde (2001:9) points out that despite the size and resources of a business, something effective can still be done to protect the business in the long-term. In Brazil, steel company Villares recorded a 31% reduction in HIV infections one year after implementing an HIV / AIDS workplace programme. Similarly, 40 factories participating in a Zimbabwean AIDS programme had a 34% lower rate of new infections than non-participating factories. This programme was implemented at a cost of US$6 per employee, less than the cost of safety regulation requirements such as goggles or overalls. A South African company projection showed that the cost of a one-off extensive AIDS training for 11 000 employees would cost R17 per employee.

When compared to the cost of decreased productivity and loss of skilled labour alone, these figures appear negligible. Smith and Napier (2001) in a case study of the labour intensive mining industry, determined that 55% of AngloGold's total costs relate to labour. With an estimated HIV prevalence rate of 23% AngloGold can expect their labour costs to increase proportionally. However, a mere 15% increase in labour costs will result in a 100% decline in forecast earnings.

The sugar industry in South Africa and Swaziland are under a similar threat due to the labour intensive nature of the industry and the related high costs of employment and training. A study of AIDS related deaths on a Swaziland sugar estate indicates a rise from 1,56 per 1000 employees in 1995 to 9,41 per 1000 employees in 1999.

At a presentation at the Gordon Institute of Business Science on 12 August 2002, Michael Blain, General Manager Business Development – NOVA Group, used Figure 2.1 to emphasize the projected impact of AIDS. The stabilizing or plateau effect is more likely to arise from a balancing out of new infections and AIDS related deaths than an actual drop in new infections. It is a scary reality
that an entire generation will be lost by 2010, leaving a new generation that is either unskilled or already infected via mother to baby transmission of HIV. The threat must therefore be recognized as having a long-term, generational impact that will require an equal investment of time and resources for recovery.

Figure 2.2 Projection of AIDS Sick Cases

Similarly, the incidence of AIDS related deaths as compared to natural deaths is set to escalate drastically by 2010 with a plateau effect thereafter. The implications are a decimation of the general population resulting in an increase in AIDS orphans and the breakdown of the family structure. The need for social welfare services will increase proportionally, burdening both business and the state.
2.9 RISK ASSESSMENT

Any discussion of risk usually focuses on the individual as 'being at risk' due to personal knowledge, attitudes and behavior compounded by social and economic conditions. Similarly, it is vital to assess a company's vulnerability in terms of specific risk factors. These would include the nature of the industry, size and profile of the workforce, the socio-economic climate and HIV prevalence rate of the community. The literature review shows that the level to which the company is 'at risk' can and should determine the urgency, scale and focus of the business's response to HIV / AIDS. Table 3 illustrates the HIV prevalence rate per 100 workers in the given sectors. It indicates that all sectors will be impacted by HIV/AIDS – but to varying degrees. Column two indicates
that skills levels do determine the level of risk between sectors. Finally, it presents a reference framework for relative sector risk exposure.

2.10 HIGH RISK FACTORS

2.10.1 Migrant Labor

In the South African context, for example, the mining and road building industries have a historically migrant workforce. Research shows under these conditions, where recreation activities and the restriction of family life are limited or absent, high risk behaviour is more likely. This high risk group is more likely to spread infection not just by engaging in high risk behaviour within the
workplace environment, but also by being a carrier to their home locations. It is worth mentioning that in this way, a group previously flagged as low-risk, now by association, becomes high-risk.

The high HIV prevalence has focused the mining companies' response in that their HIV/AIDS workplace programmes has prioritized treatment and counseling with education and prevention as a secondary objective. This policy has been adopted despite the high cost and controversial nature of antiretroviral treatment, the long-term commitment required of the company and the lack of final assurance that this strategy will actually work.

Chima (2001:10) reflects on the unique workforce profile of foreign and indigenous companies in the oil and tin mining sectors in Nigeria. These companies depend on advanced technology with a mix of expatriate and local professionals, semi-skilled and unskilled labour. The cities around the Nigerian industrial clusters have a high rate of prostitution and a considerable number of brothels which in themselves delineates "the sexual network of businessmen, people working in mining, and industrial and financial services". The highly skilled expatriate community is still a migrant community, prone to high-risk behavior, only more expensive to employ than truck driver and mine workers. The cost of relocation, medical benefits in a foreign country or emergency flights home are just some of the additional costs companies have to face. The greatest threat to the Nigerian economy however lies in the fact that these industries, operating in the highly competitive global market in combination with high labour costs, are extremely sensitive to any shifts in production costs.

The risk and pressure of economic globalisation has, in addition to its impact on the company itself, destabilized the economies of developing nations, increased competition and escalated poverty.

2.10.2 Poverty

The link between poverty and HIV prevalence has historically been established as directly proportional. Africa and Asia are quoted as examples of high levels of poverty leading to high levels of HIV infection. Halperin and Allen (2001:1)
argue however that many of the African countries most affected by AIDS are in fact among the most economically developed. In addition, in these countries HIV rates tend to be higher among people with greater income and education levels who can afford to have more sexual partners than the unemployed or manual labor force. It would therefore appear worthwhile to consider other social and cultural beliefs and values which have aggravated the spread of AIDS and which may be more amenable to immediate interventions.

In AIDS and Poverty: The Links, Whiteside (2001:1) examines this catch-22 relationship, acknowledging that while poverty has contributed to the speed and scale of the epidemic, AIDS in turn increases poverty. He agrees that people who are poor are more likely to become HIV positive if exposed to the virus, in that malnutrition, compromised immune systems due to exposure to other diseases and lack of access to medical care are realities of poor communities. Poor people are more likely to engage in non-preventative high risk behaviour. This is not to say that they have more unprotected sex with more partners but consider the world of difference between switching on a light to locate a condom in one’s own private bedroom to living with 6 other people in a single room shack.

Poverty and knowledge is yet another link. Poor people have less access to information to protect themselves. Despite the South African government’s commitment to the dissemination of information to previously disadvantaged communities in their AIDS Plan developed in January 2000, these communities are still largely ignorant of HIV, its impact and course of treatment. This leaves them vulnerable not just to high risk behaviour, but exploitation of their ignorance. Present day media consistently reports on huge personal losses as individuals hand over their life savings in exchange for so-called herbal and dietary miracle cures. Poverty also leaves women vulnerable to sexual exploitation. Selling sex is often the only source of income where education and skills are absent.

Even if poor people have the information, they probably do not have the resources: the reality is often the choice between buying bread and buying a condom. A poor person’s perspective on life is also more focused on the
immediate term than the long term view taken by a middle class person who
invests in a house or retirement saving. Placed in the perspective of Maslow’s
Hierarchy of Needs, the short term gratification is a priority. The need to feed
children, pay transport costs and keep a job are uppermost. A long-term
survival strategy that includes physical well-being, skills transference and
financial investments are not considered. This lack of commitment to a future
quality of life may spill over into risky sexual behavior.

However, if poverty alone determined the status of the epidemic, South Africa
would not have such a high rate of infection. By African standards, South Africa
is rich and yet we have one of the highest HIV prevalence levels in the world.
One would have to examine the links between poverty and inequality and
poverty and gender discrimination before planning a poverty alleviation
programme as a response to AIDS. More immediate term solutions are required
to manage the spread of HIV, while poverty alleviation is a long-term process.

2.10.3 Globalisation
Due to the impact of higher labour and productivity costs, companies are forced
to become more cost-sensitive to maintain their position in the global market. As
a result more companies are choosing to automate their production to maintain
the edge. This also enables companies to evade the people issues and the
need for HIV / AIDS interventions.

As more people are unemployed and unsupported, more die or become too ill to
be productive... being able to compete on the global market becomes more vital
to the national economy. As people become poorer and more economically
stressed, companies are forced to focus on their profit margins to survive in the
global economy. This precludes prioritizing people and programmes for social
well-being. The cycle is vicious and hard to break, especially in African
countries still recovering from civil war and dependent on aid.
2.10.4 Denial and Discrimination

The cultural and social belief systems also impact on the level of denial, stigmatization and discrimination. Respondents in the DCSA KAPB (July 2001) survey reveal that despite having good general knowledge about HIV / AIDS, they are still in denial about how AIDS can impact on them as an individual. This is aggravated by the constraints around discussing AIDS in the workplace and in public. A culture of silence has been built around the issue due primarily to fears of discrimination and extensive media coverage about the actual discrimination experienced by people who have disclosed their HIV positive status. Over 84% of the DCSA respondents agree that people do not discuss AIDS as a result of fear of rejection. This was further tested with the statement: “I believe that getting the AIDS virus / HIV is a disgrace”. It was found that 96% of managers agreed with this statement.

Motebele and Heywood (2001:10) describe how even major corporations engaged in international business are guilty of discrimination. In the case of Hoffman versus South African Airways (SAA), the airways rejected Hoffman’s application for employment on the grounds that his HIV status would endanger the safety of crew and passengers and that it would not be cost effective to hire and train staff with a low life expectancy. The Constitutional Court of South Africa found in favour Hoffman on the grounds of unfair discrimination and a violation of his right to dignity and equality. Cases such as this undermine attempts to break the silence around AIDS. Although the Constitutional Court has made their stance clear, people living with HIV are still in the words of Judge Ngcobo being condemned to “economic death by being denied the right to earn a living”.

People who are HIV positive have been on the receiving end of discrimination and stigmatization. Fear and panic, rooted in ignorance and misunderstanding, fuels existing prejudices. For people who are HIV positive, this has the devastating effect of unexpected job loss, disintegration of intimate relationships and the loss of support structures. This justifies and perpetuates the fear of disclosure.
2.10.5 Myths and Misconceptions

Ignorance about AIDS, and an unwillingness to discuss it, has given rise to a series of urban legends, myths and misconceptions. Culturally and traditionally based notions that having sex with a virgin or that AIDS can be cured by black magic and traditional medicine have damaging consequences for the entire society. For example, the Daimler Chrysler South Africa (DCSA) KAPB Survey (July 2001) found that a small but notable percentage of employees believe that having sex with a virgin can cure AIDS. The dramatic increase in the rate of sexual abuse among young women, children and babies in South Africa nationally points to this belief being more widespread.

Misconceptions about AIDS, that it is a gay disease and that it only affects sex workers and drug users or that only black people are at risk appear in the workplace, creating fear about previously taken-for-granted behaviors such as attending to injured work colleagues and using communal facilities such as canteens and toilets. Inappropriate behavior is not the only concern as these issues impact directly on employee moral, team performance and ultimately productivity.

2.10.6 Gender Discrimination

General AIDS discrimination is intensified in areas that are already discriminatory by practice. For example, a society that already practices gender and racial discrimination will now incline toward harsher practices against these groups, raising their vulnerability and risk levels. In Dossier December 2001, Scattergood (2001:18) argues that women are four times more vulnerable to HIV infection than men. Existing gender inequality and power relations in sexual relationships inhibit prevention programmes despite the acquisition of knowledge and skills. Women, who are already biologically more vulnerable to HIV infection than men, are further disadvantaged by the imbalance of economic and social power.
2.11 MAINSTREAMING AIDS TO REDUCE RISK

2.11.1 Breaking the Silence
Stopping HIV infection requires a substantive shift in the norms of society. Any workplace response needs to ensure a shift in the social conditioning and practices of the broader community, particularly among men. Business programmes are likely to be more effective in the long term if their interventions stimulate a ripple effect into the families and communities of their workforce.

Kaleeba, Kadowe, Kalinki, and Williams (2001:2) in the article *Open Secret: People Facing up to AIDS in Uganda* present a good example of mainstreaming AIDS in society. The article describe how openness about HIV has been translated into action at the level of the individual, the family, the community and the nation, resulting in the HIV prevalence rate dropping from 14% in the early 1990’s to 8.3% in 2001. The Ugandans have succeeded in breaching the wall of silence surrounding the epidemic, reducing the stigma against people living with HIV and so made the epidemic and ‘open secret’.

The story of AIDS in Uganda is not just about openness, prevention and care. It clearly demonstrates that an AIDS programme, in the workplace or in communities, is more effective if the participants engage in social interaction and voluntarily mobilise around the issues. The Ugandan case shows that AIDS can be beaten!

2.11.2 Mobilizing Organized Labour
Almost every sector of labour in South Africa, from domestic workers to educators, is presently organized as a union, ensuring that the worker is protected and is empowered to influence the course of business. As such, labour organizations are able to collaborate or negotiate with companies about HIV / AIDS workplace programmes. The primary concern of most of these organizations is the protection of employees from discrimination, unfair dismissal and denial of benefits because of the actual or perceived HIV positive status.
Labour organizations are also in a position to drive or undermine any workplace programme because they have established a relationship with their membership based on trust and the protection of the worker's rights and well-being. This is particularly true of South Africa where the historical relationship of activism against management has strengthened the trade unions influence on workers. The employer, by contrast, is often regarded with suspicion and perceived as being self-serving in attempts to implement programmes in the workplace.

The article “Business Response to HIV/AIDS in the African Formal Sector Workplace: Findings of a Kenya Needs Assessment” (SABCOHA website, 2003), states: "Workers believe that they will lose their jobs if they were found to be HIV positive". It is an important finding that shows the lack of a formal and explicitly communicated policy of non discrimination which leaves workers feeling mistrustful of management. Workers don't trust their employers to maintain confidentiality and act with compassion towards those who are HIV positive, resulting in the workers unwillingness to come forward for such things as voluntary testing, prevention education and STD treatment. This 'them' and 'us' division has required some governments, like Sri Lanka and Zimbabwe, to adopt the ILO tripartite structure that consists of government, labour and business, as mandatory practice.

