KNOWLEDGE AND UNDERSTANDING OF AN HIV/AIDS EDUCATION WORKSHOP IN A MULTINATIONAL ORGANISATION: AN EVALUATION OF THE AIDS CHAMPIONS WORKSHOP AT SHELL SOUTHERN AFRICA

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Submitted to the School of Management Studies, University of Cape Town as partial fulfillment for the degree of Master of Commerce; Organisational Psychology
16th April 2003
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ACKNOWLEDGEMENTS

I would like to thank Ms Anna-Louise at Shell (CHESS) Cape Town for enabling me to conduct this study. I also thank Mr. Sean O’Connor for allowing me access to the AIDS Champions program and for the support he rendered in the lead up to AIDS Champions workshop.

A two-year partial University Council scholarship from UCT enabled me to complete my studies, for this I am truly grateful.

A word of gratitude goes to Jeff Bagraim, Convener of the Masters program in the School of Management Studies, who listened patiently to all my gripes and groans through this process for his patience and tolerance. Suki Goodman of the School of Management Studies, for her moral support and assistance in the process of this thesis.

To these I owe a debt past telling:

Dr. Henry Mubanga Mulenga, my husband who withstood my sulks and many absent hours in the pursuit of academic success and (in the long run) did not mind. And for providing the technical and academic guidance patiently at all hours when required.

My children, Ida (Dida), Mukuka (Muk) and Chikumbutso (Kum), who encouraged me with loving words and deeds, well beyond their tender years.

Donald Britt MacLaughlin, who on numerous occasions listened, nodded and without criticism encouraged me to carry on. His role in my life and academic life defies any label yet invented.

My dear friend and colleague Cecilia Bermudez Horsten, for proof reading the thesis many times over, for the support, encouragement and hugs.

Karl and Maureen Cooton, for the much appreciated endless supply of articles on HIV/AIDS.

My dearest brothers Isaac, Alick, Phaka and Mabvuto, who over the years made my life so much easier with their understanding, unrelenting love and support.

Lastly but not the least, my own soul, which on a pittance survived to get this work done. Abale, chamwini samangila chinga!
Dedication

This thesis is dedicated my late father Charles Harrison Nkhungulu
and My mother Grace Mwale Nkhungulu.
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ABSTRACT

HIV/AIDS poses a global medical epidemic threatening social and economic development in most developing countries. Sub-Saharan Africa currently bears the brunt of the epidemic with close to 30 million people infected with the disease. South Africa has the second fastest growing infection rates in the world as at December 2002. Currently no known cure for the disease exists. Interventions involve education and awareness programs and multiple therapy medical treatment. The aim of this thesis is to evaluate the perceptions and knowledge of participants at the Shell AIDS Champions workshop. The research used a triangulatory approach utilizing pre-test and post-test survey questionnaires, group discussions, participant observation, and semi-structured interviews. 22 participants from Shell Southern Africa and Easigas attended the workshop. Statistical techniques were applied to the questionnaire findings. Content analysis was used to analyse the qualitative data. Findings from the evaluation indicate that participant perceptions show agreement with current Shell policy on HIV/AIDS. The findings show that the major impact of the workshop was observed on the knowledge-based section of the evaluation. The results of the evaluation confirm that participant knowledge was increased through participation in the AIDS Champions workshop.
CHAPTER ONE

MOTIVATION AND LITERATURE REVIEW

1. INTRODUCTION
This study aims to evaluate the knowledge and understanding about HIV/AIDS policy at Shell Southern Africa. This evaluation is of participants at the Shell AIDS Champions workshop conducted at Noordhoek, Cape Town during the period 5th to the 6th November 2002. The evaluation involved the structure, the process and the short-term outcomes of the AIDS Champions workshop. The following are identified as the main objectives:

- To document the AIDS Champions program
- To evaluate the understanding and knowledge of the AIDS Champions workshop participants.
- To establish that information sharing can change participant knowledge and understanding on HIV/AIDS issues, using the coded data obtained from pre-test and post-test questionnaires, interviews, focus group discussions and participant observation
- To test the hypothesis that there would be no difference between the two data sets from the pre-test and post-test questionnaires.
- To provide feedback to program designers of participant experiences as this might be useful for future program development

In order to meet the above stated objectives, this thesis provides a literature review on HIV/AIDS discussing global, regional and South African prevalence of the epidemic.

It was considered important to find out the knowledge and understanding of the workshop participants to enable future development and modification of the AIDS Champions workshop should the need arise.

1.1 MOTIVATION
HIV/AIDS brings with it a range of significant and challenging situations affecting almost all aspects of an individual. Considerable research (Williams, Campbell & MacPhail 1999; Whiteside & FitzSimons, 1992; Whiteside, 1999; Whiteside & Sunter, 2000; UNAIDS, 1999; (Loewenson & Whiteside, 1998; Whiteside & FitzSimons 1992), has been conducted in the area of HIV/AIDS, which demonstrates the economic, social, psychological impact the
epidemic has on society. Findings from such studies have alerted researchers, government, business organisations and society in general to the significance of interventions through HIV/AIDS awareness and prevention programs (Loewenson & Whiteside, 1998; Whiteside & FitzSimons 1992).

The increasing recognition of the devastating effect HIV/AIDS has on society has resulted in the need for effective interventions. However, as with all forms of intervention, the recurring question of cost effectiveness and efficacy of interventions and services provided arises in order to justify the existence of the interventions (Tessmer, 1998). What has become important in the fight against HIV/AIDS is determining whether the intervention is efficient and effective. While social science methods provide tools with which to conduct research in this area, the rise of evaluation and specifically program evaluation offers an opportunity to focus on the efficacy of such programs (Tessmer, 1998; Rossi et al, 1999). Program Evaluation offers an opportunity to consider a range of factors that impact on the functioning of intervention programs.

Studies (Coyle, Boruch & Turner, 1991) have been conducted focusing specifically on the evaluation of interventions within communities and school programs. In the case of HIV/AIDS interventions, evaluation has proved to be a challenging endeavor due to the complexity of the disease and the personal nature of the illness. This has resulted in the fact that progress in evaluating HIV/AIDS programs for the workplace has lagged behind compared to community based program evaluations initiated by Non Governmental Organisations (NGO). One of the reasons for this is that the evaluation of HIV/AIDS interventions is complex and inundated with practical, ethical and methodological problems, which are not always present in other forms of program evaluation (Coyle, et al., 1991).

1.2 Structure of the Research Study

In order to obtain related data on previous studies a comprehensive review of literature on HIV/AIDS and the implications of the epidemic on society and the workplace is given in this chapter. This review provides the reader with prevalence rates of the epidemic at global, regional and Sub-Saharan region and South African level. The chapter highlights the impact of HIV/AIDS on the different sectors of society and concludes with the notion that HIV/AIDS awareness and education will continue to be a priority for all role players in the prevention
and the fight against HIV/AIDS (Clarke & Strachan, 2000; Cchen & Trussell, 1996), and in the management of the epidemic.

In order to establish the context of the research evaluation, a detailed description of the AIDS Champion workshop is discussed in chapter two. The discussion offers activities of the workshop and impact theory explanation of the expected outcomes of the workshop.

An overview of the methods and research techniques utilised in the collection of data for the thesis is discussed in chapter three. This chapter outlines the reason for the choice of the methods of data collection.

Chapter four pertains to the short-term outcomes of the workshop and an analysis of the results. The outcomes were achieved through the use of a pre-test and post-intervention questionnaire as a measure of participant knowledge and understanding of HIV/AIDS policy and strategy at Shell and the workshop. The chapter offers participants' understanding and knowledge of the organisational policy and the AIDS Champions workshop content. A discussion of the findings is given in this chapter.

Chapter five offers a summary and analysis of the concepts obtained from the research process. The chapter concludes with a brief discussion of the prominent themes arising from the above-mentioned chapters. Recommendations drawn from the research findings on the future development of the workshop are presented.

1.3 LITERATURE REVIEW
In order to set the context for the study, this section offers a review of the literature relevant in the field of HIV/AIDS and the impact the epidemic has on society. A definition of HIV/AIDS is offered; this definition is used in the thesis when reference is made to HIV/AIDS. The distribution, spread and impact of the epidemic is briefly discussed with a Sub-Sahara African perspective and a final focus on South Africa. Solutions that have been implemented to tackle the epidemic are discussed including the South African governments' regulation on HIV/AIDS in the workplace.
1.3.1 Definition of HIV/AIDS

Although considered to be in its infancy, HIV/AIDS is now one of the major epidemics in the world and has become one of the world’s leading killer diseases in the modern era (World Bank Report, 1999; Smetherham, 2001). The disease poses a threat to all aspects of society in terms of the impact on different organisations and structures (Whiteside & Sunter 2000).

Acquired Immune Deficiency Syndrome (AIDS) is a term used to describe the end stage of a viral disease caused by the Human Immunodeficiency Virus (HIV). Although primarily transmitted through sexual activity (Osmond 1990 Bowser & Sieber 1993), this disease is also transmitted through blood transfusion of contaminated blood and blood products (Donegan 1990), and through contaminated syringes and injection needles (Chaisson, 1990). The disease can also be transmitted through organ and semen donation and from an HIV infected mother to her child (Osmond 1990 Bowser & Sieber 1993).

According to Bowser & Sieber, (1993), HIV defies the western sense of physical reality because people carrying the virus cannot initially be physically distinguished from people not infected. This means that entire social networks could be exposed to the virus before manifestation of the disease becomes evident. This multi-layer latency exploits the human desire to believe that our peers and we are not vulnerable to the virus (Bowser & Sieber 1993).

The AIDS epidemic imposes pressure on society across the world, to not only acknowledge the existence of the disease, but also demands collective accountability by individuals, industry and government towards combined efforts to tackle the epidemic. HIV/AIDS is currently the fastest growing epidemic in the world and the Sub-Saharan African region in particular, affecting all segments of the population and society thereby rendering the region very vulnerable to many social, economic and moral problems associated with the pandemic (Whiteside & Sunter 2000, UNAIDS Report 2001).

Having offered the definition of HIV and AIDS, the following section provides the prevalence of HIV/AIDS in the world.
1.3.2 Global distribution and spread of HIV/AIDS

Currently 42 million people are living with HIV/AIDS in the world (Smetherham, 2001). The current incidence of HIV/AIDS suggests a runaway epidemic as infection rates continue to rise in some parts of the world. Figure 1 shows the global distribution of HIV/AIDS according to the UNAIDS Report (2002).

Figure 1.1 Global distributions of HIV/AIDS (UNAIDS 2002)

Regional Prevalence of HIV/AIDS
1. North America 980,000
2. Western Europe 570,000
3. Eastern Europe and central Asia 1.2 million
4. North Africa and Middle East 550,000
5. East Asia and Pacific 1.2 million
6. South and South-east Asia 6 million
7. Latin America 1.5 million
8. Sub-Saharan Africa (SSA) 29.4 million
9. Australia and New Zealand 15,000
10. Caribbean 440,000

According to the UNAIDS Report (2001) infection rates are growing faster in Eastern Europe (1 million in 2001), with countries like Russia beginning to see higher rates of incidence with 75 000 infections recorded in 2001. In South East Asia, new infections are estimated at 800

In 2002, 42 million people in the world were estimated to be living with HIV/AIDS (UNAIDS Report 2002), one third of which are children and youth between the age of 10 and 24 (Jackson, Kerkhoven, Lindsey, Mutangadura & Nhara, 2000). Jackson et al also indicate that 16 000 new infections occur each day in the Sub-Saharan region. This data is supported by projections of the spread of the epidemic made by Whiteside & Sunter, (2000) and the World Bank Report, (1999).

The spread of the HIV/AIDS pandemic has exceeded the worst projections by far and the disease is still an emerging epidemic (World Bank Report, 1999). Recent evidence suggests that despite concentrated efforts at education and awareness, the disease is spreading at a rate that puts Sub-Saharan Africa and South Africa in particular, amongst countries with the fastest growing rates of infection in the world (World Health Organisation Report, 2000; Whiteside & Fitzsimmons, 1992; Jackson et al, 2000).

1.4 THE PREVALENCE OF HIV/AIDS IN SUB-SAHARAN AFRICA

The Sub-Saharan region has 70% of the total number of people living with HIV/AIDS in the world (UNAIDS Report 2002). This places upon the region a heavy burden in the prevention and management of the disease. The escalating incidence of HIV/AIDS is attributed to ignorance about the disease and lack of skills to manage the epidemic (Smetherham & SAPA 2001).

The estimated number of children under 15 years newly infected with HIV during 2001 is 87.5% for Sub-Saharan Africa. Statistics for Botswana, Namibia, Zambia and Zimbabwe indicate that between 20% and 26% of the population aged between 15 and 49 are infected with the HIV virus. In twelve other Sub Saharan countries, including Ethiopia, Kenya, Mozambique, South Africa and Tanzania, between 9% and 20% of adults are infected (Whiteside & Sunter, 2000). This means that the incidence of HIV/AIDS will increase with the development of the children into sexually active youth and adults therefore creating further strain on the social structures that need to support the incidence of HIV/AIDS in society.
According to the UNAIDS Report (2001), in countries such as Botswana, Swaziland & parts of South Africa more than 30% of pregnant women are HIV-positive. In Uganda, HIV prevalence among pregnant women in urban areas has fallen for 8 years in a row from 30% in 1992 to 11% in 2000 (UNAIDS 2001). This figure can be used as a barometer for the incidence of HIV/AIDS in the general population, considering the fact that the pregnant women will have at least one sexual partner. Chronic underreporting and under-diagnosis especially in developing countries means that the actual number of HIV/AIDS cases is estimated to be higher than the recorded incidence.

The Sub-Saharan region is at particular risk as the region is currently predicted to lose 20% of its Gross Domestic Product (GDP) by 2020 due to HIV/AIDS (UNAIDS Report, 2001).

1.4.1 The impact of HIV/AIDS on the Sub-Saharan Region

The following discussion refers to the Sub-Saharan region and the impact the pandemic is having in this region. Studies of the devastating impact of the epidemic on the region (Loewenson & Whiteside, 1998; Whiteside & FitzSimons 1992; (Whiteside & Sunter, 2000; Jackson et. al., 2000; Clarke & Strachan, 2000), indicate that the region has been severely affected by the disease. The social impacts discussed in this section include demographic issues, healthcare, education and the escalating number of orphans from AIDS related deaths.

Current literature on the impact of the epidemic on development emphasises the effect directly linked to life expectancy of the affected populations (Whiteside & FitzSimons, 1992; Whiteside, 1999; Jackson et al, 2000; Whiteside & Sunter, 2000; UNAIDS, 1999). Other areas of society directly affected on by the epidemic include industry, the economy and agriculture. Child mortality rates and family structures have also been severely affected by the epidemic (Whiteside & Sunter, 2000; Jackson et. al., 2000; Clarke & Strachan, 2000).

Although it is difficult to accurately project the economic impact of HIV/AIDS in industry, studies conducted have shown that the epidemic has an overwhelming impact on industry. Clarke & Strachan (2000); Forsythe, Roberts, Wangombe & Gakuru, (2000); Aventin and Huard, (2000); Norse, (2000); Whiteside, (2000); Rau, Forsythe & Okeyo, (2000), demonstrate the effects of the disease on different sectors in the Sub-Saharan region and
East Africa. The impact of HIV/AIDS has been divided into two broad categories; economic and social.

1.4.2. Social Impacts
The following section includes a discussion on demographic consequences, health care, education and the rising number of orphans in the region.

1.4.2.1 Demographic Consequences
According to the CIIR Comment (2000), the AIDS epidemic creates a dramatic increase in mortality rates among men and women; the mortality rate for children under the age of five is projected to rise steeply, due to their vulnerability to infections and opportunistic diseases. The rising child mortality and the high incidence of orphans in the affected populations are of great concern as the consequences have wider repercussions for society. (Whiteside & FitzSimons, 1992; Whiteside, 1999; Jackson et al., 2000; Whiteside & Sunter, 2000; UNAIDS 1999).

The report further suggests that life expectancy will fall by 20 years or more in worst affected countries. Significant demographic changes are expected in Botswana, Malawi, Zambia, Zimbabwe and South Africa (UNAIDS 2001) due to the HIV/AIDS epidemic. In Namibia, for example, life expectancy is estimated to fall 31 years by 2010 from 70 to 39 years (CIIR Comment, 2000), in Zambia life expectancy had dropped to 37 years (Kabalata, 2003). In certain areas of South Africa, life expectancy is projected to drop to 40 years in 6 years due to AIDS related deaths (Schroeder 2003).

More people are dying of HIV/AIDS in their reproductive years, thus reducing fertility rates (Loewenson & Whiteside 1998). The increased number of deaths is expected to slow the rate of population growth and alter the structure of the population in some of the worst affected countries. The number of orphaned children will increase and the burden will fall on extended family to meet the needs of these children (Schroeder 2003). The projected number of orphans is projected to exceed 5 million for the Sub-Saharan Africa region (Loewenson & Whiteside, 1998; CIIR Report, 2000).

HIV/AIDS poses a developmental crisis as the disease impacts directly on life expectancy and therefore affects both social and economic developmental aspects of societies widely
exposed to the epidemic (Clarke & Strachan, 2000). Long term impact on life expectancy of HIV infected people could result in a decrease in annual population growth in Sub-Saharan Africa by 2010 (Decosas & Adrien, 1999). This could mean a reduction in the productive population of this region at a critical time when development agendas in the region require expertise and skilled workforce.

1.4.2.2 Healthcare
Maintaining a healthy population is crucial to the development of a productive workforce, which in turn is essential for economic diversity and growth. Increased healthcare costs stretch health care systems that have to deal with the growing number of HIV/AIDS patients and the loss of healthy productive personnel due to illness and death (UNAIDS, 2001). In certain SSA countries e.g. Zambia and Zimbabwe, HIV-infected patients occupied up to 80% of urban hospital beds (UNAIDS 2001). The HIV/AIDS epidemic affects any development goals for health such as reduced infant child and maternal mortality, or mortality from other diseases such as malaria and tuberculosis (World Bank Report, 1999). This means that governments are charged with the task of providing health care services to cater for a higher number of patients. This has over stretched most health care facilities in the region; these facilities were already incapacitated due to economic and political instability in the region (Isata, 2000).

At the household level, it is anticipated that increased medical care and related costs will impact on the earning and spending patterns of families. If the infected person is an adult the production and income of the household will be reduced (Loewenson & Whiteside, 1996; Whiteside & FitzSimons, 1992). The effect on the family of losing a member of the family due to HIV/AIDS can lead to the loss of a breadwinner or loss of a care-giver. This can result in emotional, economic and social problems for the orphans (Loewenson & Whiteside, 1998).

1.4.2.3 Education
The human cost of HIV/AIDS negates progress made in education in the SSA region. Scarce resources spent on skills development are lost when students and teachers die of AIDS (World Bank Report, 1999). In Zambia and Malawi more than 30% of teachers are reported to be infected with HIV/AIDS (World Bank Report, 1999). In South Africa teacher deaths rocketed by more than 40% in 2000 and 2001 (Govender, 2001). The resulting
illness and deaths from the high prevalence of HIV/AIDS amongst teachers will also impact on the learners in the countries worst affected due to staff shortages.

Another trend in many countries in Southern Africa is that teachers are deployed far from their homes, leading to some teachers engaging in commercial sex therefore greater exposure to HIV infection which could then result in loss of teachers to AIDS. HIV/AIDS also reduces school attendance as students are withdrawn from school to care for sick relatives and when families can no longer afford school fees and uniforms (CIIR Comment, 2000).

1.4.2.4 Orphans

The high incidence of orphans in Sub-Saharan Africa poses a threat to the future social structures of the regions (UNAIDS Report, 2001). The escalating number of orphans has led to child headed households. These households are creating a new social system with inherent problems not yet exposed (Kinghorn 2000; Battersby, 2002). Some orphans end up on the streets where survival strategies expose them to high risks of contracting HIV (World Bank Report 1999). The end result of most orphans is under nourishment, poor or no healthcare, lack of education opportunities therefore creating a vicious cycle of poverty (Whiteside & Sunter, 2000, CIIR Comment 2000).

Although documentation citing the psychological effects of HIV/AIDS on society has been difficult to locate, it can be suggested that there is a huge psychological impact on both the individual and the communities that have to deal with the effects of HIV/AIDS (Decosas, 1999; Whiteside 2000).

1.4.3 Economic Impact

This section will discuss the economic impact of HIV/AIDS on the Sub-Saharan Region (SSR) focusing on the private sector and agriculture. Although literature relating to the impact of HIV/AIDS on the economies of Sub-Saharan Africa is not fully developed, studies conducted at individual business level in certain countries (Forsythe & Roberts, Wangombe & Gakuru 2000, Aventin and Huard, 2000, Norse 2000, Whiteside 2000, Rau, Forsythe & Okeyo 2000), give useful insight into the impact of HIV/AIDS in the region. These studies also provide a basis for a more informed policy and legal response to HIV/AIDS in the workplace that would address both economic and broader social issues.
Companies have reported increased mortality, lost time and longer periods of absenteeism (Aventin and Huard, 2000; Norse, 2000; Whiteside, 2000; Rau, Forsythe & Okeyo, 2000). These labour losses have a variable effect on productivity. Some company's costs were estimated at $2500 per worker per annum, the indication is that training costs would increase from $1 million in 1991 to $5 million in 2000 in order to replace labour lost to HIV/AIDS illness and death. Countries in the SADC region will need sustained investments in training to replace lost skills (Forsythe, et. al., 2000; CIIR Comment, 2000). According to Loewenson & Whiteside (1998), current spending will decrease as resources become scarce, and as public health systems attempt to devote more resources to the disease.

In Tanzania the labour force is estimated to shrink by 20% due to AIDS related illnesses (Loewenson & Whiteside 1998) and the mean age of workers to fall from 32% to 28%. This would result in a shift to younger and less experienced workers (Loewenson & Whiteside 1998). It is anticipated that a higher dependency ratio will develop between the working population and those being supported due to the decreasing number of young and middle aged adults (CIIR Comment, 2000).

