EVALUATION OF AN HIV PEER EDUCATION PROGRAMME IN THE WORKPLACE

Nicola Sloan
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Declaration

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ABSTRACT

Introduction
The private sector in South Africa has a keen interest in ensuring that all employees are fully educated on issues related to HIV/AIDS (especially transmission mechanisms) to avoid losing a large proportion of the workforce and incurring a subsequent drop in productivity. In 1997, Woolworths, a South African retail company, implemented an HIV peer education programme for its employees. The broad aim of the programme is to reduce the HIV infection rate among staff by providing educational material on safe sexual practices, discussing various issues connected to HIV such as sexuality and modes of transmission and by providing free condoms to staff.

Objectives
The objective of this study is to provide a thorough and realistic evaluation of Woolworths HIV/AIDS peer education programme. A formal evaluation is required to understand the current position of the programme and to determine its future direction.

Design
Cross-sectional observational study to compare Woolworths and Truworths staff utilising a KABP survey method to determine level of HIV/AIDS knowledge, attitudes towards people living with HIV/AIDS, perceived self risk of acquiring HIV and condom use. Qualitative methods were also used to contextualise the quantitative findings from the survey. The study did not be able to look at trends over time because no baseline data was available.

Methods
A total of 900 questionnaires were completed by Woolworths and Truworths employees from three regions (Gauteng, Western Cape and Eastern Cape/ KwaZulu-Natal) over a period of six months (Feb-July 2001). Questionnaires were made available in English, Zulu, Xhosa, Afrikaans, SiSwati, Southern Sotho and Northern Sotho; and completed during in-store training sessions after the purpose of the study was explained and consent was obtained. Focus groups and in-depth interviews were conducted with staff, peer educators, management and peer education programme co-ordinators.
Results
Overall, in-store training sessions given by peer educators to their colleagues have no significant impact on the 4 main study outcomes. Multivariate logistic regression showed that very little of the variance in each of the 4 main outcomes were explained by the determinant factors of interest. Significant factors that explained the 8% of variance in HIV knowledge were area, level of education, whether or not participants were managers and if they were peer educators. Only 85 participants out of the 900 sample correctly answered all the knowledge questions, although 59% had a high level of knowledge (scored 14 or more) and the average score was 13.6 out of 17. The 6% of variance in attitude towards people with HIV/AIDS were company, area, level of education, whether or not participants were managers and if they were peer educators. The majority of the sample (62%) had a positive attitude towards people with HIV/AIDS. Of the total sample, 34% used condoms frequently and significant factors that explained the 17% of variance in condom use were age, sex, company, area, relationship status and whether or not participants were permanent or casual employees. The majority of participants thought they were at low risk of acquiring HIV (mean risk score of 2.5 out of a possible 10). Significant factors that explain the 7% of variance in risk were age, sex, company, area and relationship status.

Qualitative findings showed that the programme is acceptable to staff and there is a high level of motivation, enthusiasm and commitment to the programme amongst the coordinators, OHPs and peer educators in stores. Potential reasons for the programmes failure to make a substantial and positive impact were located during the qualitative research e.g. lack of senior level commitment and insufficient training time. Another barrier to success is that training in stores is delivered in a factual manner that does not acknowledge the variety of beliefs, cultural practices or socio-demographic differences that exist within the target population.

Conclusion
The current peer education is of little value, therefore, improvements in the implementation process and additional resources are required. It is impossible to determine the true effect of peer education until the programme is correctly implemented with full support from senior management.
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Chapter 1: Literature Review, Study Aims and Objectives

1.0 Introduction

In 1997, Woolworths in South Africa implemented an HIV peer education programme for its employees. The broad aims of the programme are to prevent HIV infection by providing free condoms to staff, educational training on safer sex practices and discussing various issues connected to HIV/AIDS such as modes of transmission, sexuality, HIV testing and Woolworths employment policy relating to HIV/AIDS.

The overall aim of this study is to provide a thorough evaluation of the HIV peer education programme to determine its current effectiveness within the workplace and provide recommendations on the future direction of the programme.

1.1 Literature Review

A Medline search was conducted to find all relevant published material from 1990 onwards. Peer education as a method of HIV prevention is relatively new, therefore, the search was restricted to the last 11 years. Published material was collected on HIV/AIDS epidemiology in South Africa, the economic impact of HIV/AIDS within South Africa, HIV/AIDS and the workplace, HIV/AIDS risk factors and HIV peer education prevention strategies within South Africa and overseas. However, literature relating to HIV peer education within schools and prisons is not discussed in detail within this review because the population demographics, risk profile and methods of peer education differ from those of a private sector workforce. Unpublished (‘grey’) literature was obtained by searching material held at the AIDS Training and Information Centre (ATTIC) library in Cape Town, South Africa. Information on other HIV prevention initiatives within South African companies was obtained from personal communications and internal unpublished documentation. The Cochrane database was examined, however, no reviews relating to the topic of peer education within the business workplace were found. While the literature review included in this study cannot be classed as systematic, it provides an adequately comprehensive overview of the relevant literature that is available to date.
1.1.1 HIV/AIDS in South Africa
HIV was first seen in South Africa in the early 1980s. In 1990, the first of a series of annual national surveys in antenatal clinic attenders found an HIV prevalence of 0.8% [Schneider, 1996]. The epidemic has grown rapidly and the prevalence of HIV in South Africa is estimated at 24.9% of women attending antenatal clinics by the end of 2000 [Department of Health, 2000]. According to a report by the South African Medical Research Council (MRC), AIDS was responsible for an estimated 40% of deaths among South Africans aged 15 to 49 in 2000, and will cause a threefold increase in deaths among small children by 2010 [Cape Times, 2001].

1.1.2 Economic Impact of AIDS in Africa
In 1996, Whiteside & Barnett reported that the degree to which economic growth is affected will be determined by the level of skill and scarcity of those infected, and the extent to which savings are diverted to consumption. The authors cited modelling conducted by Over for 30 African countries that found GDP growth from 1990 to 2005 would be 0.56%-1.08% lower than it would have been in the absence of AIDS, depending on the level of skill of those falling ill and dying, and the degree to which the cost of treating AIDS patients is met from savings.

The same authors also felt that attempts to project the economic growth and level of the epidemic is fraught with uncertainty, therefore, future policy implications are unclear. In their opinion, there is still a need to plan for the impact of AIDS in the future and attempts should be made to prevent the epidemic. In light of the MRCs projections as reported in the Cape Times in 2001, this final opinion gains extra weight. At the same time it is also important to remember that policy makers in developing countries also have many other urgent problems apart from AIDS to consider when deciding how available resources should be effectively deployed.

1.1.3 AIDS and the private sector in South Africa
Wilson et al, 1998 reported that South Africa is the world's first relatively developed economy to confront a large scale AIDS epidemic, which threatens its international competitiveness. However, as Kinghorn reported in 2000, it is unlikely that the full impact of the AIDS epidemic will emerge until 2010 due to an average period of 8 to 10 years between HIV infection and death from AIDS. In 1996, Doyle asserted that no
business or employer should feel excluded from the impact of the AIDS epidemic as it will mostly affect young adults of working age.

In 2000, Kinghorn described how the direct costs of HIV/AIDS will come from increased claims on health care and other employee benefits. The author also indicated that indirect costs are likely to have the most significant impact on many firms. These include absenteeism, higher recruitment and training costs, loss of skilled people to HIV/AIDS, reduced job performance due to illness and low morale and potential labour breakdowns and litigation costs if companies fail to manage HIV/AIDS related issues effectively. These findings may in part have stemmed from findings summarised by Kinghorn & Steinberg, 1999, who reported that a World Bank study had indicated that baseline employee turnover rates in many African companies with AIDS epidemics, greatly exceeded deaths due to sickness. Delays in findings replacement workers were not enough to significantly raise costs, although in the case of skilled professionals, this could take up to 6 months. The report stated that replacement could become more difficult as the epidemic progresses.

In response to the growing South African AIDS epidemic, guidelines have been developed to manage the impact of AIDS in the workplace. In 1997, the Southern African Development Community (SADC) Heads of Government endorsed a regional Code on HIV/AIDS and Employment, and recommended that SADC member states develop such codes and incorporate them into their labour legislation. This was quickly done in Namibia and Zimbabwe. South Africa was now the third country to formalise and legalise such a Code [Heywood, 2001]. The code was issued in 1998 in terms of Section 54 (1)(A) of the South African Employment Equity Act and is based on the principle that no person may be unfairly discriminated against on the basis of their HIV status [Department of Labour, 1998]. The Act specifically outlaws unfair discrimination on grounds of HIV status in hiring and employment of staff. For example, South African Airways was taken to court for conducting (now illegal) HIV tests on a prospective employee [Howse, 2000]. Judge Cameron stated in 1991 that "employers must treat people with HIV/AIDS in the same way as they would treat people who fall prey to cancer. This is not what decency requires; it is what the law will require too".
Another example of HIV prevention initiatives is the Global Business Council (GBC) on HIV/AIDS co-ordinated by Glaxo Wellcome, which advocates for proactive approaches that include equitable employment policies and workplace education programmes. The GBC feel that businesses who conduct peer education within the workplace are in a position to encourage a greater response to HIV from other businesses and civil society. Authors such as Kinghorn have also urged the business community to invest proactively in impact reduction before the full force of the HIV epidemic hits and costs spiral.

The impact of the HIV epidemic within South Africa, especially among people of working age will be significant as evidenced in the literature. Published reports have stated that responses to the developing impact of high infection rates have been slow. "Despite such warnings and the implementation of HIV specific labour laws, the private sector in Africa has been slow to respond to the effects of the epidemic and needs to understand the benefits of workplace interventions and how these might be implemented" [Michael, 2000].

Kinghorn has gone further than purely criticising the lack of involvement from the private sector and has produced the following guidelines for successful workplace interventions:

- "Visible commitment of business leadership to HIV/AIDS issues.
- Well designed programmes that target all employees including management, are critically important.
- A reduction in the stigma associated with HIV/AIDS
- Workplace impact management where programmes are guided by sound impact assessment, policies and strategy.
- Health care and support for infected and affected employees." [Kinghorn, 2000].

Developing effective workplace interventions does however require overcoming many challenges. In Thailand, it was reported by Pramualratana et al in 2000, that a major obstacle has been the reluctance of companies to invest resources in developing and supporting workplace programmes. Similar instances of reluctance have been reported by Mzezewa et al in 2000 in Zimbabwe, where there is still resistance to investing in ongoing programmes despite the awareness that HIV is decimating the workforce. The
authors in this publication indicated that an important challenge in the future will be to convince the private sector of the benefit and indeed necessity in taking a leading role in initiating and sustaining HIV prevention programmes.

In 2000, Evian reported that "the workplace has become one of the most strategic areas for the control and management of the epidemic". People spend a majority of their waking days at work and are a captive audience during this time, which enables efficient delivery of education in a 'neutral' environment. The private sector is at risk of substantial loss to human resources capacity, operations, productivity, recruitment, rising health care costs and employee support. The literature indicates that HIV should be a strategic priority and that successful interventions require full leadership support.

1.1.4 The workplace as an appropriate setting for HIV peer education.
In 2000, Mzezwa et al found the workplace to be a logical choice of venue for HIV peer education because it provides a way of educating men, who are hard to reach with existing health programmes in the community. However, in some countries and cultures, creating an open environment in which issues related to sex such as HIV can be discussed, has proved problematic. In 2000, Kam et al reported that the barriers created by traditional Chinese values and management philosophy must be overcome to make AIDS education a success in the Chinese workplace.

1.1.5 HIV/AIDS in Woolworths
Woolworths is a large South African retail company with a workforce of approximately 15,000 employees. By 2005, it is estimated that HIV/AIDS will be responsible for a 1.54% decline in productivity of full time staff within the company (internal company data). From figures currently available, it has been predicted that approximately 760 permanent staff will be HIV positive by 2005. This figure will continue to increase and represents a substantial proportion of total permanent staff employed by the company (approximate total of 3,500 permanent staff). Woolworths, in addition to other retail outlets such as Topics and Truworths is owned by the Wooltru company.
1.1.6 Woolworths Policy on HIV/AIDS

In response to the HIV/AIDS epidemic, Woolworths policy stipulates that all employees are to be made aware of HIV and AIDS. The company’s employment policy states that no employee is to be discriminated against on the basis of diagnosis, in line with the South African Employment Equity Act. The company will respect the confidentiality of its employees at all times and provide support and encouragement e.g. provision of medical benefits in line with the Wooltru healthcare fund (although this does not include provision of anti-retroviral treatment), finding alternative employment if they are no longer able to continue in their current job and disability benefits where appropriate.

Management’s most important role is to practice non-discrimination and to base decisions only on work performance. HIV/AIDS must be considered in the same way as any other severe, chronic disease. Normal practices relating to sick leave and retirement must be followed and information regarding an individual’s HIV status must remain confidential unless the employee has given permission for the information to be shared. HIV positive employees are encouraged to divulge their status to the health services division in order to access the appropriate counselling and medical aid benefits e.g. counselling, nutritional and dental visits. Non-infected employees are encouraged to practice non-discrimination and to support fellow employees whom they know to be HIV positive.

Woolworths has a keen interest in ensuring that all employees are fully educated on issues related to HIV/AIDS (especially transmission mechanisms) to avoid losing a large proportion of the workforce and subsequent drop in productivity. The company states it is committed to improving awareness of HIV/AIDS in a way that seeks to diminish social stigma by respecting the rights of infected individuals.