Ideally, workplace interventions will be the result of a three-way dialogue between government, business and labour. Individually they each have their own agenda and reason for existence, but the combination of the parties in a commitment to the best interests of the worker in the development of workplace programmes can effectively dissipate the impact of HIV / AIDS on the nations economy.

2.12 SUMMARY

Present day South Africa is a high-risk environment. Business, already facing a full barrage of internal and external impacts and risks, must also cope with the impact of an indecisive government that is unable to provide the necessary social welfare and infrastructural support.
CHAPTER 3
AN ANALYSIS OF THE BUSINESS SECTORS RESPONSE TO HIV / AIDS

3.1 INTRODUCTION

This chapter will focus on the business sectors' response to HIV / AIDS in the context of best practice with an in-depth analysis and comparative case study of current interventions and communication techniques. It will explore HIV / AIDS programme initiatives, their impact and constraints.

For the purpose of this case study, four key components, commonly used in business, have been identified for analysis:

- Policy Formulation
- Condom Use and Distribution
- Treatment and Testing
- Training

3.2 THE GLOBAL BENCHMARK

Extensive study and research has been published on the subject of HIV / AIDS workplace programmes, the impact on business and the need for interventions. The most relevant of these initiatives to this study, is the ILO Code of Practice on HIV / AIDS and the World of Work adopted by the International Labour Conference in June 2001. It will serve as a best practice benchmark against which the four key components will be analysed. (A detailed table of contents of this comprehensive document is attached as Appendix B). The purpose of best practice is to provide direction, guidelines and standards without prescribing the actual practical steps to be taken. Used in every area of business and governance, in the case of HIV / AIDS, best practice cuts through the uncertainty that has immobilized companies for too long. Business now has a foundation on which to base their policies and interventions.
In Dossier, December 2001, Susan Leather (2001:21) describes the ILO strategy as a rights-based approach focusing on the principles of social justice and equality and on respect for core labour standards. The Code was developed in response to many requests for guidance from its constituents, including South Africa, through widespread consultation within its tripartite constituents and international partners, taking into account examples of good practice in many countries. The unique tripartite structure of the ILO, consisting of governments, employers and workers enables it to effectively mobilise against HIV / AIDS worldwide.

A pilot education and training manual to guide the implementation of the Code is presently available. Leading by example, the ILO Code of Practice is supported by the ILO Programme on HIV / AIDS which focuses on five particular areas:

- Improving knowledge and understanding of the economic and social consequences of HIV / AIDS;
- Pursuing advocacy on the socio-economic impact of HIV / AIDS and its implications for workers’ rights and enterprises;
- Setting standards and guiding national action programmes on HIV / AIDS, ensuring they include the world of work and oppose discrimination;
- Strengthening the capacity of employers and workers organisations in education and prevention, counseling and support, and action against discrimination;
- Applying the special expertise of the ILO sectoral and technical co-operation programmes to particular workplace needs, especially in training, social protection, and safety and health at work.

As a member of the ILO, South Africa has access to and support for the implementation of the ILO Code of Practice, which provides a benchmark against which the South African government, business and workers may measure the effectiveness of local interventions.
3.3 GENERAL INTERVENTIONS

Interest in HIV / AIDS Workplace Programmes first began in the mid-1990's after considerable pressure to acknowledge the existence of the threat of HIV / AIDS to the business sector. While workplace programmes may differ in their focus they are a primary source of skills and resources with which to influence the workers knowledge, attitudes and behavior.

A general overview of business initiatives indicates that a variety of interventions have been formulated. While the four key components identified appear to underpin and drive HIV / AIDS workplace programmes, they are supported by other ad hoc initiatives. Since the subject matter is dynamic and research is ongoing, the type of interventions listed below, provide the opportunity to keep the momentum:

- Posters and calendars;
- Awareness days such as World AIDS Day;
- Red Ribbon Campaign;
- In-house newsletter and emails;
- Notice board communications;
- Guest presenters at business gatherings;
- Actuarial studies and Knowledge, Attitude and Perception (KAP) Surveys;
- First Aid Training;
- HIV / AIDS Helplines;
- Video Presentations and documentary film initiatives;
- HIV / AIDS Community Outreach Initiatives and Sponsorship;
- Intranet and internet sites;
- Role plays and industrial theatre;
- Etc.

The success of these interventions depends on the success of the key components, which will be analyzed in accordance with the ILO Code of Practice to establish ‘best practice’ in user-friendly and practical terms for easy implementation.
3.4 POLICY FORMULATION AND IMPLEMENTATION

The ILO Code of Practice encourages a consistent approach to policy formulation and implementation in accordance with 10 key principles:

1. Recognition of HIV/AIDS as a workplace issue
2. Non-discrimination
3. Gender equality
4. Healthy work environment
5. Social Dialogue
6. No screening for purposes of exclusion from employment or work processes
7. Confidentiality
8. Continuation of employment relationship
9. Prevention
10. Care and support

These principles, effectively employed, provide the basis for sound interventions and long-term management of HIV/AIDS in the workplace. Research studies focused on policy making agree that the primary purpose of a policy is to communicate a business's position and practices and to clearly convey the company's stance on HIV/AIDS, its commitment and intentions. The policy should serve as a tool in directing company and employee behavior and decision making, especially in difficult situations. An overview of HIV/AIDS policies and their implementation in the South African business sector drives home the point that when the policy remains a paper exercise, neither implemented nor enforced, it is meaningless.

An outstanding example of policy making in South Africa is the Daimler Chrysler South Africa (DCSA) Policy (2002). Well documented, this policy that meets international standards and is likely to be successful because it has been implemented with commitment and creativity, in a strategic manner. The core principles of the DCSA policy are consultation at all levels, equity for all, maintaining a high level of confidentiality of HIV status, and clearly defined rights and responsibilities for workers and management. Their policy serves to inform employees of their responsibilities and rights and sets a standard of behaviour for all employees regardless of HIV status. It therefore meets best practice requirements in that it is a policy that helps employees living with HIV/AIDS...
AIDS to understand what support and care they will receive. This will promote voluntary testing and counseling.

A company's policy should seek to remain flexible to changes in the environment and workforce while ensuring consistency with appropriate national laws. Since their first HIV / AIDS policy 1996 they have reviewed and appropriately remodeled their employee medical aid benefits in 2000, conducted a KAPB study of their workforce in July 2001 and produced a practical, task-driven Communication Strategy for 2001 – 2003. The entire process was reviewed and a new policy based on previous experience, the KAPB study and participation was adopted in April 2002.

The policy also ensured that South African Labour Equity legislation and national prevention campaigns were utilized to best effect. DCSA included policy and targeted action to manage and prevent gender discrimination and to provide gender specific training and intervention. Their small workforce of women, in each plant, was provided with separate occupational health facilities while their predominantly male workforce was provided with peer education training focused on the vulnerability of women to AIDS.

Rau (2002:42) cautions companies against attempts to slot HIV / AIDS into existing dreaded illness policies. He argues that HIV / AIDS has to be recognized as unique in that it is always fatal, carries a social stigma and has a disproportionate effect on working age adults. Policy priorities must therefore focus on workforce needs. The DCSA policy has been tailor made for its' workforce in that it is based on their KAPB study and needs assessment analysis.

3.4.1 Policy Content

In best practice scenarios, the policy document is a living one in that it is practical and useful and not just another set of rules. The DCSA has not just consistently reviewed and updated the content of their policy, they have also shared it publicly via their website. In addition to other communication strategies via peer educators and their on site AIDS Kiosk, the DCSA utilizes a dedicated
page on their Intranet website to provide employees with information on an ongoing basis. Their marketing and advertising resources have been effective in launching a social marketing campaign around specific issues such as TB, voluntary testing and prevention. The company's HIV / AIDS advertising tagline speaks for itself: HIV / AIDS is everybody's business.

Perhaps the most important feature of the DCSA policy and programmes is that it is guided by a thorough analysis of behavior. Since its primary goal is to change behaviors, the DCSA communication strategy in particular describes and draws on 5 specific behavior change models including:

- **Social Ecological Model for Health Promotion (McLeroy, 1988)**
  This theory acknowledges the importance of the interplay between the individual and the environment and considers multi-level influences on unhealthy behaviour. The analysis of the individual behaviour looks at the context for behaviour modification.

- **Empowerment Education (Freire in Wallerstein, Bernstein, 1988)**
  This theory asserts that social changes happen through dialogue to build up a critical perception of the situation at hand and by taking collective action. In other words, problem solving needs to happen in a participatory fashion.

- **Health Belief Model / EPPM (Witte et al 1995)**
  In this model, behaviour is seen as a function of knowledge and motivation, reflected as a risk perception. It is based on the assumption that when people are faced with a health threat such as HIV infection they either control the danger or control their fear about the danger.

- **Social Learning Theory (Bandura, 1977)**
  Role-modeling e.g. peer education, and improved self-efficacy can influence individual and collective behavior.

- **Theory of Reasoned Action (Fishbein, Middlestadt, 1988)**
  This theory states that behaviour is influenced by individual behavioral intentions and the social beliefs and norms which significant others hold towards the desired behavioral modification. The persons attitudes are shaped by their expectations of the behaviour change.
Each model offers a different approach that in combination provides a targeted and holistic approach to changing a full range of behavior. The inclusion of the actual models and their relevance to the workplace programme in the DCSA communication strategy is in itself an effective communication tool since it ensures that all stakeholders understand the basis of the strategy and the value of the interventions.

3.4.2 Implementation

A strong policy with indifferent implementation is as useless as no policy at all. Primary requirements for effective implementation are commitment to the programme, buy-in from the various stakeholders and effective communication. DCSA utilized the ILO tripartite structure by working in partnership with workers, their organizations, and the local community and government campaigns. Their well-planned communication strategy ensures that the dissemination of information is systematic, targeted and includes every level of the workforce. It is driven by an appointed task team, supported by a range of communication tools such as posters and websites and implemented in a practical way at DCSA events, meetings and special family and youth days. All stakeholders are given an opportunity to interact with the policy and communication documents, to discuss, debate and clarify issues.

Much of the success of the DCSA policy can be attributed to effective communications. Sharing information should be aimed at empowering the targeted audience. The language must therefore be simple, culturally sensitive and presented in an inclusive style. Diverse cultures and high levels of illiteracy compounds the problems, requiring creative solutions. David Whitehead Textiles utilized comic books and language specific theatre to disseminate information. DCSA also used industrial theatre and role-plays, translation of some of their training and information sharing materials to get the HIV / AIDS message across.
3.4.3 Role Modeling

Controversial or paradigm shifting policies are usually launched with special events and training. In the case of ground-breaking policies in South Africa, the press has been utilized to inform the general public of a company’s stance and to effectively shift perceptions of the brand and company image.

In accordance with their policy, the DCSA voluntary testing campaign used every option available to reach as many people as possible. In addition to the usual media and in-house marketing options DCSA launched their VCT campaign with public testing of all senior company executives and all senior members of the National Union of Metalworkers in South Africa (NUMSA). On 22 May 2002 this united front against AIDS gathered at the DCSA plant in Swartkop and in full view of workers, the press corps and photographers, voluntarily took the HIV test. The statements made to the press were designed to encourage the DCSA workforce and all South Africans to get tested. It was also, indirectly, a challenge to other businesses. In keeping with their policy of holistic and practical follow up, DCSA simultaneously launched lucky draw competition for all workers, providing incentives to get tested.

The competition form served as an effective communications tool on several levels. The deadline for the competition lent urgency to the issues, while the graphics portraying the philosophy "see no evil, speak no evil, hear no evil" placed HIV / AIDS firmly in the position of the enemy. It also strengthened the message of confidentiality and non-disclosure stated elsewhere in the text. The competition form was also inclusive in that it spoke to all three possible audiences: those who did not know their HIV status, those that had already confirmed their HIV positive status and more importantly, those who had confirmed their HIV negative status. It provided information about how and where to get tested, what to do if you were HIV positive and how to remain HIV negative while emphasizing the facilities of care and counseling available to DCSA workers. Comprehensive, but simply presented, the DCSA launch went a long way to changing worker perceptions of management and encouraging their voluntary testing.
3.4.4 Sustainability

The sustainability of an HIV / AIDS policy is key to successful intervention. Once off or random efforts do not change behavior. Companies must therefore have a policy that seeks to reinforce training, preventative and treatment interventions. DCSA has trained 132 peer educators to maintain the momentum of their initiatives. The costs of a workplace programme are high and sufficient funding must be set aside to implement the programme.

A multi-sectoral participatory process supports the sustainability of a workplace programme by creating a ripple effect into the workers family and community. Companies can also help reduce the impact beyond employees by discussing their HIV AIDS policies with clients and suppliers and by sharing skills, resources and information. A bonus is that the company is also able establish their own credibility in a broader audience. This approach also supports other initiatives to change social norms and beliefs outside the work environment.

3.4.5 Evaluation

In evaluating the DCSA policy against best practice, it is clear that ILO guidelines were followed. This trend has continued in their monitoring and evaluation procedure. They have evaded the top down approach of prescribing policy to workers by engaging in social dialogues and debate with stakeholders. Time, resources and dedicated human investment has been made to formulate a responsive policy. The DCSA policy is self-assessing by nature, with clear goals, associated tasks and deadlines. Measures of actual results in behavior change are recognized as part of a longer-term evaluation.