Other impacts that have been identified include the increased costs to social security and benefit schemes, increases to medical aid schemes, increases to education and other social services, and threats to food security and safety nets (Loewenson & Whiteside, 1998). The threat to food security is particularly evident in rural areas where most communities are often exposed to other risk factors such as drought, famine and floods. The loss of human capital is expected to greatly affect production and the quality of life for decades to come, therefore planning for human resource needs is inevitable in the face of millions who will die prematurely (Whiteside, 1998; Webb, 1997; World Bank Report, 2000).

The projected impending death of up to 25% of adults in the SSA region is expected to affect national incomes in some countries, which will have a tremendous impact on national productivity and earnings (UNAIDS Report, 2000). Due to illness and death, labour productivity is likely to drop, the benefits of education will be lost and resources that would have been used for investments will be used for health care, orphan care and funerals (World Bank Report, 1999; Clarke & Strachan, 2000). As the number of 20-40 year olds decreases, the loss of human capital investment will affect society negatively, therefore
leading to a decrease in social and economic development in the Sub Saharan African region.

1.4.3.1 The Private Sector
The main effect of HIV/AIDS on industry is predicted to occur through increased labour costs and decreased availability of skilled labour (Decosas & Adrien, 1999). Recent studies Roberts & Rau, (1997) & UNAIDS, (1998), indicate that many Sub-Saharan Africa countries face the prospect of significant increases in staff costs arising from absenteeism due to illness and family bereavement, and increasing recruitment, training and staff welfare costs.

Barclays Bank of Zambia reports that life insurance payments rose from $44 000 to $157 000 during the period 1991 to 1992 due to concern over the consequences of HIV/AIDS. In South Africa, Zambia and Zimbabwe, absenteeism and fatigue on the job resulting from AIDS illness may be more costly than eventual deaths of employees (Robert 2000, in Clarke & Strachan, 2000). A study on the copper industry in Zambia (Green, 1988) found that 68% of HIV-positive men in the Copper belt were professionals in the copper industry. The high prevalence of HIV/AIDS on South African mines prompted the Chamber of Mines in South Africa to adopt a policy early in the 1980’s to treat HIV-positive workers no differently as long as health permitted them to work normally (Whiteside & FitzSimons, 1992).

Obvious impacts of HIV/AIDS on business include the loss of senior staff, spending more on training, health care, funerals, insurance and absenteeism (Bennett & Kobokaoare, 2000). Businesses will also be faced with customer markets shifting spending from goods and services to health and reduced markets as people die of AIDS (Bennett & Kobokaoare, 2000). The world economic forum Africa Competitiveness Report (ACR) shows that 40.7% of South African firms ranked as having a major or moderate impact on their health care costs (Bennett & Kobokaoare, 2000). The same percentage (40.7%) say AIDS related illnesses have led to time loss in productivity. 30.9% of firms say costs have been affected by work time loss due to employees attending funerals. 28.15% of firms say costs are affected in skills levels. 34% of firms say they have higher training costs. The ACR further reports that AIDS is severely eroding a relatively small base of skilled labour. The UNAIDS Report (2001) confirms the fact that HIV/AIDS is having a profound impact on many African economies, devastating the ranks of skilled workers (Smetherham & SAPA, 2001).
1.4.3.2 Agriculture

The HIV/AIDS epidemic has particularly serious implications for the rural sector. Studies show that rural occupations and farming systems are being affected by HIV/AIDS, although the impact can vary substantially between and within communities (Roseberry & Paul, 1998; Norse, 2000). The loss of agricultural knowledge and management skills due to AIDS can lead to a 61% drop in production for small-scale farmers (The Policy Project, 1999).

Studies of rural agriculture by Barnett & Blaikie, (1992); Gillespie, (1989); (Whiteside & FitzSimons, 1992; and Jackson et al., 2000), indicates that the loss of a productive adult results in a shift in cropping patterns for the remaining members. The impact of HIV/AIDS on rural communities is an added burden to other natural disasters that befall people in the Sub-Saharan Africa rural areas.

1.5 THE PREVALENCE OF HIV/AIDS IN SOUTH AFRICA

Current estimates of people living with HIV/AIDS suggest that 4.2 million of the South African population is infected (Whiteside & Sunter, 2000, UNAIDS Report, 2002).

Projections of the spread of the epidemic made in 1992 (Whiteside & FitzSimons, 1992) suggested that the disease would affect approximately 4 112 000 people in South Africa by the year 2000. The epidemic was projected to peak in 2005 at 6 410 000 amongst 30% of the adult South African population (Doyle, 1991). Current statistics on the epidemic show that the prevalence of the disease is estimated at 4 072 000 for 2001 projected to rise to 4 827 000 by 2003 representing 17.6% of the population (Whiteside & Sunter 2000, UNAIDS 2001, UNAIDS Report 2002). This represents a runaway epidemic and therefore requires a committed and dedicated effort targeting HIV/AIDS.

1.5.1 Impact of HIV/AIDS on the South African economy

South Africa is classified as one of the countries with the highest incidence of HIV infection; therefore the country is likely to experience the socio-economic impact of the epidemic similar to that of other Sub-Saharan countries. Several studies highlight the high incidence of HIV/AIDS and its impact on society in South Africa (Whiteside & Sunter, 2000; Evian, 2000; Whiteside & FitzSimons, 1992; CIIR Comment, 2000; Wilkins, 2000). This suggests that if the epidemic is not given significant and urgent attention, HIV/AIDS could severely
influence the economy of South Africa and have far reaching economic and social consequences for the Sub Saharan region.

Several studies have highlighted the impact of HIV/AIDS on industry in South Africa (Whiteside & Sunter, 2000; Jackson et al., 2000; UNAIDS Report, 1999; Whiteside, 1999). These studies highlight the increased labour costs arising from absenteeism and increased expenditures for medical and other benefits. Roberts & Rau (1997) and Decosas & Adrien (1999) cite the increased cost of recruitment and training due to decreased availability of skilled labour arising from illness and deaths from AIDS related illnesses. This rapid turnover of staff in firms will lead to organisational reluctance to train employees (Rau, Forsythe & Okeyo 2000, Whiteside 2000; Caelers 2002).

Decosas & Adrien (1999), suggest that the interaction between the epidemic and economic performance is complex in that the disease affects all aspects of an individual that is; economic, psychological, education, health and social. The loss of skilled workers impacts on the income of a community and national income of the country as it affects productivity and earnings (Whiteside, 2000).

1.5.2 The Formal Sector
The impact of HIV/AIDS in the formal sector depends on the type of workforce, organisations with a highly mobile workforce such as transport, building projects etc are likely to see large numbers of their employees contract HIV (CIIR Comment, 2000; Whiteside & Sunter, 2000). Sectors that employ skilled labour and which spend a lot of money on training (e.g. banking) are also considered more vulnerable (CIIR Comment, 2000; Whiteside & Sunter, 2000).

1.5.3 Mining
In South Africa mining is a diverse industry ranging from individual to major operations owned by national corporations. According to Evian (2000), HIV on South African mines has run virtually unchecked for the past few decades. The 1986 HIV infection rate amongst mineworkers was estimated at approximately 1: 3 500. In 1995 Gencor's medical personnel estimated that 20% of employees were HIV-positive and that 30 workers were dying of AIDS-related illness every month (Evian, 2000). The migrant labour system that has
sustained the mines for centuries is considered to contribute to the high incidence of HIV/AIDS on the mines in the Sub Saharan region.

According to the CIIR Comment (2000) knowledge about HIV/AIDS and how to prevent it, is typically very low amongst hostel dwellers that are the majority of mining employees.

South Africa is already battling with a skill's shortage and a brain drain; AIDS will exacerbate this and raise remuneration and replacement costs for companies. Due to HIV/AIDS, domestic savings may be squeezed to a point where foreign investment will be vital to plug the gap (Whiteside & Sunter, 2001). The escalating unemployment rates, the high incidence of crime and the impact of HIV on the population may not be appealing to outside investors (Evian 2000). This could result in low investment and little job creation opportunities therefore increasing the unemployment numbers and eventual poverty.

1.5.4 Impact of HIV/AIDS on an organisation

The effects of HIV/AIDS on business are reduced productivity, increased training costs, increased rate of absenteeism, strain on employee benefits and medical aid schemes, increased costs and loss of customers. Profits will be depressed by a number of factors thereby influencing the general well being of the organisation (Strude & Smart, 2000; Whiteside & Sunter, 2001; Evian, 2000). The end result could be a reduction of workforce to cover the increased costs.

Research studies (Strude & Smart, 2000; Whiteside & Sunter, 2001; Evian, 2000), shows that the alarming increase in HIV/AIDS infections can potentially lead to social decay and breakdown which is a threat on socio-economic development for many years to come (UNAIDS, 1996).

The loss of white-collar workers due to AIDS related illnesses might result in poor management of enterprises due to a shortage of skilled workforce, (Whiteside & FitzSimons, 1992). Over time, it will become difficult to recruit experienced managers, professionals and skilled technical staff (Mkhwanazi, 2002). Countries in SSA could once again find themselves increasingly reliant on foreign expertise and labour at managerial and professional levels (CIIR Comment, 2000).
Despite predictions of economic disaster, an ongoing scarcity of rigorous public-domain data about economic impacts of HIV/AIDS in the workplace prevails, (Forsythe et al., 2000; Aventin & Huard, 2000; Whiteside, 2000; Rau, Forsythe & Okeyo, 2000). The scarcity of data is attributed to the complexity and difficulty of obtaining prevalence rates amongst employees and organizations not willing to release personal data due to confidentiality laws.

1.6 CURRENT INTERVENTIONS FOR HIV/AIDS

In order to identify interventions that are currently being implemented, the following section will discuss managing HIV/AIDS in the workplace. The role of Employee Assistance Programs (EAP) in managing AIDS is offered, the different EAP models available is discussed. The section further discusses current government regulation on HIV/AIDS in the workplace. HIV/AIDS prevention and education/awareness programs are discussed.

The need for urgent action in formulating an intensified integrated contingency approach to HIV/AIDS epidemic has been determined as monumental (World Bank Report 2000). Despite the increasing crisis, many millions are not yet infected, therefore inaction at present could result in many more dying prematurely in the future.

Due to their nature and capacity, governments across the continent have a limited ability to deal with the consequences of the epidemic. Therefore other stakeholders such as the private sector, NGOs and society in general need to find more effective responses to compliment government efforts. Currently all countries are searching for seeds of a successful intervention (Clarke & Strachan, 2000). Most business organisations have realised that the emphasis in dealing with AIDS should be prevention and management rather than ignorance and exclusion (Whiteside & Sunter, 2001; Evian 2000).

1.6.1 Managing HIV/AIDS in the workplace

In many workplaces there have been concerted efforts to provide HIV prevention programs, leaflets, posters, videos, educational theatre, awareness events, condom provision, STD care and education have all been made available to employees (Evian, 2000).

In South Africa, several organisations realising the need to intervene in dealing with HIV/AIDS have initiated strategies in training, education and some the provision of medical
benefits to employees (Shevel, 2002). Some of these strategies are extended to community levels in recognition of the all-encompassing nature of the disease (Shevel, 2002). Literature on evaluation of HIV/AIDS programs implemented in industry has proven hard to locate, thus the need for program evaluation to be highlighted to generate data that can be used to formulate policy and strategies to tackle the epidemic is needed.

1.6.1.1 The Role of Employee Assistance Programs (EAP) in managing HIV/AIDS

The enormity of the challenge of managing HIV/AIDS in the workplace has compelled organisations to consider programmes and ways of dealing with the epidemic. Employee Assistance Programmes (EAP) usually an aspect of the Human Relations Department that can be effectively used to help employees with issues related to HIV/AIDS (Stoter, 1997; Maiden, 1992) and other matters that affect employee well being.

The EAP tenet argues that employees' job performance is decreased by the personal troubles and psychological pain that affect workers, therefore such employees should be helped by their employer to either secure treatment or other assistance (Kurzman & Akabas, 1993; Trice & Beyer, 1993). The EAP in its central concern with the welfare of workers can be an effective tool in the management of issues related to HIV/AIDS. The implementation of an HIV/AIDS programme through an EAP will depend on the culture of the organisation and ideologies in such an organisation (Maiden, 1992; Trice & Beyer, 1993).

EAP's in South Africa face cultural and ethical issues due to social and economic conditions created by apartheid (Maiden 1992). The population lacks homogeneity between both white and black groups, this means employees will seek help which is consistent with their cultural and ethical beliefs (Maiden, 1992). According to Campbell (1997), it is critical for HIV/AIDS programs to incorporate local knowledge and beliefs if they are to be effective. This is considered important as individuals engage in internal debates between new information and previous information about the topic. With HIV/AIDS programs this becomes critical as they aim to change peoples behaviour and as such should be informed by the understanding of the way in which behaviours are shaped by socially negotiated identities.

For an EAP to be effective and active, the top management and employees through consultation with worker representative bodies should support it. A "management only"
approach to EAP’s may be perceived as a management control system (Stoter, 1997; Maiden, 1992).

1.6.1.2 Four Models of EAP’s
Provision of EAP’s services can be implemented in a number of ways. The first model referred to as the external model, the organisation can contract a vendor to provide EAP staff and service to their employees, thereby outsourcing the programme to an outside consultant (Maiden 1999). This model has the ability to heighten voluntary utilisation because of the perceived increase of confidentiality, and it is considered a more cost and quality efficient approach to human needs management. This model can reduce the liability on the organisation especially if the EAP has incorporated behavioural health care programs (Maiden 1992).

The second model referred to as the internal model involves EAP practitioners (profitable and non-profitable) employed by the company to provide services (Maiden 1999). This form of EAP addresses more workplace issues and forges close relationships with shop stewards and line management than the external EAP provider.

The third model involves EAP co-ordinators who are trained as first time assessors and referral managers. Professional EAP resources available in the environment (Maiden 1992) provide counselling and assistance.

The final model is a combination of the above, where an organisation combines elements of the different models to suit organisational needs (Maiden 1992). EAP’s are directed towards coping with workplace changes in order to help employees adjust to the various issues that arise in the current workplace. Such EAP models are currently utilised in the management of HIV/AIDS in most workplaces and are providing an opportunity for organisations to be able to cope with the escalating incidence of HIV/AIDS in the workplace.

The implementation of any of the above models to address HIV/AIDS need to include program evaluation in order to have established mechanisms to monitor the effectiveness of the implementation process and the impact of the programs (Rossi et al., 1999; Tessmer, 1998).
1.6.2 Government Regulation on HIV/AIDS in the Workplace

Government regulation through the constitution, the Labor Relations Act (LRA) (1995), The Employment Equity Act (EEA) (1998), The Occupational Health & Safety Act (OHSA) (1993), The Basic conditions of Employment Act (BCEA) (1997) obliges employees to provide a safe working environment (Bendix, 2001; Du Toit, Woolfrey, Murphy, Godfrey, Bosch & Christie, 2000; Finemore, 1997). Safety in practical terms can also refer to the transmission of HIV/AIDS through accidents or injuries. Employers need to be sensitive in terms of the different legislation to avoid expensive litigation from aggrieved employees. In relation to HIV/AIDS it is an employer's duty to ensure that steps are taken to assess the risk of occupational HIV infection (Anderson van Wyk 1999). This duty will involve staff training on safety steps, infection control procedures and provision of first aid equipment to deal with any accidents or injuries.

If HIV/AIDS is going to be dealt with effectively, employers will need to be more sensitive to the possible ramifications of their business policy or practice (Bendix, 2001; Du Toit et al., 2000). The different laws provide organisations with avenues to address the epidemic in the workplace, but do not offer implementation or follow up procedures to assess how organizations are complying with legislation (Anderson van Wyk, 1999). Program evaluation of HIV/AIDS programs would fulfill the role of assessing both the efficiency of the program and compliance with government's legal requirements.

1.6.3 HIV/AIDS Prevention

There is an urgent need to examine all aspects of the HIV/AIDS epidemic by drawing up control plans, and monitoring how effective these control plans are. The success of prevention programs should go hand in hand with economic development. (Whiteside & FitzSimons, 1992).

The advantages of social marketing of condoms have been considered successful in countries such as Uganda, Senegal and Australia (Whiteside & Sunter, 2000; Evian, 2000). Advances in medical science, for example, research in Tanzania estimate that early, efficient and syndromic treatment of sexually transmitted diseases can reduce HIV infection rates in a target community (Evian 2000).
Prevention measures dealing with HIV/AIDS can be either pharmaceutical drugs or education. Drugs are considered a reactive form of prevention whereas education is a proactive measure (Evian 2000). In the implementation of education and awareness programs, program evaluation is critical to ensure assessment and monitoring of implementation process and impact of such programs. The current provision by some governments in the Sub Saharan region of ART and HAART to infected people will require monitoring and evaluation programs to assess what impact these programs have on both the physical and emotional well being of the people obtaining treatment. For example, Zambia has reported an extremely poor uptake of ART programs in the country (Mukonka 2003).

1.6.3.1 HIV/AIDS Education and Awareness Programs

Due to the devastating effect the disease has on society, various educational and awareness programs have been implemented in an effort to educate the population and to help manage the spread of the disease (UNAIDS, 2001). Various HIV/AIDS education and awareness programs have been implemented in South Africa (Lovelife, Soul City, Scamto). Such programs have utilised a broad spectrum of media resources e.g. television, newspapers, radio and posters.

Current successes in dealing with the HIV/AIDS epidemic are recorded in media efforts informing the public about the disease and what can be done to avoid infection (Whiteside & Sunter, 2001; Evian, 2000; Bowser & Sieber, 1993). To prevent HIV infections before the epidemic becomes evident within a social group is an extraordinary goal. This challenge requires changing attitudes and behaviour towards abstinence, safe sex and needle sharing before an immediate or apparent reason to do so (Bowser & Sieber, 1993). In the case of HIV/AIDS, where manifestation of the disease can take several years, the challenge becomes even greater.

The UNAIDS report (1998), provides evidence which suggests that prevention is a cheaper option compared to the costs of medical care provision for someone living with HIV/AIDS. A Comprehensive prevention programme was estimated at US$15 per employee annually in Kenya (UNAIDS, 1998). The cost for medical and other benefits was at the same time estimated to rise to approximately US$56 per employee by 2005 (Strode & Smart, 2000).
The cost of inaction far outweighs the cost of action to help control the spread of the disease.

Other studies (Allen et al., 1992; Kmaramayake & Watts, 1999; Laga et al., 1994; Cohen & Trussell, 1996) show that specific interventions using Voluntary Counselling and Testing (VCT), condom social marketing, peer education and treatment of sexually transmitted diseases can change behaviours and reduce the risk of HIV infection. In Senegal, infection rates are reported to be dropping because of intensive HIV/AIDS awareness and education efforts (Clarke & Strachan, 2000, UNAIDS 2001). Recent studies in Zambia indicate urban men and women are reporting consistent use of condoms, fewer partners and less sexual activity, this is suggested to come about due to extensive awareness and education HIV/AIDS campaigns in that country (Clarke & Strachan, 2000).

Certain countries such as Australia, Senegal and Uganda, have shown a negative growth of HIV/AIDS, which has been linked to implemented education programs that are changing the behaviour patterns of the population (UNAIDS, 2000). However, the issue of evaluation of HIV/AIDS education programs remains a neglected aspect of HIV/AIDS research and discourse and as a result, not much literature directly linked to evaluation of HIV/AIDS programs exists. Workplace programs are particularly neglected due to the complexity of the HIV/AIDS epidemic and the impact this has on industry (Coyle, et al., 1991).

The lack of HIV/AIDS evaluation research indicates that studies evaluating HIV/AIDS programs need to be highlighted in order to measure aspects of the educational campaigns to make such programs compatible with the ever-changing environmental factors that impact on knowledge of the epidemic.

The need for program evaluation extends beyond the scope of academic interest and can be linked to social, economic and moral demands for effective prevention and awareness mechanisms and the urgent need to reduce the escalating incidence of the HIV epidemic. Until a vaccine is developed, successful prevention efforts are all that stand between society and a potentially devastating epidemic (Thom, 2002). Although a multitude of drugs do exist that extend the lives of people with HIV, in Sub-Saharan Africa and South Africa most of these drugs are not available due to the exorbitant cost, which is beyond the means of the majority. (Cullinan, 2002). More recently the South African government has implemented
free ART treatment for all those at critical levels of the epidemic. Further research to monitor the uptake of free ART is going to become critical to improvements in the delivery of the drugs.

Early educational initiatives towards HIV/AIDS were broadly reactive, hasty responses to challenges posed by HIV/AIDS (Aggleton, Hart & Davies 1989). Currently there is a need to have proactive educational programmes that are more systematically planned, implemented and evaluated. In order to have such programs it is important to learn from the strengths and weaknesses of earlier educational endeavours. Program strengths and weaknesses can be obtained from evaluation of the implemented HIV/AIDS programs.

It has become important that educational programmes be located within a holistic framework of health education and that a clear distinction should be made between the content of the education intervention and the goals and the means by which this is achieved (Coyle et. al., 1991). These frameworks will enable critical evaluation of educational programmes to assess the efficacy of the program and for future development (Coyle et. al., 1991).

The record of HIV/AIDS programs conducted in the South African workplace is not well documented, however, it seems that the most effective programs include comprehensive prevention interventions, which are supported by a set of appropriate HIV/AIDS policies. (Robert, 2000 in Clarke & Strachan, 2000).

1.7 Summary
This chapter provided the objectives of the thesis and the motivation for the research study. A definition of HIV and AIDS is offered, including the global distribution and spread of the disease. A literature review on the prevalence and impact of HIV/AIDS in the Sub-Saharan African region and South Africa, which highlights the relevance of this program evaluation within the context of HIV/AIDS is given. The impacts of HIV/AIDS on different sectors of society have been given. A system model of the Southern African AIDS epidemic is given in figure 1.2, showing the far-reaching impact that the disease has on society. Current interventions in tackling the epidemic are discussed. The chapter concludes with a discussion of HIV/AIDS education and awareness programs. The next chapter will focus on a description of the AIDS Champions workshop, a Shell initiative on the management of HIV/AIDS in the workplace. The need to evaluate HIV/AIDS programs was discussed and
the role of evaluation in assessing the implementation and impact of such programs was highlighted.
The Autonomy of Disease - A systems model of the Southern African AIDS epidemic
CHAPTER TWO

SHELL AIDS CHAMPIONS PROGRAM DESCRIPTION

2. Introduction

This chapter offers a description of the Shell AIDS Champions program. The chapter describes the objectives of the program, what problems the program aims to address and the role of the AIDS Champion at Shell Southern Africa. A discussion of the implementation and delivery of the AIDS Champions workshop is offered and impact theory is discussed.