1.1.7 Woolworths HIV Peer Education Programme

In 1997, Woolworths initiated an HIV/AIDS peer education programme modelled on a similar programme run by the Zimbabwe AIDS Prevention Project (ZAPP) in Harare. The broad aim of the programme is to reduce the HIV infection rate among Woolworths staff by providing educational material on safer sexual practices, discussing various issues connected to HIV such as sexuality, sexually transmitted diseases and modes of transmission, in addition to providing free condoms to staff.
The programme is delivered by a network of trained peer educators who have been selected by fellow employees on the basis of criteria outlined by the programme co-ordinators. The programme is co-ordinated by the health services section at Woolworths Head Office in Cape Town and managed at regional level by the occupational health practitioners (OHPs) within the company. The aim of the programme is to have one peer educator in every store. Many large stores have several peer educators.

The training of peer educators is co-ordinated by Health Services at Woolworths Head Office and involves an initial 3-day course followed by quarterly updates where peer educators are debriefed and provided with updated information and new modules on different subjects. The initial training session focuses largely on life skills and is provided by Lifeline (self-awareness and listening) and half a day of training is devoted to HIV/AIDS. The latter part of the programme is facilitated by the OHPs in each region. No courses to train new peer educators were run in 2000 due to extensive restructuring within the company.

Peer educators return to their stores and must organise their own educational sessions which should then evaluated by the OHP in their area for style and content. The peer educators also attend quarterly feedback sessions to discuss any problems and receive training on new modules. This system also acts as a support network to ensure the continuing motivation and commitment of peer educators to the programme.

The programme was designed to ensure that all employees are aware of Woolworths’ HIV/AIDS policy, have a basic knowledge of HIV/AIDS and have access to a support network if required. The focus of the programme is on keeping people HIV negative and educating HIV positive individuals on how to stay healthy without using ARVs (anti-retroviral treatment). Woolworths does not provide treatment for HIV positive staff at present, therefore, emphasis is placed on prevention.

The peer educator selection process starts at the beginning of each year and takes approximately one month. Woolworths has a high staff turnover and a very mobile workforce, therefore peer educators are regularly replaced. In an attempt to establish continuity within the programme, permanent staff members are usually selected instead
of casual employees. The programme is further disrupted when peer educators are selected for management training. Selected candidates must be aged 25 years or over and many are ex-shop stewards (union activity stopped in 1998 when membership fell below required levels). The programme co-ordinators try to ensure that successful candidates have as many of the following qualities as possible:

- Talkative
- Confident
- Assertive
- Intelligent
- Good Communicators
- Caring
- Good listeners
- Interested in HIV/AIDS related issues
- Committed
- Enthusiastic
- Non-judgemental
- Dependable
- Trustworthy
- Discreet
- Self motivated
- Open minded

Each month 30,000 condoms supplied by the government are distributed within Woolworths. Unfortunately, the supply of free condoms from the government will run out in the near future and staff may be expected to pay. The company is in the process of designing a packet containing 3 condoms for R2 that will be available for staff in vending machines in each store.

Information on HIV/AIDS is also available to Woolworth employees via the company's intranet website 'Imbizo'. This includes a variety of information on HIV/AIDS in a user-friendly format. Examples include web pages such as 'Five things you should know about HIV/AIDS in 2001' that covers disclosure of HIV status in the workplace, information on blood tests, economic impact of HIV/AIDS, Treatment and Education. Other webpages include articles discussing whether men are responsible for spreading AIDS and how to talk to a partner about safer sex.

1.1.8 Other examples of HIV workplace interventions.

There are very few published studies of evaluations to determine the effectiveness of HIV interventions in the workplace. In 1997, Mbizvo et al reported on seroconversion among factory workers in Harare, Zimbabwe. HIV seroincidence was measured in a longitudinal cohort of male factory workers before and during a randomised peer education intervention. Participants were tested for HIV, given pre-test counselling and interviewed using a structured questionnaire that included socio-demographic and risk factor questions. This was repeated at follow-up visits every four to six months.
Between 1993 and 1996, 2992 subjects were enrolled in the study. A total of 129 seroconversions were reported during the research period, yielding a seroconversion incidence of 2.96 per 100 person years. The study found that reporting a genital ulcer during follow up, having multiple sex partners, having urethral discharge, being single, widowed or married but not residing with wife as independent factors significantly associated with risk of seroconversion.

Study findings of high HIV incidence in the presence of an HIV testing, counselling and condom promotion was reported as unacceptably high. The author reported that "a strong correlation of HIV seroconversion with genital ulcers, marital situation and multiple sex partners highlight the need for workplace and broader public health efforts to simultaneously address the biological, socioeconomic, and behavioural conditions that have lead to widespread transmission of HIV in the general population of Africa". [Mbizvo et al, 1996]

It was also stated within the findings that self reported condom use is an unreliable means of evaluating impact, which can only be adequately achieved by objective measures such as surveillance through HIV testing or diagnosed STDs.

Other examples include Eskom (The Electricity Supply Commission of South Africa), which developed a non discriminatory HIV/AIDS policy in 1993 and declared AIDS a strategic priority in 1995. In 1995, the company conducted a knowledge, attitudes and practices study within the company. The results of this study have not been published. A budget of $16 per employee per annum has been allocated to HIV education and approximately 1,200 employees have been trained as HIV peer educators. In 1998, the company embarked on a second study of voluntary, anonymous, unlinked HIV surveillance to determine the prevalence rate among employees. An economic impact analysis was conducted by the Harvard Institute for International Development based on the results of this study. The results of the surveillance study have not been released for general publication, however, in a presentation at the Durban 2000 AIDS conference the company reported that the following lessons had been learnt from the research (no data to explain the findings was given):
• Top management commitment is imperative.
• Organised labour support is essential.
• Confidentiality issues are complex.

Other companies such as BP have produced information pamphlets about HIV awareness that contain basic information on transmission methods, preventing HIV, accepting people with HIV/AIDS and caring for people with HIV/AIDS.

Engen (a South African based petrol company) also provides a peer education programme for employees. Occupational health services within the company feel that employees have a reasonably good level of knowledge regarding HIV/AIDS, however, they are unconvinced that there has been a significant change in attitudes towards people living with HIV/AIDS. Employees who are HIV positive are reluctant to disclose their serostatus within the workplace due to fears of rejection and isolation. All employees at Engen are members of a medical aid scheme with access to HIV/AIDS testing, treatment and counselling. Approximately two million Rand has been made available from company funds to provide HIV positive staff with anti-retroviral treatment over the next 5-10 years. No formal evaluation of the programme has been published to date and the information summarised here came from a personal communication with Occupational Health Services at Engen.

Since 1998, Pick 'n' Pay supermarkets in South Africa have provided an HIV peer education programme in the workplace for in excess of 30,000 employees. Peer educators are identified within the company and trained for an initial period of five days followed by six monthly revision / feedback sessions. At each supermarket, staff are given leave from their work duties to attend a three hour training session run by the stores' peer educators, which usually occurs on a biannual basis. The sessions are conducted in small groups (maximum of 15 people) and each region is monitored by an HIV programme co-ordinator to determine training coverage. No evaluation has been conducted to assess the impact of peer education on HIV incidence, knowledge, attitudes and practices (condom use) of employees within Pick 'n' Pay. The information summarised here was provided in a personal communication with HIV programme co-ordinators at Pick ‘n’ Pay.
A search of the literature revealed one example of an HIV peer education programme in the workplace outside South Africa. In 2000, Gantalaø reported that workers at the Kimball Plaza in Santos City, Philippines have a novel approach to peer education. Training time during work hours is limited to lunch and snack breaks, therefore, a team of peer educators conduct sessions on the company shuttle buses that take employees to and from the worksite and on monthly employee field trips. Senior management attended sessions and provided strong support for the programme. No formal evaluation of the programme was reported.

All of the studies described above, except for the Harare factory study, indicate that thorough evaluations of HIV peer education programmes in the workplace are scarce or the data is not published. It is therefore, difficult to assess the effectiveness of such programmes and make useful comparisons.

1.1.9 Characteristics of successful HIV peer education in the workplace

The literature has provided little concrete evidence of the effectiveness of peer education programmes in the workplace, therefore it is difficult to determine the characteristics of successful programmes. However, the literature did report on potential factors for success based on notional and anecdotal evidence.

In 1992, Susan Hyde, the national co-ordinator of Transnet's (large parastatal transport company within Africa) AIDS programme detailed guidelines for successful AIDS peer education in the workplace. No formal evaluation of Transet's programme have been published, but the following can still be considered as useful indicators:

- "AIDS programmes should be carefully planned in holistic and systematic way.
- Essential to start education at senior management level. Constant management and supervisor feedback helps to keep AIDS on top of the company agenda.
- Unions should be involved from the outset of planning.
- Each employee subgroup has its own lifestyle, language, education level and sexual and social norms. Teaching method and materials must suit the specific target group.
- Peer educator is the cornerstone of the programme. Training for peer educators needs to be tailored to suit the work environment and the peer educators.
• Once trained, each peer educator requires a kit equipped with visual aids and lecture notes appropriate for the target group.
• Peer educators should be supported, monitored and undergo refresher courses to ensure they provide quality education.
• Need to be realistic about what peer educators can achieve. Learning and change require ongoing exposure to diverse education material. Key words are targeting and creativity.
• Condoms should be made available to employees free of charge. They should be easily yet discreetly accessible at all times." [Hyde, 1992]

The second item in Hyde's list i.e. the need for senior level commitment, is substantiated by Hirschmann de Salazar in 2000, who reported a study of HIV programmes within private sector businesses in Guatemala. The support of key people (i.e. senior management) was found to be a important factor in successful programmes. Another important motivating factor to ensure a successful programme was if someone within the company had died or was living with AIDS. No measures of success were reported and so it difficult to give a full critical appraisal of the findings.

Other recommendations found in published literature on the subject look at the wider challenges of an HIV peer education programme, beyond the logistical issues listed by Hyde. In 1999, Smart stated that successful intervention programmes in the workplace:

1. "Are developed, implemented and monitored by bipartite committees
2. Are integrated into general health promotion programmes
3. Are backed by access to a company health service
4. Build an environment for long term behaviour change
5. Monitor impact through collection and review of company health sick leave, turnover and productivity data
6. Have a forum to exchange experiences and ideas". [Smart, 1999]
1.1.10 Other successful HIV interventions in the workplace

South Africa may be able learn from success stories of HIV prevention programmes in other countries. In 1991, Thailand and South Africa had similar AIDS epidemics. While South Africa's epidemic has spiralled, in Thailand, new infections have plummeted from 143,000 in 1991 to 20,000 in 2000. Experts, such as Sharma (2001) attribute this success to the countries "100% condom use" programme targeted at the commercial sex industry. The nature of the epidemic in Thailand is different because it was estimated in 1992 that 80% of infections occurred through commercial sex, however, some of the mechanisms used to reduce the infection rate are applicable to HIV epidemics with different transmission profiles. As Wilson et al reported in 1998, consistent leadership from the Thai government which introduced decisive measures such as laws requiring all sex establishments to ensure that all clients used condoms, is a key factor for success. It is logical to assume that committed leadership in South Africa would also have a positive impact on the epidemic in this country. It is important to recognise that "by focusing on a particular issue (i.e. commercial sex), setting precise targets and introducing rigorous monitoring, the Thai HIV prevention campaign proved successful" [Wilson et al, 1998].

In 2000, Dias et al reported that implementing an efficient workplace programme for AIDS prevention is a complex endeavour. The paper asserted that it is important to create the correct environment to facilitate education in the workplace by developing specific strategies that consider the hierarchy and culture of the company, in addition to recognising the need for cost effectiveness.

Cost is likely to be the first consideration of many companies when planning an intervention strategy, however, the comments made by Dias highlight that looking at cost alone will undermine the effectiveness of the intervention if it is inappropriately implemented.

A broader perspective is required when implementing an HIV intervention programme. A paper presented at the Durban 2000 AIDS conference by the Business responds to AIDS and Labour responds to AIDS (BRTA/LRTA) programmes in the USA recommends the following 5 step approach to HIV education in the workplace:
1. "HIV/AIDS policy development
2. Training for managers and labour leaders
3. HIV/AIDS education for employees
4. HIV/AIDS education for employees' families
5. HIV related community services and volunteerism" [Barnes & Benson, 2000]

This paper places the education of employees within a holistic programme of AIDS awareness that starts with effective policy and extends out into the communities where the workforce lives and where future employees are recruited.

It is important to acknowledge factors that may lead to unsuccessful interventions or create barriers to HIV awareness. One finding in the literature described the following as potential reasons for poor performance:
1. "Teaching approaches: tendency to use scare tactics that are described as highly ineffective.
2. Time factor: time allocated for presentations is either too short and/ or inconvenient to employees.
3. Reinforcement: there is a tendency to expect positive behavioural change from one isolated awareness talk." [Zazayoke, 1994b]

Each of these factors appears to be reasonable and applicable to any setting (e.g. school, workplace, and hospital) where interventions may occur. Both the method of information delivery and the time allocated for the task will affect the likelihood of the target audience retaining the information and assimilating it into their everyday lives.

1.1.11 Involving people living with HIV/AIDS in education programmes
Different strategies are used to increase awareness of HIV/AIDS in the workplace. Involving people living with AIDS (PWAs) can be an effective method of impressing the reality of the HIV/AIDS epidemic, building compassion for those affected by the disease, conveying a sense of personal susceptibility to HIV infection and promoting the avoidance of risk taking behaviour.
For example, the placement of people living with HIV/AIDS in the Ministry of Sport in Zambia has been reported as successful. This has been reported to have resulted in the immediate change in workplace attitudes regarding HIV/AIDS and all initiatives on HIV/AIDS have subsequently been supported [Chella et al, 2000].