3.5 CONDOM USE AND DISTRIBUTION

The distribution of condoms has been adopted as a national strategy in South Africa. Implemented by government and civil society in high profile media campaigns, condom distribution is recognized as a quick, cheap and effective immediate term intervention. While the traditional use of condoms as a
contraceptive has to some extent supported these campaigns, it has not been easy to drive home the message that condoms are necessary to save lives!

The purpose of condom distribution as an intervention must meet the needs of its target audience. There is very little point in issuing condoms to a workforce that has already been determined to be predominantly HIV positive, unless distribution is accompanied by education that emphasizes the need to protect one's sexual partners. In most instances condoms are a preventative measure, vital to maintaining and HIV negative status.

3.5.1 Effectiveness as an Intervention

The only effective way to limit the spread of HIV is through a behavior change. Getting everyone to make the change to condom use, although not simple, can be achieved through strategically planned projects that influence healthy behavior. Planning and implementing condom distribution and usage as an intervention requires an assessment of current behaviour. As a measurable intervention, practical and ongoing review of condom usage is more easily possible. Some companies have already used KAPB studies to establish baseline condom usage behavior, making future results easier to establish.

There appears to be general acceptance that used properly and consistently, condoms are one of the leading methods of protection against HIV. There is however, a range of obstacles hindering the effective, consistent and widespread use of condoms. In some cases companies have implemented the intervention in an ad hoc manner by providing dispensing machines only, unsupported by training or communication. While this may serve the company's image in that it is perceived to be doing something in the fight against AIDS it does not result in any long-term behavior change.

The editorial of AIDS Analysis Africa, August 2002 reports that condom use nationally is still relatively low. Reasons cited range from perceived diminished pleasure during sexual intercourse to the stigma of promiscuity associated with condom usage. Distribution has little impact where there is resistance to the use of condoms. Despite scientific research that proves that condom usage does
prevent the spread of HIV and other sexually transmitted infections, religious, moral and ethical debates have perpetuated resistance to usage. In some cases, initial bad experiences, high costs and limited or indiscreet access points inhibit condom usage. These are all factors to be considered in the planning this intervention.

An effective condom distribution intervention should be accompanied by practical, demonstrative training on the use of condoms and empowerment training for women who still have to negotiate the use of condoms, beyond just carrying them. Some companies have focused their training on changing men's attitudes and behavior toward women, attempting to shift the cultural and traditional systems that encourage discrimination against and exploitation of women.

3.5.2 Proactive Promotion of Condom Usage
Social marketing has been accepted as the most effective strategy for condom promotion because it increases acceptability and dissipates negative judgments and embarrassment associated with condoms. The impact of this face-to-face interaction is that it promotes behavior change in the immediate term. David Whitehead Textiles adopted this strategy as it sought to effectively market the use of condoms to its workforce and associated community. With the support of the Department of Health staff, David Whitehead health and safety officers and newly appointed peer educators were trained to share information in the workplace and at community venues. The ongoing education process was sustained by the peer educators who met with staff and public, after working hours, in the various entertainment venues, even public toilets, to talk about prevention. They also targeted sex workers and their clients.

A theatre company together with staff developed a play about AIDS and condom usage, which was then dramatized at various venues. Meetings were held in every possible location including beer halls, school halls, nightclubs and theatres. The company doctor and personnel manager made a brief presentation at each meeting prior to the dramatization. Every meeting and performance allowed for a question and answer session. On exit, every person
attending was given a free copy of the comic book that had been developed to share accurate information and translated into various languages to meet the community's needs. Condoms were included in the package and people were informed that the company would be distributing free condoms.

In a supporting strategy, David Whitehead Textiles took to displaying the number of AIDS related deaths every month on a notice board outside the factory clinic and canteen. Potentially controversial, this move succeeded in making people realise that HIV / AIDS kills. A second play has since been developed by workers and is now performed in the community, on farms and even at local soccer matches. This strategy has proven to be sustainable and effective.

Each aspect of the programme is proactive, with a focus on getting the information 'out there'. The use of role-plays and comic books made the information about HIV / AIDS easier to share and understand. They also facilitated use of the local language and colloquial style that 'brought the issues home' to every individual.

3.5.3 Distributing Condoms

The issue of where condoms should be dispensed in the workplace is a source of some concerns. At David Whitehead Textiles, condom dispensers in the toilets ran out before the end of each month where they were open to abuse and wastage. They were also being distributed in a vacuum, without access to information or demonstrations. Moving the dispensers to the clinics rectified these problems.

Some companies have questioned if employees should pay even a nominal amount for condoms. The argument for this is that people tend to make better use of products that are paid for, and ensures that distribution is not abused in practical jokes and pranks. Most companies have chosen to distribute free condoms, not only because they are available from the South African government at no cost, but because economically stressed employees are more likely to use condoms if they are free. The key here is an effective
communication strategy that emphasizes the value of a condom as a life changing / saving device.

Due to the national campaign, access to condoms in the community has improved during the past few years. All family health clinics, provincial hospitals and even private practitioners are distributing condoms free of charge and with minimal embarrassment. The literature overview indicates that where condoms are distributed with direct access, without judgement and in conjunction with information, they tend to be more effective than dispensing machines.

3.5.4 The Female Condom

In *The Expanding Role of the Female Condom*, Warren (2000:8) points out that with correct and consistent use, the female condom is as effective as any other barrier method and has practically no side effects. In a wide range of acceptability studies in over 35 countries the female condom was compared favourably to the male condom. It does not interrupt sexual activity, does not depend on the male erection, and feels more similar to unprotected sex.

Rau (2002:49) asserts that although the female condom is still fairly new and therefore more expensive and less accessible, companies can make them available to female workers at a subsidized cost. This would have to be accompanied by training that empowers women to negotiate their usage. Female condoms have been readily accepted by women, indicating that women want to take responsibility for their sexual behavior and HIV status.

3.5.5 Evaluation

Evaluating this intervention by the number of condoms distributed is probably the easiest and most misleading method. The quantity of condoms distributed does not extrapolate to the number actually used. Nor does it indicate the necessary changes in behavior that make condom usage an effective barrier to further HIV infections.
David Whitehead Textiles evaluated their condom distribution campaign by comparing the distribution to rate of sexually transmitted infections (STI). They found that between 1989 and 1992 there was a sharp decrease of between 50% and 75% in the number of STI's treated at the company clinics. They also found however that the average distribution of condoms was calculated at less than one per worker per month. This implied that factors other than condom usage were contributing to the lower incidence of STI's. AIDS information officers found that the accompanying education programme had resulted in men now staying with one partner instead of having several.

The success of the David Whitehead condom distribution campaign lies primarily in their proactive communication techniques and the combined management and employee participation.

3.6 TREATMENT AND TESTING

Treatment and testing as an intervention incorporates:
- Sexually Transmitted Infections
- Voluntary HIV Counseling and Testing
- HIV Treatment

This broad definition seeks to promote treatment and care, as well as prevention. This intervention has the capacity to address a full range of AIDS related issues including secondary infections.

3.6.1 Sexually Transmitted Infections

Rau (2002:55) identifies STI's as one of the most common health problems among workers. In many countries STI's feature as one of the top 5 reasons for medical consultations. Addressing STIs as a workplace intervention has value in that the clinic can provide on-site treatment, counseling and education about prevention and management of STI's as they relate to HIV. Treatment interventions are also more immediate and effective, as they are usually one-on-one interactions.
In a “Case Study: Public Private Partnerships in South Africa to control STI s and HIV” Rau (2002:91) sites the example of a partnership between mining companies, trade unions, public health officials and civic organizations. Their goal was to reduce STI infections and the risk of HIV infection by targeting mineworkers and their sexual partners, including the women in the surrounding community. The pilot programme provided a preventative and curative service to both women and mineworkers, resulting in a reduced STI prevalence of between 70% to 85% in the women and at least 40% among the mineworkers. The data analysis suggested that HIV infection was half what it would have been without the STI clinics.

The merit of treatment and prevention in the workplace is that they provide a therapeutic interim intervention that can promote long-term behavior change.

3.6.2 Occupational Health Clinics

Unlike the other key interventions discussed in this chapter, occupational health clinics geared toward the treatment, counseling and testing of STIs and HIV, require an upfront capital investment. Whether the STI treatment is provided on-site or by private medical practitioners, the cost of treatment should be covered as a company provided service. The benefit to the company is that it usually costs less than one day’s wage and the worker remains productive. For example, the South African mining industry estimates that for every US$1 spent on prevention they save US$30 in production and labour costs.

It is vital that an on-site clinic be established in a non-threatening, easily accessible setting. Although labeling it an STI clinic has been standard practice, the ILO best practice term is occupational health clinic, indicating the availability of a variety of health services and reducing the threat of embarrassment and discrimination around this issue.

Best practice recommends that clinics be established with medically trained personnel, proper equipment and adequate supplies of medication. Treatment and voluntary HIV testing procedures should be well-defined and communicated to workers. The use of a reputable pathology laboratory, attention to detail and
counseling before, during and after testing is a pre-requisite. Where possible, wellness programme guidelines should be available for workers living with HIV. Clinic professionals should also be able to refer employees to other agencies at the company expense.

Ideally, personnel in the clinics should be able to engage workers on a broad range of social issues with a clear understanding of the cultural, religious and gender dynamics of the community they serve. Companies face an ethical and moral dilemma and require proper procedures, accepted by workers, to inform and treat partners of employees.

The benefit of the occupational health clinic as an intervention is that it provides an opportunity to introduce broader issues such as secondary infections, discrimination and in the long term, protects the company against future losses. High levels of leadership are required to set an example by using the clinics, primarily to prevent the perception of low quality service not fit for upper management.

All best practice guidelines consistently highlight the need for confidence in the services offered by on-site clinics. Issues of trust and confidentiality can and do dictate the success of STI clinics as an intervention. How the programme is communicated to employees in terms of both policy and intervention is vital. The clinic must be seen to operate independently of management influence with a commitment to non-disclosure, even within the company.

Awareness of gender sensitivity raises the question of whether men and women workers should have separate clinics? Daimler Chrysler SA introduced separate facilities for the small group of female workers at each of their plants. This is not always possible or cost effective. The clinic therefore requires an adequate support system to meet the varying needs of the workforce.
3.6.3 Supporting Strategies
Where companies don't have the necessary resources to meet all the best practice requirements, the clinic can be supported by peer education, inclusion of HIV / AIDS awareness in the induction programmes and access to AIDS help agencies. Above all, the programme must offer assurance and understanding and work to remove fear of using the services offered. Companies can also create support structures in the form of onsite support groups for workers living with HIV, or encourage the use of external groups by offering paid time off or flexible work schedules. Rau (2002:57) cites the unique example of a Durban company that meets its workers traditional and cultural needs by paying for dietary counseling through a traditional herbalist.

3.6.4 HIV Treatment Strategies
A good example of best practice at work is once again found in the mining industry. Having accepted the high HIV prevalence in their industry and the impact of a loss of productivity on their forecast earnings, Anglo American took a policy decision to provide all employees with voluntary antiretroviral treatment. Unique in its size and scope with an estimated 30,000 HIV infected employees, the projected costs of the programme at R8,700 per employee exceeds R26 million per annum. In addition the company offers treatment and care, voluntary testing and a wellness programme that includes home-based care.

In a clear statement of long term commitment, the Anglo American wellness programmes for HIV positive individuals takes the holistic view. It includes best practice requirements such as:
- understanding the disease
- encouraging a healthy lifestyle
- offering nutritional supplements / immune therapy
- preventing and treating opportunistic infections, especially TB
- providing access to appropriate, affordable and sustainable anti-retroviral therapy when clinically indicated
In conjunction, the company has embarked on a “destigmatization of the environment” programme to encourage workers to obtain an early diagnosis and to promote acceptance of those living with HIV. It goes further to assure workers that with proper care and treatment, they can LIVE with HIV. There are currently 32 ART delivery sites registered with 223 employees on treatment as of 7th April 2003. Despite the almost prohibitive costs of the treatments, Anglo American management has reiterated their commitment to caring for their employees by ensuring the sustainability of the programme by engaging in partnership with drug manufacturers and medical research companies.

In a similar move, the Gold Fields mining company implemented the health clinic intervention with a different strategic focus. With an estimated 72% of their workforce presently HIV negative, their focus is a prevention programme promoted with the message "Protect your HIV free status with your life". The programme requires every employee to attend at least one AIDS awareness programme with a view to encouraging workers to take charge of their own health and recognizes the responsibilities and rights of workers and management.

3.6.5 Evaluation

The nature of STI interventions and health clinics allow companies to broaden local level interventions to provide ongoing support of behavior changes in the entire community. They are also by nature, self-evaluating: if they are not being used or are under-utilised, companies need to review their implementation and communication strategy.

Clinic statistics provide more definite numbers to assess company risk while providing a testing site to monitor use of other interventions and their successes. Access to raw data is easier at a clinic. Simple monitoring of the number of visits and the incidents of infection and treatment compared to initial baseline data will provide a picture of the clinic's effectiveness. Counseling and meetings with clinic staff provide an in-depth understanding of the issues faced by workers without compromising their confidentiality. This too allows
companies to assess their vulnerability and to strategically develop interventions to meet the specific needs of their workforce.

3.7 TRAINING

Education and information sharing is at the core of an HIV / AIDS workplace programme. Training, formal or informal, provides an opportunity for the strategic dissemination of information about the disease, company policy and planned or current interventions. While training is an intervention in itself, it should be incorporated in any other intervention such as condom distribution. It is worth noting that unlike the mining industry with a strategic focus on treatment, other industries perceived as being 'low risk' tend to use HIV training as their primary intervention.