This program description is for the AIDS Champions workshop, which was conducted by Shell Southern Africa in November 2002, and was coordinated by Mr. Sean O'Connor for Shoestring Productions. The program description is for the purposes of a research study evaluation to assess the effectiveness of the workshop in providing knowledge to participants and recommendations for improvement on implementation where necessary. The workshop offered discussions on Shell policy, medical, counselling, legal and support services related to HIV/AIDS in the workplace. The role of the AIDS Champion was identified and clarified.

2.1 Overview of the Nature of the Program

Shell as an employer offers various programs and projects that are targeted at addressing the HIV/AIDS epidemic. The AIDS Champions program falls under the initiatives undertaken by Shell, which are aimed at promoting HIV/AIDS education and awareness amongst its employees (Shell Policy Documents 2002). The AIDS Champions program is based on the principle that offering current information on HIV infection and AIDS to employees is the most effective way of preventing the spread of the disease as well as managing AIDS in the workplace and broader society (UNAIDS 2001).

The inaugural AIDS Champions workshop was conducted at the Monkey Valley Beach Resort in Noordhek on the 5th and 6th of November 2002.

The AIDS Champions program identified the following main objectives:

- Establish a communication link for the implementation of Shell AIDS policy for employees
To create an environment which will assist Shell in managing HIV/AIDS in the workplace

Maintain general HIV/AIDS awareness in the organisation and provide employees at all levels of the organization with current information about HIV infection and AIDS

To promote a culture that provides a supportive environment for employees infected with HIV

To encourage voluntary testing for employees to know their status

In the medium and long term, to identify community projects, monitoring and assessment of such programs and reporting to the steering committee for policy formulation on HIV/AIDS

To identify, encourage and assist employees to implement non-standardised multi-media HIV/AIDS programs.

2.2 The Problem the Program aims to address
The problem that the AIDS champions program aims to address is the increasing incidence of HIV/AIDS in the region therefore impacting on the operations of the organisation. The AIDS Champions program also aims to create an environment where infected and affected employees would feel free to approach an AIDS Champion with their concerns and be offered support where necessary.

The program is a pilot project being introduced in the Sub Saharan Region in order to address the alarming incidence of HIV/AIDS. The program falls under Employee Well-being of Care Health Environment Safety and Security (CHESS) section at Shell Southern Africa.

2.3 Targets of the AIDS Champions Program
The AIDS Champions program is targeted at all levels of employees at Shell. Participation in the program is voluntary. Participants attending the workshop were volunteers from different geographical locations in the Sub-Saharan Region and Europe where Shell depots and Easigas depots are located, and one participant from the Holland office.

2.4 The Role of the AIDS Champion at Shell
The main objective of the AIDS Champion will be to ensure that there is increased knowledge of HIV/AIDS services and facilities amongst employees at Shell. The main areas of focus for the AIDS Champion will be:
• Identify HIV/AIDS related needs within the workplace. At a later stage extend service to the family and broader community
• Promote open communication and dialogue between employees and the steering committee
• To help promote a program encouraging employees to know their status and to encourage voluntary disclosure of status
• Create a caring workplace community that treats HIV/AIDS as a manageable disease
• To communicate access to support services available to infected and affected employees

AIDS Champions would be able to:
• Discuss HIV/AIDS related needs with colleagues in the workplace
• Communicate the needs to the steering committee
• Participate in the development of a sustainable AIDS workplace program
• Generate commitment to a range of self conceived, self maintained and self owned HIV/AIDS related projects

2.5 Program Components
The AIDS Champions program is a component of a larger initiative by Shell to promote HIV/AIDS education and awareness amongst its employees. The following diagram shows the components of the AIDS Champions program.
FIGURE 2.1: AIDS Champions program Components

The Aids Champions program is formulated to provide a vital communication link between employees in the workplace and role players/structures in the Southern Saharan African region. The following diagram indicates the link that HIV/AIDS champions will provide.
2.6 Delivery of the AIDS Championship workshop

Mr. O’Connor and Emma Durden of the HIV/AIDS Unit at UCT facilitated the AIDS Champions workshop. The purpose of the AIDS Champions program was to enable selected employees of Shell to attend a workshop and participate in the activities that were scheduled under the program workshop. Knowledge gained from the workshop will be used to form an information link between employees, AIDS Champions and the Steering Committee. The AIDS Championship workshop is expected to be conducted once a year.
and will be organized in line with other HIV/AIDS education and awareness programs that Shell undertakes to keep employees up-to-date on the epidemic. The activities of the workshop are tabulated in table 2.1 and 2.2 respectively.

**Table 2.1 Activities involved in the workshop**

<table>
<thead>
<tr>
<th>Day 1</th>
<th>TIME</th>
<th>CONTENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:30</td>
<td></td>
<td>Registration</td>
</tr>
<tr>
<td>10:00</td>
<td></td>
<td>Welcome and Introduction</td>
</tr>
<tr>
<td>10:15</td>
<td></td>
<td>Ice-breaker</td>
</tr>
<tr>
<td>10:40</td>
<td></td>
<td>Group Contract</td>
</tr>
<tr>
<td>10:50</td>
<td></td>
<td>Assessment/Evaluation: questionnaire (Big group/Individual)</td>
</tr>
<tr>
<td>11:10</td>
<td></td>
<td>Establish Discussion groups</td>
</tr>
<tr>
<td>12:00</td>
<td></td>
<td>Break</td>
</tr>
<tr>
<td>12:10</td>
<td></td>
<td>Group Discussions (HIV/IADS, What are we talking about, Shell &amp; HIV/AIDS)</td>
</tr>
<tr>
<td>13:00</td>
<td></td>
<td>Lunch</td>
</tr>
<tr>
<td>13:45</td>
<td></td>
<td>Medical information on HIV/AIDS (Virology, Vaccines, ARV, Research)</td>
</tr>
<tr>
<td>15:30</td>
<td></td>
<td>Tea</td>
</tr>
<tr>
<td>15:50</td>
<td></td>
<td>Group Discussions (Testing and simulated tests)</td>
</tr>
<tr>
<td>16:30</td>
<td></td>
<td>Collective group discussion (ways of seeing)</td>
</tr>
<tr>
<td>18:00</td>
<td></td>
<td>Break for supper</td>
</tr>
<tr>
<td>20:15</td>
<td></td>
<td>HIV/AIDS epidemiological and statistics quiz</td>
</tr>
<tr>
<td>20:45</td>
<td></td>
<td>Steps short films (voluntary participation)</td>
</tr>
</tbody>
</table>

**Table 2.2 Day 2**

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:45</td>
<td>Recap: What are the gaps (Collective group)</td>
</tr>
<tr>
<td>09:00</td>
<td>Counseling information</td>
</tr>
<tr>
<td>10:30</td>
<td>Tea</td>
</tr>
<tr>
<td>Time</td>
<td>Activity</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>10:50</td>
<td>Group discussions (Shell: How does it affect us? Implications of HIV/AIDS)</td>
</tr>
<tr>
<td></td>
<td>Shell policy</td>
</tr>
<tr>
<td></td>
<td>National legal structures that govern HIV/AIDS</td>
</tr>
<tr>
<td></td>
<td>Rights and responsibilities in the workplace</td>
</tr>
<tr>
<td>12:45</td>
<td>Lunch</td>
</tr>
<tr>
<td>13:30</td>
<td>Becoming AIDS Champions: Where do we fit it? What do we do with Shell policy</td>
</tr>
<tr>
<td></td>
<td>Develop a draft action plan for AIDS Champions</td>
</tr>
<tr>
<td>13:40</td>
<td>Group discussions (What do we do with policy)</td>
</tr>
<tr>
<td>14:10</td>
<td>Video – Moments</td>
</tr>
<tr>
<td>14:20</td>
<td>Commitment exercise</td>
</tr>
<tr>
<td>15:00</td>
<td>Commitment exercise</td>
</tr>
<tr>
<td>15:20</td>
<td>Workshop evaluation/assessment (questionnaire)</td>
</tr>
<tr>
<td>15:50</td>
<td>Wrap up/Future communications</td>
</tr>
<tr>
<td>16:00</td>
<td>Workshop closure</td>
</tr>
</tbody>
</table>

### 2.7 History of the Program

The program is in its first phase of implementation therefore still in a developmental process. Changes will continuously take place with adjustments being made to develop the effective running of the program. The program is currently subcontracted to Shoestring Productions, which is based in Cape Town. Mr. Sean O’Connor is responsible for the coordination and administration of the workshop. The workshop coordinator effectively organised the program in an organic manner, changing program aspects to suit the interests of the stakeholders.

### 2.8 Assumption of the AIDS Champions Program Functions

The major assumption that is made with the implementation of the AIDS Champions workshop is that information sharing leads to changes in the perception of individuals. Therefore, knowledge about HIV/AIDS gained from the AIDS Champions workshop will
enable the participants to be able to deal with HIV/AIDS issues in the workplace in an informed manner.

2.9 Impact Theory

The objective of the AIDS Champions program is to assist employees in dealing with and managing the HIV/AIDS epidemic. AIDS Champions will be equipped to identify the needs of employees in relation to HIV/AIDS and report these to the Steering Committee at Shell for further consideration. The implied theory is that involvement of the organization within the workplace and beyond the scope of the workplace will lead to general increase in awareness and management of the disease (Rossi, et al., 1999).

According to the causal model (Chen & Rossi, 1992), the functions of management are to provide resources for the AIDS Champions workshop. The services are the implementation of multimedia HIV/AIDS programs of which AIDS Champions is one aspect. Immediate outcomes will be the anticipated improved participant knowledge on issues covered in the workshop. Final outcomes are expected to be improved effective communication between employees, AIDS Champions and Shell steering committee and senior management. Figure 2.3 illustrates the impact theory of the AIDS Champions program.

Summary

As part of the thesis objectives, this chapter has successfully documented and described the AIDS Champions program implemented by Shell Southern Africa. The chapter has highlighted the program objectives and offered a discussion on the implementation of the workshop. Workshop activities were outlined and the program assumptions and impact theory is offered. The following chapter provides a detailed description of the investigative procedures and actual research implementation process used to collect data for the study.
FIGURE 2.3 Diagram representing Impact theory of the AIDS Champions program

**FUNCTIONS**
- Shell HR/Employee Wellbeing (CHESS)
- Resource provision
- Advocacy
- Service
- Linkage

**SERVICES**
- Implement multimedia HIV/AIDS programs
- Maintain HIV/AIDS awareness in the workplace
- Provide supportive environment for employees
- Encourage voluntary testing to establish status

**PROXIMAL OUTCOMES**
- Knowledge of company policy on HIV/AIDS
- Understand medical, legal aspects of HIV/AIDS in the workplace
- Ability to identify projects for involvement by Shell
- Communication skills
- Ability to assist Shell employees to obtain access to HIV/AIDS services and facilities offered by Shell

**DISTAL OUTCOMES**
- Effective communication between employees, AIDS Champions and Shell steering committee
- Implement programs to create a caring workplace environment
- Provide support for infected and affected employees

**AIDS CHAMPIONS**
- Develop an understanding of Shell policy on HIV/AIDS
- Understanding of medical, legal counseling aspects of HIV/AIDS
- Develop ability to identify non-standardised projects in the workplace and community
- Improved HIV/AIDS knowledge for employees

**PROXIMAL OUTCOMES**
- Knowledge of company policy on HIV/AIDS
- Understand medical, legal aspects of HIV/AIDS in the workplace
- Ability to identify projects for involvement by Shell
- Communication skills
- Ability to assist Shell employees to obtain access to HIV/AIDS services and facilities offered by Shell

**DISTAL OUTCOMES**
- Effective communication between employees, AIDS Champions and Shell steering committee
- Implement programs to create a caring workplace environment
- Provide support for infected and affected employees
CHAPTER THREE
RESEARCH METHODOLOGY

3. Introduction
This chapter offers a discussion of the research method and the process used to collect data in this study. The chapter provides an overview of the research procedures. A discussion of program evaluation is offered to set the context for the discussion on the data collection methods used. A rationale for the documentary, interviews, focus groups and questionnaire methods are offered. Ethics and limitations of the study are discussed.

The aim of the thesis was to conduct an evaluation of the Shell HIV/AIDS Champions program implemented by Shell Southern Africa. A few preliminary comments on this study may provide the reader with an indication of the context in which this evaluation took place. The researcher firstly contacted Anna-Louise Olivier (CHESS; Core Group) at Shell headquarters in Cape Town enquiring on the possibility of conducting such a study. Ms Olivier briefed the researcher on the programs that have been and were being implemented by Shell Southern Africa in the area of HIV/AIDS awareness and education. The researcher was then introduced to Mr. Sean O'Connor of Shoestring Productions, an organisation contracted to conduct HIV/AIDS awareness workshops on behalf of Shell. Both Mr. O'Connor and Ms. Olivier met the proposal for an evaluation of the AIDS Champions workshop, a component of the various HIV/AIDS activities that were planned for Shell with enormous support and co-operation, thereby setting the scene for the research study.

The aim of the evaluation is to determine the effect of the Shell AIDS Champions workshop, whether such a workshop does have an impact on participants' understanding and knowledge and if so estimate the impact of the workshop. The impact is obtained through difference in perception and knowledge between the pre-intervention and post-intervention results derived from the questionnaires.

In order to estimate the impact of the workshop some definition of the impact is given below:
Let $Y^{**}$ be the outcome of the post-intervention value and $Y^*$ the pre-intervention value of each question.

The difference between the two values is the impact denoted by $\theta$

$Y^{**} - Y^* = \theta$
The aim of the evaluation is to obtain $\theta$, (Coyle, et al., 1991).

In order to investigate whether the difference ($\theta$) is statistically significant, a t-test was carried out. Selected variables were subjected to a t-test to determine any statistical significance difference between the pre-intervention and the post-intervention outcomes of the survey. According to Keller & Warrack, (2000), a t-test is one technique that can be used to compare two sample surveys in order to establish the difference between the two means. Findings of the t-tests are presented in a table as Appendix 3.

### 3.1 OUTLINE OF THE RESEARCH PROCESS

The procedure by which information was gathered and analyzed is set out below. A summary of the data collection process is summarized in figure 3.1.

1. Documentary data was collected from the program coordinator in the form of policy documents on HIV/AIDS policy guidelines and goals and objectives of the HIV/AIDS Champions program.

2. Six conversational interviews were conducted with the program coordinator, these interviews ranged from 25 minutes to 90 minutes in duration. The interviews were used to clarify information gathered from the documents that were given to the researcher.

3. Based on the documentary evidence and the outcome of the interviews, a pre-workshop attendance questionnaire was then compiled. The items in the questionnaire were drawn from documents obtained, interview data and the literature review. The questionnaire compiled was to be distributed to all the participants at the HIV/AIDS Champions workshop. Due to the limited sample population of the workshop attendants, a pilot study of the questionnaire was not feasible.

4. A follow up questionnaire was designed based on the workshop presentations that were going to be offered to participants. This questionnaire was a post attendance test designed to gauge the difference in participant perception towards the information obtained in the workshop.

5. The pre-test questionnaires were distributed to all 22 participants on site and time was factored into the workshop process to allow for the evaluation to occur. The researcher explained the requirement for participation in the evaluation process. All 22 questionnaires were returned.
6. The post-test questionnaires were distributed to the 20 participants who were present at the end of the workshop, all were returned.
3.2 INVESTIGATIVE PROCEDURES AND IMPLEMENTATION OF THE EVALUATION STUDY

In order to investigate the effectiveness of the AIDS Champions workshop to equip the participants with knowledge that could be used to manage HIV/AIDS issues in the
workplace, program evaluation was selected as an assessment procedure. In this study, evaluation is used to identify workshop strengths and weaknesses and make recommendations to the organisation appropriately.

There is contention that program evaluation should include three major classes of evaluations: (a) an evaluation of the need for the program; (b) formative evaluation; and (c) summative evaluation (Fetro, 1988; Attikisson, 1978). The systematic role of evaluation is designed to identify program weaknesses and strengths and then utilize these to revise the assessed program (Tessmer, 1998; Hope & Timmel, 1984).

3.2.1 Evaluation of the Need for the Program
An evaluation of the need to implement any program includes the establishment of a program's goals and objectives (Tessmer, 1998; Rossi et al., 1999). Once program goals and objectives are set, effective program evaluation and development may take place (Chen & Rossi, 1992). The AIDS Champions program identified the goals and objectives of the program as discussed in chapter two. The stated goals and objectives provided a basis for an evaluation of the workshop, which was deemed necessary to identify strengths and weaknesses of the workshop.

3.2.2 Formative Evaluation
Aspects of formative evaluation include pre-program studies and process evaluation (Fetro, 1988; Tessmer, 1998). In this study the researcher covered both aspects of formative evaluation. Two particular aspects of the evaluation process were considered: (a) the implementation of the intervention, (b) participant evaluation of the program. The findings of these aspects of the process are discussed in chapter four.

3.2.3 Summative Evaluation
This study constitutes one aspect of summative evaluation that is an impact evaluation, implying as it does an evaluation of the probable short-term effects of a program on participants (Tessmer, 1998; Rossi et al., 1999). The responsive approach to evaluation was adopted for this study. The responsive approach places emphasis on personal understanding focusing on the people who have a stake in the program and their points of view. The role of the evaluator in this approach is that of a facilitator or counselor (Strecher & Davies, 1987).
Summative evaluation may be conducted to determine if program expectations are met. The evaluation is used to ascertain, measure or assess how far the existing program has been effective in the context of teaching and learning (Bates & Robinson, 1977) and to render summary judgment on program performance (Rossi et al., 1999). The findings of summative evaluation are intended for decision makers with major roles in the program, this may influence decisions such as program continuation, allocation of resources, restructuring or legal action.

3.2.4 Selection of the AIDS Champions workshop for the Evaluation

In order to identify the workshop strengths and weaknesses and make recommendations where necessary, a formative and summative evaluation needed to be carried out on the AIDS Champions workshop. This process required the researcher to identify program goals and objectives.

The AIDS Champions workshop was selected for investigation for several reasons:

- The Employee Wellness representative expressed enthusiasm for the program thus ensuring wholehearted support.
- Shell has implemented several employee wellness and HIV/AIDS awareness programs and workshops covering sex education, drug and alcohol abuse and crime. This workshop represented a deviation from the usual awareness program to a more “management” approach to the epidemic.
- The workshop was conducted in Cape Town and the coordinator for the workshop was located in Cape Town, close to the University of Cape Town. As the evaluation process required access to the coordinator on several occasions and participation in the workshop by the researcher, the geographical location was convenient. The geographical location and access to Shell headquarters in Cape Town ensured that time disruption and cost of transportation could be kept to a minimum.

Shell is a large multinational corporation geared towards maximising profits, therefore embarking on a program geared towards employee and community care on a topical issue represented a challenge. This is also an indication that business is embracing the far-reaching consequences of HIV/AIDS and addressing the issue.
3.2.5 Selection of the Study Population
The planned number of participants at the Aids Workshop was 25; however other participants did not turn up. 22 participants attended the workshop on the first day. Two participants left early on the second day and were thus unable to take part in the post-test questionnaire, but participated in the morning discussions. By virtue of attending the workshop, participants were asked to participate in the assessment process. This being a self-contained sample of volunteers, consideration was given to the fact that some participants may have been unwilling to complete the questionnaires and only did so as an obligation. However, personal discussion with participants nullified this consideration.

3.2.6 Evaluation Criteria
All researchers face general problems of finding and developing appropriate criteria to reduce by some operational procedures the observed phenomena so that it can be analysed by acceptable methods and techniques. Simple data such as the aims of a program, the expected impacts or benefits, operating strategies and techniques are difficult to isolate (Franklin & Thrasher, 1976). When standards exist or if measurable goals/objectives are estimated, selecting criteria for evaluation becomes less problematic (Franklin & Thrasher, 1976). The availability of program objectives and goals made selection of evaluation criteria for this study possible.

3.2.7 Benefits of Evaluation
Several benefits have been identified with the implementation of a systematic program evaluation of a social intervention (Tessmer, 1998, Rossi et al. 1999). The most relevant of program evaluation benefits linked to the Shell AIDS Champions program are discussed below.

Firstly, the successful elements of training can be identified and reinforced and the ineffective elements revised or stopped, evaluation therefore acts as a quality control mechanism. In this study, formative evaluation reinforces the training design by defining the training objective on which learning activities will be based and setting the criteria by which those activities will be evaluated (Rossi et al., 1999; Tessmer, 1998).

Secondly, most organisations have some kind of appraisal system, but training staff sometimes fall outside it scope. Evaluation can provide the missing input and a better
alternative to performance measures, which focus on effort rather than end results. Trainers involved in the educational program can gain an enhanced and merited stature from reliance on systematic evaluation data thereby raising their professional self-esteem (Rossi et al., 1999; Tessmer, 1998). This study would offer the trainers an opportunity to have access to input from participants and fellow training staff; this input can be used to modify the program. Keeping a record of the evaluation makes it possible to demonstrate a record of accomplishment of relevant, successful and cost-effective training over a period. In this case, Shell can use the information for the future development of the program (Rossi et al., 1999; Tessmer, 1998).

Thirdly, people make judgements about the training that is provided. Where no assessment criteria exists individual criteria is used e.g. enjoyment of instruction, how many work days lost, cost per employee etc., (Rossi et al., 1999; Tessmer, 1998). Systematic evaluation preempts judgements being made using inappropriate criteria and provides participants with an opportunity to have input into the educational program. This process offers a framework through which trainers and managers can examine their roles in the training process (Rossi et al., 1999; Tessmer, 1998).

Finally, evaluation can function to give legitimacy to a program, product or service being offered, and can also be used to determine accountability of the program to its stakeholders. This is especially important with social intervention programs as they are funded mostly by taxpayer’s money (Rossi et al., 1999; Tessmer, 1998).