1.1.12 HIV Testing in the Workplace
Voluntary counseling and HIV testing (VCT) programs are now a major component of AIDS control programs in industrialized countries, and are increasingly being advocated and implemented in developing country settings. In 1995, the Centre for AIDS prevention studies (CAPS) at the University of California asserted that the major reasons currently put forward for promoting the widespread availability of voluntary counselling and testing are as follows:
1. “The early detection of HIV can lead to referral for clinical care, and social support.
2. Knowledge of serostatus can relieve anxiety associated with uncertainty and assist decision making and future planning.
3. People have the right to know their serostatus if they wish.
4. Counseling with HIV serostatus information can provide enhanced motivation for risk reduction, and allows more informed choice concerning personal risk reduction strategies”. [Centre for AIDS prevention studies (CAPS), University of California, 1995]

Programmes that promote HIV testing must recognise that for the individual, taking an HIV test means facing the possibility that they may have the virus, which at some stage in the future will lead to an incurable disease. For many people this possibility is too difficult to face and they would rather not know their serostatus. Taking an HIV test requires people to move on from the feeling that 'ignorance is bliss'. Additional concerns about social stigma, discrimination and potential rejection of family and friends all act as dissuading factors when considering whether or not to take a test. Counselling on risk reduction encourages HIV positive individuals to feel a basic responsibility towards others i.e. not want to pass on the infection. Intervention programmes should not only relate factual information to staff about what testing involves, where to go and why they be tested; but should also address these issues.
Dr Clive Evian, an exponent of voluntary, anonymous, unlinked HIV surveillance testing in the workplace states that in the corporate world, "what is measured is managed". While Dr Evian makes a valid point, HIV surveillance is not only costly, but raises many problematic ethical issues. In 2000, he reported that HIV prevalence studies and ongoing surveillance has proved a powerful tool for motivating labour and management to take the epidemic seriously.

1.1.13 Disclosure of Sero-status in the Workplace

A qualitative study in India examined AIDS related responses in the employment sector in two Indian metros by interviewing 44 HIV positive people and conducting focus groups with HIV positive support groups. HIV positive respondents maintained secrecy about their sero-status in their workplace for fear of social discrimination and job loss. Those who had disclosed reported discrimination from management and co-workers. "Few people disclose their status in the workplace so the disease is invisible resulting in a reluctance to develop AIDS policies within the workplace to take care of the emerging needs of positive workers" [Bharat, 2000]

Every individual has the right to choose whether or not to disclose their HIV status, however, workplace interventions can be useful in creating an environment that removes stigma from the disease and eliminates myths about transmission that may lead to fear of working with someone who is HIV positive.

1.1.14 Condoms

Free condom provision has already been reported as an essential part of an HIV intervention programme in the workplace. In 1991, Bledsoe reported that although condoms have worked well in other parts of the world, they pose large problems in Africa as they obstruct fertility, a key value. In addition, it is asserted that condoms "become symbols of social distance between men and women, disrupting the delicate process of developing conjugal relations" [Bledsoe, 1991].

Another perspective offered in the literature is that under utilisation of condoms is due to poor marketing methods. "If we brand condoms as cool, confident, safe, sexy, popular and a masculine man's choice, people will use them. The critical factor is our lack of
commitment to distribute and promote condoms as intensively as we promote beer” [Wilson et al, 1998].

Regardless of marketing approaches or social barriers to condom use, there is a shortage of condoms in Africa. In 2001, Shelton & Johnston reported that condom provision in the six countries with highest HIV levels (Botswana, South Africa, Zimbabwe, Togo, Congo and Kenya) averaged about 17 condoms per man per year aged 15-59. The authors stated that if this level of provision were replicated for all 156 million sub-Saharan African men, annual provision would be 2.65 billion, which corresponds to a condom gap of roughly 1.9 billion a year.

1.1.15 Gender
In 2000, Duncan et al reported on the Planned Parenthood Association of South Africa’s Knowledge, Attitudes and Practices (KAP) study among a sample of men and women in South Africa on issues related to HIV, including gender equity, relationships, human sexuality and violence against women. The study found that men reported high rates of sexually transmitted infections (STIs), low rates of condom use, and low levels of knowledge about HIV. This finding indicates that men have a poor understanding of the need for HIV prevention.

Men are often regarded as the controllers of condom use within relationships and that power imbalances can obstruct safer sex. Bledsoe asserts that AIDS information campaigns often assume that all individuals have complete control over their sexual lives. In reality, women may feel that they are unable to negotiate condom use for fear of losing their partner and economic support. In 1997, Harrison et al stated “it is the norm for men to pursue multiple partnerships. As a result, even women in long-term, monogamous partnerships face heightened risk for STDs”. These literature findings indicate that many women in South Africa are at great risk of HIV because they are not empowered within their sexual relationships to take protection against infection.

A woman may also fear losing her partner if she does not have children. “Denying a man children risks a number of things, among them, that he will stop supporting her and finding another woman.” [Bledsoe, 1991]. The author also reports “a woman wanting to use condoms may be implying that her partner is consorting with other women or even
has HIV. In doing so she risks undermining economic support form an outraged partner". [Bledsoe, 1991]. Issues of trust, financial support and physical harm may all contribute to the lack of empowerment and the capacity of women to negotiate condom use.

Sexual networking is an important issue to consider when planning for successful HIV prevention strategies. As Harrison et al assert, "it is important to understand that partner networks are fluid and changing, not static, and that communication between partners in a network depends on power dynamics within relationships and perceptions of different types of partners".

1.1.16 Culture

The South African workplace is a culturally diverse setting and cultural beliefs may lead to differences in understanding of HIV prevention. A study conducted by Zazayokwe in 1994 detailed the following reasons as barriers for HIV education among black population groups in South Africa:

1. "Tendency to blame AIDS on others - that it only affects certain groups of the population e.g. gay men.
2. Media coverage on AIDS can lead to misconceptions and fear provoking information.
3. Traditional African people who do not understand the disease concept. AIDS may be understood as 'evil spirits'.
4. Sex is not openly discussed in most cultures.
5. Wisdom is associated with increasing age in black culture and adults may disapprove of being addressed by a young person.
6. Language may result in serious communication breakdown.
7. Educational background can lead to a variety of learning problems.
8. Dichotomy between indigenous and Western healing.
9. Lack of money to buy condoms / Embarrassment in purchasing condoms". [Zazayokwe, 1994a]

Additional comments from the study such as "quite often the condom is received with suspicion in that it could be meant to promote birth control and decrease the black population" [Zazayokwe, 1994a] and "preaching to all black people about monogamy is often futile since some people still practise polygamy." [Zazayokwe, 1994a] reflect many cultural stereotypes that are associated with HIV/AIDS. Cultural diversity should be
recognised and incorporated into the planning and delivery of HIV interventions so that differences in beliefs and attitudes related to HIV can be fully explored. Providers of HIV education should be able to respond to the different educational needs within culturally diverse groups. This does not mean that education should be conducted separately, but that cultural differences need to be acknowledged and explored as part of an intervention.

1.1.17 Risk Perceptions
Several articles discussed potential reasons why individuals may or may not feel at risk of acquiring HIV. The importance of risk perception became apparent during analysis, as this issue pulls together knowledge, attitudes, gender, culture and a range of other factors that have already been discussed and translates these complex interactions into a coherent explanation for behaviour.

In 1995, Ray et al reported that individuals in a study of male factory workers in Zimbabwe did not recognise themselves or their partners as candidates for infection because of categorisation of high-risk groups as "promiscuous" or clients of sex workers. They made inaccurate assessments of who was 'safe' to have unprotected sex with, based on judgements about their character, background or age. Over 40% of the seroconvertors in the study had previously received counselling on how to stay HIV negative.

In 1997, a study by Marcus examined the meaning of HIV risk to long distance truck drivers. This involved interviewing 213 long-distance truck drivers passing through the midlands of KwaZulu-Natal in South Africa. Findings showed that drivers did not relate the risks of AIDS to their own practices or their "knowledge" that having multiple partners increases the danger. Their fears were greatest when they had been tested for HIV, or they knew or had heard of someone who had died of AIDS. The author stated that "the fluidity of the boundaries of risk for them and for the women they interact with on the road and at home, presents a huge personal crisis in an industry which is notable for the lack of support it provides drivers" [Marcus, 1997].

In 1990, Prohaska et al reported on a study conducted by the University of Illinois, USA to examine self perceptions of risk for AIDS and factors that contribute to estimations of risk using a telephone survey of 1, 540 adults (age18-60 years). The findings revealed
that the following 5 main determinants were associated significantly with increased perceptions of risk:
1. Sexual practices.
2. Moral evaluations of people with AIDS.
3. Demographic characteristics.
4. Number of sexual partners over the past five years.
5. Knowledge of sexual partners' past sexual experience.

Each of the studies described above reveal that people do not use knowledge about HIV transmission methods alone when judging risk. Potential partners are "weighed up" on a range of criteria to determine how likely they are to be HIV positive. The studies indicate high levels of under assessment by individuals who think they are not at risk of HIV even when they report high risk behaviour. It is clear that knowledge is only one item on a long list of factors that explain human behaviour. In 1990, Prohaska et al reported that increased exposure to the media as a source of information about AIDS did not affect people's perceptions of risk, either positively or negatively. The author states that "knowing the facts about AIDS and HIV does not influence people's perceptions of risk. This finding is not surprising when we consider that risk behaviour, and not knowledge alone, results in HIV transmission". This indicates that HIV awareness campaigns only have a limited use as there are so many other confounding factors that influence behaviour change.

Zazayokwe's categorisation of different personality types provides a possible explanation of different types of HIV risk perceptions.
1. "The Invulnerable: Even in the face of full factual knowledge about AIDS, this person will engage in self deception that 'it won't happen to me'.
2. TheAvoider: Distances themselves from AIDS information and has the tendency to disbelieve that AIDS is a reality.
3. The Fatalist: These people feel that it is unimportant whether death due to AIDS or another cause. They do not take necessary precautions or responsibility for their own actions. Prevention of HIV infection is not an issue for them.
4. The Diligent: Someone who is eager to learn and apply acquired knowledge to their behaviour". [Zazayokwe, 1994]
In 1996, Reddy reported that there several kinds of factors that will determine a specific behaviour that places people at risk, like beliefs, lack of knowledge, negative attitudes, social pressure, lack of confidence in practising healthy behaviour, lack of skill to perform the desired behaviour. Environmental factors such as lack of resources (no money for condoms), lack of educational facilities and unequal power in gender relations may also be determinants of behaviour. This indicates that risk is not the only important factor in behaviour, however, understanding what influences people's perceptions of personal risk is important for three reasons:

1. "Most theories of health behavior build on the concept of perceived risk.
2. To be effective, prevention programmes must take into account how people process and receive information about transmission of the HIV virus and development of AIDS. (Cleary et al, 1986)
3. We know little about sexual behaviour in general or how people make sense of their sexual experiences and possible disease outcomes. (Booth, 1998)" [Prohaska et al, 1990].

By understanding risk perceptions, it is then possible to develop interventions that challenge these harmful and often misinformed perceptions. Two different models can be utilised in HIV awareness interventions to challenge perceptions of risk. Social diffusion "relates to a change of behaviour not because of expert opinion but because close, trusted friends and peers change and in turn persuade us to change." [Wilson et al, 1998]. In contrast, participatory discovery learning "explains how change occurs when we are confronted by situations which make us reflect upon, debate and develop our own responses" [Wilson et al, 1998].

The mechanisms employed by individuals to assess their personal risk or that of their partner can be explored during HIV interventions using the methods described above to successfully direct people towards making objective assessments of risk based on knowledge.
1.1.18 Theories of Health Behaviour

Proshaka et al outlined 3 common models used to describe health behaviour; the Health Belief Model, the Model of Illness Danger and the PRECEDE model. This review will only examine the Health Belief Model. In 1997, Katzenellengbogen et al stated that “the Health Belief Model suggests that preventive health behaviour can be understood as a function of perceived self-susceptibility of acquiring the disease, perceived severity of the disease, perceived benefits to be realised by engaging in the particular preventive behaviours, as opposed to the costs / barriers of such behaviour or actions; and information on or advice that focuses the attention of the individual on the disease and on the recommended behaviours”.

The Knowledge, Attitudes, Belief and Practice (KABP) research method is based on the principles of the health belief model and is an effective tool for measuring the impact of HIV intervention programmes.

1.1.19 Knowledge, Attitudes, Behaviour and Practices (KABP) Studies

The following steps are followed to conduct thorough KABP surveys:

- “Consultation with programme managers and participants, social scientists and educationalists to develop the most appropriate evaluation mechanism.
- Literature Review to identify all variables associated with the behaviour of interest and synthesises known information on similar programme evaluations.
- Exploration using qualitative and informal open-ended questions to characterise the target group in the evaluation. This allows participants in the process to express their concerns and helps to identify key issues.
- Questionnaire Design that ensures the survey is non-leading, unambiguous and comprehensive.
- Administration of questionnaire to a selected sample in a way that ensures a maximum response rate and maintains confidentiality. Questionnaires must be available in the participants’ first language.
- Analysis of data.
- Report of findings and recommendations” [Katzenellengbogen et al, 1997].
Questionnaires allow researchers to collect a large volume of data in a relatively short period of time. This type of methodology can be limited because the data only reflects the opinions of the individual about their behaviour in absence of his or her relations to other people. In addition, the data is only able to provide a one off 'snapshot' of an individual's knowledge, attitudes and behaviour at a particular point in time. It cannot monitor the changes that inevitably occur due to shifting social contexts of everyday life.