As discussed under Policy Formulation a training policy, formulated in consultation with all stakeholders is necessary to ensure that a proper programme of training is implemented. While the training itself may take on various forms, successive training should build on the previous, consistently raising awareness and understanding among the workers and their communities. For example, people living with AIDS as guest speakers will provide experiential information that may then be supported by medical presentations. In the case of BIC South Africa, while the company HIV / AIDS programme is focused on care, treatment and prevention, their key driver is education and awareness. The educational campaign is structured to encourage staff to become aware of their HIV status so that they can access the care and counseling available. Education is also key to maintaining an HIV negative status. (IOL Website: The Star, 27/11/2002)

3.7.1 Training for Change

Whatever the method of training, it should provide a platform for worker participation. These interactions are an opportunity for companies to foster a culture of openness about HIV / AIDS that will support the company's overall policy and programmes. Training should be geared toward overcoming resistance and fear and encouraging tolerance and compassion towards
workers with HIV by addressing any myths and misconceptions about AIDS. This approach to training can significantly reduce HIV related anxiety and fear of discrimination in the workplace.

The real value of any training lies in its results: has it achieved a shift in knowledge, attitudes and perceptions with a possible long-term impact on behavior? While KAPB studies taken over a long period of time will be able to determine the effect of training, more immediate results can be measured in terms of a reduction in STI treatments or AIDS related sick leave. It is necessary to track the results of training to ensure that it remains focused and resources are not being expended on ad hoc once-off sessions.

All training must be developed, implemented and monitored for the company specific target audience. Where a general programme is being used, it should be adapted to incorporate age, gender and cultural sensitivities as well as job role requirements. In the case of management, for example, an explanation of workers rights within the legal and ethical framework, will serve to inform managers of their own rights as well as inform their behavior toward their staff. The same topic being trained to the semi-skilled workforce should adopt a different approach in language and relevance of information. In this case the workers needs are to understand his or her rights and how to protect themselves from any form of workplace discrimination.

The content of a training programme should comprehensively cover all HIV / AIDS issues relevant to the workplace programme and planned interventions including voluntary counseling and testing, treatment, sexually transmitted infections, the workers right to confidentiality, discrimination etc. It should also cover related issues such as the legal framework protecting workers. Wherever possible, access to information about internal and external support should be made available as part of the training process. In addition, the rights of HIV positive and HIV negative people should be explored, ensuring that HIV negative workers do not feel discriminated against. Gender sensitive training that seeks to empower women to take responsibility for their HIV status and to protect themselves can also be used to create awareness among men.
The style and language of training is essential to its successful implementation. Practical, event oriented training that broadens the workers understanding of HIV and seeks to allay anxiety can include tours of the company health clinics, local community projects and AIDS related first aid. This provides an opportunity to introduce workers to accurate information and good quality learning material on HIV / AIDS while inspiring them to view HIV / AIDS as a universal issue that is not isolated to the individual.

Training materials such as a directory of company and community based services, AIDS helplines and related family health practitioners can serve workers who wish to obtain treatment and testing outside of the work environment. At DCSA these were presented via an Intranet website and an AIDS kiosk. The use of supporting media like videos to complement and stimulate discussion is strongly advised. Similarly, other manuals and documents that support training sessions should be used to provide workers with information after the training. This allows for later review and makes the ripple effect from worker to community possible as this knowledge may be easily shared.

3.7.2 Creative Techniques
Best practice guidelines show that a focused, driven approach is required for long-term results. Wherever possible, a task team or committee led by an AIDS Training Coordinator should be appointed to drive the training process. Businesses should not however make the mistake of treating the AIDS committee or task team as an isolated department within the company. As in the case of Daimler Chrysler South Africa, senior company executives and trade union leaders should support the task team in creating awareness and commitment to workplace interventions.

One of a few HIV / AIDS disclosure success stories indicates how those living with AIDS can bring passion and determination to the workplace programme as its champion and role model. Merely a month after a senior corporate manager's disclosure, the Board of Directors appointed him the Group National HIV / AIDS Manager, responsible for leading the fight against AIDS in the
company. Speaking from personal experience, infused with a personal and professional need to make a difference, he is able to inspire co-workers and communicate his messages with immediate results. His mere presence in the company as a senior manager speaks of tolerance and acceptance, presenting a daily example to undermine workplace discrimination. (SABCOHA website, 2003)

Peer educators have a similar impact. They are usually people who inspire their colleagues, earn their respect and trust and are able to lead by example. Peer education is an ideal way to implement non-threatening, informal training. As part of the workforce, peer educators are able to communicate in the same colloquial language, have access to information not easily available to management and are available as required. This is also a more easily sustainable form of training than most other forms that require external consultants or complicated training schedules. Peer educators are also able to provide the vital one-on-one interactions required. Peer educators themselves should be extensively trained to manage the full range of training information.

HIV / AIDS lends itself to a full variety of training methods designed to enhance and maintain the responsiveness of the target audience. Different techniques such as role-plays, industrial theatre and debates will keep the subject fresh and interesting enough to capture the workers attention. The tendency to block out issues as the same old story is a very real obstacle when training on a subject already fraught with cultural and social blocks.

Keeping the subject in the forefront without tiring the audience is key. The NAMDEB Diamond Corporation in Namibia employed an interesting communication method combined with peer education. Regular monthly meetings were held to discuss at least 10 HIV related topics per year. Peer educators facilitated this life style management approach that provided information for the prevention and treatment of HIV / AIDS without actually focusing on it. Less threatening than other direct approaches, this technique ensured the meeting of workers and peer educators and provided an opportunity to discuss and clarify concerns, share information and to give and receive feedback regularly. The information was disseminated in manageable
chunks and related to previous meetings in a structured way. An indirect result was a progressive increase in condom use with an associated drop in STI infections. A related increase in HIV diagnosis supports the assumption that more people volunteered for HIV testing. This process maintains dignity, leaves the choices to the worker, is easily sustainable and cost effective.

A concern of this study is that in most companies, peer educators tend to be HIV geared, with a label that generates its own set of fears and perceptions. In the NAMDEB case there is no label, no stigma or discrimination attached to meeting with the peer educator. It is also a multi-pronged approach that is more likely to meet the needs of all training participants, including those who are not directly affected by HIV / AIDS.

There is no doubt that the transference of information is necessary, but knowledge alone is insufficient for future behavior change. Peer educators are ideal facilitators of small-group, realistic demonstrations that will ensure practical skills transference. This one-on-one interaction is usually the best forum for skills training.

Rau (2002:88) uses the Kenya Port Authority case study to support the above recommendations. Peer educators who were required to host informal discussions of AIDS with at least 10 employees monthly, facilitated the Kenyan training programme. This targeted method shows goal setting and the imperative to follow up regularly. The communication methods of role playing, picture cards, short dramas and games used to convey the HIV / AIDS messages were both original and creative. A particularly successful technique was the “one minute role play” that raises an important social issue but leaves it unresolved. There is then an interaction between cast and audience allowing for a discussion of the issue and for the audience to suggest an ending. It is worth noting here that the Kenya Port Authority peer educators are being trained to work with workers to share their concerns and feelings with a goal to change sexual attitudes and behaviors.

3.7.3 Mainstreaming HIV / AIDS
Incorporating HIV / AIDS issues into regular business practice is necessary. This is possible by integrating HIV / AIDS into staff meetings, strategic planning and day-to-day operations. It should also feature in business partnerships. HIV / AIDS training and interventions should become as consistent a process as performance appraisals, SWOT analysis and goal-setting sessions. The primary advantage of this approach is that it strengthens a business’s capacity to anticipate and manage HIV associated impacts.

Peer educators, while successful, are not to be used as an evasion tactic by management. Leaving training in the hands of peer educators without the support of top management will correctly be perceived as a burden shifting strategy. While training should be offered to everyone as part of their work related obligations, it is often not mandatory. It is however necessary to ensure that the training is offered during working hours and paid for by the company. The worker should not have a sense of being penalized with work pressures after the training. Management must ensure that the training is not just another item on the agenda and that sufficient time is made available.

Where companies do not have in-house training resources, external consultants and facilitators are engaged to drive the HIV / AIDS training programme. The advantage of external facilitators is that they are perceived to be neutral and not subject to the company culture or office politics. The disadvantage is that they come and go. Once the training is over, the consultant leaves, removing the source of information and support. In this instance, peer educators are an ideal way to keep the momentum and follow up on the training provided.

It is advisable for companies to include an awareness of HIV / AIDS in the company orientation programme. This introduces new employees to the AIDS policy and workplace programme and immediately makes the company culture and stance on HIV / AIDS clear. The orientation could be accompanied by a survival kit that includes information about prevention, testing and treatment; directories of available services within the company. A schedule of available HIV training can be included wherever possible.

3.7.4 Evaluation
As in all workplace interventions, the expectation of training is that it should result in a change in behavior. Evaluation is essential to determine if the training meets policy requirements or adds value to other interventions. Follow up to measure impact is necessary in both the short and long term. The evaluation must also comprehensively consider the training techniques, looking at what works or does not work for the specific target audience. The relevance of the training information should accommodate changes and new developments in HIV / AIDS.

While some training techniques lend themselves to immediate evaluation, measurement of actual behavior change is a long-term process. Where managers are being trained on company policy and programmes, companies should be careful to ensure that the information does indeed get filtered through to other staff. A method of follow up and feedback to ensure that managers are implementing a ripple effect and that the training has added value to their job roles is required. It is worth noting that in some cases, the HIV / AIDS information is only used when making a judgement call in observing behavior of staff. The inclusion of HIV / AIDS on staff meeting agendas will stimulate regular discussion and provide a feedback forum for evaluation of training.

Evaluation questionnaires are also often used to test the effectiveness of the facilitation and information. As in the research of this study, the questionnaire may test for changes in knowledge, attitudes and perceptions, but behavior changes must be monitored over a long period of time. This method can only be used where baseline data, obtained prior to the training is available. It does however provide an overview of the response to the training itself, its relevance to the audience and its techniques.

Evaluation of accompanying interventions can be used to evaluate the associated training. Where a significant change in behavior with regard to condom usage is indicated, the associated training can be credited for the behavior change. A similar assumption may be made where there is a drop in STI treatments or an increase in voluntary testing.
COMMUNICATION, EVALUATION AND SUSTAINABILITY

The three consistent themes in best practice guidelines are communication, evaluation and sustainability. These components underpin and drive all interventions, indeed determine the viability and success of any workplace programme.

As discussed in the above case studies, effective communication requires the message to be geared toward the target audience in style, language and content. Unless the intervention is appropriately communicated, its impact may well be lost. The communication techniques used vary from simple memoranda to broad-scale social marketing campaigns, but the most influential method evidenced in the case studies is that of direct, face-to-face interaction. All the initiatives analyzed, and the ILO guidelines, indicate that although the face-to-face communication is more costly, it yields not just an immediate influence, but can also shift knowledge and attitudes more quickly. This communication method has the advantage of holding the audience’s attention, creating a meaningful dialogue that allows for a more focused exchange of information and is inherently self-evaluating. Facilitators are able to monitor the audience response and tailor the message even as they deliver it. They are able to receive and act immediately on any form of feedback that arises from the direct interaction.

Companies are however advised to utilize the full range of communication resources at their disposal. While this may appear extreme, it does ensure that workers have information available from a variety of sources and are able to access those that are least threatening to them.

Communication is also an indicator of company culture and values. Where open and honest communication is encouraged, the relationships between staff members and management is less likely to be inhibited by a lack of trust and suspicion, facilitating a move away from fear of discrimination and rejection. The level of interactive dialogue will surely determine the success of interventions even as it determines the nature of the relationships within the company. The stronger and more supportive the messages being communicated, the stronger
the relationships. This is key to managing the human and social factors that impact on business.

The second foundation of evaluation serves to determine the success of the intervention. Regular review and monitoring systems enable companies to receive feedback on existing programmes, ensure that they remain focused on the original goals and make modifications in the best interests of meeting those goals. As a business strategy, evaluation is already used in other aspects such as sales and team building. It is therefore not an unknown process within the business sector, is easy to implement in conjunction with existing systems and has been proven to be cost-effective in the long-term.

The use of KAPB studies has, as evidenced by the Daimler Chrysler case study, been effective in directing a company's policy and strategies to manage HIV / AIDS in the workplace. It is important however that these surveys be conducted regularly, have sound baseline data and be focused in their research questions.

The final cornerstone for an effective HIV / AIDS workplace programme is sustainability. AIDS is here to stay and business must be prepared to meet long-term needs. The unpredictable nature of the disease and present day controversy around treatment and projections of economic decline require the business sector to be proactive with contingency plans not just for the workplace programmes, but also for their own survival. Interventions must therefore meet the short and medium term needs while being flexible enough to accommodate changes in the long term.

The cost of workplace programmes must also be factored into the long-term business plans. The prohibitive cost of medication makes antiretroviral treatment inaccessible to most companies, while companies with sufficient resources may find the drain on profits stressful in the long run. With this in mind, interventions must be designed to be easily sustainable. The sudden termination of a workplace programme will be damaging to both the worker and the employer.
3.9 SUMMARY

The analysis of existing workplace programmes has clearly indicated that HIV / AIDS can be managed in the workplace. Given commitment and time, a workplace programme implemented in accordance with best practice guidelines can and does protect the business sector from the impact of the disease. It makes business sense to act NOW!
CHAPTER 4
RESEARCH METHODOLOGY

4.1 INTRODUCTION

This chapter presents the quasi experimental research design and objectives, sample analysis and data encoding procedure.