3.3 DATA COLLECTION

Due to the fluid nature of most HIV/AIDS educational programs, certain variables cannot be controlled as they are constantly changing (Franklin & Thrasher 1976). Evaluation is considered a diversified activity, therefore no one set of principles can suffice for all situations. Constant attention should be paid to the fluid dynamic situation of learning where an enormous number of variables exist. (Bates & Robinson 1977). Currently, HIV/AIDS education is a continuous process of tryout and development due to the ever-increasing information generated around the epidemic (UNAIDS 2002). As such no existing education campaign can lay claim to employing a complete program. This factor is a major influence in the choice of utilising both formative and summative evaluation to the HIV/AIDS workshop
implemented to train AIDS Champions at Shell, as programs will develop and change in line with scientific and medical knowledge.

Several methods have been identified as being useful in the assessment of training such as questionnaires, interviews. For the purposes of this study, the selected techniques to be used for data gathering are discussed below.

3.3.1 Qualitative Approach to Data Collection

Qualitative data is viewed as intrinsically meaningful consisting of the relativity of participants' account of social worlds and the relation between social descriptions and actors' conceptions of their actions (Neumann, 1997). The collection of data involved documenting real events, recording what people say, studying written documents or examining visual images. In evaluating the AIDS Champions workshop, the researcher used discussions, official documents, questionnaire and participant observation to collect the required data.

Research using qualitative methods is considered subjective and has multiple realities with complex and broad research focus. A qualitative approach to research is "subjective in nature and involves examining and reflecting on perceptions in order to gain an understanding of social and human activities" (Hussey & Hussey, 1997:12). Due to the nature of the workshop, and the amount of time allocated to allow for evaluation as part of the workshop, a combination of questionnaire and qualitative tools limited the amount of subjectivity involved in a purely qualitative process.

3.3.2 Explanation of Document Analysis

In order to have a general background understanding of the AIDS Champions program, the analysis of documents relating to the program was considered an important aspect of data collection. These documents were internal correspondence, program reports indicating structure and process of the program and other documentary evidence that related to the AIDS Champions program. The documents the researcher has access to were deemed confidential Shell property therefore will not be included in the appendix.

The researcher gained access to existing documents in the form of Shell policy documents on HIV/AIDS and life threatening diseases and documents from Shoestring Productions on
the workshop processes. The availability of such documents assisted the researcher in saving time in the program description phase of the evaluation. This data was made available during the course of interaction with the workshop coordinator.

3.3.2.1 Rationale for using documents as a source of data
The researcher holds a belief that documents act as form of expression or representation of relevant elements of the social world under study (Neumann 1997). Data on the research subject may not be available in other forms; documents provide a way of gaining access to sets of processes or events that occurred (Miles & Huberman 1994).

Documentary data enables the researcher to gather background information that assists in the preparation of a checklist for group discussions and an interview guide for interviews with key informants. Document analysis also deepens the researcher's understanding of the concepts and practice of the program under study (Miles & Huberman, 1994; Neuman 1997).

However, the use of documentary evidence as a data source has some limitations. The documents available for analysis may have been prepared for purposes other than research (Neuman 1997; Miles & Huberman 1994).

3.3.3 Explanation of Interviews
Interviews are defined as a process of data collection where "participants are an essential part of a discussion process that reveals subjective meanings" (Neuman, 1997:371; Weller & Romney, 1988).

The researcher used semi-structured interviews, which were capable of engaging participants in a natural flow of conversation whilst following a set pattern of questioning and therefore revealed information that structured interviews may have omitted (Rubin & Rubin, 1995; Mishler, 1986). The researcher used a general interview guide to outline issues that needed to be explored. This served as a checklist to make sure that relevant topics were covered. Interviews are suitable to formative evaluation in a one-to-one review in order to obtain information from the subjects. Semi-structured interviews also ensure that participants are asked standard questions therefore reducing bias (Tessmer, 1998; Neuman, 1997).
3.3.3.1 Rationale for using Interviews

The choice of the data collection tools is influenced firstly by the researcher's ontological position, which suggests that people's knowledge, views, understandings, interpretations, experiences and interactions are meaningful properties of the social reality, which the research questions are designed to explore (Burrell & Morgan, 1978). Secondly, the researcher's epistemological position suggests that a legitimate way to generate data on these ontological properties is to interact with people to gain access to their articulations and accounts. Certain epistemological assumptions about the interaction suggest that semi-structured interviewing is appropriate (Rubin & Rubin, 1995). An underlying assumption is that bias can be controlled if the stimulus is standardised, any variation in response will be a true measure rather than an artefact of the method used. Finally, the information desired may not be easily obtained from short standardised questions and also may not feasibly be available in any other form (Rubin & Rubin, 1995; Neuman, 1997).

The evaluation interview is appropriate as a data gathering tool due to the ability to extract information that can be used to assess the extent to which training aims and content are perceived to be relevant to the learner. In addition, the interview allows the research to examine the extent to which training content can be applied practically (Tessmer, 1998, Rossi et al., 1999). Interviews allow for more extensive and more accurate data about attitudes, opinions and reported changes in behaviour. Interviews also allow the rephrasing of questions to increase the respondents' understanding of what is asked. However, the presence of the interviewer sometimes predisposes respondents to answer in a certain way (Tessmer, 1998). This was limited by participant observation and the questionnaire to obtain similar data.

Interviews are considered the most effective way of enlisting co-operation from populations (Neuman, 1997; Tessmer, 1998). Using this technique, the researcher was able to probe for adequate answers. In an interview process, rapport and confidence building are possible; therefore, data collected includes rich details not obtainable using other techniques. One-on-one interviews were used in this study to obtain data from the workshop facilitators.

The most cited disadvantages of using personal interviews as a data collection tool is the fact that it is a costly process and the period required to collect data is much longer than for
other methods (Neuman, 1997; Tessmer, 1998). The interviews for this study were conducted at the workshop site, therefore access to all respondents was localised saving the researcher time.

3.3.4 Explanation of Focus Groups

Considering the limited time that, the researcher had with workshop participants, the workshop group discussions were utilised as a data-generating source. The workshop participants were divided into four groups, two groups had five people and the other two groups had six people.

The goal of the group discussion was to collect qualitative data that is of interest to the researcher in a focused discussion, with the intent of finding a range of opinions of people across several groups. According Krueger & Casey, (2000), in a research process, at least three focus groups are required to compare and contrast the data collected.

In the determination of perceptions, feelings and thoughts of participants about the training program, focus groups work particularly well to gather such data. The interactive nature of focus groups enables participants to ponder, reflect and listen to experiences and opinions of others. This participation helps participants to compare their own reality with that of others (Krueger & Casey, 2000).

The researcher used on location group discussions to gather information from participants. This method is recommended when the purpose of the study is related to the purpose of the meeting (Krueger & Casey 2000). The participants were attending the inaugural Aids Champions workshop, which was evaluated by the researcher. This provided an opportunity for the researcher to build on group discussions during the workshop.

3.3.4.1 Group Discussion Process

The group discussions centred on general knowledge about HIV/AIDS, Shell policy on the management of the disease in the workplace and about issues affecting employees that related directly to HIV/AIDS. The groups were required to write their concerns and pose them as questions to the rest of the participants and then collectively all concerns were addressed and discussed. This forum generated a lot of data, as participants would emerge
with different issues, which were all related to the same topic. Presenters and other participants in a combined group discussion forum later addressed these issues.

3.3.4.2 Advantages of Focus Groups

In this study, focus group discussion was given preference because it furnishes data from a participants' point of view. Focus groups are highly interactive therefore highly productive as the evaluator has the opportunity to talk to the participants about their reactions to the instruction, being highly conversational allowing for the probing of participants' comments (Kruger & Case, 2000).

One disadvantage of focus group interviews is the lack of personal interaction that exists in a one-to-one discussion, and may therefore not furnish the desired amount of intrinsic information that a one-on-one interview may provide. In this study, one limitation may have arisen due to the small number of people in each group, thereby limiting the total number of experiences of participants. However, the data collected was detailed and rich and provided the researcher with adequate resources to conclude the study.

3.3.5 Participant Observation

As a participant at the workshop, the researcher was able to observe the workshop process and use participant observation as a research tool (Rubin & Rubin, 1995). Participant observation process included a qualified anthropologist who is a skilled observer and note taker. The researcher had the opportunity to actively participate in various activities of the program such as listening to all professional presentations at the workshop. This closeness enabled the researcher to gather data relating to how the participants viewed the activities of the workshop. According to Kurtz, (1984), participant observation is effective in situations where the focus is not on the larger social whole but where the perspectives of group member's are important. The strength of participant observation lies in the ability to explore a situation in-depth and obtaining a descriptive account of the working of a program and the attitudes of participants from an insiders point of view (Ely, Anzul, Friedman, Garner & Steinmetz, 1991)

The advantage of being an observer and participant at the workshop was that the researcher was able to cross check the data that I had collected from using other methods.
3.3.6 Qualitative Data Analysis

Data gathered was analysed using content analysis that is defined as "a research methodology that utilises a set of procedures to make valid inferences from text" (Miles & Huberman 1994; www.geolog.com/gmsmnt/gmca.htm). Similarly, content analysis was used to analyse data collected from the interviews.

In qualitative coding raw data is organised into conceptual categories from which themes are created to analyse the data. Codes are tags or labels for assigning units of meaning to the descriptive or inferential information complied during a study (Miles & Huberman, 1994:56). Coding is two simultaneous activities that impose order on the data reducing it into manageable piles.

Strauss (1987 in Neuman, 1997) and Miles & Huberman (1994) define three kinds of coding: open coding, axial coding and selective coding. Open coding is performed at the early stage of coding when the researcher locates themes and assigns initial codes or labels to condense the data into categories. Open coding brings themes to the surface from the large amount of data that qualitative research generates.

Axial coding involves an organised set of initial or preliminary concepts. In this process focus is on the initial coded themes, additional themes may emerge, these can be noted and reviewed with initial codes (Miles & Huberman, 1994). Axial coding enabled the researcher to organise data into subcategories, and to sequence and the combination of closely related concepts into a general one. Using axial coding of documentary data the researcher was able to raise new questions and stimulate thoughts about linkages between themes and concepts in the group discussions. During axial coding, the researcher consolidated codes and located evidence for core themes, which supported qualitative data that was collected.

The researcher coded the data from the questionnaires into 8 subcategories e.g. Shell policy, orientation, training, sensitising etc allowing for the analysis of the results according to these themes.

Selective coding occurred as a final run through the data after the researcher had identified the major themes. Selective coding involved scanning data and previous codes, looking for cases that illustrate themes and make comparisons and contrasts after data collection was
completed (Miles & Huberman 1994). Major themes or concepts ultimately guided the researcher’s organisation of specific themes.

3.4 Quantitative Approach to Data Collection

Although a positivist approach of questionnaire will be used in the study, the researcher recognises the fact that behaviour and actions of human beings cannot be investigated objectively as stipulated by this approach, Hussey & Hussey (1997). This is because perceptions and thoughts of participants cannot be objectively measured; this creates the need for a subjective approach, which was used concurrently in this study.

3.4.1 Explanation of the Questionnaire

The study used self-administered questionnaire’s, which were completed, on site (Fowler, 1993) to gather data. A questionnaire is defined as “a list of carefully structured questions designed to elicit reliable responses from a chosen sample” (Hussey & Hussey, 1997:161).

Although this study used a small sample, the questionnaires were used as a subsidiary tool to crosscheck data collected from interviews, focus groups and documents. The pre-test questionnaire was constructed after interviews with the workshop co-ordinator and input from all presenters from the workshop was sought for this questionnaire. The post test-questionnaire was constructed after the first day of the workshop and used part of the pre-test questions as follow-up statements.

The study used two questionnaires, the first one a pre-test assessment tool and the second one a post-test tool. The first questionnaire consisted of 76 questions divided into nine separate categories (See Appendix 1), and was distributed to all 22 participants at the workshop. The second questionnaire consisted of 62 questions divided into eight separate categories (See Appendix 2) and was distributed to the 20 remaining participants at the end of the workshop. According to Howell, (1995), the relationship between two data sets does not need to be perfect for predictions to occur. The data sets are considered matched when the sets are significantly correlated. The correlation in this study was established on 62 out of 76 questions.

The problem of poor returns limits the use of questionnaires in research (Neuman, 1997). In this study, this disadvantage was non-existent due to all participants being available on site
and the survey being administered as part of the workshop process. The researcher was available to address any questions that participants may have giving participants an opportunity to give thoughtful answers. The researcher was able to explain the study and clarify any complex issues that participants had (Czaja & Blair, 1996). The nature of the population was such that the use of a questionnaire did not pose any challenges to participants due to the high level of education of the population sample.

3.4.2 Quantitative Data Analysis

The researcher coded each participant’s responses to items on both questionnaires in the following manner:

- Responses to items in Pre-test questionnaire 1 were in such a way that if the participant responded to the first option offered, it was coded 1, if the second option was checked it was coded 2 and so on. (Refer to appendix 1 and 2)
- Responses to Post-test questionnaire 2 were scored using the same method
- Where no response was given to a particular item, the response was coded as 6 representing no opinion

The coded responses were arranged according to the questionnaire categories and captured by the researcher. These scores were used to generate graphic representation of participant responses.

In summary, there is no single data collection method that was used exclusively. The research methods used in this study combined both qualitative and quantitative traditions, recognising the “paradigm of choices” as suggested by Patton (1980). The objective of using multiple data collection techniques was to ensure that the validity and reliability of data is established.

The combination of documentary data, interview, group discussions and questionnaire technique enabled the researcher to gather complimentary aspects of data on the AIDS Champions process (Mathison, 1988). The use of an additional participant observer in the observation of the process can also be considered to enhance the quality of data collected. The concept of triangulation was utilised in the study to enable the researcher to acquire a holistic understanding of the specific situation under study as well as obtain empirical data that could be quantified.
3.5 Ethics in Research

The study took particular consideration of the following ethical issues:

Voluntary participation was anticipated, as the study will be accessing sensitive personal views of respondents. Informing participants' that responding to the questionnaire was optional ensured voluntary completion of the questionnaire Neuman, 1997). Though refusal to participate can produce a biased sample, compulsion to participate was not considered a solution (de Vaus, 2001). The need to respect the participants' privacy was respected in that participants were not asked intrusive or personal questions.

Informed consent was considered with the view that for a participant to have true choice they require accurate information. Information was supplied in the form an outline of the purpose of the evaluation and how the research would benefit the Aids Champions program. The identity of the researcher and her colleague was established at the beginning of the workshop (de Vaus, 2001; Neuman, 1997).

The study guaranteed anonymity and confidentiality of information given to the researcher (de Vaus, 2001; Neuman, 1997). The issue of confidentiality and anonymity was important because HIV/AIDS is a sensitive topic; therefore the participants required assurance that the information shared would be used within the agreed confidential status (Renzetti & Lee, 1993).

3.6 Limitations of the Study

The research process utilised a rigorous research process to conduct the evaluation to ensure that rich and detailed data was collected and analysed. Further evaluation research is however required to measure the long-term effects of a workshop such as the AIDS Champions program. Due to academic calendar limitations, this study was unable to conduct a longitudinal evaluation to determine long-term effects of the workshop (Tessmer, 1998; Attikisson, 1978; Frankiin & Thrasher, 1976). Further research in this area would enhance the impacts that this study has offered.

There are issues concerning HIV/AIDS that are highly sensitive and therefore require a sensitive approach to conducting research. The researcher in this study ensured sensitivity
to individual dynamics to ensure that participants did not experience undue pressure, therefore rendering the process to be stifling rather than stimulating (Vaughan et al., 1996).

This study was exploratory; therefore much of the data was dependant on the results from the questionnaire, group discussions and conversational interviews. This potentially raises the level of uncertainty regarding the research outcomes. The research was conducted in a single organisation evaluating one program; therefore the results are limited in their generalisation to other HIV/AIDS programs within Shell or other organisations. However, this does not mean that other organisations cannot benefit from the insights obtained in the study. Organisations involved with HIV/AIDS educational programs can draw on this knowledge and adapt it to suit their in-house programs.

3.7 Summary

In order to fulfill the second objective of the thesis, this chapter has described the data collection process to be used in this study. Documentary evidence, interviews, focus groups participant observations and questionnaires were the data collection tools used and described. A discussion of program evaluation and the benefits of evaluation are offered. The benefits of evaluation were identified as identifying program goals and objectives, a quality control mechanism for program implementation, justification for the program, and the provision of missing inputs for program development. Finally. Ethics and limitations of the research process were outlined. The following chapter presents the findings of this evaluation and a discussion of the concepts in the findings is given.
CHAPTER FOUR
RESULTS AND DISCUSSION

4. Introduction
The previous chapter outlined the research procedures used to generate data and how the data was analysed. This chapter presents the findings from this data. Characteristics of the participants such as age, gender, location of work, employment tenure and academic qualifications are offered. The findings from the questionnaire, interviews, group discussion and observational data have all been integrated in the findings. The evaluation findings are presented in two sections; section A. offers findings on participant understanding regarding Shell policy, orientation, training and sensitising. Discussion is offered on the employee and the organisation and HIV. Section B. presents results and discussion on knowledge based information of medical, HIV testing, counselling, legal and support services topics covered in the workshop.

4.1 Characteristics of the Study Population

4.1.1 Age
The table below represents the age for all respondents from both the pre-test and post-test questionnaire. As table 4.1 shows, the majority of the sample falls between 40 – 49 and 20 – 29 age groups, with less age representation at the 50 – 59 age group.

Table 4.1 Age distribution of the study population

<table>
<thead>
<tr>
<th>Age bracket</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 - 29</td>
<td>7</td>
<td>32%</td>
</tr>
<tr>
<td>30 - 39</td>
<td>5</td>
<td>23%</td>
</tr>
<tr>
<td>40 - 49</td>
<td>8</td>
<td>36%</td>
</tr>
<tr>
<td>50-59</td>
<td>2</td>
<td>9%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>22</td>
<td>100%</td>
</tr>
</tbody>
</table>

This age distribution indicates that the majority the participants are in the high-risk age category as outlined by the UNAIDS 2002 report.
4.1.2 Gender
The sample’s gender representation is skewed towards the females, with male respondents being 23% of the sample and 77% female participants. The sample composed of 50% married participants, 31% single participants, 2% divorced and 2% of the participants are living with someone.

4.1.3 Location of Work
In terms of the geographical location of the respondents, the sample was derived from different locations in the Sub-Saharan African region and one respondent from Europe. There were representatives from the following countries: Botswana (1), Holland (1), Namibia (1) South Africa (18) and Swaziland (1). The South African respondents were drawn from different centers such as Alberton, Durban Kimberley, Witbank, Cape Town and Johannesburg.

4.1.4 Employment Tenure
The table below shows the distribution of employment tenure of the respondents at Shell. One respondent did not indicate the number of years working with Shell. Data from one respondent was considered contradictory as it indicated the age of the respondent as 29 and gave the tenure at Shell as 18 years suggesting that employment commenced at age 11. This information is not represented in the given table.

Table 4.2 Employment tenure

<table>
<thead>
<tr>
<th>EMPLOYMENT TENURE</th>
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</thead>
<tbody>
<tr>
<td><strong>Years</strong></td>
</tr>
<tr>
<td>-2</td>
</tr>
<tr>
<td>2 - 4</td>
</tr>
<tr>
<td>4 - 6</td>
</tr>
<tr>
<td>6 - 8</td>
</tr>
<tr>
<td>8 - 10</td>
</tr>
<tr>
<td>10 +</td>
</tr>
</tbody>
</table>
4.1.5 Academic Qualifications of the Study Population

Participants in the workshop gave an indication of their highest academic qualifications. These were broken down into five different categories. Participants with a high school diploma represented 38% of the sample; participants with an undergraduate degree or diploma represented 43% of the sample. The remaining participant’s had an Honors degree 5%, Masters’ degrees representing 14% of the sample. One respondents’ data was not considered due to contradictions in the given data.

4.2 STATISTICS OF PROGRAM EVALUATION WITH GROUP DISCUSSIONS INTERVIEW AND OBSERVATIONAL DATA

4.2.1 Introduction

The discussion of the statements that appeared in the questionnaires is broken down into eight main categories that reflect the nature of the particular questionnaire items. The Pretest questionnaire was administered at the beginning of the workshop before any workshop activities had been embarked upon. Due to the nature of the evaluation, some of the research findings do not lend themselves to theoretical discussion. Such outcomes are included as evidence of the changing knowledge and understanding of workshop participants.

The categories in section A of the pre-test questionnaire are:

- Shell policy, training, orientation, sensitizing;
- Me and my organisation;
- HIV/AIDS and me.

These three categories were designed to assess respondent understanding towards organisational policy on HIV/AIDS and personal reflection on HIV/AIDS in relation to the work environment.

Section B. of the questionnaire rated the respondent knowledge on the following categories:

- Medical,
- HIV testing,
- Counseling,
- Legal issues related to HIV/AIDS in the workplace
- Support services offered by Shell for those affected by HIV/AIDS.

For full list of statements on the pre-test questionnaire refer to Appendix 2. The post-test questionnaire comprised of eight categories corresponding to those in the pre-test questionnaire. This questionnaire addressed fewer statements on Shell policy, training, orientation and sensitising sections because these statements had been extensively covered in the group discussions.

Group discussion outcomes have been integrated in the study findings together with the questionnaire outcomes to avoid duplication of the topics discussed. The pre-intervention questionnaire was administered to the four groups at the same time.

Participant observation occurred throughout the duration of the workshop, the researcher was assisted in both the distribution and collection of the questionnaires and observing the workshop process by a skilled participant observer.

The researcher and a qualified social anthropologist observed the workshop process. The presenter styles provided a very interesting contrast. The two main facilitators adopted a casual informal style with activities geared towards general group participation.

The medical presentation was very professional with visual aids illustrating medical aspects of the presentation. The presenter maintained contact with the respondents throughout the presentation encouraging participants to express their views, asking questions and listening attentively and commenting positively on all opinions expressed.

The counselling presenters approached the workshop in an entirely different manner. The presenters encouraged very little group discussion. The information was presented in a prescriptive manner, encouraging few questions. Particular criticism was directed at the skit the presenters performed during the session.