Svenson states that various authors such as Varhagen and Svenson, (1990), Waldron et al, (1995); and McAleavy et al, (1996) who conducted KABP studies in schools, have indicted that there were no differences in level of HIV/AIDS knowledge between groups who had been exposed to the education programmes and those who had not. However, the studies did show that students who participated in the programmes were more likely to engage in safer sexual practices, such as condom use and communication with their partner. The following studies have been described in more detail to provide examples of the methods used and conclusions drawn from KABP study findings conducted in the workplace.

Quach et al, reported that Care International in Hanoi, Vietnam conducted a study in 1999 to assess the change in knowledge and attitudes of employees at one state owned and one joint venture company, two years after HIV/AIDS education programmes had been implemented in both companies. A sample of 200 employees completed a KABP survey, and focus groups were conducted with workers and in-depth interviews with management to determine the effect of the training. The survey results were compared to a baseline taken in 1997 and found that knowledge had increased by 51%. Condom use had risen from 37% to 46%. Attitudes towards people living with HIV/AIDS had not changed and depended on the way in which people acquired HIV. The authors concluded that peer education can effectively educate staff and that the understanding and support of the Board of Directors plays an important role in the successful implementation of HIV education in the workplace.

A cross sectional survey conducted by Kalale Seetharamarao et al in 2000, recruited 975 employees from various large to small scale industries in Mysore, India, and examined knowledge of HIV/AIDS, attitudes towards people with HIV, risk perception, personal sexual practices, working conditions and management policies. No employees had been
exposed to education programmes within the workplace. The results indicated that basic knowledge was lacking (30% did not know different methods of HIV transmission and 13% were unaware that condoms can prevent HIV/AIDS) and that negative attitudes towards people living with AIDS were common (55% were not willing to accept HIV positive colleagues within the workplace). A total of 70% reported HIV education via the media.

A study conducted by the University of Hong Kong by Abdullah & Fielding, in 2000 examined the HIV related risk behaviour and the perception of risk among the business community in Hong Kong, and assessed the feasibility of workplace AIDS education interventions. The study showed that misconceptions of AIDS and high risk behaviour were common among a business sector population (23% consistent condom use with regular sex partner in Hong Kong and 54% inconsistent condom use with casual partners in Hong Kong from a sample size of 442). It also indicated the need for a well designed AIDS education programme targeting this group of the population (62% of respondents reported no existing company policy regarding discrimination against HIV infected individuals).

KABP studies conducted in other settings also provide useful information. An unpublished study by the Massachusetts Department of Education surveyed 584 high school students using a modified knowledge, attitudes and beliefs questionnaires to assess the effectiveness of integrating people living with AIDS (PWAs) into HIV/AIDS education programmes directed at adolescents. Participants were divided into 3 group each receiving a different intervention: 1) skills building session (discussions on risk reduction, condom use, decision making and refusal skills) 2) identical skills building session and an interactive presentation from a PWA 3) identical skills building and a video featuring 3 teenage people living with AIDS. Each group were surveyed pre and post intervention. The findings indicated that interacting with a person living with AIDS had a significantly positive impact on students' attitudes towards people living with AIDS. A possible explanation for this is may be a decreased sense of social distance from person with AIDS.
In 1993, Ratsaka & Hirschowitz reported on knowledge, attitudes, beliefs and general sexual behaviour of inhabitants in a high density informal settlement in Alexandra Township, South Africa. A sample of 200 men from the area completed the survey. The study found that there was resistance to condom use because people stated they were faithful to their partners and they were not used to condoms (only 35% had ever used a condom). In addition, 85% knew that HIV could be transmitted during sex, however, 52% thought they could get HIV from sharing food with someone who has AIDS. Other myths such as sharing toilets and shaking hands were also common (50% and 35% respectively). Respondents did not perceive themselves as being at risk because “they did not sleep around”.

1.1.20 Randomised Controlled Trial Evaluation (RCT) of HIV interventions

Few interventions have been rigorously evaluated using randomised controlled trial methodology. In 2001, Imrie et al reported on a randomised controlled trial with 12 month follow up to investigate a cognitive behavioural intervention to reduce sexually transmitted infections among gay men. A total of 343 participants at a sexual health clinic in London were included in the study. Participants were randomly allocated into two groups. Both groups received standard management consisting of a brief one-on-one counselling session about sexual risk behaviour. They were also offered clinic or community based education on HIV and counselling. In addition to the standard management, the intervention group was also invited to a one-day workshop. Participants were followed up at six and twelve months. At 12 months 31% of the intervention group had had at least one new infection in comparison to 21% of the control group. In addition, at 12 months, 37% of the intervention group reported having unprotected anal sex in the last month compared to 30% of the control group. The authors concluded that while the behavioural intervention was acceptable and feasible to deliver, it did not reduce the risk of acquiring a new sexually transmitted infection. This highlights that even carefully designed interventions should not be assumed to bring benefit.
1.1.21 Observational Study Evaluation of HIV interventions

In 1998, a study conducted by Gregson et al recruited 1,237 rural women from two areas of Manicaland Province in Zimbabwe, to examine evidence of behaviour change in response to AIDS. The findings revealed gaps in knowledge including misconceptions about the distinction between HIV and AIDS, the influence of STDs, perinatal transmission, and incorrect methods of transmission. Better knowledge was associated with education, religion, travel and media exposure. Personal risk perceptions were quite high (42%) and correlated with non-marriage, media exposure and contact with medical services. Few respondents stated that they knew close relatives with HIV/AIDS (4%) but nearly a quarter of those who felt in danger of infection said this was because friends and relatives were dying of AIDS.

In 2001, Elford et al reported that HIV peer educator campaigns among gay men in London gyms had no significant impact on HIV risk behaviour. Self administered questionnaires were completed at baseline, six months, twelve months and eighteen month follow up periods. The survey included questions on potential exposure to HIV (unprotected anal sex and sharing of injection needles), ever testing for HIV, talking to a peer educator about risk reduction strategies and if peer education was a worthwhile idea. The study claimed to have found that peer education had no impact on risk, however, only 3% of respondents had spoken to a peer educator during the course of the study. It is therefore difficult to see how any conclusion can be made about the intervention if the intervention did not actually occur. The study does however, highlight the importance of planning intervention strategies adequately and testing their feasibility and acceptability. Peer education within a social environment such as a gym is different to a workplace or school where the target group is more homogenous. The peer educators in the gym study revealed difficulties in talking to complete strangers about sex, and therefore, relatively few conversations with gym members occurred. Recruiting and retaining peer educators also proved difficult and some peer educators felt that the length of the intervention was too short to build a rapport with the people they were targeting.

In 2000, Thebe reported that an assessment study of Eskom's workplace education programme in 1999 showed a significantly lower HIV prevalence among workers who use condoms and much lower prevalence among those with faithful partners as well as
employees travelling less than 5 days per month. It is however, important to note that this findings has not been corroborated by published statistical findings.

Abdool Karim et al stated in 1991, "the process by which health knowledge is transformed into health promoting behaviour is poorly understood, but many theories have been proposed. While these models differ on how health behaviour is determined, they concur that appropriate knowledge is a prerequisite for health behaviour. Hence education programmes that are cognizant of current perceptions and knowledge are more likely to succeed." In 2001, this finding still holds true. Evaluations of HIV interventions in the workplace are rare and it is important to conduct such studies to determine their effectiveness and develop mechanisms to improve their effectiveness.
1.2 Study Purpose
The senior management at Woolru wish to know if the Woolworths HIV/AIDS peer education programme is functioning effectively and to determine its future direction, with a view to expansion of the programme into other Woolru companies.

1.3 Study Aim
A comprehensive evaluation of the peer education programme as a whole including specific programme components for health promotion and prevention in relation to HIV/AIDS. The study will not be able to look at trends over time because baseline data on sexual practices, condom use and HIV knowledge were not collected prior to the start of the programme.

1.4 Objectives
The principle study objectives are to evaluate the following programme components:

A. Process
- Peer educator selection, training and functioning. This will be achieved via focus groups (separate groups for staff, peer educators and management), one-on-one interviews and peer educator questionnaires.
- Stakeholders views of current operation / management process. This will provide recommendations for improvement from the stakeholders and will be assessed through focus groups.

B. Outputs Assessment
- Number of peer educators trained.
- Number of training sessions given by peer educators per year and the quality of training.

C. Outcomes
- To assess the impact of peer educator training sessions on their colleagues’ HIV knowledge, attitudes towards people living with HIV/AIDS, perceived self risk of HIV and condom use. This will be achieved using staff questionnaires.
- Company comparison as an index of the effect of the programme. This will be achieved by selecting a sample of Truworths staff to complete the staff questionnaire (excluding the peer education training section).
- To examine regional differences (Western Cape, North [Gauteng] and KwaZulu-Natal / Eastern Cape).

D. Implementation objectives
i.e. to make recommendations on the continuation of the programme.
Chapter 2: Methods

2.1 Quantitative Research

2.1.1 Study Design
Cross sectional KABP survey comparing two groups (Woolworths and Truworths staff).

2.1.2 Sample Size
A sample size of 5% of the total Woolworths population was used to provide a large enough sample to provide substantial and worthwhile findings. Woolworths has approximately 13,583 staff including 3,568 permanent and 10,015 casual staff. A total of 680 were required for a 5% sample, which was then stratified by region and staff category. Permanent staff were over-sampled because they were more likely to have attended a training session than casuals. The sample was split proportionally between the regions to reflect the geographical spread of staff within the company. The majority of stores are concentrated in the North Region (Gauteng); therefore it is the largest region represented in the sample.

Table A: Woolworths Sample size:

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<thead>
<tr>
<th></th>
<th>North</th>
<th>WC</th>
<th>EC &amp; KZN</th>
<th>TOTAL</th>
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<tr>
<td>Perm</td>
<td>255</td>
<td>170</td>
<td>85</td>
<td>528</td>
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<tr>
<td>Cas</td>
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<td>57</td>
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<td>Total required for 5% survey</td>
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<td>Extra surveys (perm)</td>
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<td>Grand Total</td>
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Table B: Actual number of Woolworths surveys collected and analysed

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<th>TOTAL</th>
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</table>

Truworths has approximately 5,178 employees in total, of whom 1,784 are permanent and 3,394 are casual staff. The sampling pattern used is identical to Woolworths to represent the geographical spread of staff within the company.
Table C: Truworths sample size

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<tr>
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<th>EC &amp; KZN</th>
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<td>Total required for 5% survey</td>
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</tbody>
</table>

Table D: Actual number of Truworth surveys collected and analysed

<table>
<thead>
<tr>
<th></th>
<th>North</th>
<th>WC</th>
<th>EC &amp; KZN</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perm</td>
<td>72</td>
<td>11</td>
<td>15</td>
<td>98</td>
</tr>
<tr>
<td>Cas</td>
<td>13</td>
<td>4</td>
<td>6</td>
<td>23</td>
</tr>
<tr>
<td>Unknown</td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Grand Total</td>
<td>85</td>
<td>16</td>
<td>21</td>
<td>122</td>
</tr>
</tbody>
</table>

The Truworth staff, who have not been exposed to a peer education programme, act as a ‘control’ group. This part of this study will determine if there is a difference in level of knowledge about HIV/AIDS, perceptions of people living with HIV/AIDS and condom use, between the two groups.

2.1.3 Sampling Strategy

Cluster sampling was used to obtain a representative sample of permanent and casual staff in each area. Each individual store represents a cluster. The OHPs in each region were asked to choose a range of small (less than 120 staff), medium (120 - 250 staff) and large (250+ staff) stores. Stores included from each region were as follows:

Western Cape: Head Office (large), Central Admin (small), V&A (large), N1 City (medium), Somerset Mall (medium), Tygervalley (large), Claremont (large), Adderley Street (large) and Blue Route (large).

North: City Deep (medium), Market Street (small), Fourways (medium), Balfour Park (medium), Cresta (large), Brooklyn (medium), Eastgate (large), Westgate (medium), Southgate (small), Sandton (large), Centurion (medium), Randburg (small), Castlewalk (small), Southdale (small), Benoni (small) and Montana (small).

Eastern Cape / KwaZulu-Natal: Walmer Park (medium), Musgrave (large), Durban (medium), Westville (large), Chatsworth (small), Vincent Park (medium), Pietermaritzberg (medium), Pinetown (small) and La Lucia (medium).
2.1.4 Data collection
At the majority of stores, the study co-ordinator attended a morning training session between 8-9am when it was possible to get the maximum number of staff together at one time. The purpose of the study, the consent form and each section of the questionnaire were verbally explained to all employees. The study co-ordinator also stated that people did not have to take part in the study if they did not wish to and that this would not affect their employment status or rights. Anonymity and confidentiality were stressed with a reminder to leave out questions that made them feel uncomfortable. Participants were then given a questionnaire in their language of preference (choice of English, Zulu, Xhosa, Sotho, SiPedi, SiSwati, Xhosa and Afrikaans). Participants were asked to complete the questionnaires on their own and return the questionnaire with the completed consent form, to the study co-ordinator when they had finished. In stores where the study co-ordinator could not attend the morning training sessions, employees completed questionnaires during their lunch and tea breaks. If participants were unable to complete the questionnaire within the training session, an envelope was provided to send the questionnaire to post to the study co-ordinator.