4.2 BACKGROUND

Around June 2002, Company X decided to take a more proactive approach and based on actuarial and KAP studies, drafted a detailed HIV / AIDS policy. This policy was sent to all the employees via internal electronic mail (E-mail). The policy was then reinforced at training sessions held in November 2002.

The HIV / AIDS specific training sessions were held for all management level employees with staff reporting to them. In these training sessions the company’s HIV / AIDS policy was discussed at length, and legal professionals, HIV / AIDS activists as well as individuals living with HIV / AIDS were invited to address staff. The training content was comprehensive in that it covered the keys issues including general discussion of HIV / AIDS the disease, how infections occur, myths surrounding HIV / AIDS, the employees rights, the importance of confidentiality and associated legal aspects, prevention and the use of condoms, voluntary testing and STD clinics. The company’s commitment and dedication to the issue was underscored in discussions of the various support packages and HIV / AIDS related services on offer by the company.

The stated objective of these interactive sessions was to equip managerial staff with an all-round knowledge of HIV/AIDS from the perspective of:

- The company’s HIV / AIDS policy;
- The different HIV / AIDS services available within the company;
- Facts and realities about HIV / AIDS;
- The company’s commitments and declarations;
- Negative attitudes and stigma associated with HIV / AIDS.
A secondary objective was to establish a ripple effect between this group of employees and the staff reporting to them.

4.3 OBJECTIVES OF STUDY

The objectives of the study were to assess, as accurately as possible, any significant changes in the employees' knowledge and attitudes before and after training as it relates to:

- General knowledge on HIV / AIDS facts;
- Attitude towards HIV / AIDS and other related issues;
- Knowledge of the company policy on HIV / AIDS;
- Preferred mode of communication and training.

In addition, the findings of study were to be utilized:

- To give the company feedback for future reference; and
- If strongly indicated by the results, to make a recommendation as to which is the most effective mode of communication.

4.4 RESEARCH DESIGN

This study employs a quasi experimental research design within a case study.

The case study approach and literature review explored the issue of HIV / AIDS within the business sector to facilitate an in-depth investigation and understanding of human knowledge, attitudes and behavior.

The quasi experimental research was undertaken to test the emerging hypothesis that the face-to-face interactive HIV / AIDS training is more effective in shifting knowledge and attitudes.
4.4.1 The Case Study and Analysis

The case study began with information gathering. It quickly became clear that the scope of the topic was immense and that the body of information was not only vast, but also available from an unmanageable range of sources. These included daily written and electronic media, literature in the form of books, journal articles, commercial and business sector magazines, business annual reports, past research, the internet and interviews with recognized experts in the field of HIV / AIDS. Company specific archives, in-house communications, surveys and results were also analyzed.

The information was then filtered for relevance to the research topic and analyzed in a process of review, debate and discussion with various stakeholders.

4.4.2 The Quasi Experimental Research Design

In the absence of a control group or a single sample pre-test or randomization of employees of Company X, the quasi experimental research design was employed to test the emerging hypothesis. According to Cooper and Schindler, (1998:398), if the information gained by this design is essential, it justifies the compromise of true experimental designs.

A Separate Sample Pretest-Posttest Study was designed to measure knowledge and attitudes before and after a face-to-face training intervention. Cooper and Schindler (1998:398) confirm that although this design is weakened by concerns of internal validity, it is considered superior to true experiments in external validity in that the information gleaned from the field experiment is more pertinent to the sample population to which we wish to generalize our findings.

A company (hereinafter referred to as Company X) currently employing various interventions simultaneously was identified as a suitable case study. Due to the extremely sensitive nature of the topic, considerable steps were taken to obtain permission to conduct the research first within the company, and secondly from individual participants.
4.4.3 The Research Sample
Company X operates within the financial business sector with a head office in Gauteng, and branches countrywide. A sample of Gauteng-based managers who have staff reporting to them was invited to participate in an interactive HIV / AIDS training programme organized by the company. This provided a convenient, captive sample for the study. An external consultant facilitated the training.

A total sample of 180 participants was divided into two groups of “BEFORE” and “AFTER” training. Of these, only 150 responses qualified for use in the final analysis. 30 incomplete responses were disqualified.

4.4.4 The Questionnaire
The questionnaire was designed to test for knowledge and attitudes about HIV / AIDS before and after training. A pilot research consisting of 80 questions was conducted to test for language, understanding and relevance of the questions. The questionnaire was then appropriately amended in accordance with feedback received. The second questionnaire included a cover letter that informed potential respondents of the nature of the study and more importantly, reiterated the confidentiality of the responses. It also included a disclaimer that released Company X from any involvement with or responsibility for the study. (See Appendix C)

Questionnaires were personally handed to the target respondents either before or after the training. This benefited the study in that it enabled the researcher to:

- Assure participants of complete confidentiality;
- Be available to respond to any queries;
- Emphasize the need for honest participation in the study;
- To explain the potential value of the study to the company.

Questionnaires were collected immediately upon completion.
The first part of the questionnaire requested demographic data that was used to verify the consistency of the sample population. The questionnaire was then divided by question type. Sections A, C and E had multiple-choice type questions that tested for actual knowledge and negative or positive attitudes. Dichotomous questions were utilised in Sections B, D and F with AGREE / DISAGREE / UNCERTAIN type questions and in Section G which offered the options of YES / NO.

The Likert scale was adapted to suit the highly sensitive nature of the study. The neutral stance as an option was removed to ensure a more decisive response as opposed to a perceived “right” response. This type of close ended question added value to the research results. The open-ended questions were consciously avoided due to the highly controversial and fluctuating nature of the topic. Despite the absence of personal questions (it is important to note that the questionnaire deliberately did not ask questions about the individual’s sexual habits or behaviors), HIV / AIDS remains personal by nature in that it challenges the individual’s inherent value and belief systems and prejudices around this disease.

Knowledge questions were rated according to accuracy of factual information and attitudinal questions were rated for positive or negative response.

4.5 SAMPLE POPULATION

The sample universe, referring to the larger company population from which the study sample was drawn, consists of all the Johannesburg-based managerial employees with staff reporting to them. It was difficult to determine the exact size or to compile an up-to-date list of staff with all the reporting relationships within the sample universe.

The sample frame consists of all those managerial employees who attended the training, on a department by department basis, from November 2002 to April 2003. The estimated population of the sample frame is +/- 1000 employees. If
required, Company X is able produce a register of all managers who attended the training. At present however, Company X has not collated this information.

For the purposes of this study cluster sampling, which allows for the division of a sample population into clearly defined heterogeneous sub-groups, was used. The sub-grouping criteria included:

- Geographic location – all Johannesburg-based employees only
- Employment – all employed by Company X
- Job Status – all managers with staff reporting to them
- Departmental – managers were invited on a department by department basis
- Voluntary – the training was not mandatory.

For the convenience of this study, the sampling was deliberately linked to the training sessions held during November and December 2002. The list of dates for training and the projected size of the population cluster were applied in a one-stage cluster sampling. Clusters were drawn at random with equal sampling probabilities. A larger sample than required was drawn to compensate for any loss of precision associated with cluster sampling. The decision to administer the questionnaire before or after training was made at random, depending on the number of ‘before’ or ‘after’ samples required.

The final sampling fraction was 15% of the sample frame. i.e.

\[
\frac{150}{1000} = 15\%
\]

A total of 150 questionnaires were administered. 69 of the questionnaires were administered just before the training, while 81 were administered just after the training. Hence the sample proportions were:

Before Training: 46%
After Training: 54%

This is equivalent to 7% and 0.8% of the total sample frame of 1000 managers as depicted in Figure 4.1:
In order to make inference about the universe population, based on the information gathered from the BEFORE and AFTER sample groups, we need to show that the difference between the BEFORE and AFTER sample is representative of the universe population and that the difference between the two groups was negligible. Therefore, a comparison of the responses between the two groups is well founded. A demographic analysis of the two samples was conducted to mathematically derive the properties of the two sample groups, as shown in Table 4 below. These summary statistics and the mean of demographic characteristics between the groups gave the initial suggestion that the two samples differ very slightly.

Further non parametric test results supported this finding. This method was used because the data was ranked and normal distribution of the sample could not be assumed.
Table 4  Summary Statistics of the Sample Demographics

<table>
<thead>
<tr>
<th>Job Grading</th>
<th>BEFORE Group</th>
<th>AFTER Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.813</td>
<td>2.963</td>
</tr>
<tr>
<td>Std Error</td>
<td>0.141</td>
<td>0.124</td>
</tr>
<tr>
<td>Std Deviation</td>
<td>1.125</td>
<td>1.112</td>
</tr>
<tr>
<td>Sum</td>
<td>180.000</td>
<td>240.000</td>
</tr>
<tr>
<td>Count</td>
<td>64.000</td>
<td>81.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>BEFORE Group</th>
<th>AFTER Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.085</td>
<td>2.138</td>
</tr>
<tr>
<td>Std Error</td>
<td>0.103</td>
<td>0.097</td>
</tr>
<tr>
<td>Std Deviation</td>
<td>0.794</td>
<td>0.868</td>
</tr>
<tr>
<td>Sum</td>
<td>123.000</td>
<td>171.000</td>
</tr>
<tr>
<td>Count</td>
<td>59.000</td>
<td>80.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>BEFORE Group</th>
<th>AFTER Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.656</td>
<td>3.842</td>
</tr>
<tr>
<td>Std Error</td>
<td>0.204</td>
<td>0.195</td>
</tr>
<tr>
<td>Std Deviation</td>
<td>1.635</td>
<td>1.697</td>
</tr>
<tr>
<td>Sum</td>
<td>234.000</td>
<td>292.000</td>
</tr>
<tr>
<td>Count</td>
<td>64.000</td>
<td>76.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Race</th>
<th>BEFORE Group</th>
<th>AFTER Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.415</td>
<td>3.457</td>
</tr>
<tr>
<td>Std Error</td>
<td>0.112</td>
<td>0.105</td>
</tr>
<tr>
<td>Std Deviation</td>
<td>0.900</td>
<td>0.949</td>
</tr>
<tr>
<td>Sum</td>
<td>222.000</td>
<td>280.000</td>
</tr>
<tr>
<td>Count</td>
<td>65.000</td>
<td>81.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>BEFORE Group</th>
<th>AFTER Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.866</td>
<td>2.681</td>
</tr>
<tr>
<td>Std Error</td>
<td>0.122</td>
<td>0.119</td>
</tr>
<tr>
<td>Std Deviation</td>
<td>0.998</td>
<td>0.993</td>
</tr>
<tr>
<td>Sum</td>
<td>192.000</td>
<td>185.000</td>
</tr>
<tr>
<td>Count</td>
<td>67.000</td>
<td>69.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>BEFORE Group</th>
<th>AFTER Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>1.571</td>
<td>1.494</td>
</tr>
<tr>
<td>Std Error</td>
<td>0.063</td>
<td>0.057</td>
</tr>
<tr>
<td>Std Deviation</td>
<td>0.499</td>
<td>0.503</td>
</tr>
<tr>
<td>Sum</td>
<td>99.000</td>
<td>115.000</td>
</tr>
<tr>
<td>Count</td>
<td>63.000</td>
<td>77.000</td>
</tr>
</tbody>
</table>
The Wilcoxon Test for two independent samples was appropriately used to test whether the two independent sample groups (BEFORE and AFTER) came from the same underlying universe population. The Wilcoxon Two-Sample Test together with the Kruskal-Wallis Test (see Appendix D) proved that the BEFORE and AFTER groups are not statistically different in terms of job grade, education, marital status, race, age, and gender compositions.

Table 5  Results of the Wilcoxon Two-Sample Test

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>Chi-square</th>
<th>Df</th>
<th>Pr &gt; chi-square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Grade</td>
<td>2.3086</td>
<td>1</td>
<td>0.1287</td>
</tr>
<tr>
<td>Age</td>
<td>0.4245</td>
<td>1</td>
<td>0.5147</td>
</tr>
<tr>
<td>Education</td>
<td>7.9544</td>
<td>1</td>
<td>0.0048</td>
</tr>
<tr>
<td>Marital Status</td>
<td>0.0725</td>
<td>1</td>
<td>0.7877</td>
</tr>
<tr>
<td>Race</td>
<td>0.4008</td>
<td>1</td>
<td>0.5267</td>
</tr>
<tr>
<td>Gender</td>
<td>6.8983</td>
<td>1</td>
<td>0.0086</td>
</tr>
</tbody>
</table>

From the results it can be deducted that:

- The two sample groups are not significantly statistically different in terms of the overall demographic variables;

- Although the two sample groups were marginally different in terms of Gender and Education, this is an independent effect that is unlikely to affect the general result; (Refer to Table 4 for actual proportions of sample.)

- As both samples were drawn from the same universe population independently, chances that the population is much different in terms of these characteristics are very low. In other words the two samples can be taken as a representative of the real population;

- The two points above justify making inferences about the universe population based on the results of the two groups.

In addition, the high response rate of 97.72% in the AFTER sample and 95.41% in the BEFORE sample, boosts the possibility that the sample survey is of a high quality in that it managed to capture accurate information from the two groups. It has also been proven that given the negligible difference between the
two groups, the effect of demographic characteristics on the overall results would be minimal and hence can be ignored.

It is safe to conclude that since the two samples are statistically the same in all aspects, and differ only in terms of responding BEFORE or AFTER training, it is appropriate to attribute any significant difference in the responses to the training.