From the observations noted, it would appear that the sessions presented as open forum discussion groups were more effective than the ones presented as a lecture. Participants
were more enthusiastic and interested when involved in a group discussion. These observations confirm literature on participatory small group education (Aggleton, et al., 1986b; Mwilu, et al., 1990) and point to the importance of educating the trainers in persuasive communication techniques.

In spite of the reported variability in program delivery the questionnaire results of the workshop suggest that the program was effective as illustrated in the following results.

4.2.2 t-test findings

For the comparison of responses from the participants in the pre-intervention and post-intervention questionnaires, t-test measure was selected. The choice of the t-test as a measure of significant difference was influenced by the sample size that was best suited to this form of statistical test.

The t-test is one of the techniques that can be used to compare two sample surveys in order to establish the difference between two means (Keller & Warrack, 2000). In order to evaluate the impact of the AIDS Champions workshop on the participants, the results from the two questionnaires administered were analysed and the data subjected to a t-test. The effect of the program on the participants was measured by comparing the two data sets. The parameter of interest was the difference between the two means.

The Null hypothesis was established to be:

\[ H_0 : \mu_1 = \mu_2 \] (There is no difference between the two data sets)

Significant level: 5% to test whether there is any difference in the effectiveness of the workshop on participant knowledge and understanding.

The table in Appendix 3 represents a summary of the t-tests conducted on a random selection of variables. At 95% confidence level, it is required that the t-value be greater than +/-2. From the tables it can be suggested that variables with a significant statistical difference are highlighted in red. Therefore, there is evidence to conclude that the means between the surveys differ indicating that the workshop was successful in the short-term impact of participants’ knowledge and understanding.
Significant differences were generally evident on the knowledge-based sectors of the questionnaires. Variables on participant understanding generally depicted insignificant differences.

The results are presented in the form of bar graphs and pie charts. The results are based on understanding and knowledge of the participants at the workshop.

4.3 SECTION A

4.3.1 Participant Knowledge and Understanding on Shell Policy, Orientation, Training, Sensitising

This category was designed to establish the respondent's knowledge and understanding on the organisational policy on statements related to Shell's HIV/AIDS policy on orientation, training and sensitising of employees.

4.3.1.1 Shell Policy:

Organisational policy provides an organisation with a blue print for strategies and framework for tackling workplace issues that affect employees. In the pretest questionnaire, statements 1, 2, 3, 16 and 17 addressed organisational policy issues linked to HIV/AIDS. In response to statement 1 on whether Shell had developed an appropriate response to HIV/AIDS, 32% of the respondents strongly agreed, a significant portion 59% agreed, 9% disagreed that the policy was appropriate. See figure 1.
The post-test questionnaire indicates that 20% of the respondents strongly agreed that Shell had developed an appropriate response to HIV/AIDS, further 80% agreed with this statement. This constitutes 100% agreement with organisational policy after the respondents had been briefed on Shell's current and future policy on HIV/AIDS.

It can therefore be inferred that the workshop was successful in changing the participants' understanding and knowledge on organisational policy on HIV/AIDS. Shell could experience a marked improvement in employment understanding of company policy on HIV/AIDS by continuously sharing information with AIDS Champions thereby reaching the majority of employees.

Implementation of the HIV/AIDS Champions program by Shell represents business sector involvement in the management of the disease (Kmaramayake & Smart 2000; Cohen & Trussell, 1996). The findings from the evaluation of this workshop suggest that participants have a positive perception of the company's policy on HIV/AIDS. This finding is important because a positive opinion of the organizational policy will enable the AIDS Champions to tackle HIV/AIDS related issues in the workplace positively. The AIDS Champions will be able to share information with work colleagues and therefore influence behaviour and help reduce transmission rates.
4.3.1.2 Role of Management in HIV/AIDS policy implementation

At the level of the decision-maker, Shell senior management has a huge role to play in managing HIV/AIDS. Decision makers have the power to influence decisions that can facilitate the prevention of new HIV infections as well as influence the health management of HIV infected employees (Evian, 2000; Whiteside & Sunter, 2000).

Workshop participants perceived the attitude and approach of certain levels of management negatively. Levels JG4 (middle management) to levels JG2 higher management were singled out as non-participants in the implementation of policy on HIV/AIDS, this was considered as lack of senior management support by some participants. Maiden (1992) emphasizes the involvement of all parties to ensure successful implementation of an EAP such as the AIDS Champions program. The lack of management participation at certain levels can be detrimental to the effective formulation and implementation of an HIV/AIDS policy at Shell.

An overview of the findings on Shell policy and strategy towards HIV/AIDS indicates that workshop participants significantly changed their views on the post-test questionnaire. The proactive and comprehensive approach adopted by Shell in dealing with and implementation of strategies generated positive perceptions towards the policy on HIV/AIDS. Shevel, (2002) & Caelers, (2000) suggest that a positive attitude towards an HIV/AIDS program aids participants to take responsibility for the success of the program. The continued development of these policies and strategies was considered by workshop participants to enable Shell to cope with the changes in environmental variables including the increased severity of infections as well as changes in relevant legislation that may impact on such policies or strategies.

Total buy in from management in implementing policy on HIV/AIDS should not only consider the organizations bottom line but also as a commitment to investing in their staff. This investment in employees is considered important as HIV/AIDS interventions affect the incidence and prevalence of the epidemic, therefore affecting latency period of the disease (Trotter, 1993). The improvement of the latency period reduces incapacity of the individual and therefore reduces absenteeism. (Grimwald, 2002; Aventin and Huard, 2000; Norse, 2000; Whiteside, 2000; Rau, Forsythe & Okeyo, 2000). Incapacity and absenteeism, causes
loss of productivity, this requires that business involvement in education and awareness programs is imperative (Robert, 2000; Robert & Rau 1997; Grimwald 2002). Interventions by organisations such as provision of ARV treatment as suggested by Shell policy document enhance the quality of life of employees affected and infected by HIV/AIDS, and therefore impacts on the employees ability to continue work and be productive members in the organisation.

The epidemic has enormous implications for business but it has such a gradual impact that by the time it begins to show and workers begin to get sick and die, the problem is so advanced at such a point there is little opportunity left for managers to limit its impact (Strachan & Clarke, 2000). Therefore, the formulation of HIV/AIDS policy by Shell, which is being perceived positively by workshop participants, represents a step in the right direction of managing HIV/AIDS in the workplace.

Due to the nature of Shell’s HIV/AIDS policy, conflict as a result of the policy was identified. Some participants perceived the equitable nature of the policy in dealing with those infected and affected by HIV/AIDS as unfair, because the disease was elevated above other fatal illnesses. Closer scrutiny of Shell’s policy reveals that other diseases are equally covered, although not offered similar visibility status as HIV/AIDS (Shell Policy Document on Fatal Illnesses, 2002).

4.3.1.3 Participatory Policy Formulation
The absence of labor movement involvement in the AIDS Champions workshop was observed in this study. According to Isata (2000) and Whiteside & Sunter, (2000), the process of policy development should include all stakeholders in order to promote shared responsibility. Participation of employees in policy formulation ensures that the policy is more acceptable to employees (Maiden, 1992). It would therefore be ideal that the establishment and use of partnerships between parties who are interested in the management of HIV/AIDS be encouraged. Advocacy of parties interested in effective management of HIV/AIDS have proved successful in Uganda, Senegal and Australia (Walker 2001; Maiden 1992). Findings from interviews with participants at the workshop indicate that labor union movement involvement was lacking in the policy formulation and implementation of the AIDS Champions workshop, therefore isolating an important partner in the effort to manage the epidemic.
Statement 16 on the pretest questionnaire required respondents to state whether the policy of Shell sufficiently addressed their concerns regarding the impact of the disease on society. 45% of the respondents agreed that the policy addressed their concerns, 9% strongly agreed, 36% disagreed with the statement and 9% remained neutral. See figure 4.2.

Figure 4.2

Shell's policy on HIV/AIDS sufficiently addresses my concerns regarding the impact of the disease on society

In the group discussions, there was consensus that Shell's policy addressed most of the respondents concerns on the impact of HIV/AIDS on society. One respondent was however concerned of the lack of cooperation between different groups addressing HIV/AIDS issues (e.g. church, government NGO's etc). The absence of labour participation was also highlighted further suggesting the need to involve labour in HIV/AIDS interventions.

A holistic approach to the management of HIV/AIDS is recommended (Shevel, 2002) as the disease impacts are manifested beyond the workplace (Whiteside & Sunter, 2000). A significant percentage (36%) of the workshop participants disagreed with the statement that Shell's policy addressed their concerns regarding the impact of the disease on society. Shell could therefore use AIDS Champions future workshops to establish what these concerns are and how the concerns can be addressed.

Shell by formulating an organisational policy that is specifically targeting the management of HIV/AIDS is attempting to reverse the documented impact that HIV/AIDS can have on an organisation (Strude & Smart 2000, Whiteside & Sunter 2001). The workshop can be
deemed effective in shifting the participant's perceptions of the organisational policy because a significant percentage of the participants had changed their views on the company HIV/AIDS policy at the end of the workshop. The shift in perception is indicative of the understanding of the organisations' policy that occurred during the workshop. According to the social transformatory model (French & Adam 1986), it is important for employees to have a positive perception of organisational policy because such a perception can lead to a positive approach to managing workplace issues, this can include HIV/AIDS (Shell Document: Anatomy of a disease model).

In the implementation of policy on HIV/AIDS, it is important to look at what has happened before in the field of HIV/AIDS programs in the organization, what the missing pieces are and what the organization should be aiming to do next. Investment in research to help determine new methods and approaches of managing the disease is important as the epidemic is still evolving. There is need for up-to-date information to keep abreast of the ever-changing epidemic progression (Rossi, et al., 1999; Tessmer, 1998).

4.3.2 Orientation, Training and Sensitising
Shell has chosen to follow an integrated approach to the implementation of HIV/AIDS policies and strategies. This includes a focus on education and self-awareness training on all levels in the organisation. The empowerment of employees with information on HIV/AIDS and facilities that can assist them cope and manage the disease will enhance the chances of employees living a healthy productive life (French & Adams 1986). This could lead to the policy on HIV/AIDS at Shell improving and changing as a result of actual experiences dealing with HIV/AIDS.

The evaluation in regard to training and sensitising of staff and the dissemination of information to the employees was perceived negatively. Although plans and programs have been made to begin the implementation of such programs, lack of uniformity in the implementation had generated a negative perception amongst the workshop participants.

A high level of employee participation and support can assist the successful implementation of the policy on HIV/AIDS. Effective channels of communication between employees and senior management through AIDS Champions will greatly enhance feedback relating to policy. This would result in improvements on policy and strategy
In the pre-test questionnaire, statement’s 4,6,7,8, and 9 addressed the orientation of Shell staff on HIV/AIDS issues in the workplace. In response to statement 4 on the responsibility of Shell to inform, educate and assist employees affected by HIV/AIDS, 50% of respondents strongly agreed with the statement, 45% agreed and 5% expressed a neutral opinion. See figure 4.3

Figure 4.3

In response to a similar statement in the group discussion, there was unanimous agreement amongst the participants that Shell had a responsibility to inform, educate and assist employees affected by HIV/AIDS. Participants at the workshop indicated that Shell did not honor this responsibility.

4.3.2.1 Orientation

Similar trends of shifts in participant understanding were observed from workshop participants on questionnaire items on the orientation of employees to HIV/AIDS issues in the workplace. The unanimous agreement of workshop attendants on the need for Shell to be responsible for the education, information and assistance on HIV/AIDS related issues is in agreement with Whiteside & Sunter, (2000); Strude & Smart (2000) and Walker, (2001), that orienting and information sharing forms the core of managing HIV/AIDS. It is therefore considered imperative that Shell participates actively in the orientation, information and also assists employees affected by the epidemic. This participation should be inclusive of senior management levels, the labor movement and general employees.
In the group discussions on this statement, the participants were quite divided in their opinions. The most prominent issue was the difference of information requirements by the participants. Differences of opinion were evident between workshop participants and were expressed in comments such as:

"In my country we have moved on from wanting to know how HIV is transmitted to the point where we want to know the management of the disease so that we can help deal and cope with the affected employees"

"Yes I would be interested to learn more about the disease and how condoms help prevent transmission because some issues are not well explained in the awareness programs".

Although slight differences of opinion on the form of HIV/AIDS training that was required for employees, the workshop participants were of agreement that training of all employees on HIV/AIDS related issues was important. The point of contention amongst workshop attendants was the inconsistency of the training provided at the different work locations. The participants emphasised that Shell should offer a uniform training program for all work locations and get all employees to participate.

In response to statement 8 on the pre-test questionnaire, respondents were asked if staff members were briefed on their entitlements for all life threatening diseases. 41% of the sample agreed with this statement, 5% strongly agreed, 36% of the respondents disagreed with the statement, 14% strongly disagreed and 5% remained neutral. See figure 4.4
The group discussions expressed different opinions on this statement. A large proportion of the participants felt that Shell did not explicitly state what entitlements were due to staff affected by life threatening diseases. One respondent said:

"The details of the entitlement are very complex, sometimes you give up trying to chase the benefits because time is of essence when addressing life threatening diseases".

Other participants felt that the entitlements were clear enough, but the problem with HIV/AIDS is that it is a new epidemic therefore no clear boundaries for medical entitlements have been determined by the organisation. With the government currently offering Antiretroviral treatment to all those in need, Shell’s current policy is line with national policy on HIV/AIDS.

4.3.3 Training
Several broad paradigms of health education as identified by French & Adams (1986) are assumed in the implementation of the Aids Champions Program. Firstly the behaviour change model that seeks to improve health by changing people's ability to understand and control their status to whatever extent is possible within their environmental circumstances. This is evident in the provision of information on the HIV/AIDS epidemic to employees and seeking alternative ways to tackle the epidemic.
Secondly, the social transformatory model, which identifies ideas that society holds about a disease and targets the change of ideas to prevent the disease from spreading (French & Adams 1986). The Aids Champions program has a participatory learning approach to encourage societal change in managing HIV/AIDS and aims to involve the broader community in tackling the epidemic. This approach is evident in the information sharing processes that currently exist at Shell.

By empowering employees with knowledge access, to resources and providing them with skills, understanding and awareness through various educational programs on the management of HIV, Shell adheres to the self-empowerment model thereby maximising the chances of infected employees to live a healthy life. Education challenges and influences customs and beliefs and has a direct impact on economic organization.

In the pre-test questionnaire, statements 5, 7 and 15 addressed the issues of awareness programs on HIV/AIDS conducted by Shell for all staff. In response to statement 5 on Shell having an ongoing awareness program on HIV/AIDS, 50% of the respondents agreed with this statement, and 18% strongly agreed, 27% disagreed and 5% were of a neutral opinion. See figure 4.5

Figure 4.5

The outcome of the group discussions on this statement indicated that respondents had differences of opinion on the awareness programs. Participants needed to know how a large
organization like Shell may be able to reach employees with relevant and up-to-date information on HIV/AIDS.

Disagreement with this statement was more evident in the group discussions, with respondent's stating that information though considered available had to be sought out by members of staff. Access to information is considered to be linked to an employees work role in the organisation. The information demands of the participants were also different in terms of topics participants wanted to be addressed in awareness programs. This indicates that effective communication of HIV/AIDS information to all employees is important in order to manage the epidemic within Shell (Whiteside & Sunter, 2000; Evian 2000).

The role of EAP's in HIV/AIDS education is exemplified by efforts of business organisations (Shevel, 2002; Contreras, 2003; Bennett, 2002), where programs are implemented beyond the scope of the workplace to educate not only the workers but outside communities that interact with the employees (Shevel, 2002).

Statement 15 on the pre-test questionnaire addressed the existence of a focal point for HIV/AIDS issues in the workplace in relation to the availability of an EAP. 50% of the respondents agreed with the statement, 14% strongly agreed, 32% of respondents disagreed and 5% remained neutral. Figure 4.6

Figure 4.6

Shell has a focal point for HIV/AIDS issues in the workplace

- Strongly agree, 14%
- Agree, 50%
- Disagree, 32%
- Neutral, 5%
The group discussion on this statement indicated that different work locations had different facilities for HIV/AIDS issues in the workplace. One respondent in response to a fellow participants comment stressed this by stating that:

“At Headquarters (Cape Town), you people have everything, you get all the facilities that are not available elsewhere”.

This dichotomy came up several times during the course of the workshop in the group discussions. An example was given of the fact that employees at Cape Town office were offered free voluntary testing but no free testing was available at other work locations. It can therefore be argued that employees from Shell Headquarters have access to a focal point for HIV/AIDS and the rest of the participants did not. The absence of a focal point for HIV/AIDS represents a need for Shell to intervene and provide focal points at all workstations.

4.3.4 Sensitising
Aggleton & Homaus (1998), suggest two significant dimensions to health education, the first dimension involves learning about diseases, the effects that they have on our health, how to avoid them and how if we become diseased, health can be restored. The second dimension involves developing a more sophisticated appreciation of the social factors affecting our health and acquiring insight into the ways in which different states of health and well being are socially constructed. The concept of public health is very relevant in reference to managing HIV/AIDS as environmental, social and economic factors impact on the management of the epidemic.

In the pre-test questionnaire, statements 9, 10, 11, 12, 13 and 14 addressed issues of sensitising staff members to services and facilities available to employees affected by HIV/AIDS.

Statement 9 inquired as to whether an up-to-date list of reliable testing services is readily available for all staff to access. 55% of the respondents disagreed with this statement, 9% strongly disagreed, and 18% of the respondents agreed with the statement, 9% of the sample remained neutral. See figure 4.7
The group discussions on this statement were divided on the availability of a list for reliable testing services for all staff. The differences were evident along geographical location of workstations. Those in large cities stated the lists were available whereas those from smaller locations appeared to have access to their local Medical Practitioner for testing services. Similar findings were evident for statement 10, which addressed an up-to-date list of reliable counselling services.

Statement 13 addressed the issue of an up-to-date list of healthcare professionals dealing with HIV/AIDS being available for all staff. 55% of the respondents disagreed that such a list was not available, 27% agreed, 9% strongly agreed and 9% were neutral. See figure 4.8.
Figure 4.8

A list of healthcare professionals dealing with HIV/AIDS is available for all staff

- Strongly agree, 9%
- Agree, 27%
- Disagree, 55%
- Neutral, 9%

NewVar4

Statement 14 was used to assess the general availability of information sources such as websites, magazines etc to all staff. 45% of the respondents disagreed with this statement, 18% strongly disagreed, 27% agreed and 9% remained neutral. See figure 4.9

Figure 4.9

A list of information sources on HIV/AIDS is available to all staff

- Strongly disagree, 18%
- Disagree, 45%
- Agree, 27%
- Neutral, 9%

NewVar5

The group discussions revealed that the support services provided were mainly through a call in telephone service, which was available for all other employee related problems such as drug addiction, alcohol or divorce. The discrepancy in the availability of up-to-date
resources and information availability represents yet another dichotomy in the facilities and resources available to employee at Shell. There was a general agreement from participants' outside Cape Town office that the Headquarters had better and more up-to-date resources than other locations. This dichotomy in the provision of services needs to be addressed in order to provide a uniform service for all employees. During the focus group discussions, the participants got very emotional on this point giving several examples of discrepancies of the facilities between Cape Town and other offices.

As costs of managing HIV/AIDS increase both the government and industry will find it difficult to invest in the education of people skills and capacity development (CIIR Comment 2000). Economic implications of the disease will be manifested both at the individual and community level, with increased medical care costs affecting both the household and employers (Whiteside 1998).

Two realities currently face managers in the South African workplace; firstly there will be a steady increase in illness and death in SA and much of it among the working age population (UNAIDS, 2002; Whiteside & Sunter, 2001; Clarke & Strachan 2000). Secondly there is little information on the impact of AIDS on business; this creates a need to initiate studies to generate a database of the impact of HIV/AIDS. This is necessary in order to document reliable database that can be utilised for planning purposes.

4.3.5 Me and my Organisation

This category was designed to establish the respondents' understanding of their work environment in relation to work colleagues, and their own individual views of the organisation. Statements 1, 2, 3, 4 and 5 addressed the respondent's opinion of their well-being, goals and values and Shell as an employer. In statements 1 to 4, there was general agreement that Shell firstly valued employee's contribution to its well-being (87%). Secondly, agreement was also unanimous of Shell considering the employees' well being (86%). Thirdly, respondents generally agreed that Shell cared about their well being and finally, (82%) of the respondents agreed that Shell considered their personal goals and values.

Statements 6, 7, 8, and 9 addressed the working relationships between respondents and other staff at work locations. In response to statement 6, 36% of the respondents agreed
that there was a good working relationship between people in their workgroup, 23% strongly agreed with this statement, 32% disagreed with the statement and 9% remained neutral.

Responding to statement 7, 32% of the respondents disagreed that working in their office is like working with friends, 18% strongly disagreed, 45% agreeing with this statement and 5% remained neutral. See figure 4.10

Figure 4.10

Statement 8 addressed co-dependence of work colleagues. 50% of the respondents agreed with this statement, 32% disagreed, 9% strongly disagreed and 9% remained neutral. See figure 4.11
Statements 10, 11, 12 and 13 sought to establish respondent initiative in dealing with new situations and producing innovative solutions to problems in the workplace.

In response to statements 10, 11 and 12, nearly 90% of the respondents agreed with creating new ideas and searching out new methods to handle difficult problems. In view of the significant positive perceptions held by most participants at the workshop on their relationship with Shell as an employer, the post-test questionnaire did not include questions in this category.

Statements 10, 11, 12 and 13 sought to establish respondent initiative in dealing with new situations and producing innovative solutions to problems in the workplace. In response to statements 10, 11 and 12, nearly 90% of the respondents agreed with creating new ideas and searching out new methods to handle difficult problems. In view of the significant positive perceptions held by most participants at the workshop on their relationship with Shell as an employer, the post-test questionnaire did not include questions in this category.

4.3.6 Me and HIV/AIDS
This category was designed to assess the workshop participants' views towards HIV/AIDS and their attitude towards action towards dealing with HIV/AIDS.
In response to statement 1 in the pre-test questionnaire to assess respondent feelings towards HIV/AIDS as a problem that was overwhelming for them, 27% of the sample strongly agreed with the statement, 27% agreed with the statement, 36% of the respondents disagreed with this statement and 9% strongly disagreed. See figure 4.12

Figure 4.12

The post-test questionnaire shows a shift in participant responses to the same statement. 15% strongly disagreed with the statement, 45% disagreed with the statement, whereas 10% strongly agreed, 25% agreed with the statement and 5% remained neutral. The slight shift in participant opinion can be suggested to come about because of involvement in the AIDS Champions workshop. The workshop provided participants with an opportunity to discuss HIV/AIDS issues and clarify uncertainties they had on the disease.