2.1.5 Pilot Study
The study questionnaire was tested in a pilot study at both Somerset Mall and the Central Administration Office in the Western Cape during February 2001. A sample staff members of varying education levels were asked to complete the an English survey and then answer the following questions for each item in the questionnaire:

- Is each question easy to understand?
- What does it mean to you? (Ask people to explain it in their own words what each question meant)
- How else would you have said it?
- Would you change any of the words?
- Are the response options understandable / adequate?
- Overall is the questionnaire offensive, too long, anything missing?
- Is the consent form understandable?

Two peer educators were asked to complete and comment on the peer educator survey and consent form; and 5 staff members looked at the staff survey and the consent. The instruments were reviewed following the short pilot and final changes made prior to
implementation to improve comprehensibility and ease of response. See Appendix A (staff survey), Appendix B (peer educator survey) and Appendix C (consent form).

2.1.6 Data Management

Completed survey questionnaires and consent forms were checked by the study co-ordinator. A database was created in Epi Info and each survey was entered by a trained data capturer. Missing data was coded appropriately and entered. Data was managed and analysed using the computer facilities at the University of Cape Town. Management and staff at Woolworths did not have access to individual questionnaires.

2.1.7 Data analysis

Data was analysed using STATA software. Univariate and bivariate analysis were conducted, however, it is important to determine the effect of each independent variable after adjusting for other factors.

Independent variables of interest were chosen from the available dataset on a notional basis and from the literature described in chapter one. Each factor of interest was converted from categorical into binary data.

Scoring: This was used to create binary variables for knowledge and attitude. After consultation with the health service team at Woolworths, it was decided that only 17 of the 31 knowledge questions were relevant to the analysis. This subset included the crucial questions on HIV transmission and other key knowledge areas (these questions are highlighted in Appendix A). Participants were then given a score out of 17 depending on how many of the knowledge questions they had correctly answered. If the participant achieved a score of 14 or higher, they were deemed to have a good level of knowledge (recorded as a ‘1’ in the binary knowledge variable). A score of 13 or less was recorded as a poor level of knowledge (recorded as a ‘0’ in the binary knowledge variable). There are 8 questions in the survey relating to attitude and each participant was scored out of 8 depending on how many of these questions were answered correctly. While attitude is a reflection of personal belief and therefore, technically cannot be judged as right or wrong, it was felt that either agreement or disagreement with each of the statements reflected a positive or negative attitude towards people living with HIV/AIDS. Participants who scored 8 were recorded as having a positive attitude towards people living with
HIV/AIDS (recorded as ‘1’ in the binary attitude variable) and those who scored 7 or less were recorded as having a negative attitude (recorded as ‘0’ in the binary attitude variable).

Modelling: Logistic regression was used to model the data because all dependent variables contained categorical data. All possible independent variables (i.e. age, sex, geographical area, relationship status, permanent / casual staff status, trained / untrained by peer educators, peer educator / staff status, job level [staff / manager] and company [Woolworths / Truworths]) were included in the multivariate regression model to obtain the adjusted effect of each on the four main dependent variables (knowledge, attitudes, condom use and risk) and to allow for any possible negative confounding.
2.2 Qualitative research

To complement the KABP survey, a number of focus groups were conducted in each area to provide contextual information and allow for in-depth discussion on issues related to HIV education, condom use and Woolworth’s policy.

2.2.1 Sampling strategy

Focus groups

Staff focus groups: three focus groups per area. OHPs in each area were asked to select 3 stores of differing sizes in each area. It was requested that no more than 15 people from each store participate in a focus group where possible.

Management focus groups: one focus group per area. In each instance the study co-ordinator was allocated 2 hours at a regional store manager meeting to conduct the focus group, therefore, the number of participants was fixed.

Peer Educator focus groups: The OHPs in each area were asked to select a maximum of 15 peer educators for each peer educator focus group. In the North and the Eastern Cape / KwaZulu-Natal the study co-ordinator was allocated a 3 hour session during a pre-arranged regional peer educator meeting, therefore, the number of participants was fixed.

Table E indicates the focus groups conducted between February - July 2001.
Table E: Focus groups for Qualitative research

<table>
<thead>
<tr>
<th>Type</th>
<th>Area</th>
<th>Number attending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff</td>
<td>Western Cape</td>
<td>6</td>
</tr>
<tr>
<td>Staff</td>
<td>Western Cape</td>
<td>9</td>
</tr>
<tr>
<td>Staff</td>
<td>Western Cape</td>
<td>15</td>
</tr>
<tr>
<td>Staff</td>
<td>North</td>
<td>17</td>
</tr>
<tr>
<td>Staff</td>
<td>North</td>
<td>10</td>
</tr>
<tr>
<td>Staff</td>
<td>Eastern Cape</td>
<td>15</td>
</tr>
<tr>
<td>Staff</td>
<td>KwaZulu-Natal</td>
<td>25</td>
</tr>
<tr>
<td>Peer Educators</td>
<td>Western Cape</td>
<td>15</td>
</tr>
<tr>
<td>Peer Educators</td>
<td>North</td>
<td>3</td>
</tr>
<tr>
<td>Peer Educators</td>
<td>North</td>
<td>7</td>
</tr>
<tr>
<td>Peer Educators</td>
<td>Eastern Cape</td>
<td>7</td>
</tr>
<tr>
<td>Peer Educators</td>
<td>Eastern Cape</td>
<td>5</td>
</tr>
<tr>
<td>Peer Educators</td>
<td>North</td>
<td>6</td>
</tr>
<tr>
<td>Peer Educators</td>
<td>KwaZulu-Natal</td>
<td>21</td>
</tr>
<tr>
<td>Peer Educators</td>
<td>KwaZulu-Natal</td>
<td>12</td>
</tr>
<tr>
<td>Management</td>
<td>Western Cape</td>
<td>15</td>
</tr>
<tr>
<td>Management</td>
<td>North</td>
<td>14</td>
</tr>
<tr>
<td>Management</td>
<td>Eastern Cape</td>
<td>5</td>
</tr>
<tr>
<td>Management</td>
<td>KwaZulu-Natal</td>
<td>9</td>
</tr>
</tbody>
</table>

An additional two follow up focus groups with newly trained peer educators that the study co-ordinator joined during the training process were also conducted the Western Cape and the Eastern Cape.

**In-depth interviews**: a small sample of 7 peer educators in the Western Cape were interviewed at the beginning of the project develop an understanding of the education programme. In addition, an OHP from each region and the programme co-ordinators at head office were interviewed in depth on all aspects of the HIV/AIDS education programme.

**Survey data**: participants were asked in the KABP survey to explain the risk score they allocated for themselves in the survey. These comments were also included in the qualitative analysis.
2.2.2 Data collection
Each focus group lasted between 45 minutes - 2 hours in duration depending on the time available. Where possible, each focus group was tape recorded to avoid lengthy note taking by the study co-ordinator. Consent was obtained from each group prior to recording with an assurance that no one except the study co-ordinator would have access to the tapes to ensure confidentiality and anonymity.

Each focus group was different to allow natural flow from one topic to another. However, the study co-ordinator who facilitated each session ensured that as far as possible the following topics were covered during discussions:

- Personal concern about HIV/AIDS
- Appropriateness of workplace as an education forum
- Condom distribution / use
- Value of HIV training given in stores
- Attitudes towards people with HIV/AIDS
- Other sources of HIV education
- Woolworths Policy
- Perception of Woolworths commitment to tackling HIV.
- HIV testing
- Improvements to training
- Management involvement
- Medical Aid
- Discussing HIV/AIDS in the home with family and friends

Participants were not asked about their personal lives or personal risk of exposure to HIV, as such questions would have been threatening in a group situation. Unlike the KABP study, the majority of discussions were on an impersonal level and were expressed in the third person (i.e. "people need education about HIV").

2.2.3 Analysis
The content of the focus groups, in-depth interviews and survey data was analysed for dominant themes. Illustrative quotes (anonymous) were extracted to highlight relevant issues.
2.3 Ethical considerations

2.3.1 Peer review
The Research Ethics Committee of the Health Sciences Faculty of the University of Cape Town approved the protocol following minor adjustments to the consent form.

2.3.2 Benefits and risks to subjects
The tests proposed are not harmful in any way. Strict rules of confidentiality protected participants from potential discrimination.

2.3.3 Informed consent
Each participant received a consent form (see Appendix C), which accurately describes the purpose and procedures of the research. Participants were asked to give their consent. The study co-ordinator answered any questions the participants had when consent was requested. All participants have the right to refuse to participate.

2.3.4 Confidentiality and reporting of results
Individual results have been kept strictly confidential. Questionnaires are stored away from Woolworths at the University of Cape Town after completion, and are only available to the study co-ordinator. Computerised data is protected by security software.

2.3.5 Dissemination of Results
Group results from the KABP survey are available to stakeholders. Results and their implications for health will also be explained to participants and stakeholders after analysis in a planned feedback programme.

A draft final report will be developed and circulated among all the stakeholders. The report will detail study methods, findings, interpretations and recommendations, including those for further research.

Dissemination of results to Wooltru employees is essential and is the joint responsibility of the study co-ordinator and Wooltru. Results will be put into a user-friendly format that is accessible to all Wooltru employees.
Chapter 3: Quantitative Findings

3.1 Demographics

A total sample number of 900 anonymous surveys were completed by 122 staff at Truworths, 687 staff at Woolworths (26 of whom, were about to begin peer educator training) and 91 peer educators.

It is important to understand the differences between regions as each programme operates semi-autonomously in each area. Truworths is a control group for Woolworths; therefore, the findings have been stratified according to company and region.

3.1.1 Age

(RR* = 92%). The mean age was 34.5 years (range from 18 to 69 years of age).

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Under 35</td>
<td>129 (53%)</td>
<td>7 (54%)</td>
<td>67 (53%)</td>
</tr>
<tr>
<td>35+</td>
<td>116 (47%)</td>
<td>6 (46%)</td>
<td>59 (47%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>245</td>
<td>13</td>
<td>126</td>
</tr>
</tbody>
</table>

WW = Woolworths  TW = Truworths

Table 1 indicates that the majority of Truworths staff are under 35 years of age. In comparison, an equal number of over 35 and under 35 people from Woolworths participated. The cut off point of 35 years was chosen to reflect the mean age of participants.

* RR refers to the response rate in the survey e.g. 92% of participants answered the question;
3.1.2 Gender
(RR = 97%)

Table 2: Sex of participants by company and region

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Male</td>
<td>75 (30%)</td>
<td>0</td>
<td>41 (31%)</td>
</tr>
<tr>
<td>Female</td>
<td>177 (70%)</td>
<td>15</td>
<td>92 (69%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>252</td>
<td>15</td>
<td>133</td>
</tr>
</tbody>
</table>

The percentages shown in table 2 reflect the recruitment patterns in both companies i.e. majority of employees are female.

3.1.3 Education
(RR = 96%)

In the questionnaire, participants are asked to tick one of the following 5 categories to indicate their highest level of education: none, Standard 6, Standard 8, Standard 10 or University /Tecknikon. The 5 categories have been collapsed into 2 categories to simplify the analysis.

Table 3: Education level of participants by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>None – Std 8</td>
<td>84 (43%)</td>
<td>5</td>
<td>42 (32%)</td>
</tr>
<tr>
<td>Std 10 &amp;</td>
<td>165 (66%)</td>
<td>9</td>
<td>89 (68%)</td>
</tr>
<tr>
<td>University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>249</td>
<td>14</td>
<td>131</td>
</tr>
</tbody>
</table>

The majority of participants have completed Standard 10, however, a substantial number of participants from Woolworths in the Western Cape had only completed Standard 8.
3.1.4 Staff / Management split
(RR = 97%)

Table 4: Staff category by company and region

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Staff</td>
<td>169 (67%)</td>
<td>10 (67%)</td>
<td>93 (71%)</td>
</tr>
<tr>
<td>Managers</td>
<td>85 (33%)</td>
<td>5 (30%)</td>
<td>38 (29%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>254</td>
<td>15</td>
<td>131</td>
</tr>
</tbody>
</table>

3.1.5 Relationship status
(R = 97%)

Participants were asked which of the 6 categories best described their relationship status. The percentages were as followed: 44.5% (390) were married, 29% (252) were in a relationship but not living together, 12% (104) were not in a relationship, 10% (89) were living with a partner, 3% (26) were in a casual relationship and just under 1.5% (14) were in 2 or more relationships. The 6 categories were then collapsed into 3 to simplify the analysis. Married or living with partner have been categorised as a ‘stable’ relationship and all other categories except for ‘no relationship’ have been categorised as ‘unstable’. It is important to note however that not all marriages are ‘stable’ and that other types of relationships may not be ‘unstable’. The labels are proxies to levels of commitment within a relationship.