4.7 QUESTIONNAIRE AND DATA CODING

The multiple choice, close-ended structure of the questionnaire, as described in Section 4.4.4 was used to minimize incidents of refusal and non-compliance. This goal was achieved with 99.3% success, with only 1 out of the 150 questionnaires administered being returned without completion.

The limited range of possible answers for each question helped minimise inconsistent data, simplified the data encoding procedure and made the questionnaire self-administering. This was supported by the use of short, clear and simple questions.

Although not strictly required for the analysis of knowledge and attitudes, demographic questions were included to form the basis of a comparison of the two sample groups, namely, BEFORE and AFTER. They were also used to highlight any trends that may advise future study and interventions.

The 79 questions included in the final questionnaire were of 3 main categories defined for the purposes of this study as:

a) **Demographic**: Specific population distribution variables such as age and education;

b) **Attitudinal**: The way a person views or tend to behave toward the issue of HIV / AIDS;

c) **Knowledge**: The facts or experiences known by a person about HIV / AIDS.
The same definitions were used in encoding and analyzing the questionnaire responses.

4.7.1 Demographic Questions

The demographic questions captured Age, Education, Race, Gender and Grade. The variables were grouped and were coded in numerical form. E.g.: for education:

- Below Matriculation = 1
- Matriculation = 2
- Diploma / college certificate = 3
- Postgraduate & graduate = 4

4.7.2 Attitudinal Questions

Opinion testing questions were rated on how negative or positive the response to HIV / AIDS was. E.g.: on condom usage

- Do you think that people who carry condoms are promiscuous (sleep around).
  - Agree = -1
  - Disagree = 1

4.7.3 Factual Questions

These knowledge-based questions were coded for accuracy of information. Correct answers were rate 1, incorrect answers were rated -1 and uncertain responses were rated zero. E.g. On company policy:

- My company has an HIV / AIDS policy
  - Agree = 1
  - Disagree = -1
  - Uncertain = 0

All missing values were coded 9. It was not easy to establish the reason for missing values, which could relate to refusal to answer, don’t know the answer, don’t understand the question etc.
4.8 SUMMARY

The quasi experimental research design within a case study proved most suitable for the study of HIV / AIDS as an issue and more specifically, an analysis of HIV / AIDS interventions within the business sector. The case study literature review provided a comprehensive background for the analysis of the research findings.

The sample analysis has conclusively shown that the Pretest and Posttest samples are an equivalent representation of the universe population and that findings discussed in Chapter 5 can be generalized.
5.1 INTRODUCTION

This chapter focuses on the analysis of the data and findings thereof. It will assess the impact of the various communication modes in regard to the HIV / AIDS issue, and more specifically, the impact of interactive training on a change in knowledge and attitudes, before and after training.

5.2 DATA ANALYSIS: THE GENERAL IMPACT OF TRAINING

The two samples were analyzed and scored to study the effect of the training on the employees' knowledge and attitudes before and after training as it relates to:

- General knowledge on HIV / AIDS facts;
- Attitude towards HIV / AIDS and other related issues;
- Knowledge of the company policy on HIV / AIDS;
- Preferred mode of communication and training.

Based on a general comparison of the raw data scores, the AFTER training sample scored significantly higher than the BEFORE training sample. This gives the first indication that the interactive intervention made a significant difference to both knowledge & attitudes.

**Table 6** Comparison of Total BEFORE and AFTER Training Group Scores

<table>
<thead>
<tr>
<th></th>
<th>BEFORE Group</th>
<th>AFTER Group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Raw Score</strong></td>
<td>2289</td>
<td>3214</td>
</tr>
<tr>
<td><strong>Sample Size</strong></td>
<td>69</td>
<td>81</td>
</tr>
<tr>
<td><strong>Average Score</strong></td>
<td>33.17</td>
<td>39.68</td>
</tr>
<tr>
<td><strong>Difference</strong></td>
<td></td>
<td><strong>6.51</strong></td>
</tr>
</tbody>
</table>
A comparison of the responses to knowledge questions and responses to attitudinal questions before and after training indicates that there was a greater shift in knowledge than in attitude as indicated by Table 7 and Figure 5.2. This is consistent with behavioral change model theories that propose that it is easier to impact on knowledge than attitude and behaviour.

### Table 7  Comparison of BEFORE and AFTER Training Group Scores for Knowledge Questions compared to Attitude Questions

<table>
<thead>
<tr>
<th>KNOWLEDGE QUESTIONS</th>
<th>ATTITUDE QUESTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GROUP</strong></td>
<td><strong>BEFORE</strong></td>
</tr>
<tr>
<td>Total Raw Score</td>
<td>822</td>
</tr>
<tr>
<td>Sample Size</td>
<td>69</td>
</tr>
<tr>
<td>Average</td>
<td>11.913</td>
</tr>
<tr>
<td>Difference</td>
<td>5.86</td>
</tr>
</tbody>
</table>
Figure 5.3 depicts the difference in the actual shift in knowledge and attitude, showing a greater shift in knowledge than in attitude. This is consistent with the objectives of Company X's training programme which was geared towards ensuring that factual information about the company's HIV / AIDS policy and initiatives were reinforced. This verifies that the interactive training programme was more successful than other modes of communication. It also reinforces the understanding that the focus of the training will determine the resulting shift in knowledge and possible future shifts in attitudes and behavior. It is therefore vital that the workplace programme be the source of accurate information on all aspects of HIV / AIDS.

The lower significant shift in attitude indicates less success in meeting Company X's objective to change attitudes about HIV / AIDS.

A more in-depth analysis of the individual knowledge and attitudinal questions presented later in this chapter will consider what types of knowledge and which attitudes changed the most.
A Wilcoxon Two-Sample Test was used to test for significance in the difference between responses to knowledge and attitude questions BEFORE and AFTER training. The tests showed that these score differences are actually significant, leading to the conclusion that the interactive training did in fact influence the knowledge and attitude of participants.

5.3 DATA ANALYSIS: IMPACT OF TRAINING ON KNOWLEDGE

An analysis of the knowledge questions and responses of the BEFORE and AFTER training groups indicates that specific questions, especially those
related to Company X's policy and HIV / AIDS programme, showed the most significant changes.

Questions concerning general knowledge about HIV / AIDS showed a smaller degree of change. It is possible to infer that the sample groups attending the training had already been exposed to information about HIV / AIDS within their general environment.

The non-parametric Kruskal-Wallis Test was used to verify the changes in the following 14 questions which showed the greatest shift:
(See Appendix A for full questionnaire).

<table>
<thead>
<tr>
<th>Question</th>
<th>Kruskal-Wallis test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Chi-Square</td>
</tr>
<tr>
<td>G17</td>
<td>28.5964</td>
</tr>
<tr>
<td>F6</td>
<td>27.5564</td>
</tr>
<tr>
<td>B3</td>
<td>27.5266</td>
</tr>
<tr>
<td>F4</td>
<td>19.2353</td>
</tr>
<tr>
<td>F3</td>
<td>19.0443</td>
</tr>
<tr>
<td>B4</td>
<td>13.2862</td>
</tr>
<tr>
<td>D4</td>
<td>10.944</td>
</tr>
<tr>
<td>G3</td>
<td>7.5717</td>
</tr>
<tr>
<td>G16</td>
<td>7.0017</td>
</tr>
<tr>
<td>F5</td>
<td>6.8235</td>
</tr>
<tr>
<td>A2</td>
<td>5.9834</td>
</tr>
<tr>
<td>H5</td>
<td>4.0447</td>
</tr>
<tr>
<td>C2</td>
<td>3.7124</td>
</tr>
<tr>
<td>H6</td>
<td>3.4708</td>
</tr>
</tbody>
</table>

These results support the analysis of training as an intervention discussed in Chapter 3.3.4 in that the immediate direct result of the one-on-one intervention is a shift in knowledge. Best practice guidelines require that training be
implemented in a regular, consistent way so as to reinforce the knowledge shifts and stimulate a change in attitudes and behavior.

Based on the predominance of particular sections of the factual questions, it is possible to infer that the focus of the interactive training impacted on the shift in knowledge. For example, only one question from Section A, that tested for general knowledge of HIV / AIDS is listed, namely:

**Question A2:** I have touched HIV infected blood. What next?

a. I will be infected with HIV.
b. I will not be infected with HIV.
c. Depending on whether I am a carrier or not, I may or may not be infected.
d. Depending on whether my skin has a cut or not, I may or may not be infected.

and

**Question B3:** Can you test for HIV by using saliva?

AGREE DISAGREE

![Figure 5.4 Results of Question B3](image)

Historically a blood test was required to test for HIV. General public perception is that a blood test is still the only way. Modern medical technology however,
now makes it possible to test for HIV using a small saliva sample. The shift in response indicates that this information is not yet general knowledge.

There is a larger number of questions from Section F that focus on the knowledge of company specific HIV / AIDS information. For example,

**Question F3:** My company does provide STD treatment.

<table>
<thead>
<tr>
<th>AGREE</th>
<th>DISAGREE</th>
<th>UNCERTAIN</th>
</tr>
</thead>
</table>

The results indicate that initially, 37 respondents did not know that Company X offered STD treatment, despite other communication initiatives within the company. After the training fewer people disagreed with the statement. Respondents who indicated uncertainty either before or after training were ranked zero and not included in the results.

**Question F4.** My company does provide HIV testing.

<table>
<thead>
<tr>
<th>AGREE</th>
<th>DISAGREE</th>
<th>UNCERTAIN</th>
</tr>
</thead>
</table>
Question D4: An HIV positive diagnosis is a death sentence. It’s just a matter of time.

AGREE  DISAGREE

This question was controversial in that most people do perceive an HIV+ diagnosis as a death sentence, leading to depression and hopelessness. In Chapter Two examples of the business sector’s discrimination against those who are HIV+ indicated an unwillingness to invest in employees who are destined to die. The shift in response reinforces the understanding that accurate
information is vital. In this case an understanding of treatment available and the capacity to live with HIV was successfully provided.

Question G17. The risk of HIV transmission within most workplaces is minimal. However should occupational accidents involving bodily fluids occur, would you know what to do?

Yes No

Again, accurate information about how to manage HIV and workplace safety precautions proved vital to the managers confidence levels. The AFTER training group felt more able to manage staff queries and incidents in the workplace.

Figure 5.8 Results of Question G17

Question F6: Employees have a right to refuse to work with an HIV positive colleague.
The shift in response to this question indicates that not only did employees successfully receive information about their legal rights, but that the behaviour, namely respecting the rights of HIV+ individuals, imposed by the constitution can follow.

Behavioral change is a complex process that can both, result from and lead to a change in attitude. It is generally understood that a shift in knowledge can create an understanding that shifts attitudes and ultimately behaviour. However, where a behaviour is imposed and supported by knowledge, consistent practice can generate a change in attitude to match the behaviour, viz.

Knowledge ----> Attitude ----> Behaviour

OR

Knowledge ----> Behaviour ----> Attitude

5.4 DATA ANALYSIS: IMPACT OF TRAINING ON ATTITUDE
While the research findings indicate a less significant shift in attitude towards HIV / AIDS, an analysis of the individual questions show a marked shift in specific attitudes. The questions with the most significant change in response from BEFORE and AFTER training are:

Table 9  Total Raw Data Scores for Attitude Questions with the Most Significant Shift in Response BEFORE and AFTER Training

<table>
<thead>
<tr>
<th>Question</th>
<th>BEFORE</th>
<th>AFTER</th>
<th>Shift in Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>G4</td>
<td>42</td>
<td>72</td>
<td>30</td>
</tr>
<tr>
<td>F8</td>
<td>8</td>
<td>41</td>
<td>33</td>
</tr>
<tr>
<td>G36</td>
<td>17</td>
<td>53</td>
<td>36</td>
</tr>
<tr>
<td>D5</td>
<td>1</td>
<td>43</td>
<td>42</td>
</tr>
<tr>
<td>G23</td>
<td>-31</td>
<td>26</td>
<td>57</td>
</tr>
<tr>
<td>A7</td>
<td>155</td>
<td>251</td>
<td>96</td>
</tr>
</tbody>
</table>

Question D5. For the sake of safety of our company, and that of its people, anyone with HIV/AIDS must divulge his/her status to the company.

AGREE  DISAGREE

![Figure 5.10 Results of Question D5](image)

The substantial shift in response from 1 to 43 respondents disagreeing that an individual’s HIV status should be revealed indicates a shift in attitude about privacy and confidentiality.
Question F8: The statistics of the number of HIV/AIDS infected people in the workplace should be communicated to staff.

AGREE

DISAGREE

Figure 5.11 Results of Question F8

The results indicate a new interest in the company's HIV prevalence rate and an acknowledgement that HIV/AIDS is a reality in Company X. As demonstrated in the David Whitehead case study, these statistics have the potential to decrease high risk behavior.

Question G23. If you had an HIV positive subordinate/colleague, do you feel you have the skills to handle the situation?

Yes

No

The results of Question G23 corresponds to the knowledge Question G17, confirming that after the training, managers felt more capable of managing HIV/AIDS related situations in the workplace. This combination indicates how a shift in knowledge can and does lead to an immediate shift in attitude.
Screening for HIV / AIDS during the recruitment process is illegal in South Africa. Despite the legislation, only 17 respondents initially disagreed with the statement. Subsequent to training, 53 people felt that the company should not use HIV / AIDS as criteria for selection. This is important in that all research respondents are managers who are likely to engage in recruitment. The shift in response also indicates a new understanding the HIV+ individual's right to employment.
The results also reveal that with regard to the specific issue of communication, participants held very strong opinions about the communication techniques employed by Company X.