Statement 3 on the pre-test questionnaire sought respondent opinion of anticipated support from Shell for HIV/AIDS initiative. 59% of the respondents agreed with this statement, 36% strongly agreed and 5% disagreed with the statement. See figure 4.13
A slight negative shift of opinion is observed on the post-test questionnaire with 60% agreeing with the statement, 30% strongly agreed with the statement and 10% disagreeing with the statement. This shift though slight could be an indication of the need for Shell to reinforce its commitment to HIV/AIDS programs and projects that employees are involved in.

In response to statement 4 on the pre-test questionnaire, 36% of the respondents strongly agreed with the statement that their colleagues would support their initiatives regarding HIV/AIDS in the workplace. 45% of the respondents agreed with the statement, 14% disagreed and 5% remained neutral. See figure 4.14.
The post-test questionnaire indicates that 85% of the respondents were in agreement with the statement, 10% strongly agreed and 5% remained neutral. This major shift reinforces participant responses in section A; number 2 (Me and my organization). Participants spoke positively of their work relations and a good work environment and were positive of support from colleagues. This is considered important by the researcher as HIV/AIDS management requires understanding and judgment free support from colleagues and family. The positive perception on these statements is a good indication that employees would feel free to discuss HIV/AIDS issues in the workplace.

The implementation and success of the Shell AIDS Champions program will depend on employees supporting each other and ultimately the organization providing an environment where employees feel safe to be open about HIV/AIDS. This is especially important for The AIDS Champions as they will be responsible for communicating data to senior management for policy and decision-making. This process needs to be viewed by fellow employees as a constructive process and not one that creates insecurity for affected employees.

4.4 Section A Summary
Section A of this chapter presented and discussed the results from the research evaluation. In general participant’s opinions of Shell policy, orientation, training and sensitising shows an understanding and agreement with current organisational initiatives. On statements
where comparable data is available little shift (small impact) was observed and hence the impact of the workshop of this section was considered minimal. The outcomes in this section indicate that information sharing in the AIDS Champions workshop managed to change participant understanding, knowledge and awareness.

4.5 SECTION B
4.5.1 Introduction
Section B of both questionnaires required the workshop participants to rate their understanding and knowledge on 5 different categories related to HIV/AIDS. In order to meet the final objective of the thesis, section B provides findings and discussion from the knowledge-based categories. The knowledge-based statements were designed to assess whether there would be a significant change in participant knowledge after attending the workshop. The categories in this section of the questionnaire were:

- Medical knowledge,
- HIV testing,
- Counseling,
- Legal knowledge
- Support services.

The ratings were on a scale of 1 to 5 coded as very poor, poor, average, good and very good. Questionnaire B had two extra sections, section I evaluated the workshop process and the final section consisted of open-ended statements also assessing the workshop process. The knowledge-based questions were designed to determine whether there would be a significant impact on participant’s knowledge after attending the workshop.

In assessing participant knowledge and understanding in this category, it can be inferred that the workshop had a significant impact on the outcomes that were observed from the evaluation. The results in this section confirm that knowledge was increased through the workshop intervention. Significant changes were observed on all statements in the knowledge categories: medical; HIV testing; counseling; legal and support services.

A significant statistical difference is shown on most of the statement outcomes, thus reinforcing the inference that the workshop had an impact on participant knowledge and
understanding. The null hypothesis is in this section rejected for all categories on the basis that there is a significant difference between the two data sets. Evidence of the statistical difference is provided in Appendix 3 where t-test value outcomes are presented.

The major impact of the workshop was observed on this section of the evaluation. Statements with a t-value greater than four (4) were considered a major impact. Values greater than 4, 5, 6, and 7 were observed and attributed to several factors. Firstly the highest values were observed on the medical section of the workshop. The next category with t-values greater than 3 were observed in the legal and support sections of the workshop. Lower values were evident in the counseling section.

The difference in values between medical category and the counseling section can be attributed to the factual nature of the medical presentation. The counseling section consisted of subjective knowledge therefore not clearly distinguished in its impact on participants. The legal category also registered higher differences due to the factual content of the presentation.

The following results are presented as evidence of the knowledge and understanding shifts after participation in the AIDS Champions workshop.

4.5.2 Medical Knowledge
This category of the questionnaire required the participants to rate their knowledge on medical knowledge related to HIV/AIDS. In the pre-test questionnaire outcomes there was generally a low rating for knowledge on the different statements. The post-test questionnaire showed positive knowledge shifts in participant knowledge of medical issues related to HIV/AIDS.

In response to statement 1 on the pre-test questionnaire, respondent knowledge on the ways that HIV may or may not be transmitted is represented by 41% of the sample had very good knowledge, 45% had good knowledge and 14% had poor knowledge. See figure 4.15
The posttest questionnaire shows a positive shift in the respondent knowledge on this statement, with 60% of the sample having very good knowledge, 35% had good knowledge and the number of respondents with poor knowledge dropped to 5%. A slight shift observed on participant knowledge on this statement is attributed to the workshop information.

This is in line with research literature, which has shown that providing current information on HIV/AIDS and the management of the disease will influence individual behaviour. In turn self-confidence, personal responsibility, healthy lifestyle, condom uses are all considered to reduce HIV transmission rates (Thom, 2002; Whiteside & Sunter, 2000; Evian 2000).

Statement 2 rated knowledge on the non-medical factors that enhance the spread of HIV, 18% of the respondents had very good knowledge, 50% had good knowledge, 27% had poor knowledge and 5% had average knowledge. See figure 4.16
The post-test questionnaire indicates a major positive shift in respondent knowledge with 55% of the respondents having very good knowledge, 35% of the respondents had good knowledge, 10% had poor knowledge. There was a reduction in the poor knowledge numbers by 17%. This major shift in participant knowledge is evidence of the impact of the AIDS Champions workshop had on participants. The knowledge gained from the workshop would enable AIDS Champions to share information with colleagues therefore creating an environment tolerant of HIV/AIDS infected and affected employees (Whiteside & Sunter, 2000; Evian, 2000).

Statement 4 rated respondent knowledge of the effect of HIV on the immune system. In the pre-test questionnaire, 45% of the respondents had poor knowledge on this statement, 27% had good knowledge 23% had very good knowledge and 5% had average knowledge. See figure 4.17
The post-test questionnaire outcomes once again show a major positive shift in participant responses on this statement, 55% of the respondents had very good knowledge of how HIV affects the immune system, 40% had good knowledge and 5% had average knowledge.

Statement 5 on the pre-test questionnaire rated the respondent's knowledge of how the HIV virus reproduces inside the body, 64% of the respondents had very poor knowledge, 14% had average knowledge, 14% had good knowledge and 9% had very good knowledge. See figure 4.18.
The post-test questionnaire shows that 50% of the respondents had good knowledge of how HIV virus reproduces inside the body, 40% had very good knowledge and 10% had average knowledge. Once again major knowledge shifts are observed, therefore suggesting that the workshop was effective in improving participant knowledge.

Statement 7 rated the workshop participants' knowledge on the manifestation of AIDS. In the pre-test questionnaire, 55% of the respondents had poor knowledge, 32% had good knowledge, 9% had very good knowledge and 5% had average knowledge. See figure 4.19

![Figure 4.19](image)

The post-test questionnaire results show that respondent knowledge on the manifestation of AIDS had changed, 55% of the respondents had good knowledge, 30% had very good knowledge, and 15% of respondents had poor knowledge on the statement.

In response to statement 8 on the pre-test questionnaire, 45% of the respondents had poor knowledge of how HIV/AIDS can be managed, 36% had good knowledge and 18% had very good knowledge on this statement. See figure 4.20
The post-test questionnaire results show a positive change in knowledge on this statement, 60% of the respondents had good knowledge and 40% had very good knowledge.

Statement 9 and 10 rated participant knowledge on how anti-retroviral drugs work and when these should be administered. On statement 9, 73% of respondents had poor knowledge of how ARV drugs work, 5% had very poor knowledge, 9% had good knowledge, 8% had very good knowledge and 5% had average knowledge. Figure 4.21
The posttest questionnaire shows that respondent knowledge of how ARV drugs work changed with 65% having good knowledge, 25% with very good knowledge, 5% had poor knowledge which is a significant drop from the initial 73% and 5% had very poor knowledge.

On the statement of when the drugs should be administered, 59% of the respondents had poor knowledge, 27% had good knowledge, and 9% had very good knowledge with 5% having average knowledge. See figure 4.22

Figure 4.22

![Graph showing knowledge levels](image)

Respondent knowledge on the post-test questionnaire about when ARV drugs should be administered also showed a positive change, 45% of the respondents had good knowledge, 35% had very good knowledge, 15% had average knowledge and 5% had poor knowledge.

4.5.2.1 HIV and testing

This category of statements was designed to assess participants' knowledge of HIV testing procedures and the implications of an HIV test result. In the pre-test questionnaire, there was an overall poor knowledge of the statements in this category. The posttest questionnaire results show a marked positive change in the knowledge of respondents on the statements.
In response to statement 1 on the pre-test questionnaire on the testing procedures of an HIV test, 59% of respondents had poor knowledge, 23% of the respondents had good knowledge and 18% of the respondents had very good knowledge. See figure 4.23

The post-test questionnaire statement on knowledge of testing procedures, 70% of the respondents had good knowledge and 30% had very good knowledge. This response was a significant positive shift in participant knowledge on this statement.

Statement 2 on the pre-test questionnaire assessed the respondent knowledge of what an HIV test measures, 68% of the respondents had poor knowledge, 14% had very poor knowledge, 9% had good knowledge and 9% had very good knowledge. See figure 4.24
The post-test questionnaire results show that respondent knowledge changed with 55% having good knowledge, 30% had very good knowledge, 10% had average knowledge and 5% had very poor knowledge.

Statement 3 on the pre-test questionnaire asked respondent knowledge of types of HIV test are available and in use. 68% had poor knowledge on this statement, 18% had good knowledge, 9% had average knowledge and 5% had very poor knowledge. See figure 4.25.
The post-test questionnaire results show a positive change in the respondent knowledge on the types of HIV tests available and in use. 50% of the respondents had good knowledge, 30% had very good knowledge, 10% had poor knowledge, 5% had very poor knowledge, and 5% had average knowledge.

Statement 5 and 6 on the pre-test questionnaire assessed respondent knowledge on the implications of a positive and a negative HIV test result. On statement 5 on the implications of a positive HIV test result, 55% of the respondents had good knowledge, 18% had average knowledge, 23% had poor knowledge and 5% had very good knowledge. See figure 4.26

Figure 4.26

The implications of a positive HIV test result

- The post-test results from both statement 5 and 6 show a positive change in respondent knowledge on these statements. On statement 5, 55% of the respondents had good knowledge of the implications of a positive HIV test, 40% had very good knowledge and 5% had average knowledge.

On statement 6 on the implications of a negative HIV test result, 50% had good knowledge, 14% had very good knowledge, 27% had poor knowledge and 9% had average knowledge on this statement. See figure 4.27
The implications of a negative HIV test result

![Graph showing implications of a negative HIV test result.]

On statement 6, 55% had good knowledge and 45% had very good knowledge.

The category of medical and HIV testing of the evaluation showed the most vivid shifts in knowledge of the participants in comparison to the other categories. This was attributed to the articulate and informative presentation by the medical expert, which was rated highly by all participants. The presenter was able to engage with the participants successfully. The workshop participants' capacity to assimilate the given information is attributed to the general high academic level of the attendants.

There was a substantial difference in the pre-test and post-test questionnaires in this section. Knowledge and sources of information on HIV/AIDS were quite diverse, with participants reporting that the media was instrumental in providing information on the disease. Most participants argued that knowledge is critical to reducing new incidence of HIV infections.

### 4.5.3 Counselling

This category of statements was designed to assess respondent knowledge on the different aspects of HIV counseling. There was generally poor knowledge of statements in the pre-test questionnaire, this however changed in the post-test questionnaire results with knowledge showing a positive change. The impact of the workshop was moderate with t-
values of greater than 3 on some statements whereas some statements had t-values greater than 2, Appendix 3 refers.

Statement 1 on the pre-test questionnaire assessed respondent knowledge on the need for pre-test and post-test counseling. 41% of the respondents had good knowledge on this statement, 23% had very good knowledge, 32% had poor knowledge and 5% had average knowledge. See figure 4.28

The post-test questionnaire results indicate that 60% of the respondents had very good knowledge, 35% had good knowledge and 5% had average knowledge. This statement shows almost a 100% agreement with knowledge gain. This statement was considered important because employees seek voluntary testing would need to understand the need for counseling before and an HIV test (Burnard, 1992).

In response to question four on the pre-test questionnaire, 54% of the respondents had good knowledge on what confidentiality meant for HIV/AIDS counseling, 18% had very good knowledge, 14% had poor knowledge and 9% had average knowledge with 4% had very poor knowledge. See figure 4.29
The post-test questionnaire shows a marked change in participant knowledge with 75% having very good knowledge and 25% having good knowledge. This represents a 100% positive shift in participant knowledge on this statement. Confidentiality is a very important aspect of any counseling relationship (Burnard, 1992). This factor is especially important in reference to HIV/AIDS due to the nature of the disease and the stigma that still surrounds the illness.

This category was generally criticised in the open-ended section of the questionnaire with workshop participant’s suggesting that the presentation of counseling section of the workshop was not pitched at the correct level for the participants. Participants felt that the session was pitched too low. Significant shifts of knowledge were however observed on this section, and the importance of counseling in the management of HIV/AIDS in the workplace requires that future presenters are made aware of the importance of this section of the AIDS Champions workshop. During the workshop participants did not actively engage with presenters of this session, this was attributed to the manner in which the presentation was given.
4.5.4 Legal Knowledge

This category of statements was designed to assess respondent knowledge on legislation that applies to HIV/AIDS in the workplace. A moderate impact of the workshop is also observed on this section with t-test values greater than 3.

In response to statement 1 on the pre-test questionnaire, 59% of the respondents had poor knowledge of which laws apply to HIV/AIDS in the workplace, 23% had good knowledge of the statement, 5% had very poor knowledge, 5% had very good knowledge and 9% had average knowledge. See figure 4.30

Figure 4.30

The post-test results indicate a very positive change with 60% of the respondents having good knowledge on this statement, 30% had very good knowledge, 5% had poor knowledge and 5% had average knowledge. Good understanding of the legal requirements on HIV/AIDS is important as Shell can be liable for litigation if a labor practice can be deemed discriminatory against an HIV positive employee (Bendix 2001; Finnemore, 1999).

Statement 2 on the pre-test questionnaire assessed respondent knowledge on workplace issues that are affected by legislation related to HIV/AIDS, 64% of the respondents had poor knowledge on this statement, 27% had good knowledge, 5% had very poor knowledge and 5% had average knowledge. See figure 4.31
The post-test questionnaire results indicate that 50% of the respondents had good knowledge on this statement, 35% had very good knowledge, 5% had average knowledge, 5% had poor knowledge and 5% expressed no opinion. A slight shift in participation was observed. This statement is relevant in the management of HIV/AIDS in the workplace. Good knowledge would imply that participants would recognize unfair labor practices and report these to management for rectification.

Statement 3 on the pre-test questionnaire assessed respondent knowledge of legislation covering employer obligations towards HIV/AIDS in the workplace. In response 64% of the participants had poor knowledge on this statement, 23% had good knowledge, 9% had very poor knowledge and 5% had average knowledge. See figure 4.32.
The post-test questionnaire outcomes indicate a positive shift in knowledge of the respondents. 55% of the respondents had good knowledge, 35% had very good knowledge, 5% had poor knowledge and 5% expressed no opinion.

Statement 4 on the pre-test questionnaire assessed respondent knowledge of legislation covering employee rights in the workplace. In response, 68% of participants had poor knowledge on this statement, 23% had good knowledge and 9% had very poor knowledge. See figure 4.33.
The post-test outcome on this statement indicate a positive change in respondent knowledge, 45% of the respondents had good knowledge, 40% had very good knowledge, 5% had poor knowledge, 5% had average knowledge and 5% expressed no opinion.

Although shifts were observed in this section, they were moderate in comparison to the first section but higher than the counselling section of the evaluation. It is beneficial for AIDS Champions to be aware of the legal requirements relating to HIV/AIDS as such information will prove valuable in the interaction with fellow employees (Bendix, 2001; Anderson & van Wyk, 2000).

4.5.6 Support services

The prevalence of HIV/AIDS has challenged management to pledge their commitment to their employees. The problem of employees being infected with HIV has become the responsibility of the Human Resources department. This has resulted in managers designing interventions for HIV/AIDS to manage the problem. The design and implementation of these interventions should be a collaborative integrated initiative in order to create a cohesive intervention.

This category of statements was designed to assess respondent opinion of the support services offered by Shell for employees and their families. Overall, there was a positive shift in knowledge of the participants in the post-test questionnaire. Individual statements are discussed in detail below.

Statement 1 on the pre-test questionnaire assessed respondent views of support services for family members of Shell employees. 59% of the respondents had a poor perception of this statement, 23% had a good perception of the statement, 8% had a very good perception, 5% had a very poor perception and 5% had an average perception of the organisation's support for family members affected by HIV/AIDS. See figure 4.34
In the post-test questionnaire, a marked positive response was observed, 45% of respondents had good perception of this statement, 40% had a very good perception, 5% had an average perception, 5% had a poor perception and 5% expressed no opinion. Campbell (1997) emphasizes the importance of family and social support when dealing with HIV/AIDS; this could be reinforced by Shell through programs that include family members.

Statement 3 on the pre-test questionnaire assessed respondent perception on assistance offered by Shell with acquiring ARV drugs to all staff. 77% of the respondents had a poor perception of this statement, 14% have a very poor perception and 9% had an average perception. See figure 4.35
The post-test questionnaire showed a remarkable positive shift in respondent knowledge on this statement, 55% of the respondents had a good knowledge, 30% had a very good knowledge and 15% had a poor knowledge. This shift represented a big shift from the pre-test questionnaire outcomes. To counteract the devastating effect of HIV/AIDS, Shell’s policy and strategy includes the provision of medical assistance with ARV treatment for employees (Shell Policy Document). This is a progressive and positive step as it has capacity to reach beyond the current workplace programme to the community.

Statement 4 on the pre-test questionnaire assessed the respondent perception of facilities that exist to foster cultural sensitivity when dealing with HIV/AIDS in the workplace, 82% of the respondents had a poor perception on this statement, 9% had a very poor perception, 5% had an average perception and 4% had good perception of the services offered. See figure 4.36
The post-test questionnaire offers a contradiction of results, with a positive shift of opinion but also an increase in the percentage of the poor perception. 55% of the respondents had a good perception of the statement, 15% had a very good perception, 15% had a poor perception and 15% had an average perception. Factors such as cultural norms, educational levels and circumcision rituals have an impact on how HIV/AIDS knowledge is accepted and assimilated (Maiden, 1992). Campbell (1997) suggests that it is critical to ensure that HIV/AIDS programs include local knowledge and beliefs as people are always referring to the previous knowledge to made critical life decisions.

Statement 5 on the pre-test questionnaire assessed respondent perception of the facilities that exist for psychological or emotional support for employees, 59% of respondents had a poor perception, 9% had a very poor perception, 23% had a good perception and 9% had an average perception. See figure 4.37.
In the post-test questionnaire, a marked positive change was observed with 45% of the respondents having a good perception, 15% had a very good perception, 30% had a poor perception and 10% had an average perception.

Statement 6 on the pre-test questionnaire assessed respondent perception on policies that encourage voluntary testing for HIV. 77% of the respondents have a poor perception of this statement, 5% had a very poor perception on the statement, 9% had a good perception and 9% had a very perception of the statement. See figure 4.38
On the post-test questionnaire, 55% of the respondents had a good perception of the statement, 10% of the respondents had a very good knowledge, 28% had a poor knowledge, and 10% had an average knowledge on the statement.

4.6 Section B Summary
Section B of the evaluation provided findings from the knowledge-based categories of the questionnaire. These findings give evidence that there is a statistical significant difference between the two data sets. The major shifts were observed in the medical category, followed by the legal category and minor shifts on the counseling section. The final thesis objective is fulfilled in this section, implying that the AIDS Champions workshop had an impact on participant knowledge.

4.7 Chapter Summary
The overall impact of the workshop was established in this chapter and discussion of the results was presented. The impact of the workshop was highlighted. The overall impact of the workshop was attributed to the workshop activities and the presentation ability of the facilitators. The second point observed was the academic qualifications of the participants, which contributed to the easy assimilation of information. The following chapter provides a conclusion of the research study and recommendations for future program development.
CHAPTER FIVE
CONCLUSION AND RECOMMENDATIONS

5. Introduction
HIV/AIDS challenges the economic, social and emotional fabric of rich and poor nations alike, but the impact of the disease, in the absence of health services and affordable life-prolonging drugs, exists on an altogether different scale in Sub-Saharan Africa where high levels of poverty and underdevelopment are dominant. The epidemic is destroying opportunities for entire generations and families, communities and nations are losing everything for which they have worked so hard. In reflection of other countries that have successfully tackled the spread of the epidemic it is clear that this does not have to happen.

Empowering people with the same prevention, awareness and management strategies that have helped in some countries reduce the incidence and spread of HIV, the knowledge that they need to avoid contracting and transmitting the disease, has already proven effective in at least two African countries. These strategies need to be expanded and supported elsewhere in the Sub-Saharan region to tackle the epidemic. Taking direct action that will assist individuals and communities to slow the rate of new HIV infection and provide infected individuals and their families with basic health services will go a long way in firstly stabilising the infections rates, and then managing the spread of HIV. This way community can ensure that future generations who have lost their parents to HIV continue to have access to safe and loving home environments, remain in school, and can grow to be productive people in society.