Table 5: Relationship Status by company and region

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Stable</td>
<td>144 (57%)</td>
<td>7 (47%)</td>
<td>88 (65%)</td>
</tr>
<tr>
<td>Unstable</td>
<td>65 (26%)</td>
<td>3 (20%)</td>
<td>33 (25%)</td>
</tr>
<tr>
<td>Not in a relationship</td>
<td>43 (17%)</td>
<td>5 (33%)</td>
<td>13 (10%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>252</td>
<td>15</td>
<td>134</td>
</tr>
</tbody>
</table>

Table 5 indicates that the majority of participants are in ‘stable’ relationships.
3.1.6 Children
(RR = 85%)

Table 6: Participants with children by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / KwaZulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>One or more child</td>
<td>161 (74%)</td>
<td>9 (82%)</td>
<td>95 (77%)</td>
</tr>
<tr>
<td>No children</td>
<td>56 (26%)</td>
<td>2 (18%)</td>
<td>29 (23%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>217</td>
<td>11</td>
<td>124</td>
</tr>
</tbody>
</table>

The majority of participants have at least one child. This may impact on their willingness to learn about HIV as many parents are concerned about their children’s welfare.

3.1.7 Peer educators [Category of participants]
(RR = 100%)

Table 7: Category of participants by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / KwaZulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Peer educator</td>
<td>26 (10%)</td>
<td>-</td>
<td>40 (30%)</td>
</tr>
<tr>
<td>Staff</td>
<td>230 (90%)</td>
<td>16</td>
<td>94 (70%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>256</td>
<td>16</td>
<td>134</td>
</tr>
</tbody>
</table>

3.1.8 Time working at Wooltru
(RR = 94%)

The mean amount of time worked for the company was 8 years. The minimum amount of time working at the company was 1 month and the maximum was 34 years.

3.1.9 Language

The majority of staff participants (91%) preferred to answer the questionnaire in English (peer educators were only provided with English questionnaires). Four of the remaining nine percent of questionnaires were in Zulu. Other languages included Afrikaans, Xhosa, Northern Sotho, Southern Sotho and SiSwati.
3.1.10 Geographical Distribution  
(RR = 100%)

The distribution was as follows: 53% (473) work at stores in the Northern (Gauteng) region, 30% (272) from the Western Cape and 17% (155) are from stores in the Eastern Cape / KwaZulu-Natal region.

3.1.11 Training  
(RR = 77%)

Of those who responded to the question, 48% had attended some form of training, ranging from full peer educator training to one in-store training session given by a peer educator. Training is a key variable and it is unfortunate that the response rate for this question was much lower than other variables. A sensitivity analysis was done replacing all the missing values with '1' to indicate that training had occurred. This made no significant difference to the logistic regression analysis, therefore, the missing data is not have an impact on the study findings.

3.1.12 Sexually active  
(RR = 95%)

Table 8: Participants who are sexually active by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / KwaZulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Sexually Active</td>
<td>201 (82%)</td>
<td>11 (73%)</td>
<td>106 (88%)</td>
</tr>
<tr>
<td>Not Sexually Active</td>
<td>44 (18%)</td>
<td>4 (27%)</td>
<td>15 (21%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>245</td>
<td>15</td>
<td>121</td>
</tr>
</tbody>
</table>

3.1.13 Sexually Transmitted Diseases  
(RR = 82%)

Table 9: Participants who have ever had a sexually transmitted disease by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / KwaZulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>STD at some point</td>
<td>11 (5%)</td>
<td>0</td>
<td>10 (9%)</td>
</tr>
<tr>
<td>Never had an STD</td>
<td>200 (95%)</td>
<td>14</td>
<td>100 (91%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>211</td>
<td>14</td>
<td>110</td>
</tr>
</tbody>
</table>
The percentage of participants reporting an STD sometime in the past seems very low. The percentage of STDs at Woolworths in Gauteng is much higher (20%) than the other two regions. Participants may not have been entirely truthful when completing the questionnaire.
3.2 Determinants of Knowledge, Attitudes & Behaviour

Further analysis focused on the 4 main areas of interest: knowledge about HIV/AIDS, attitude towards people living with HIV/AIDS, condom use and perceived risk of HIV.

3.2.1 Level of Knowledge

There are 31 questions in the survey to test the participant’s knowledge of HIV/AIDS. A decision was then taken by the health services team at Woolworths to include only 17 of these questions for in depth analysis. The questions that have been included are viewed as ‘essential’ knowledge. Each correct answer was scored as one and a wrong answer or no answer as zero. Each participant was given a score out of 17 to show their level of knowledge regarding HIV/AIDS. Scores ranged from a minimum of 2 to a maximum of 17. The mean score for the whole sample was 13.6.

Table 10: Mean knowledge score for each sex by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Men</td>
<td>14.6</td>
<td>-</td>
<td>15</td>
</tr>
<tr>
<td>Women</td>
<td>14</td>
<td>14.7</td>
<td>14.1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>14.2</td>
<td>14.7</td>
<td>14.3</td>
</tr>
</tbody>
</table>

(26 cases of missing gender were not included)

Table 11: Mean knowledge score for each age group by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Under 35</td>
<td>14.4</td>
<td>15.1</td>
<td>14.7</td>
</tr>
<tr>
<td>35+</td>
<td>13.9</td>
<td>14.2</td>
<td>14.2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>14.2</td>
<td>14.7</td>
<td>14.5</td>
</tr>
</tbody>
</table>

(74 cases of missing age were not included)

Table 12: Mean knowledge score for peer educators / staff by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Staff</td>
<td>14.1</td>
<td>14.4</td>
<td>14</td>
</tr>
<tr>
<td>TOTAL</td>
<td>14.2</td>
<td>14.4</td>
<td>14.3</td>
</tr>
</tbody>
</table>
Table 13: Mean knowledge score for each job category by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Staff</td>
<td>13.9</td>
<td>14.9</td>
<td>14.2</td>
</tr>
<tr>
<td>Managers</td>
<td>14.8</td>
<td>14.2</td>
<td>14.8</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>14.2</strong></td>
<td><strong>14.7</strong></td>
<td><strong>14.4</strong></td>
</tr>
</tbody>
</table>

(30 cases of missing job category were not included)

Table 14: Mean knowledge score for job type by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Casual</td>
<td>13.8</td>
<td>15</td>
<td>14.3</td>
</tr>
<tr>
<td>Permanent</td>
<td>14.3</td>
<td>14.5</td>
<td>14.3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>14.2</strong></td>
<td><strong>14.7</strong></td>
<td><strong>14.3</strong></td>
</tr>
</tbody>
</table>

(23 cases of missing job type were not included)

Table 15: Mean knowledge score for each relationship category by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Stable</td>
<td>14</td>
<td>14.9</td>
<td>14.3</td>
</tr>
<tr>
<td>Unstable</td>
<td>14.3</td>
<td>16.3</td>
<td>14.3</td>
</tr>
<tr>
<td>Not in a relationship</td>
<td>14.7</td>
<td>13.4</td>
<td>14.6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>14.2</strong></td>
<td><strong>14.7</strong></td>
<td><strong>14.3</strong></td>
</tr>
</tbody>
</table>

(25 cases of missing relationship category were not included)

Table 16: Mean knowledge score for training by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Not trained</td>
<td>14</td>
<td>14.5</td>
<td>14</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>14.2</strong></td>
<td><strong>14.4</strong></td>
<td><strong>14.4</strong></td>
</tr>
</tbody>
</table>

(116 cases of missing training category were not included)
Table 17: Mean knowledge score for each education category by company and region.

<table>
<thead>
<tr>
<th>Education Category</th>
<th>Western Cape WW</th>
<th>Western Cape TW</th>
<th>Eastern Cape Kwa Zulu-Natal WW</th>
<th>Eastern Cape Kwa Zulu-Natal TW</th>
<th>Gauteng WW</th>
<th>Gauteng TW</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>None - Std 8</td>
<td>13.6</td>
<td>13.4</td>
<td>13.6</td>
<td>16</td>
<td>11.8</td>
<td>11.2</td>
<td>12.8</td>
</tr>
<tr>
<td>Std 10 - University</td>
<td>14.4</td>
<td>15.4</td>
<td>14.7</td>
<td>14.8</td>
<td>13.6</td>
<td>13.2</td>
<td>14</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>14.2</strong></td>
<td><strong>14.7</strong></td>
<td><strong>14.3</strong></td>
<td><strong>14.9</strong></td>
<td><strong>13.1</strong></td>
<td><strong>12.9</strong></td>
<td><strong>13.6</strong></td>
</tr>
</tbody>
</table>

(33 cases of missing education category were not included)

Table 18: Mean knowledge score for attitude categories by company and region.

<table>
<thead>
<tr>
<th>Attitude Category</th>
<th>Western Cape WW</th>
<th>Western Cape TW</th>
<th>Eastern Cape Kwa Zulu-Natal WW</th>
<th>Eastern Cape Kwa Zulu-Natal TW</th>
<th>Gauteng WW</th>
<th>Gauteng TW</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative attitude</td>
<td>13.6</td>
<td>14</td>
<td>13.9</td>
<td>13</td>
<td>12.2</td>
<td>11.9</td>
<td>12.8</td>
</tr>
<tr>
<td>Positive attitude</td>
<td>14.4</td>
<td>14.5</td>
<td>14.5</td>
<td>14.9</td>
<td>13.5</td>
<td>13.6</td>
<td>14</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>14.2</strong></td>
<td><strong>14.4</strong></td>
<td><strong>14.3</strong></td>
<td><strong>14.7</strong></td>
<td><strong>13.5</strong></td>
<td><strong>12.8</strong></td>
<td><strong>13.6</strong></td>
</tr>
</tbody>
</table>

Table 19: Mean Knowledge score for each condom use category by company and region.

<table>
<thead>
<tr>
<th>Condom Use Category</th>
<th>Western Cape WW</th>
<th>Western Cape TW</th>
<th>Eastern Cape Kwa Zulu-Natal WW</th>
<th>Eastern Cape Kwa Zulu-Natal TW</th>
<th>Gauteng WW</th>
<th>Gauteng TW</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrequent condom users</td>
<td>14.1</td>
<td>14.8</td>
<td>14.5</td>
<td>14.9</td>
<td>12.9</td>
<td>12.4</td>
<td>13.6</td>
</tr>
<tr>
<td>Frequent condom users</td>
<td>14.6</td>
<td>17</td>
<td>14.2</td>
<td>14.6</td>
<td>13.5</td>
<td>13.3</td>
<td>13.8</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>14.2</strong></td>
<td><strong>14.9</strong></td>
<td><strong>14.4</strong></td>
<td><strong>14.7</strong></td>
<td><strong>13.1</strong></td>
<td><strong>12.8</strong></td>
<td><strong>13.6</strong></td>
</tr>
</tbody>
</table>

(189 cases of missing condom category were not included)

Table 20: Mean knowledge score for each risk category by company and region.

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>Western Cape WW</th>
<th>Western Cape TW</th>
<th>Eastern Cape Kwa Zulu-Natal WW</th>
<th>Eastern Cape Kwa Zulu-Natal TW</th>
<th>Gauteng WW</th>
<th>Gauteng TW</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low risk</td>
<td>14.4</td>
<td>14.7</td>
<td>14.7</td>
<td>14.6</td>
<td>13.5</td>
<td>13.6</td>
<td>14.1</td>
</tr>
<tr>
<td>High risk</td>
<td>14.1</td>
<td>12.8</td>
<td>14.4</td>
<td>15.8</td>
<td>13.4</td>
<td>13</td>
<td>13.7</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>14.3</strong></td>
<td><strong>14</strong></td>
<td><strong>14.7</strong></td>
<td><strong>14.9</strong></td>
<td><strong>13.5</strong></td>
<td><strong>13.4</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

(219 cases of missing risk were not included)
Table 10 indicates that there is no obvious difference in levels of knowledge between men and women (13.8 and 13.6), however figures for both sexes are low in the North. Table 11 indicates that people under 35 years of age have a higher level of knowledge, but again scores are much lower in the North than other regions. Peer educators and managers score consistently better than staff as shown in table 12 and 13 respectively. Table 14 indicates that there is little difference in knowledge levels between permanent and casual staff. There is only a slight difference in level of knowledge between those who have been to an HIV training session and those who have not, as shown in table 16. Again, participants in the North had substantially lower score than those in other regions. Relationship status made little difference to the level of knowledge as shown in table 15. Participants with Matric or higher scored much higher (mean = 14) than those with lower levels of education (mean=12.8) as described in table 17. Table 18 indicates that people with a negative attitude towards people living with HIV/AIDS scored lower (mean = 12.8) than those with positive attitudes (mean=14). Level of condom use and level of perceived risk (tables 19 and 20) appear unrelated to level of knowledge.
Logistic Regression was then used to determine if the variables shown above had a meaningful effect on level of knowledge.

Table 21: Full Model multivariate analysis showing the effect of explanatory variables on level of HIV/AIDS knowledge.

| Variable               | Baseline | Adjusted Odds Ratio | \( P>|z| \) | 95\% Confidence Interval |
|------------------------|----------|---------------------|-------------|--------------------------|
| Age                    | > 35 years | 0.967 | 0.9 | .57 – 1.64 |
| Sex                    | Female   | 1.01 | 0.972 | .62 – 1.63 |
| Peer Educator          | Staff    | 2.135 | 0.065 | .95 – 4.77 |
| Company                | Truworths | 1.183 | 0.646 | .58 – 2.43 |
| Area 2: EC / KZN       | Western Cape | 1.961 | 0.056 | .98 – 3.92 |
| Area 3: Gauteng        | Western Cape | 0.602 | 0.048 | .37 – .99 |
| Managers               | Staff    | 1.965 | 0.014 | 1.15 – 3.37 |
| Unstable Relationship  | Stable relationship | 0.706 | 0.169 | .43 – 1.16 |
| Not in a Relationship  | Stable relationship | 0.987 | 0.973 | .45 – 2.15 |
| Trained                | Untrained | 1.116 | 0.671 | .67 – 1.85 |
| Permanent staff        | Casual staff | 0.947 | 0.850 | .54 – 1.67 |
| Education              | Low education | 1.836 | 0.029 | 1.07 – 3.16 |
| Perceived Risk         | Low risk | 1.009 | 0.969 | .64 – 1.58 |
| Condom use             | Infrequent use | 1.14 | 0.592 | .71 – 1.84 |
| Attitude               | Poor attitude | 1.048 | 0.837 | .67 – 1.64 |

The model represented in table 21 includes data from 463 participants. The remaining data is incomplete and therefore not included in the model. Overall, the explanatory variables included in the model explain only a small percentage (8%) of the variance in level of knowledge.