Two specific questions were analyzed in this regard:

**Question B10:** Communication material at work should be done in different languages.

<table>
<thead>
<tr>
<th>AGREE</th>
<th>DISAGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>85.91%</td>
<td>14.09%</td>
</tr>
</tbody>
</table>

The results indicate the need for audience specific communication techniques. 85.91% of the sample agreed that communication should be in different languages while only 14.09% of them don't believe it's necessary to publish in different languages.

and

**Question A7:** What is the best way of communicating HIV/AIDS messages at work?

- a. Email (Business communications)
- b. Pamphlets and In-house magazines
- c. Notice Boards
- d. Face-to-face communications

46.90% of the total sample preferred face-to-face communication

20.81% of the total prefer e-mail

18.79% of the total prefer pamphlets and

8.72% of the total prefer the use of notice boards

The pie graph in Figure 5.14 illustrates the communication preferences of the BEFORE and AFTER Groups.
5.6 SUMMARY

The Wilcoxon Test was used to verify the overall result of the research study. The p value for significant change in knowledge was 0.0001 and the p value for significant change in attitude was reflected as 0.0028. This supports the hypothesis that face-to-face interactive training is more effective than other forms of training interventions.

The data analysis confirms this finding, indicating substantial shifts in specific areas of knowledge and attitudes that directly impact on the workplace.
CHAPTER 6
CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

This study assessed the impact of HIV / AIDS on the business sector by drawing on the literature review and case studies. It analyzed the business sector's response in terms of HIV / AIDS Workplace Programmes and Interventions against best practice standards.

It further tested the emerging hypothesis that the face-to-face interaction is the most viable intervention to change knowledge and attitudes about HIV / AIDS.

The study has served its purpose in investigating the broad range of interventions currently used by business and providing a guideline to how they may be successfully implemented in the future.

6.2 RESEARCH CONCLUSIONS

In terms of the primary objective, the study concludes that the business sector's response to HIV / AIDS on the global level is proactive and purposeful, serving to inform best practice standards.

In the South African context, the business sector's response is less directed in that it is hampered by a confused response from the South African government; controversy about issues relating to HIV / AIDS and the overwhelming range of impacts and risks to the business sector.

In terms of the secondary objective, the study concludes that the one-on-one or face-to-face intervention is more successful in changing knowledge with a less significant shift in attitudes.
6.3 RECOMMENDATIONS

6.3.1 ILO Code of Practice on HIV / AIDS and the World of Work
Companies, especially those just beginning to formulate their response to HIV / AIDS, should refer to the Code. Companies already engaged in an HIV / AIDS workplace programme can use the Code to benchmark their interventions.

6.3.2 Pressure on the South African Government
The South African business sector needs to be united in pressurizing government to meet service delivery promises and full implementation of the National AIDS Plan formulated in consultation with business in January 2000.

Business is in a position to recommend to government that the Joint Services Board Skills Development Levy be extended to subside HIV / AIDS workplace programme with an adequate incentive that allows for consistent monitoring.

6.3.3 Partnerships and Alliances
The first level of partnership recommended to business is the tripartite structure utilized by the ILO. Business needs to implement workplace programme in partnership with labour organizations, and government. Wherever possible, other stakeholders should be included to sustain the programme.

A second foundation of support can be established in partnership with other industries that provide services or products necessary for successful implementation.

Partnerships with community-based service providers and organizations are recommended to broaden the scope and impact of the workplace intervention.

Despite competition in the market place, businesses within a particular sector should join forces to share knowledge of successful interventions, acquire an understanding of the impact of HIV / AIDS on their sector and to that impact.

Companies can subsidize home-based care and community outreach programmes by engaging in partnerships with community based organisations
that encourage skills development and related income-generating projects. This will serve to empower communities to take responsibility for their HIV status and treatment. Not only does this ensure sustainability of the financial support of the project, it also provides and opportunity to maintain the affected individual's dignity and self-respect.

6.3.4 Interventions
Companies should have a good communication strategy for disseminating information about their policy and interventions to ensure maximum usage.

A workplace programme should be targeted in terms of the knowledge, attitudes and behaviors it seeks to change. For example, the DCSA Communication Strategy lists specific messages that need to be communicated to shift related attitudes and behaviour.

Every intervention should be accompanied by a system of evaluation and monitoring with a long-term view to measuring changes in behavior.

All interventions should seek to maintain the dignity of the affected individuals. Depression and anxiety are key factors influencing attitudes to managing HIV / AIDS.

Company's need to be committed in their approach to workplace programmes and cannot treat them as a check list exercise. Specific goals must be established with a commitment to meeting the agreed deadlines.

Awareness of the company HIV / AIDS policy and programme should be included in the company induction training.

6.3.5 Company Culture
The company culture should reflect and support the HIV / AIDS policy and interventions in terms of management style, communication techniques and attitude.
Companies should encourage openness and transparency about HIV / AIDS by mainstreaming it into their day-to-day business. This should be extended to include employees, suppliers and customers. For example, Woolworths in South Africa has launched an HIV / AIDS anti-discrimination campaign in all retail outlets with the tag line “AIDS does not discriminate, why should we?”

Top management should lead by example. Role modeling is an effective method of encouraging use of workplace programmes and dissipating fear and suspicion.

HR Policies can be amended, particularly for managers who have staff reporting to them, to include HIV / AIDS awareness and participation in training in performance appraisals. This can be extended to include participation in a social investment component than embraces the broader community.

The company should be in a state of preparedness with easy access to educators, trainers etc. so as to increase their capacity to manage AIDS related emergencies and trauma.

Staff should be encouraged to be multi-skilled in their job roles by engaging in a skills transference programme so as to cost-effectively hedge against the loss of skilled labour.

6.4 SUMMARY

This chapter has served to highlight the conclusions and recommendations of the study. It must however be remembered that the analytic nature of the study is inherently advisory.

While the nature of the topic of HIV / AIDS is by no means conclusive, the study remains relevant in that it is placed in the context of timeless best practice. It can hopefully inform future research into, and implementation of, the business sectors response to HIV / AIDS.
GLOSSARY OF TERMS
(Includes terms commonly used in AIDS related literature.)

**Acquired immune deficiency syndrome (AIDS):**
The late stage of HIV disease. AIDS involves the loss of function of the immune system as CD4 cells are infected and destroyed, allowing the body to succumb to opportunistic infections that are generally not pathogenic in people with intact immune systems. Common symptoms of AIDS include malignancies and wasting syndrome.

**Antiretroviral therapy:** Drugs that kill or suppress a retrovirus such as HIV. All of the anti-HIV drugs e.g. AZT, protease inhibitors

**Asymptomatic:** Without signs or symptoms of disease or illness (i.e., the patient does not complain of any symptoms). Most people who are HIV-positive are asymptomatic for five to 10 years or more.

**Business:** An enterprise that produces a product or provides a service.

**Cofactors:** Factors that increase the probability of development of a disease. For example, sexually transmitted infections such as gonorrhea and chlamydia are cofactors for HIV transmission.

**Company:** The people who collectively make up a given business, including workers, supervisors, managers and members of the board of directors.

**Discrimination:** Denial of opportunities or benefits (otherwise available to everyone) to a person or group because of real or assumed features or conditions of that person or group.

**ELISA:** A blood test that detects the presence of antibodies to HIV, used to determine whether a patient is HIV-positive. The term stands for enzyme-linked immunosorbent assay.

**Epidemic:** A sudden, unusual increase in an illness that exceeds the number expected on the basis of experience.

**Gender attitudes:** Culturally defined attitudes, roles and responsibilities for females and males that are learned. Gender attitudes and roles may vary over time and among societies.

**Human immunodeficiency virus (HIV):** The virus that causes AIDS. The virus is acquired through sexual activity, sharing of infected needles and cutting instruments, contaminated blood supplies and mother-to-fetus/infant transmission. The virus remains in the body for five to 10 years or more before full symptoms of opportunistic infections or AIDS appear. The virus is detected in the bloodstream through the ELISA test.

**Incidence:** The number of cases recorded in a specific time period.
Incubation period: The time period between initial infection with a disease-causing agent and clinical manifestation of the disease. With HIV, the incubation period may be five to 10 years or more.

Mother-to-child transmission: The transmission of HIV from a woman with HIV infection to her fetus / infant before or during birth or through breastfeeding.

Non-governmental organization (NGO): A group that functions outside of formal government structures, usually on a non-profit basis. Some NGOs provide a variety of program services and advocacy around HIV/AIDS.

Opportunistic infection: Illnesses that afflict people with weak immune systems, as occurs with HIV. Common opportunistic infections in people with HIV/AIDS include tuberculosis (TB), certain kinds of pneumonia, fungal infections, viral infections and lymphoma.

Peer education: Sharing of information by people of similar backgrounds and experiences (for example, similar ages, occupations or life experiences).

Policy: A framework for expected actions by members of an organization.

Prevalence (prevalence rate): The number of persons with a particular condition in a given population. Prevalence is determined by dividing the number of people with the condition by the total population.

Preventive behaviors: Conduct that reduces exposure to health risks. Such behaviors include planning ahead for condom use, seeking information about a reproductive health concern and forming positive relationships with peers who are not engaging in risky behaviors.

Primary care: Basic medical care; the first line of medical management of a condition.

Protease inhibitor: A class of anti-HIV drugs that prevent creation of an HIV-specific protease.

Role model: A person who serves as an example of positive behaviors and/or skills.

Screening: measures whether direct (HIV testing), indirect (assessment of risk-taking behaviour) or asking questions about tests already taken or about medication.

Seroconversion: Development of detectable anti-bodies to HIV in the blood. Seroconversion may take several months or more after initial HIV transmission. After antibodies to HIV appear in the blood, a person will test positive for the infection in the standard ELISA test.

Sexually transmitted infection (STI); sexually transmitted disease (STD): A virus or bacteria transmitted between sexual partners. Common STIs include chancroid (often causing painful sores on the penis, vagina or anus, and swollen lymph nodes); chlamydia (often causing irregular bleeding and pain
during intercourse in women, burning during urination in men and discharge in both men and women); and gonorrhea (symptoms include urethral or vaginal discharge).

**Stigma:** Negatively perceived characteristic(s) of a person or group. Stigmatization is the labeling of persons with such feature(s); for example, of persons who are (or are considered to be) HIV-positive.

**Syndrome:** A set of symptoms that occur together.

**Universal precautions:** Infection control measures that prevent the transmission of HIV between patients and health workers. They include washing hands; using gloves and protective clothing; handling sharp objects safely; disposing of waste materials; cleaning, disinfecting and sterilizing medical instruments; handling corpses properly; and treating injuries at work.

**Virus:** A large group of submicroscopic agents capable of infecting plants, animals and bacteria. Viruses are characterized by total dependence on living cells for reproduction and lack of independent metabolism.

**Western blot:** A blood test to confirm the results of an ELISA test for HIV antibodies, used because it is much more specific.
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Appendix A: Picture of The Human Immune-Deficiency Virus
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SECTION A

A1. How would you go about getting to know your HIV status?
   a. Go for a blood or saliva test.
   b. Keep a close look at the signs of illness.
   c. Practice safe sex.
   d. Weight loss and a persistent cough are the common symptoms.

A2. I have touched HIV infected blood, what next?
   a. I will be infected with HIV.
   b. I will not be infected with HIV.
   c. Depending on whether I am a carrier or not, I may or may not be infected.
   d. Depending on whether my skin has a cut or not, I may or may not be infected.

A3. Why is it important to treat STD’s (Sexually transmitted diseases)?
   a. STD-free intercourse reduces the risk of HIV transmission.
   b. STD reduces sexual interest.
   c. No STD, No HIV.
   d. Having sexual intercourse while you have an STD is always painful.

A4. To what extent would you say HIV/AIDS is likely to have an economic and emotional effect on you or your family?
   a. No way will it have an effect
   b. Up to 50% chances
   c. Above 50% chance
   d. Has already started having an effect

A5. It is said that HIV/AIDS statistics seems to be high within a specific race group in our country, which race group is that?
   a. Whites
   b. Blacks
   c. Indians
   d. Coloureds

A6. How often would you like to see information about HIV/AIDS at work
   a. Daily
   b. Weekly
   c. Monthly
   d. Bi-annually

A7. What is the best way of communicating HIV/AIDS messages at work
   a. E-mail (Business communications)
   b. Pamphlets and in-house magazines
   c. Notice boards
   d. Face to face communications
SECTION B

Indicate whether you AGREE or DISAGREE with the following statements.

B2. A condom is the most commonly used form of prevention against HIV infection.
   AGREE    DISAGREE

B3. You can test for HIV by using saliva.
   AGREE    DISAGREE

B4. The country’s constitution protects the rights of HIV positive citizens.
   AGREE    DISAGREE

B5. HIV testing is one of the first steps towards dealing with AIDS.
   AGREE    DISAGREE

B6. “Top” management has been involved in the HIV/AIDS programmes?
   AGREE    DISAGREE

B7. The information about HIV/AIDS at work has been adequate
   AGREE    DISAGREE

B8. I am properly informed about the HIV/AIDS initiatives and interventions that my company has undertaken
   AGREE    DISAGREE

B9. My company is culture sensitive when communicating messages about HIV/AIDS
   AGREE    DISAGREE

B10. Communication material at work should be done in different languages
    AGREE    DISAGREE

B13. Do you think that people that carry condoms are promiscuous (sleep around)
    AGREE    DISAGREE
SECTION C

C1. Where would you prefer to have an HIV test?
   a. At the workplace.
   b. At the clinic, hospital or family doctor.
   c. With a new doctor far away from your work and family
   d. I prefer not to have it.