This study evaluated the AIDS Champions workshop conducted by Shell Southern Africa. The following objectives were identified:

- To Document the AIDS Champions program
- To evaluate the perceptions and knowledge of the AIDS Champions workshop participants.
- To generate data for future program development. The generation of data for future program development is important especially in the instance of HIV/AIDS, which is considered as an evolving epidemic.
• To establish that information sharing can change participant knowledge and understanding on HIV/AIDS issues, using the coded data obtained from pre-test and post-test questionnaires
• To test the hypothesis that there would be no difference between the two data sets from the pre-test and post-test questionnaires.
• Consideration of the diversity of the workforce should be incorporated in the HIV/AIDS interventions implemented by Shell as different cultural, social and economic factors impact on the employees' knowledge and understanding.

The study firstly provided literature on HIV/AIDS and outlined the impact that the epidemic has on society. Current solutions were discussed to set the context for the evaluation research.

In order to conduct the evaluation, the researcher provided a detailed description of the identified program. The program description is offered in chapter two of the study.

The research procedure is outlined and the following research techniques were used to conduct the study; interviews with workshop coordinator, focus group discussions with participants, questionnaires administered to the participants, documentary analysis and participant observation. Details of the research techniques are provided in chapter three. Program evaluation is discussed in this chapter offering the different forms of evaluation (formative and summative) and the benefits.

Formative evaluation was used to assess the implementation process of the workshop. Participants at the workshop were required to assess the presentation skills and ability to impart knowledge of the trainers and the relevance of the information. The study reinforced formative evaluation by defining the program objectives on which the workshop activities were based. The activities in the workshop formed the basis for setting the evaluation criteria.

Summative evaluation was implemented in the form of a responsive approach. The evaluation assessed the individual understanding of the workshop and presented these as the mean difference between the knowledge at the beginning of the workshop and after the workshop. The outcomes were obtained using self-scoring questionnaires. In the
assessment of how far the program was effective in the context of teaching and learning, the major shifts observed on the knowledge-based statements is evidence of the success of the workshop.

The weaknesses of the workshop were identified mostly on the general understanding statements where minimal impact was observed on evaluation outcomes. The benefits of this evaluation were identified in the input that participants provided on the different sections of the workshop. This input will be presented to Shell to offer an opportunity to develop or modify the program. This evaluation provides Shell with a documented, systematic assessment of the workshop using criteria based on program goals and objectives. This reduces subjective judgment about the program and the workshop. The evaluation further offers a framework through which Shell can measure workshop effectiveness and examine the various roles required in the development of the program.

The fluid nature of most HIV/AIDS programs requires that systematic evaluation be built into the education and awareness programs. This is necessary to keep up to date with the ever-changing environmental and scientific factors that impact on knowledge and understanding of the epidemic.

This research study successfully evaluated an HIV/AIDS Champions workshop. This represents data generation on HIV/AIDS program evaluation in the workplace, an area where documented evaluation is hard to locate.

Gaps in addressing the HIV/AIDS epidemic still prevail, as there is little empirical evidence about the levels of societal determinants of behavior and the effectiveness of various interventions to bring about behavior change. Stopping the epidemic means not only preventing people from getting infected, but also improving the well-being and environment of those most at risk and affected. Initiatives such as Shell AIDS Champions, which aim to get involved in managing HIV/AIDS in the workplace and broader society, reinforce corporate citizenship and build a positive reputation.

Education and awareness programs work, according to Ng (2002), solid evidence has been collected and documented by UNAIDS to show that where education and awareness programs have been implemented, new infection rates were declining.
Shell is in this respect abreast with progressive trends in managing HIV/AIDS in the workplace. Current Shell policy and proposed policy places the organization in the innovative category in managing HIV/AIDS. The implementation of the Shell AIDS Champion is but one aspect of the organisations' wider policy on HIV/AIDS.

The above findings indicate that the AIDS Champions workshop had a positive short-term impact on the participant’s knowledge. The advantages of effective prevention and awareness programs are documented for countries such as Uganda, Senegal, Australia (Whiteside & Sunter, 2000; Evian, 2000) and most recently for Zambia (Clarke & Strachan, 2000).

Some of the impacts of HIV/AIDS on an organisation were identified in chapter 2 as:
- Reduced productivity
- Increased rate of absenteeism
- Increased recruitment and training costs
- Strain on employee benefits and medical aid schemes
- Increased costs and loss of customer base
- Poor management skills base due to shortage of a skilled workforce (Strude & Smart, 2000, Whiteside & Sunter, 2000; Evian, 2000; Mkhwanazi, 2002).

These impacts if not addressed in an organisation have a variable effect in terms of growth and productivity. According to Evian (2000), concerted efforts to provide HIV prevention and awareness programs have been implemented in many South African organisations. Strategies in training education and some provision of medical benefits have been extended to employees (Shevel, 2002). The implementation of the AIDS Champions program represents a proactive approach to HIV/AIDS awareness and management in the workplace and the broader community. The implementation of the AIDS Champions program is a fulfilment of the EAP tenet. According to Maiden (1992) & Trice & Beyer (1993), the EAP tenet argues that job performance is decreased by the personal troubles and psychological pain that affects workers. Therefore, such employees should be helped by their employers to either secure treatment or other assistance. The policy and strategy implemented at Shell on HIV/ are indicative of a combination of the EAP models discussed in chapter 4 AIDS.
The cost of the impacts of HIV/AIDS on an organisation may be more costly than the eventual death of the employees. With customer markets shifting and customer spending patterns shifting from goods and services to health, it is imperative for organisations to implement programs that cover employees as well as their communities (Whiteside & Sunter, 2000). The extension of HIV/AIDS programs beyond the workplace will benefit the nation as information and services provided will impact positively on mortality from opportunistic illnesses, therefore reducing government expenditure to cater for a high number of patients.

Lessons about effective prevention programs implemented elsewhere and advances in medical science verify that early, efficient management of HIV related issues can effectively reduce infection rates in a targeted community (Evian, 2000). The challenge for Shell in implementing the current strategies and policies dealing with HIV/AIDS is to effectively monitor the programs to ensure that they are in line with both organisational and government legislation. Evidence (UNAIDS, 1998), suggests that prevention is a cheaper option compared to the costs of medical care provision for someone living with AIDS. The cost of inaction far outweighs the cost of action (Strude & Smart, 2000).

Countries where a negative growth of HIV/AIDS has been recorded (UNAIDS 2002) are credited with the implementation of educational and awareness programs. South African organisations have implemented various programs in the past decade but the efficacy of these programs has not been established. The lack of program evaluation on the implemented programs is attributed to the complexity of the epidemic and the variable impact on organisations. The need for program evaluation has been established to extend beyond the economic, social or moral demands for effective prevention and awareness programs. The need to reduce the escalating incidence of the HIV epidemic demands evaluation and monitoring of such programs.

5.2 RECOMMENDATIONS
Shell Southern Africa through its AIDS management policy is implementing several projects to help prevent the spread of the epidemic. In the workplace the continued implementation of education and awareness programs shows a commitment to the issue of HIV/AIDS. The following recommendations arising from the evaluation of the AIDS Champions are therefore put forward:
• There is need to establish a plan of action with a schedule and lines of responsibility to implement Shell’s policy on HIV/AIDS effectively
• Committed leadership, education and multi-sectoral approaches need to be established. These need to include representatives from top management through middle management, including HR, training, health and safety department as well as workers representative bodies and workers.
• Monitor and assess what current health information and services are offered both in the workplace and how effective have they been.
• Cultural and diversity factors should be incorporated in the programs implemented in the workplace
• Constantly review national labor laws on HIV/AIDS and direct implications for Shell policy on the management of HIV/AIDS.
• The future presentation of the counselling section of the workshop should be pitched at a higher level in line with participant capability of knowledge assimilation.
• Clarification of Shell policy on HIV/AIDS to clarify questions participants had on this section.
• The continued involvement of people living with HIV/AIDS is central to an effective workplace program.

5.3 The need for follow-up evaluation
It is important to remember that the findings in this research study say nothing about the long term change of participant knowledge. It is therefore recommended that to ascertain whether long term knowledge was sustained following the workshop, further evaluation research of the AIDS Champions workshop be conducted.

The follow-up evaluation can help researchers and planners discern the changes in dynamics of the program over time. In this vein, the follow-up evaluation can also determine whether the AIDS Champion program has unintended consequences, beneficial or otherwise (Rossi, et al., 1999).

Two issues come to the fore in the management and evaluation of social intervention programs. Firstly, restraints on resources will continue to require choosing the social problem areas on which to concentrate and the programs that should be given priority.
Secondly, intensive scrutiny of existing programs will continue because of the pressure to curtail or dismantle those that do not demonstrate that their services are effective and efficient (Rossi et al. 1999).

Despite many education and awareness programs being implemented in Sub-Saharan Africa and South Africa, the incidence of HIV/AIDS occurrence is still escalating dramatically (UNAIDS Report 2002). This calls for efforts to evaluate programs to assess efficacy of performance and adequacy of information being imparted to participants and the perceptions that participants have towards the educational program. Program evaluation seeks information to improve instruction effectiveness and efficiency. Strecher & Davies (1987). The development of most HIV/AIDS education programs has been largely unplanned, highly fragmented, discontinuous and costly (Whiteside, 2000 in Clarke & Strachan 2000), therefore evaluation of such programs will help develop and improve the interventions.

The basic idea behind the theory of human capital is that the embodiment of skills through education and training is as much a form of investment as is the purchase of a machine (Trotter, 1983).

"A man educated at the expense of much labor and time...may be compared to an expensive machine. The work, which he learns to perform, it must be expected over and above the usual wages of common labor, will replace to him the whole expense of his education, with at least the ordinary profits of an equally valuable capital. It must do this too in a reasonable time, regard being had to the very uncertain duration of human life, in the same manner as the more certain duration of the machine" (Smith cited in Trotter 1993)

If the uncertainty surrounding the duration of human life can be reduced and some improvement in the quality of life can be secured, through education and awareness campaigns then employees become a valuable investment for organisations.
REFERENCES:


The Policy Project 1999. The Economic impact of AIDS. (Draft) Futures Group Int.


RE: Permission to conduct an evaluation of HIV/AIDS Workshop

I am delighted to be able to offer you full access to the above workshop, which will be conducted for Shell Southern Africa at Monkey Valley Beach Resort in Noordhoek on 5 and 6 November 2002, and thank you for the interest you have shown.

As per our discussions, you will be attending the workshop with a colleague, and are expected to participate fully in all activities and discussions. Two designated slots for evaluation have been timetabled for you, one at the beginning and one at the end of the workshop. However, your participation in the workshop will enable you to gather information throughout the two-day period. Names of any interviewees shall remain confidential.

The documentation you have received, both belonging to Shell and myself, shall remain totally confidential. The findings of your evaluation shall be confined to the academic purpose for which they were intended, and shall not be published commercially or made available to any other organisations without my written consent. However, I reserve the right to access the findings of your research once your thesis has been submitted.

Signed by candidate
SHELL HIV/AIDS CHAMPIONS QUESTIONNAIRE

NOVEMBER 2002 WORKSHOP

Thank you for taking the time to fill in this questionnaire.

The purpose of the exercise is to research the process and implementation of the Championship Workshop. This questionnaire is confidential and conducted on behalf of Sean O’Connor. Any information gathered will be used anonymously. Certain recommendations drawn may be presented to Shell to enhance the HIV/AIDS education program.

Any queries or problems regarding this questionnaire, please contact Chao Mulenga at Chaoferamo@yahoo.co.uk or Sean O’Connor at seanoconnor@mweb.co.za

A

1. PLEASE ANSWER ALL QUESTIONS
2. MARK YOUR RESPONSE WITH AN "X"
3. AVOID SELECTING NUMBER 3

X

Your Response matters!

DO NOT PUT YOUR NAME ON ANY PART OF THE QUESTIONNAIRE
Please tick one box only

1. Gender: Male □   Female ☐

2. Marital Status:
   - Married
   - Living together
   - Divorced
   - Single
   - Other

3. Your Highest Qualifications:
   - High school
   - Undergraduate degree or diploma
   - Honours degree
   - Masters degree
   - Doctoral degree

4. Your age (in years) : 47

5. Years in current position: 4

6. Years with Shell: 30

7. If Shell had five (5) levels with 5 being top management, what level would you be on?
   - 1
   - 2
   - 3
   - □ 4
   - □ 5

Indicate area of specialization in the organization:
### Shell Policy; Training, Orientation, Sensitising

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
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</thead>
<tbody>
<tr>
<td>1. Shell has developed an appropriate response to HIV/AIDS</td>
<td>1</td>
<td>2</td>
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<td>2. I know and understand Shell's policy on HIV/AIDS in the workplace</td>
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<td>5</td>
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<td>3. My colleagues know and understand Shell’s policy on HIV/AIDS</td>
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<td>2</td>
<td>3</td>
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<tr>
<td>4. Shell has a duty to inform, educate and assist all employees affected by HIV</td>
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<td>2</td>
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<td>5. Shell has an ongoing awareness program on HIV/AIDS for all staff</td>
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<td>6. Staff members are briefed on Shell’s policy on HIV/AIDS in the workplace</td>
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<tr>
<td>7. Every employee is provided with information relevant to HIV/AIDS</td>
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<td>8. Staff members are briefed on their entitlements for all life threatening diseases</td>
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<td>2</td>
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<td>9. An up-to-date list of reliable testing services is readily available to all staff</td>
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<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>10. An up-to-date list of reliable counselling services is readily available to all staff</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>11. A list of reliable support services (groups, financial, legal) is available to all staff</td>
<td>1</td>
<td>2</td>
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<td>5</td>
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<tr>
<td>12. Procedures of confidentiality are strictly adhered to in regards to HIV/AIDS</td>
<td>1</td>
<td>2</td>
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<td>5</td>
</tr>
<tr>
<td>13. A list of healthcare professionals dealing with HIV/AIDS is available for all staff</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. A list of information sources on HIV/AIDS related issues is available to all staff</td>
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<td>2</td>
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<td>5</td>
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<tr>
<td>15. Shell has a focal point for HIV/AIDS issues in the workplace</td>
<td>1</td>
<td>2</td>
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<tr>
<td>16. Shell’s policy on HIV/AIDS sufficiently addresses my concerns regarding the disease and its impact within the workplace and community</td>
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<td>2</td>
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<tr>
<td>17. Shell’s policy on HIV/AIDS sufficiently addresses my aspirations regarding the disease and its impact within the workplace and community</td>
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<td>2</td>
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<tr>
<td>18. There isn’t much one can do about HIV/AIDS in a large corporation without the support of management</td>
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<td>2</td>
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<td>5</td>
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<tr>
<td>19. There isn’t much one can do about HIV/AIDS in a large corporation without the support of the labour movement</td>
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<td>2</td>
<td>3</td>
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<tr>
<td>20. Shell’s other priorities will impact negatively on the ability to address HIV/AIDS issues</td>
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<td>2</td>
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## Me and my Organisation

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<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
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<td>1</td>
<td>Shell values my contribution to its well being</td>
<td>1 2 3 4 5</td>
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<td>2</td>
<td>Shell strongly considers my well being</td>
<td>1 2 3 4 5</td>
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<tr>
<td>3</td>
<td>Shell really cares about my well being</td>
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<td>4</td>
<td>Shell considers my personal goals and values</td>
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<td>5</td>
<td>Shell is willing to help me when I need a special favour</td>
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<td>6</td>
<td>There is a good working relationship between people in my office</td>
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<td>7</td>
<td>Working in my office is like working with friends</td>
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<td>8</td>
<td>Members of my workgroup are co-operative with each other</td>
<td>1 2 3 4 5</td>
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<td>9</td>
<td>My work group members know that they can depend on each other</td>
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<td>10</td>
<td>I create new ideas to handle difficult issues</td>
<td>1 2 3 4 5</td>
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<td>11</td>
<td>I search out new methods, techniques or tools to solve work problems</td>
<td>1 2 3 4 5</td>
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<td>12</td>
<td>I create new ideas to handle work problems</td>
<td>1 2 3 4 5</td>
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<td>13</td>
<td>Consideration of all parties is sought when designing organisational policies</td>
<td>1 2 3 4 5</td>
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## Me and HIV/AIDS

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<td>1</td>
<td>I feel that HIV/AIDS is a problem that is overwhelming for me</td>
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<td>2</td>
<td>I am capable of making a difference on issues related to HIV/AIDS</td>
<td>1 2 3 4 5</td>
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<td>3</td>
<td>I will be supported by Shell for my initiatives regarding HIV/AIDS</td>
<td>1 2 3 4 5</td>
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<td>4</td>
<td>My colleagues will support my initiatives regarding HIV/AIDS</td>
<td>1 2 3 4 5</td>
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<tr>
<td>5</td>
<td>I feel empowered to do something about HIV/AIDS</td>
<td>1 2 3 4 5</td>
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<tr>
<td>6</td>
<td>I am tired of hearing about HIV/AIDS</td>
<td>1 2 3 4 5</td>
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## Rate your knowledge on the following statements

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<th>Poor</th>
<th>Average</th>
<th>Good</th>
<th>Very good</th>
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<td>1</td>
<td>The ways that HIV may or may not be transmitted</td>
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<td>The non-medical factors that enhance the spread of HIV</td>
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<td>3</td>
<td>The difference between HIV and AIDS</td>
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<td>4</td>
<td>HIV's effect on the immune system</td>
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<td>5</td>
<td>How the HIV virus reproduces inside the body</td>
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<td>6</td>
<td>How AIDS develops from HIV</td>
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<td>7</td>
<td>The manifestation of AIDS</td>
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<td>8</td>
<td>How AIDS can be managed</td>
<td>1 2 3 4 5</td>
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<td>9</td>
<td>How anti-retroviral drugs work</td>
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<td>When anti-retroviral drugs should be administered</td>
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<td>11</td>
<td>The ways that mother-to-child transmission (MTCT) of HIV can occur</td>
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### HIV testing

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<th>The testing procedures for an HIV test</th>
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<td>2</td>
<td>What an HIV test measures</td>
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<td>What types of HIV tests are available and being used</td>
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<td>4</td>
<td>What the window period refers to in regards to HIV</td>
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<td>The implications of a positive HIV test result</td>
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<td>The implications of a negative HIV test result</td>
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### Counselling

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<td>The need for relevant and appropriate counselling for HIV/AIDS</td>
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</tr>
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<td>3</td>
<td>What voluntary testing means</td>
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</tr>
<tr>
<td>4</td>
<td>What pre-test and post-test counselling involves</td>
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<td>2</td>
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<td>5</td>
<td>What confidentiality means for HIV counselling</td>
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<td>The difference between counselling and advice</td>
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### Legal knowledge

<table>
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<tr>
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<th>Which laws apply to HIV/AIDS in the workplace</th>
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<td>What workplace issues are affected by legislation related to HIV/AIDS</td>
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<td>2</td>
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<td>3</td>
<td>The legislation that covers employer obligations</td>
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<td>Legislation covering employee rights in the workplace</td>
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### Support Services

<table>
<thead>
<tr>
<th></th>
<th>Support services for family members of Shell employee (HIV/AIDS related)</th>
<th>1</th>
<th>2</th>
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<tr>
<td>2</td>
<td>Medical care services for life threatening illnesses for Shell employees</td>
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<td>2</td>
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<td>3</td>
<td>Assistance with acquiring anti-retroviral drugs for employees</td>
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<td>4</td>
<td>Facilities to foster cultural sensitivity in dealing with HIV/AIDS</td>
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<td>5</td>
<td>Facilities for psychological/Emotional support (HIV/AIDS support-groups)</td>
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<td>Policies encouraging voluntary testing for HIV</td>
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<td>2</td>
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</tbody>
</table>
SHELL HIV/AIDS CHAMPIONS QUESTIONNAIRE
NOVEMBER 2002 WORKSHOP

Thank you for taking the time to fill in this questionnaire.

The purpose of the exercise is to research the process and implementation of the Championship Workshop. This questionnaire is confidential and conducted on behalf of Sean O’Connor. Any information gathered will be used anonymously. Certain recommendations drawn may be presented to Shell to enhance the HIV/AIDS education program.

Any queries or problems regarding this questionnaire, please contact Chao Mulenga at Chaoferamo@yahoo.co.uk or Sean O’Connor at seanoconnor@mweb.co.za

1. PLEASE ANSWER ALL QUESTIONS
2. MARK YOUR RESPONSE WITH AN “X”
3. AVOID SELECTING NUMBER 3

X

Your Response matters!