Of the 8% of variance that the model explains, the following variables related to level of HIV/AIDS knowledge:

- **Job Category**: Managers are twice as likely to score 14 or more in the knowledge quiz than staff. This effect was found to be significant (p value of 0.014).
- **Peer Educators** are twice as likely to have a higher level of knowledge than other members of staff. This finding approached significance (p value = 0.065).
- **Participants in Gauteng** are 40% less likely to have a good level of knowledge in comparison to staff in the Western Cape. This finding was significant (p value = 0.048).
• Participants in the Eastern Cape / KwaZulu-Natal are twice as likely to have a good level of knowledge in comparison to staff in the Western Cape. This finding approaches significance (p value = 0.056).

• Education: Participants with standard 10 education or higher are twice as likely to have a high level of knowledge than those with standard 8 education or lower. This finding was significant (p value = 0.029).

3.2.2 Attitude towards people living with HIV/AIDS

There are 8 questions in the survey to determine if people have a positive attitude towards people who are HIV positive or living with AIDS. Each participant was assigned a score out of 8 for attitude. Individuals were then put into two groups indicating if they had a positive or poor attitude. A score of 8 indicates a positive attitude and a score of 7 or less indicates a poor attitude. This cut off point was chosen because 62% of respondents (561) scored 8. A score of 7 or less indicates that the participant has negative attitudes regarding some aspect of HIV/AIDS, which is important to address. The following variables were then examined to determine if they had an impact on attitude.

Overall the mean attitude score was 7.4 for Woolworths and 7.2 for Truworths. The average score for the Western Cape and The Eastern Cape / KwaZulu-Natal was 7.5 in comparison to 7.3 in Gauteng.

Table 22: Mean attitude score for each sex by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / KwaZulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Men</td>
<td>7.5</td>
<td>7.7</td>
<td>7.2</td>
</tr>
<tr>
<td>Women</td>
<td>7.5</td>
<td>8</td>
<td>7.6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7.5</td>
<td>7.7</td>
<td>7.5</td>
</tr>
</tbody>
</table>

(26 cases of missing gender were not included)
Table 23: Mean attitude score for each age group by company and region.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Western Cape WW</th>
<th>Western Cape TW</th>
<th>Eastern Cape/Kwa Zulu-Natal WW</th>
<th>Eastern Cape/Kwa Zulu-Natal TW</th>
<th>Gauteng WW</th>
<th>Gauteng TW</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 35</td>
<td>7.5</td>
<td>7.6</td>
<td>7.5</td>
<td>7.9</td>
<td>7.5</td>
<td>7.3</td>
<td>7.5</td>
</tr>
<tr>
<td>35+</td>
<td>7.5</td>
<td>7.8</td>
<td>7.7</td>
<td>6.8</td>
<td>7.2</td>
<td>6.9</td>
<td>7.4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7.5</td>
<td>7.7</td>
<td>7.6</td>
<td>7.7</td>
<td>7.4</td>
<td>7.2</td>
<td>7.4</td>
</tr>
</tbody>
</table>

(74 cases of missing age were not included)

Table 24: Mean attitude score for peer educators/staff by company and region.

<table>
<thead>
<tr>
<th>Category</th>
<th>Western Cape WW</th>
<th>Western Cape TW</th>
<th>Eastern Cape/Kwa Zulu-Natal WW</th>
<th>Eastern Cape/Kwa Zulu-Natal TW</th>
<th>Gauteng WW</th>
<th>Gauteng TW</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff</td>
<td>7.4</td>
<td>7.8</td>
<td>7.4</td>
<td>7.7</td>
<td>7.3</td>
<td>7</td>
<td>7.3</td>
</tr>
<tr>
<td>Peer Educator</td>
<td>7.9</td>
<td>-</td>
<td>7.7</td>
<td>-</td>
<td>7.44</td>
<td>-</td>
<td>7.7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7.5</td>
<td>7.8</td>
<td>7.5</td>
<td>7.7</td>
<td>7.3</td>
<td>7</td>
<td>7.4</td>
</tr>
</tbody>
</table>

Table 25: Mean attitude score for each job category by company and region.

<table>
<thead>
<tr>
<th>Category</th>
<th>Western Cape WW</th>
<th>Western Cape TW</th>
<th>Eastern Cape/Kwa Zulu-Natal WW</th>
<th>Eastern Cape/Kwa Zulu-Natal TW</th>
<th>Gauteng WW</th>
<th>Gauteng TW</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff</td>
<td>7.4</td>
<td>7.7</td>
<td>7.5</td>
<td>7.7</td>
<td>7.3</td>
<td>7</td>
<td>7.3</td>
</tr>
<tr>
<td>Managers</td>
<td>7.7</td>
<td>7.8</td>
<td>7.5</td>
<td>8</td>
<td>7.6</td>
<td>7.2</td>
<td>7.6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7.5</td>
<td>7.7</td>
<td>7.5</td>
<td>7.7</td>
<td>7.3</td>
<td>7.1</td>
<td>7.4</td>
</tr>
</tbody>
</table>

(30 cases of missing job category were not included)

Table 26: Mean attitude score for job type by company and region.

<table>
<thead>
<tr>
<th>Job Type</th>
<th>Western Cape WW</th>
<th>Western Cape TW</th>
<th>Eastern Cape/Kwa Zulu-Natal WW</th>
<th>Eastern Cape/Kwa Zulu-Natal TW</th>
<th>Gauteng WW</th>
<th>Gauteng TW</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casual</td>
<td>7.28</td>
<td>8</td>
<td>7.6</td>
<td>7.8</td>
<td>7.3</td>
<td>7.2</td>
<td>7.4</td>
</tr>
<tr>
<td>Permanent</td>
<td>7.5</td>
<td>7.6</td>
<td>7.5</td>
<td>7.7</td>
<td>7.3</td>
<td>7</td>
<td>7.4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7.5</td>
<td>7.7</td>
<td>7.5</td>
<td>7.7</td>
<td>7.3</td>
<td>7.3</td>
<td>7.4</td>
</tr>
</tbody>
</table>

(23 cases of missing job type were not included)
Table 27: Mean attitude score for each relationship category by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Stable</td>
<td>7.5</td>
<td>7.9</td>
<td>7.5</td>
</tr>
<tr>
<td>Unstable</td>
<td>7.7</td>
<td>7.7</td>
<td>7.5</td>
</tr>
<tr>
<td>Not in a relationship</td>
<td>7.5</td>
<td>7.6</td>
<td>7.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7.5</td>
<td>7.7</td>
<td>7.5</td>
</tr>
</tbody>
</table>

(25 cases of missing relationship category were not included)

Table 28: Mean attitude score for training by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Not trained</td>
<td>7.5</td>
<td>7.7</td>
<td>7.4</td>
</tr>
<tr>
<td>Trained</td>
<td>7.5</td>
<td>8</td>
<td>7.6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7.5</td>
<td>7.8</td>
<td>7.5</td>
</tr>
</tbody>
</table>

(116 cases of missing training category were not included)

Table 29: Mean attitude score for each education category by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>None - Std 8</td>
<td>7.4</td>
<td>7.4</td>
<td>7.6</td>
</tr>
<tr>
<td>Std 10 - University</td>
<td>7.6</td>
<td>7.9</td>
<td>7.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7.5</td>
<td>7.7</td>
<td>7.5</td>
</tr>
</tbody>
</table>

(33 cases of missing education category were not included)

Table 30: Mean attitude score for each condom use category by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Infrequent condom users</td>
<td>7.5</td>
<td>7.8</td>
<td>7.6</td>
</tr>
<tr>
<td>Frequent condom users</td>
<td>7.7</td>
<td>8</td>
<td>7.6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7.5</td>
<td>7.8</td>
<td>7.6</td>
</tr>
</tbody>
</table>

(189 cases of missing condom category were not included)
Table 31: Mean attitude score for each risk category by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Low risk</td>
<td>7.6</td>
<td>7.9</td>
<td>7.6</td>
</tr>
<tr>
<td>High risk</td>
<td>7.4</td>
<td>7.4</td>
<td>7.4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7.6</td>
<td>7.7</td>
<td>7.6</td>
</tr>
</tbody>
</table>

(219 cases of missing risk were not included)

Overall, the attitudes scores were high (ie.7+) in all groups. Table 22 indicates that there is no difference in attitudes between men and women. Similarly, table 23 indicates no difference in attitudes between age groups. Peer educators and managers score consistently better than staff as shown in table 24 and 25 respectively. Table 26 indicates that there is no difference in attitudes between permanent and casual staff. There is no difference in attitudes between those who have been to an HIV training session and those who have not, as shown in table 28. Relationship status made little difference to attitudes as shown in table 27. Table 29 indicates there is little difference between the different education groups. Table 29 indicates that who use condoms frequently have a slightly more positive attitude towards people living with HIV/AIDS people than those who use condoms infrequently. Level of perceived risk (table 30) is unrelated to attitude. There are no differences between regions or companies.

Logistic regression was then used to determine if any of the following variables had a substantial impact on attitude.
Table 32: Full model multivariate analysis showing the effect of different factors on attitude towards people living with HIV/AIDS.

|                             | Baseline | Adjusted Odds Ratio | P>|z| | 95% Confidence Interval |
|-----------------------------|----------|---------------------|-----|-------------------------|
| Age                         | > 35 years | 0.878               | 0.62 | 0.52 – 1.47            |
| Sex                         | Female   | 0.844               | 0.489 | 0.52 – 1.37            |
| Peer Educator               | Staff    | 1.648               | 0.182 | 0.79 – 3.43            |
| Company                     | Truworths | 2.253               | 0.043 | 1.03 – 4.95            |
| Area 2: EC / KZN            | Western Cape | 0.922               | 0.8  | 0.5 – 1.7              |
| Area 3: Gauteng             | Western Cape | 0.619               | 0.065 | 0.37 – 1.03            |
| Staff / Managers            | Staff    | 1.982               | 0.013 | 1.15 – 3.41            |
| Unstable Relationship       | Stable relationship | 1.119               | 0.66 | 0.68 – 1.84            |
| Not in a Relationship       | Stable relationship | 1.076               | 0.853 | 0.5 – 2.33            |
| Training                    | Untrained | 1.232               | 0.411 | 0.749 – 2.029          |
| Permanent / Casual          | Casual staff | 0.966               | 0.904 | 0.548 – 1.701          |
| Education                   | Low education | 1.703               | 0.05 | 1.0 – 2.9              |
| Knowledge                   | Low level  | 1.077               | 0.743 | 0.69 – 1.68            |
| Condom use                  | Infrequent use | 1.413               | 0.161 | 0.87 – 2.29            |
| Perceived Risk              | Poor attitude | 1.015               | 0.95 | 0.65 – 1.59            |

The model represented in table 32 includes data from 463 participants. The remaining data is incomplete and therefore not included in the model. Overall, the explanatory variables included in the model explain only a small percentage (6%) of the variance in attitude score.

Of the 6% of variance that the model explains, the following variables contributed to attitude score:

- **Job Category**: Managers are twice as likely to score 8 out of 8 in the 'attitude' quiz than staff. This effect was found to be significant (p value of 0.013).

- **Company**: Staff from Woolworths are more than twice as likely to have a positive attitude towards people living with HIV/AIDS than staff at Truworths. This finding was significant (p value = 0.043).

- **Education**: Participants with standard 10 education or higher are 1.7 times more likely to have a positive attitude towards people living with HIV/AIDS than those with standard 8 education or lower. This finding was significant (p value = 0.05).
• Peer Educators are 1.6 times more likely to have a positive attitude than other members of staff. This finding was not significant (p value = 0.182) but worth noting in view of the size of the effect.

• Participants in Gauteng are 40% less likely to have a positive attitude in comparison to staff in the Western Cape. This finding approaches significance (p value = 0.065).

3.2.3 Condom use

Participants were asked about their condom use as an indicator of behaviour. Of particular interest is whether level of knowledge and attendance at training sessions have an effect on an individual’s decision to use condoms.

**Number who have ever tried condoms (RR = 92%)**

Of those who answered the question, 69.4% had at some point in their life used a condom.

**Frequency of condom use (RR = 79%)**

Of those who responded, 36% stated that they never use condoms when they have sex, 20% always use condoms, 15% hardly ever use them, 15% use them half of the time and 14% use them most of the time. When these 5 responses are split into 2 categories - those who use condoms frequently and those who do not, of the 711 participants who responded to the question, 34% use condoms frequently and 66% do not.