C2. What could be the reason for the high incidence of HIV/AIDS amongst one race group?
   a. They have many wives.
   b. They earn more money and buy more sex.
   c. Poverty leads to risk behaviour.
   d. They sleep with animals.

C3. How do you feel about sharing food and utensils with an HIV positive person?
   a. I would never do that.
   b. I'm confident nothing will happen.
   c. It does not enter my head that the person is, by the way, HIV positive.
   d. Apprehensive (little bit scared), even if I know it is very safe.

C4. Everyday your child, younger brother, etc, plays and is in contact with other children whose HIV status is often unknown. How do you feel about the risk involved?
   a. It could be very risky.
   b. It is not risky.
   c. I've never thought about it.
   d. The situation is beyond my control.

C5. How do you feel about condoms being dispensed at the workplace?
   a. It will promote promiscuity (sleeping around more).
   b. It is against my religion.
   c. Buying condoms is waste of money. Instead, give that money as a salary increase.
   d. It is a good idea.

C6. I think that women are more prone to becoming HIV Positive because:
   a. They are often forced into having unprotected sex
   b. They have to pay for the sins of Eve.
   c. They are more promiscuous than men.
   d. Both genders are actually at risk.
SECTION D

D1. A well-trained professional can accurately say whether a person is HIV positive or not, without necessarily testing.
AGREE DISAGREE

D4. An HIV positive diagnosis is a death sentence. It's just a matter of time.
AGREE DISAGREE

D5. For the sake of safety of our company, and that of its people, anyone with HIV/AIDS must divulge his/her status to the company.
AGREE DISAGREE

D6. Many companies seem to protect the rights of the HIV positive people more than those of the HIV negative.
AGREE DISAGREE

D7. HIV positive people contributed to a certain degree towards getting themselves infected.
AGREE DISAGREE

D8. God uses AIDS to punish those who disobey Him.
AGREE DISAGREE

D9. Talking about sex with your children might encourage them to be promiscuous (to sleep around).
AGREE DISAGREE

D12. An HIV positive person has a right to work.
AGREE DISAGREE

D15. My company is willing to share information about HIV/AIDS
AGREE DISAGREE
SECTION E

E1. Do you think it risky to help a bleeding colleague.
   a. No.
   b. Yes.
   c. It depends on various factors.
   d. Always take precautions.

E2. If you were to be diagnosed HIV positive today, what would you do next?
   a. Relax more and save energy.
   b. Sit and wait for death.
   c. Do everything that is said to extend healthy life.
   d. I don't know what I would do.

E3. It would be more risky to have sex without a condom with a person of low economic status than it is with a person of high economic status, because it is said that HIV is rife amongst the economically low status group.
   a. Economic status does not matter; I'll first have to consider other factors before I do so.
   b. It is equally risky; I would not do that.
   c. High economic status is actually more risky.
   d. Economic status does not matter as long as the person is not a sex worker.

E4. Would you mind going all out to seek help should you be diagnosed HIV positive.
   a. Yes I would mind being tested
   b. You can go anywhere and waste money, there's no help.
   c. I will never be diagnosed HIV positive.
   d. None of the above.

E5. It is common to suspect that another person is HIV positive. How often are you tempted to do so?
   a. Never tempted.
   b. Sometimes tempted.
   c. Always tempted.
   d. Whenever someone of a certain age has been sick for a long time, has lost weight, etc. I get tempted.

E6. Would you work side by side with a person who had been diagnosed HIV positive?
   a. It depends on whether the person has started getting sick or not.
   b. I don't mind so long as we do not touch each other.
   c. No.
   d. Yes.
| F1.  | I would not mind touching HIV infected blood, so long as I don’t have a cut or an open wound. | AGREE | DISAGREE |
| F2.  | My company does provide condoms. | AGREE | DISAGREE |
| F3.  | My company does provide STD treatment. | AGREE | DISAGREE |
| F4.  | My company does provide HIV testing. | AGREE | DISAGREE |
| F5.  | My company has an HIV/AIDS policy | AGREE | DISAGREE |
| F6.  | Employees have a right to refuse to work with an HIV positive colleague | AGREE | DISAGREE |
| F8.  | The statistics on the number of HIV/AIDS infected people in the workplace should be communicated to staff | AGREE | DISAGREE |
| F9.  | E-mail was the best form of communicating the policy | AGREE | DISAGREE |
| F10. | I trust the information that my company sends out to staff members | AGREE | DISAGREE |
SECTION G

G1. In the past 6 months, the average number of people you have come into direct contact with an STD is between:
   a. 1-10
   b. 10-20
   c. 20 and more
   d. none

G2. Are you and your staff aware of the options available for STD (sexually transmitted disease) treatments?
   Yes No

G3. Do you discuss HIV/AIDS issues at work?
   Yes No

G4. Do you think that your company is serious about fighting HIV/AIDS?
   Yes No

G5. Should we have a support system that helps managers cope with specific HIV/AIDS issues?
   Yes No

G6. Do you trust that if you go for a test, the results will be confidential?
   Yes No

G8. Would you like to be more involved in future interventions?
   Yes No

G11. Are you aware of any HIV programs or interventions in your company?
   Yes No

G12. Do you think that management training program equips you to better handle staff that may be HIV positive?
   Yes No

G14. Would you feel comfortable to disclose your HIV status to your manager?
   Yes No

G15. Do you believe that your staff members would feel comfortable to disclose their HIV status to you as a manager?
   Yes No

G16. Are you aware of any counseling services that your company offers for staff who may be HIV positive?
   Yes No

G17. The risk of HIV transmission within most workplaces is minimal. However should occupational accidents involving bodily fluids may occur, would you know what to do?
   Yes No

G18. Are people that you work with "high risk" in contracting the HIV virus
   Yes No
G19. Should the company be investing so much of money on HIV/AIDS programmes?  
Yes  No

G22. Can you trust that your company won't discriminate against you if you were HIV positive?  
Yes  No

G23. If you had an HIV positive subordinate/colleague, do you feel you have the skills to handle the situation?  
Yes  No

G28. Have you experienced any AIDS related deaths in your organisation?  
Yes  No

G31. Should there be an education programme on the use of condoms?  
Yes  No

G33. Do you think that staff needs to be trained at negotiating the use of condoms?  
Yes  No

G35. Does the company protect the rights of the HIV negative staff?  
Yes  No

G36. Should the company screen for HIV during recruitment in order to reduce HIV/AIDS impact?  
Yes  No

G37. Should the company subsidise drugs to extend productive life of an HIV positive employee?  
Yes  No

G40. Has the company's interventions in the past few months made a difference in the awareness of HIV/AIDS?  
Yes  No

G41. Does the company have a right screen for HIV during promotion or employee development in order to avoid investing in a dying employee?  
Yes  No
SECTION H

H1. If I choose to be tested at work, the results will be communicated to my company?
    Agree  Disagree

H2. You can get HIV from sharing cups and utensils or using the same toilet seats?
    Agree  Disagree

H3. When employees request to be tested for AIDS, the company commits itself to confidentiality of medical information
    Agree  Disagree

H4. The most effective way of preventing the spread of AIDS is via pro-active measures such as educational and awareness programs.
    Agree  Disagree

H5. Employees will be required to undergo HIV testing as a condition of the selection procedure for employment or job advancement.
    Agree  Disagree

H6. Employees with AIDS should be treated on the same basis as those with other life-threatening conditions. The criterion for continuing to work shall be based on fitness for the job/capacity to comply with the job requirements.
    Agree  Disagree

H7. Refusal to work with an HIV Positive Employee is acceptable.
    Agree  Disagree
Appendix D: Wilcoxon Two Sample Test Calculations

TESTING ANY SIGNIFICANT DIFFERENCE BETWEEN BEFORE AND AFTER SAMPLES.

The NPAR1Way Procedure

Wilcoxon Scores (Rank Sums) for Variable JOB GRADE
Classified by Question

<table>
<thead>
<tr>
<th>Question</th>
<th>No.</th>
<th>Sum of Scores</th>
<th>Expected Under HO</th>
<th>Std Deviation Under HO</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>81</td>
<td>6284.50</td>
<td>5913.0</td>
<td>244.502507</td>
<td>77.586420</td>
</tr>
<tr>
<td>1</td>
<td>64</td>
<td>4300.50</td>
<td>4672.0</td>
<td>244.502507</td>
<td>67.195313</td>
</tr>
</tbody>
</table>

Average Scores were used for ties.

Wilcoxon Two Sample Test

Statistic 4300.5000

Normal Approximation
Z -1.5194
One-Sided Pr < Z 0.0643
Two-Sided Pr > |Z| 0.1287

Approximation
One-Sided Pr < Z 0.0654
Two-Sided Pr > |Z| 0.1309

Kruskal-Wallis Test

Chi-Square 2.3086
DF 1
Pr > Chi-Square 0.1287
TESTING ANY SIGNIFICANT DIFFERENCE BETWEEN BEFORE AND AFTER SAMPLES.

The NPAR1Way Procedure

Wilcoxon Scores (Rank Sums) for Variable **AGE**
Classified by Question

<table>
<thead>
<tr>
<th>Question No.</th>
<th>Sum of Scores</th>
<th>Expected Under HO</th>
<th>Std Deviation Under HO</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>5510.50</td>
<td>5358.0</td>
<td>234.058458</td>
<td>72.506579</td>
</tr>
<tr>
<td>1</td>
<td>4359.50</td>
<td>4512.0</td>
<td>234.058458</td>
<td>68.117188</td>
</tr>
</tbody>
</table>

Average Scores were used for ties.

**Wilcoxon Two Sample Test**

Statistic: 4359.5000

Normal Approximation
- $Z$: -0.6515
- One-Sided $Pr < Z$: 0.2573
- Two-Sided $Pr > |Z|$: 0.5147

$t$ approximation
- One-Sided $Pr < Z$: 0.2579
- Two-Sided $Pr > |Z|$: 0.5158

**Kruskal-Wallis Test**

- Chi-Square: 0.4245
- DF: 1
- $Pr >$ Chi-Square: 0.5147
TESTING ANY SIGNIFICANT DIFFERENCE BETWEEN BEFORE AND AFTER SAMPLES.

The NPAR1Way Procedure

Wilcoxon Scores (Rank Sums) for Variable EDUCATION
Classified by Question

<table>
<thead>
<tr>
<th>Question</th>
<th>No.</th>
<th>Sum of Scores</th>
<th>Expected Under HO</th>
<th>Std Deviation Under HO</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
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<td>5355.50</td>
<td>6034.50</td>
<td>240.749797</td>
<td>66.117284</td>
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<tr>
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<td>5670.50</td>
<td>4991.50</td>
<td>240.749797</td>
<td>84.634328</td>
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</tbody>
</table>

Average Scores were used for ties.

Wilcoxon Two Sample Test

Statistic 5670.5000

Normal Approximation
Z 2.8204
One-Sided Pr < Z 0.0024
Two-Sided Pr > [Z] 0.0048

t approximation
One-Sided Pr < Z 0.0027
Two-Sided Pr > [Z] 0.0055

Kruskal-Wallis Test

Chi-Square 7.9544
DF 1
Pr > Chi-Square 0.0048
TESTING ANY SIGNIFICANT DIFFERENCE BETWEEN BEFORE AND AFTER SAMPLES.

The NPAR1Way Procedure

Wilcoxon Scores (Rank Sums) for Variable MARITAL STATUS
Classified by Question

<table>
<thead>
<tr>
<th>Question</th>
<th>No.</th>
<th>Sum of Scores</th>
<th>Expected Under HO</th>
<th>Std Deviation Under HO</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>80</td>
<td>5654.0</td>
<td>5600.0</td>
<td>200.485803</td>
<td>70.675000</td>
</tr>
<tr>
<td>1</td>
<td>59</td>
<td>4076.0</td>
<td>4130.0</td>
<td>200.485803</td>
<td>69.084746</td>
</tr>
</tbody>
</table>

Average Scores were used for ties.

Wilcoxon Two Sample Test

Statistic 4076.0000

Normal Approximation
Z -0.2693
One-Sided Pr < Z 0.3938
Two-Sided Pr > [Z] 0.7877

T approximation
One-Sided Pr < Z 0.3940
Two-Sided Pr > [Z] 0.7881

Kruskal-Wallis Test

Chi-Square 0.0725
DF 1
Pr > Chi-Square 0.7877
TESTING ANY SIGNIFICANT DIFFERENCE BETWEEN BEFORE AND AFTER SAMPLES.

The NPAR1Way Procedure

Wilcoxon Scores (Rank Sums) for Variable **RACE**
Classified by Question

<table>
<thead>
<tr>
<th>Question No.</th>
<th>Sum of Scores</th>
<th>Expected Under HO</th>
<th>Std Deviation Under HO</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>6085.50</td>
<td>5953.50</td>
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<td>75.129630</td>
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<td>4645.50</td>
<td>4777.50</td>
<td>208.511181</td>
<td>71.469231</td>
</tr>
</tbody>
</table>

Average Scores were used for ties.

**Wilcoxon Two Sample Test**

Statistic 4645.5000

Normal Approximation
Z -0.6331
One-Sided Pr < Z 0.2633
Two-Sided Pr > |Z| 0.5267

\[ t \text{ approximation} \]

One-Sided Pr < Z 0.2638
Two-Sided Pr > |Z| 0.5277

**Kruskal-Wallis Test**

Chi-Square 0.4008
DF 1
Pr > Chi-Square 0.5267