DO NOT PUT YOUR NAME ON ANY PART OF THE QUESTIONNAIRE
## Indicate the extent of your agreement with each of the following statements

### Shell Policy

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Shell has developed an appropriate response to HIV/AIDS</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I know and understand Shell's policy on HIV/AIDS in the workplace</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. There isn't much one can do about HIV/AIDS in a large corporation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>4. There isn't much one can do about HIV/AIDS in a large corporation</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Shell's other priorities will impact negatively on the ability to</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>address HIV/AIDS issues</td>
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</table>

### Me and HIV/AIDS

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel that HIV/AIDS is a problem that is overwhelming for me</td>
<td>1</td>
<td></td>
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</tr>
<tr>
<td>2. I am capable of making a difference on issues related to HIV/AIDS</td>
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</tr>
<tr>
<td>3. I will be supported by Shell for my initiatives regarding HIV/AIDS</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. My colleagues will support my initiatives regarding HIV/AIDS</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I feel empowered to do something about HIV/AIDS</td>
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<td></td>
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</table>

### Rate your knowledge on the following statements

**Medical Knowledge**

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<tr>
<th>Statement</th>
<th>Very Poor</th>
<th>Poor</th>
<th>Average</th>
<th>Good</th>
<th>Very Good</th>
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</thead>
<tbody>
<tr>
<td>1. The ways that HIV may or may not be transmitted</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. The non-medical factors that enhance the spread of HIV</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>3. The difference between HIV and AIDS</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>4. HIV's effect on the immune system</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>5. How the HIV virus reproduces inside the body</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>6. How AIDS develops from HIV</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td></td>
<td>The manifestations of AIDS</td>
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<tr>
<td></td>
<td>How AIDS can be managed</td>
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<td></td>
<td>How anti-retroviral drugs work</td>
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<tr>
<td></td>
<td>When anti-retroviral drugs should be administered</td>
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<tr>
<td></td>
<td>The ways that mother-to-child transmission (MTCT) of HIV can occur</td>
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<tr>
<td></td>
<td>HIV testing knowledge</td>
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<tr>
<td></td>
<td>What an HIV test measures</td>
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<tr>
<td></td>
<td>What types of HIV tests are available and being used</td>
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<tr>
<td></td>
<td>The testing procedures for HIV</td>
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<tr>
<td></td>
<td>What the window period refers to in regards to HIV</td>
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<td></td>
<td>The implications of a positive HIV test result</td>
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<tr>
<td></td>
<td>The implications of a negative HIV test result</td>
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<td></td>
<td>Counseling Knowledge</td>
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<td>The difference between counseling and advice</td>
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<td></td>
<td>The need for pre- and post-test counseling</td>
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<tr>
<td></td>
<td>The need for relevant and appropriate counseling for HIV/AIDS</td>
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<td></td>
<td>What confidentiality means for HIV counseling</td>
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<td></td>
<td>Why pre- and post-test counseling is necessary</td>
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<td></td>
<td>What informed consent means</td>
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<td>Legal knowledge</td>
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<td></td>
<td>Which laws apply to HIV/AIDS in the workplace</td>
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<tr>
<td></td>
<td>What workplace issues are affected by legislation related to HIV/AIDS</td>
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<tr>
<td></td>
<td>Why the legislation is applied specifically to HIV/AIDS</td>
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<td></td>
<td>Legislation that covers employer obligations</td>
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<tr>
<td></td>
<td>Legislation covering employee rights in the workplace</td>
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<td></td>
<td>Support Services</td>
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<td></td>
<td>Support services for family members of Shell employees (HIV/AIDS related)</td>
<td></td>
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<tr>
<td></td>
<td>Medical care services for life threatening illnesses for Shell employees</td>
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</tbody>
</table>
Assistance with acquiring anti-retroviral drugs for employees 1 2 3 5

Facilities that currently exist to foster cultural sensitivity in dealing with HIV/AIDS 1 2 3 5

Facilities that exist for psychological/emotional support (HIV/AIDS support groups) 1 2 3 5

Policies encouraging voluntary testing for HIV 1 2 3 5

On a scale of 1 to 5 rate the following statements

AIDS champions Workshop

1. The trainers were very knowledgeable about HIV and AIDS 1 2 3 4
2. The trainers were well prepared and professional 1 2 3 4
3. Trainers valued my contribution to the workshop 1 2 3 4
4. I re-evaluated my perceptions about HIV/AIDS 1 2 3 4
5. My colleagues valued my contribution to the workshop 1 2 3 5
6. I valued my colleagues contribution the workshop 1 2 3 4
7. I would recommend others to attend this workshop 1 2 3 5
8. The workshop was stimulating 1 2 3 4
9. I understand my role as an AIDS Champion in the workplace 1 2 3 5
10. The workshop had a positive effect on my ability to fulfill my normal responsibilities as Shell 1 2 3 5
11. I look forward to my role as an AIDS Champion 1 2 3 4
12. I am apprehensive about my role as an AIDS Champion 1 2 3 5
13. This workshop will have a lasting effect on my perception on HIV/AIDS 1 2 3 4
14. I would like to attend a refresher course 1 2 3 4
15. The workshop was better than expected 1 2 3 4
16. The workshop did not live up to my expectations 1 2 3 4 5
17. I am feeling motivated after attending this workshop 1 2 3 4
18. I left feeling better informed after this workshop 1 2 3 4
Indicate your favorite part of the workshop:

THE SESSION WITH DR. ASHAFF

State one thing that could have been left out of the workshop:

NO E E TIME - FELT LOTS OF QUESTIONS LEFT UNANSWERED

Mention one thing that you would have liked more of:

Time

Indicate something that surprised you about yourself during the workshop:

THAT I HAD MY OWN MISCONCEPTIONS

Mention one tip you would give to Emma:

[Blank space]

Mention one tip you would give to Sean:

[Blank space]

These are the strong points of this workshop:

DR. ASHAFF

These are the weak points of the workshop:

NOT ENOUGH TIME TO TALK THRU' ISSUES

THIS IS YOUR SPACE!!

Any further details that you wish to add on the Shell policy on HIV/AIDS and your participation in the AIDS Champions workshop?

1 BELIEVE THAT LOWER LEVEL M/EMENT BUY IN IS ESSENTIAL
JG 4-2, I WAS VERY DISAPPOINTED AT THE ABSENCE
OF MANAGERS VOLUNTEERING FOR THIS ROLE .... BELIEVE
IT GIVES AN INDICATION OF THEIR SUPPORT ?? IF
WE HAD M/EMENT @ JG 3 OR 2 IN OUR GROUP IT MIGHT
ASSIST US IN GETTING MORE SUPPORT OR HIGHER
Peoples.

Thank you for your participation in this evaluation.
1. Shell has developed an appropriate response to HIV/AIDS

<table>
<thead>
<tr>
<th>Group 1 vs. Group 2</th>
<th>Mean</th>
<th>Mean</th>
<th>t-value</th>
<th>df</th>
<th>p</th>
<th>t separ.</th>
<th>df</th>
<th>p</th>
<th>df</th>
<th>p</th>
<th>Valid N</th>
<th>Valid N</th>
<th>Std. Dev.</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Var2 vs. Var77</td>
<td>4.136364</td>
<td>4.200000</td>
<td>-0.308843</td>
<td>40</td>
<td>0.759044</td>
<td>-0.318169</td>
<td>31.23728</td>
<td>0.752474</td>
<td>22</td>
<td>0.833550</td>
<td>0.410391</td>
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<td></td>
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</tr>
</tbody>
</table>

T-test for Independent Samples (T-test data)
Note: Variables were treated as independent samples

2. I know and understand Shell's policy on HIV/AIDS in the workplace

<table>
<thead>
<tr>
<th>Group 1 vs. Group 2</th>
<th>Mean</th>
<th>Mean</th>
<th>t-value</th>
<th>df</th>
<th>p</th>
<th>t separ.</th>
<th>df</th>
<th>p</th>
<th>df</th>
<th>p</th>
<th>Valid N</th>
<th>Valid N</th>
<th>Std. Dev.</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Var3 vs. Var78</td>
<td>3.303636</td>
<td>4.050000</td>
<td>-2.340384</td>
<td>40</td>
<td>0.024336</td>
<td>-2.30410</td>
<td>35.0417</td>
<td>0.02215</td>
<td>22</td>
<td>1.135801</td>
<td>0.666333</td>
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</table>

T-test for Independent Samples (T-test data)
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3. There isn't much one can do about HIV/AIDS in a large
corporation without management support

<table>
<thead>
<tr>
<th>Group 1 vs. Group 2</th>
<th>Mean Group 1</th>
<th>Mean Group 2</th>
<th>t-value</th>
<th>df</th>
<th>p</th>
<th>t separ. var.est.</th>
<th>df</th>
<th>Valid N</th>
<th>Std.Dev. N</th>
<th>Std.Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Var19 vs. Var79</td>
<td>3.363636</td>
<td>3.000000</td>
<td>-1.08093</td>
<td>40</td>
<td>0.286201</td>
<td>-1.08286</td>
<td>9.85027</td>
<td>0.285381</td>
<td>22</td>
<td>20</td>
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</tbody>
</table>

Note: Variables were treated as independent samples.

4. There isn't much one can do about HIV/AIDS in a large
corporation without the support of labour

<table>
<thead>
<tr>
<th>Group 1 vs. Group 2</th>
<th>F-ratio</th>
<th>p</th>
<th>Variances Group 1</th>
<th>Variances Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Var19 vs. Var79</td>
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<td>0.878330</td>
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<table>
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<tr>
<th>Group 1 vs. Group 2</th>
<th>Mean Group 1</th>
<th>Mean Group 2</th>
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<th>df</th>
<th>p</th>
<th>t separ. var.est.</th>
<th>df</th>
<th>Valid N</th>
<th>Std.Dev. N</th>
<th>Std.Dev.</th>
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</thead>
<tbody>
<tr>
<td>Var20 vs. Var80</td>
<td>2.636364</td>
<td>3.600000</td>
<td>-2.63860</td>
<td>40</td>
<td>0.011805</td>
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<td>0.012628</td>
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</table>

Note: Variables were treated as independent samples.

<table>
<thead>
<tr>
<th>Group 1 vs. Group 2</th>
<th>F-ratio</th>
<th>p</th>
<th>Variances Group 1</th>
<th>Variances Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Var20 vs. Var80</td>
<td>1.356751</td>
<td>0.495988</td>
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</table>
5. Shell's other priorities will impact negatively on the ability to address HIV/AIDS issues.

<table>
<thead>
<tr>
<th>Group 1 vs. Group 2</th>
<th>Mean Group 1</th>
<th>Mean Group 2</th>
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<th>df</th>
<th>p</th>
<th>t separ. var. est.</th>
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<th>p</th>
<th>2-sided</th>
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<th>Valid N Group 2</th>
<th>Std. Dev. Group 1</th>
<th>Std. Dev. Group 2</th>
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<tbody>
<tr>
<td>Var21 vs. Var81</td>
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<td>2.650000</td>
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<td>20</td>
<td>1.272418</td>
<td>1.182103</td>
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1. The ways that HIV may or may not be transmitted.

<table>
<thead>
<tr>
<th>Group 1 vs. Group 2</th>
<th>Mean Group 1</th>
<th>Mean Group 2</th>
<th>t-value</th>
<th>df</th>
<th>p</th>
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<th>Valid N Group 1</th>
<th>Valid N Group 2</th>
<th>Std. Dev. Group 1</th>
<th>Std. Dev. Group 2</th>
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<tbody>
<tr>
<td>Var41 vs. Var87</td>
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<td>4.500000</td>
<td>-1.32440</td>
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<td>0.192889</td>
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<td>0.990212</td>
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<table>
<thead>
<tr>
<th>Group 1 vs. Group 2</th>
<th>F-ratio Variances</th>
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<th>Variances Variances</th>
<th>F-ratio Variances</th>
<th>p</th>
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<tbody>
<tr>
<td>Var21 vs. Var81</td>
<td>1.158640</td>
<td>0.751471</td>
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<tr>
<td>Var41 vs. Var87</td>
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<td>1.693625</td>
<td>0.253021</td>
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</table>
The non-medical factors that enhance the spread of HIV

T-test for Independent Samples (T-test data)
Note: Variables were treated as independent samples

<table>
<thead>
<tr>
<th>Group 1 vs. Group 2</th>
<th>Mean Group 1</th>
<th>Mean Group 2</th>
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<th>t separ. var.est.</th>
<th>df</th>
<th>p</th>
<th>2-sided</th>
<th>Valid N Group 1</th>
<th>Valid N Group 2</th>
<th>Std.Dev. Group 1</th>
<th>Std.Dev. Group 2</th>
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<tbody>
<tr>
<td>Var42 vs. Var88</td>
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<td>4.350000</td>
<td>-2.40150</td>
<td>40</td>
<td>0.021065</td>
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<table>
<thead>
<tr>
<th>Group 1 vs. Group 2</th>
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<th>p</th>
<th>Variances</th>
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</thead>
<tbody>
<tr>
<td>Var42 vs. Var88</td>
<td>1.384104</td>
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</table>

HIV's effect on the immune system

T-test for Independent Samples (T-test data)
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<th>Std.Dev. Group 2</th>
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<td>1.279204</td>
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<tbody>
<tr>
<td>Var44 vs. Var90</td>
<td>4.441558</td>
<td>0.001853</td>
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</tr>
</tbody>
</table>
### The manifestations of AIDS

#### T-test for Independent Samples (T-test data)
**Note:** Variables were treated as independent samples

<table>
<thead>
<tr>
<th>Group 1 vs. Group 2</th>
<th>Mean Group 1</th>
<th>Mean Group 2</th>
<th>t-value</th>
<th>df</th>
<th>p</th>
<th>t separ. var.est.</th>
<th>df</th>
<th>p 2-sided</th>
<th>Valid N Group 1</th>
<th>Valid N Group 2</th>
<th>Std.Dev. Group 1</th>
<th>Std.Dev. Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Var47 vs. Var93</td>
<td>3.954545</td>
<td>4.000000</td>
<td>-3.19191</td>
<td>40</td>
<td>0.002751</td>
<td>-3.21547</td>
<td>39</td>
<td>0.002583</td>
<td>22</td>
<td>20</td>
<td>1.132939</td>
<td>0.973329</td>
</tr>
</tbody>
</table>

#### How AIDS can be managed

#### T-test for Independent Samples (T-test data)
**Note:** Variables were treated as independent samples

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<th>Std.Dev. Group 1</th>
<th>Std.Dev. Group 2</th>
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</thead>
<tbody>
<tr>
<td>Var48 vs. Var94</td>
<td>3.272727</td>
<td>4.000000</td>
<td>-3.78531</td>
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<td>0.000505</td>
<td>-3.92032</td>
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<td>0.000514</td>
<td>22</td>
<td>20</td>
<td>1.241421</td>
<td>0.502625</td>
</tr>
</tbody>
</table>

---

**F-ratio**

**p**
The ways that mother-to-child transmission (MTCT) of HIV can occur

<table>
<thead>
<tr>
<th>Group 1 vs. Group 2</th>
<th>T-test for Independent Samples (T-test data)</th>
<th>Note: Variables were treated as independent samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid N Group 1</td>
<td>Valid N Group 2</td>
<td>Std.Dev. Group 1</td>
</tr>
<tr>
<td>Valid N Group 2</td>
<td>Std.Dev. Group 2</td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>df</td>
<td></td>
</tr>
<tr>
<td>p</td>
<td>p</td>
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<tr>
<td>t separ. var.est.</td>
<td>t separ. var.est.</td>
<td></td>
</tr>
<tr>
<td>t-value</td>
<td>t-value</td>
<td></td>
</tr>
<tr>
<td>Mean Group 1</td>
<td>Mean Group 2</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>Mean</td>
<td></td>
</tr>
</tbody>
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Group 1 vs. Group 2

<table>
<thead>
<tr>
<th>Var51 vs. Var97</th>
<th>Mean Group 1</th>
<th>Mean Group 2</th>
<th>t-value</th>
<th>df</th>
<th>p</th>
<th>t separ. var.est.</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.272727</td>
<td>4.250000</td>
<td>-3.24046</td>
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<td>0.002406</td>
<td>-3.83021</td>
<td>22</td>
<td>0.002166</td>
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</table>

T-test for Independent Samples (T-test data)
Note: Variables were treated as independent samples

F-ratio | p
Variances | Variances
Var51 vs. Var97 | 3.544756 | 0.007509

What types of HIV tests are available and being used

<table>
<thead>
<tr>
<th>Group 1 vs. Group 2</th>
<th>T-test for Independent Samples (T-test data)</th>
<th>Note: Variables were treated as independent samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid N Group 1</td>
<td>Valid N Group 2</td>
<td>Std.Dev. Group 1</td>
</tr>
<tr>
<td>Valid N Group 2</td>
<td>Std.Dev. Group 2</td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>df</td>
<td></td>
</tr>
<tr>
<td>p</td>
<td>p</td>
<td></td>
</tr>
<tr>
<td>t separ. var.est.</td>
<td>t separ. var.est.</td>
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</tr>
<tr>
<td>t-value</td>
<td>t-value</td>
<td></td>
</tr>
<tr>
<td>Mean Group 1</td>
<td>Mean Group 2</td>
<td></td>
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<td>Mean</td>
<td>Mean</td>
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Group 1 vs. Group 2

<table>
<thead>
<tr>
<th>Var53 vs. Var98</th>
<th>Mean Group 1</th>
<th>Mean Group 2</th>
<th>t-value</th>
<th>df</th>
<th>p</th>
<th>t separ. var.est.</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.318182</td>
<td>4.050000</td>
<td>-5.36143</td>
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<td>0.000000</td>
<td>-5.40784</td>
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<td>0.000000</td>
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</tbody>
</table>

T-test for Independent Samples (T-test data)
Note: Variables were treated as independent samples

F-ratio | p
Variances | Variances
Var53 vs. Var98 | 1.429082 | 0.437996
### The testing procedures for HIV

<table>
<thead>
<tr>
<th>Group 1 vs. Group 2</th>
<th>T-test for Independent Samples (T-test data)</th>
<th>Note: Variables were treated as independent samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Mean</td>
<td>t-value</td>
</tr>
<tr>
<td>Group 1</td>
<td>Group 1</td>
<td>Group 2</td>
</tr>
<tr>
<td>Var54 vs. Var99</td>
<td>2.400000</td>
<td>3.900000</td>
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</table>

### The difference between counseling and advice

<table>
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<tr>
<th>Group 1 vs. Group 2</th>
<th>T-test for Independent Samples (T-test data)</th>
<th>Note: Variables were treated as independent samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Mean</td>
<td>t-value</td>
</tr>
<tr>
<td>Group 1</td>
<td>Group 1</td>
<td>Group 2</td>
</tr>
<tr>
<td>Var58 vs. Var105</td>
<td>3.545455</td>
<td>4.550000</td>
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</tbody>
</table>
1. Which laws apply to HIV/AIDS in the workplace

<table>
<thead>
<tr>
<th>Group 1 vs. Group 2</th>
<th>Mean Group 1</th>
<th>Mean Group 2</th>
<th>t-value</th>
<th>df</th>
<th>p</th>
<th>t separ. var.est.</th>
<th>df</th>
<th>p</th>
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<th>Valid N Group 2</th>
<th>Std.Dev. Group 1</th>
<th>Std.Dev. Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Var59 vs. Var106</td>
<td>3.590909</td>
<td>4.500000</td>
<td>-3.37977</td>
<td>40</td>
<td>0.001630</td>
<td>-3.16725</td>
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<td>0.000430</td>
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<td>20</td>
<td>1.098011</td>
<td>0.512989</td>
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</table>

2. The need for pre- and post-test counseling

<table>
<thead>
<tr>
<th>Group 1 vs. Group 2</th>
<th>Mean Group 1</th>
<th>Mean Group 2</th>
<th>t-value</th>
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<th>p</th>
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<th>Std.Dev. Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Var59 vs. Var106</td>
<td>2.636364</td>
<td>4.000000</td>
<td>-3.08410</td>
<td>40</td>
<td>0.000276</td>
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<td>1.048602</td>
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</table>

<table>
<thead>
<tr>
<th>Group 1 vs. Group 2</th>
<th>F-ratio Variances</th>
<th>p</th>
<th>Variances</th>
<th>Variances</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Var59 vs. Var106</td>
<td>1.244509</td>
<td>0.623885</td>
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<td></td>
</tr>
</tbody>
</table>
3. Why the legislation is applied specifically to HIV/AIDS

| Group 1 vs. Group 2 | Mean  | Mean  | t-value | df  | p  | t separ. var. est. | df  | p  | Valid N | Valid N | Std. Dev. | Std. Dev.
|---------------------|-------|-------|---------|-----|----|-------------------|-----|----|---------|---------|-----------|-----------
| Var67 vs. Var113    | 2.400091 | 4.050000 | -4.83827 | 40  | 0.000014 | -4.88714 | 36  | 0.000021 | 22     | 20      | 0.59121   | 1.190075  |

T-test for Independent Samples (T-test data)
Note: Variables were treated as independent samples

4. Legislation that covers employer obligations

| Group 1 vs. Group 2 | Mean  | Mean  | t-value | df  | p  | t separ. var. est. | df  | p  | Valid N | Valid N | Std. Dev. | Std. Dev.
|---------------------|-------|-------|---------|-----|----|-------------------|-----|----|---------|---------|-----------|-----------
| Var68 vs. Var114    | 2.363636 | 4.050000 | -4.98055 | 40  | 0.000013 | -4.91919 | 35  | 0.000020 | 22     | 20      | 0.53463   | 1.234376  |

T-test for Independent Samples (T-test data)
Note: Variables were treated as independent samples
1. Support services for family members of Shell employees (HIV/AIDS related)

<table>
<thead>
<tr>
<th>Group 1 vs. Group 2</th>
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<th>Mean Group 2</th>
<th>t-value</th>
<th>df</th>
<th>p</th>
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<th>Valid N Group 2</th>
<th>Std.Dev. Group 1</th>
<th>Std.Dev. Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Var69 vs. Var115</td>
<td>2.727273</td>
<td>3.950000</td>
<td>-3.71832</td>
<td>40</td>
<td>0.000615</td>
<td>-3.75561</td>
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<td>0.000557</td>
<td>22</td>
<td>20</td>
<td>1.162174</td>
<td>0.944513</td>
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</tbody>
</table>

T-test for Independent Samples (T-test data)
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<tr>
<th>Group 1 vs. Group 2</th>
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<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Var69 vs. Var115</td>
<td>1.514002</td>
<td>0.367617</td>
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</table>

2. Assistance with acquiring anti-retroviral drugs for employees

<table>
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<tr>
<th>Group 1 vs. Group 2</th>
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<th>Mean Group 2</th>
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<th>p</th>
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<th>df</th>
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<th>Valid N Group 2</th>
<th>Std.Dev. Group 1</th>
<th>Std.Dev. Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Var71 vs. Var117</td>
<td>1.954545</td>
<td>3.700000</td>
<td>-7.76582</td>
<td>40</td>
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<td>-7.55646</td>
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<td>20</td>
<td>0.485727</td>
<td>0.923381</td>
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</table>

T-test for Independent Samples (T-test data)
Note: Variables were treated as independent samples

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<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Var71 vs. Var117</td>
<td>3.613906</td>
<td>0.005433</td>
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</table>
Facilities that currently exist to foster cultural sensitivity in dealing with HIV/AIDS

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<td></td>
</tr>
<tr>
<td>Mean</td>
<td>Mean</td>
</tr>
<tr>
<td>Var72 vs. Var118</td>
<td>2.045455</td>
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</tr>
<tr>
<td>F-ratio</td>
<td>Variances</td>
</tr>
<tr>
<td>Var72 vs. Var118</td>
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Policies encouraging voluntary testing for HIV

<table>
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</tr>
<tr>
<td>Mean</td>
<td>Mean</td>
</tr>
<tr>
<td>Var74 vs. Var120</td>
<td>2.409091</td>
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<tr>
<td>F-ratio</td>
<td>Variances</td>
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<tr>
<td>Var74 vs. Var120</td>
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