**Table 33: Percentage of frequent condom users for each sex by company and region.**

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Men</td>
<td>30</td>
<td>-</td>
<td>24</td>
</tr>
<tr>
<td>Women</td>
<td>19</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>TOTAL</td>
<td>23</td>
<td>8</td>
<td>19</td>
</tr>
</tbody>
</table>

(26 cases of missing gender were not included)
Table 34: Percentage of frequent condom users for each age group by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th></th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th></th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Under 35</td>
<td>31</td>
<td>0</td>
<td>22</td>
<td>56</td>
<td>53</td>
</tr>
<tr>
<td>35+</td>
<td>13</td>
<td>0</td>
<td>14</td>
<td>0</td>
<td>33</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>22</strong></td>
<td><strong>0</strong></td>
<td><strong>18</strong></td>
<td><strong>50</strong></td>
<td><strong>44</strong></td>
</tr>
</tbody>
</table>

(74 cases of missing age were not included)

Table 35: Percentage of frequent condom users for peer educators / staff by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th></th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th></th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Staff</td>
<td>23</td>
<td>8</td>
<td>22</td>
<td>50</td>
<td>43</td>
</tr>
<tr>
<td>Peer Educator</td>
<td>23</td>
<td>-</td>
<td>13</td>
<td>-</td>
<td>53</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>23</strong></td>
<td><strong>8</strong></td>
<td><strong>19</strong></td>
<td><strong>50</strong></td>
<td><strong>44</strong></td>
</tr>
</tbody>
</table>

Table 36: Percentage of frequent condom users for each job category by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th></th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th></th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Staff</td>
<td>19</td>
<td>0</td>
<td>21</td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td>Managers</td>
<td>29</td>
<td>0</td>
<td>14</td>
<td>100</td>
<td>41</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>23</strong></td>
<td><strong>8</strong></td>
<td><strong>19</strong></td>
<td><strong>50</strong></td>
<td><strong>44</strong></td>
</tr>
</tbody>
</table>

(30 cases of missing job category were not included)

Table 37: Percentage of frequent condom users for job type by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th></th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th></th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Casual</td>
<td>39</td>
<td>0</td>
<td>23</td>
<td>40</td>
<td>56</td>
</tr>
<tr>
<td>Permanent</td>
<td>18</td>
<td>10</td>
<td>18</td>
<td>54</td>
<td>37</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>23</strong></td>
<td><strong>8</strong></td>
<td><strong>20</strong></td>
<td><strong>50</strong></td>
<td><strong>43</strong></td>
</tr>
</tbody>
</table>

(23 cases of missing job type were not included)
Table 38: Percentage of frequent condom users for each relationship category by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Stable</td>
<td>10</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Unstable</td>
<td>38</td>
<td>0</td>
<td>46</td>
</tr>
<tr>
<td>Not in a relationship</td>
<td>55</td>
<td>25</td>
<td>33</td>
</tr>
<tr>
<td>TOTAL</td>
<td>22</td>
<td>8</td>
<td>19</td>
</tr>
</tbody>
</table>

(25 cases of missing relationship category were not included)

Table 39: Percentage of frequent condom users for each training category by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Not trained</td>
<td>22</td>
<td>0</td>
<td>22</td>
</tr>
<tr>
<td>Trained</td>
<td>24</td>
<td>50</td>
<td>18</td>
</tr>
<tr>
<td>TOTAL</td>
<td>23</td>
<td>8</td>
<td>19</td>
</tr>
</tbody>
</table>

(116 cases of missing training category were not included)

Table 40: Percentage of frequent condom users for each education category by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>None - Std 8</td>
<td>10</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>Std 10 - University</td>
<td>29</td>
<td>11</td>
<td>19</td>
</tr>
<tr>
<td>TOTAL</td>
<td>23</td>
<td>8</td>
<td>19</td>
</tr>
</tbody>
</table>

(33 cases of missing education category were not included)

Table 41: Percentage of frequent condom users for each attitude category by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Negative attitude</td>
<td>17</td>
<td>0</td>
<td>19</td>
</tr>
<tr>
<td>Positive attitude</td>
<td>26</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td>TOTAL</td>
<td>23</td>
<td>8</td>
<td>19</td>
</tr>
</tbody>
</table>
Table 42: Percentage of frequent condom users for each risk category by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Low risk</td>
<td>23</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>High risk</td>
<td>24</td>
<td>0</td>
<td>35</td>
</tr>
<tr>
<td>TOTAL</td>
<td>23</td>
<td>0</td>
<td>19</td>
</tr>
</tbody>
</table>

(219 cases of missing risk were not included)

Table 43: Percentage of frequent condom users for each knowledge category by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Low level of knowledge</td>
<td>17</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td>High level of knowledge</td>
<td>25</td>
<td>9</td>
<td>17</td>
</tr>
<tr>
<td>TOTAL</td>
<td>23</td>
<td>8</td>
<td>19</td>
</tr>
</tbody>
</table>

Overall the mean percentage of frequent condom use Table 33 indicates that there is a large difference in reported levels of condom use between men and women, each reporting 41% and 31% respectively. Similarly, table 34 indicates a large difference between age groups as 42% of under 35s use condoms frequently compared with 23% of over 35s. Table 35 indicates a large difference in frequent condom use between staff and peer educators (47% and 29% respectively). There is little difference between managers and staff (32% and 35% respectively) as indicated in table 36. Table 37 indicates that there is a large difference for frequent condom use between permanent and casual staff (29% and 47% respectively). Overall, trained staff (31%) have slightly lower levels of frequent condom use than untrained staff (38%) as indicated in table 39. Table 38 indicates that frequent condom use is low in stable relationships (20%) and high in unstable relationships (51%). It is also interesting to note that 60% of participants who were not in a relationship reported frequent condom use. Table 40 indicates participants with Matric and higher reported a higher level of condom use (37%) than those with Standard 8 or lower (29%). Table 41 indicates that participants with a positive attitude towards people living with HIV/AIDS people reported higher levels of condoms use (37%) than those with negative attitudes (29%). Table 42 shows that participants who described themselves at high risk reported higher levels of frequent condom use (41%) than those at low risk (30%). Level of knowledge (table 43) is unrelated to condom use.
as high and low level knowledge groups reported 35% and 34% frequent condom use respectively. Between regions, frequent condom use is lowest in the Eastern Cape/KwaZulu-Natal (18%) and highest in the North (45%). Levels of frequent condom use were also low in the Western Cape (23%). The sample size for Truworths in the Western Cape and Eastern Cape/KwaZulu-Natal is very small (16 and 21 respectively) and it is therefore not possible to draw any substantial conclusions from the data.

Truworths staff in the North reported high levels of condom use (48%) with male employees reporting high levels of condom use (70%) in comparison to female employees (40%). However, only 23% of this group reported frequent condom use if they were in stable relationships (table 38) compared to 69% who were in an unstable relationship. Table 42 indicates that within this group, those who felt themselves to be at high risk reported 73% frequent condom use compared with 36% who felt themselves to be at low risk.

Logistic regression was then used to determine if any of the following variables had a substantial impact on condom use.
Table 44: Full Model Multivariate analysis showing the effect of different factors on condom use.

|                         | Baseline | Adjusted Odds Ratio | P>|z| | 95% Confidence Interval |
|-------------------------|----------|---------------------|------|-------------------------|
| Age                     | >35 years| 0.609               | 0.078| 0.35 – 1.06             |
| Sex                     | Female   | 1.644               | 0.05 | 1.0 – 2.70              |
| Peer Educator           | Staff    | 1.167               | 0.693| 0.54 – 2.52             |
| Company                 | Truworths| 2.012               | 0.064| 0.96 – 4.22             |
| Area 2: EC / KZN        | Western Cape | 0.928           | 0.834| 0.46 – 1.87             |
| Area 3: Gauteng         | Western Cape | 3.129           | 0.000| 1.80 – 5.43             |
| Staff / Managers        | Staff    | 0.722               | 0.25 | 0.41 – 1.26             |
| Unstable relationship   | Stable relationship | 2.786       | 0.000| 1.69 – 4.6              |
| Not in a relationship   | Stable relationship | 6.337       | 0.000| 3.02 – 13.3             |
| Training                | Untrained | 1.629             | 0.085| 0.93 – 2.8              |
| Permanent / Casual      | Casual staff | 0.698          | 0.238| 0.38 – 1.27             |
| Education               | Low education | 1.045         | 0.887| 0.57 – 1.92             |
| Knowledge               | Low level  | 1.477             | 0.573| 0.71 – 1.85             |
| Attitude                | Poor attitude | 1.403        | 0.174| 0.86 – 2.29             |
| Perceived Risk          | Low risk   | 1.175             | 0.501| 0.74 – 1.88             |

The model represented in table 44 includes data from 463 participants. The remaining data is incomplete and therefore not included in the model. Overall, the explanatory variables included in the model explain only 17% of the variance in condom use.

Of the 17% of variance that the model explains, the following variables contributed to frequency of condom use:

- Participants in Gauteng are more than 3 times likely to use condoms frequently in comparison to staff in the Western Cape. This finding was very significant (p value = 0.000).
- Relationship status: Participants in ‘unstable’ relationships are 2.7 times more likely to use condoms frequently than those in ‘stable’ relationships. This finding was very significant (p value =0.000). It is also interesting to note that participants not in a relationship were 6 times more likely to report using condoms frequently (very significant finding with a p value of 0.000).
- Gender: Men were 60% more likely to report using condoms in their relationships than women. This finding was significant (p value=0.05).

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• Company: Participants at Woolworths were twice as likely to be frequent condom users than participants from Truworths. This finding approaches significance (p value = 0.064).

• Age: Participants over 35 years of age were 40% less likely to be frequent condom users than participants aged under 35. This finding approaches significance (p value = 0.078).

• Training: Participants who had attended a training session were 60% more likely to use condoms frequently than those who had not. This finding approaches significance (p value=0.085).

• Job Type: Permanent staff are 30% less likely to be frequent condom users in comparison to casual staff. This effect was not significant (p value=0.238).

• Knowledge: Participants who scored 14 or more in the knowledge quiz were 47% more likely to use condoms frequently than those with a low level of knowledge. This finding was not significant (p value = 0.573).

3.2.4 Level of Perceived risk of acquiring HIV

Self-perception of HIV risk is an important issue to study because it may explain differences in behaviour (i.e. condom use) and indicate the relevance or need for training. It may also indicate certain groups of people who are more concerned about acquiring HIV infection than others.

Individuals were asked to assess how at risk they personally felt of getting HIV by scoring themselves between 0 and 10 on a Likert scale. A total of 77% of participants answered this question. Of those who responded, 73% scored themselves as less than 5. Indicating that they felt themselves to be at low risk of getting HIV, while 40% felt they were at no risk at all. No participants reported that they were already HIV positive, although this does not mean that all participants were HIV negative.

Participants were then split into two groups; those who felt they were at risk (scored 5 or more) and those who do not think they are at risk (less than 5). Logistic regression was used to determine the impact of the following variables on perceived risk of HIV.
Table 45: Mean risk score for each sex by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Men</td>
<td>2.2</td>
<td>-</td>
<td>1.9</td>
</tr>
<tr>
<td>Women</td>
<td>1.6</td>
<td>2</td>
<td>1.9</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1.8</td>
<td>2</td>
<td>1.9</td>
</tr>
</tbody>
</table>

(26 cases of missing gender were not included)

Table 46: Mean risk score for each age group by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Under 35</td>
<td>2.3</td>
<td>2.2</td>
<td>2.4</td>
</tr>
<tr>
<td>35+</td>
<td>1.3</td>
<td>1.3</td>
<td>1.2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1.8</td>
<td>1.8</td>
<td>1.8</td>
</tr>
</tbody>
</table>

(74 cases of missing age were not included)

Table 47: Mean risk score for peer educators / staff by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Staff</td>
<td>1.8</td>
<td>2.2</td>
<td>1.8</td>
</tr>
<tr>
<td>Peer Educator</td>
<td>1.6</td>
<td>-</td>
<td>2.1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1.8</td>
<td>2.2</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Table 48: Mean risk score for each job category by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Staff</td>
<td>1.7</td>
<td>1.3</td>
<td>2</td>
</tr>
<tr>
<td>Managers</td>
<td>1.9</td>
<td>3.2</td>
<td>1.7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1.8</td>
<td>2</td>
<td>1.9</td>
</tr>
</tbody>
</table>

(30 cases of missing job category were not included)
Table 49: Mean risk score for job type by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Casual</td>
<td>2.5</td>
<td>1.3</td>
<td>1.6</td>
</tr>
<tr>
<td>Permanent</td>
<td>1.6</td>
<td>2.3</td>
<td>2.1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>1.8</td>
<td>2</td>
<td>1.9</td>
</tr>
</tbody>
</table>

(23 cases of missing job type were not included)

Table 50: Mean risk score for each relationship category by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Stable</td>
<td>1.8</td>
<td>1.8</td>
<td>1.9</td>
</tr>
<tr>
<td>Unstable</td>
<td>1.9</td>
<td>1.7</td>
<td>2.2</td>
</tr>
<tr>
<td>Not in a relationship</td>
<td>1.6</td>
<td>2.5</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>1.8</td>
<td>2.2</td>
<td>1.9</td>
</tr>
</tbody>
</table>

(25 cases of missing relationship category were not included)

Table 51: Mean risk score for training by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Not trained</td>
<td>2.1</td>
<td>1.8</td>
<td>1.6</td>
</tr>
<tr>
<td>Trained</td>
<td>1.7</td>
<td>5</td>
<td>1.9</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>1.9</td>
<td>2.2</td>
<td>1.9</td>
</tr>
</tbody>
</table>

(116 cases of missing training category were not included)

Table 52: Mean risk score for each education category by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>None - Std 8</td>
<td>1.3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Std 10 - University</td>
<td>2</td>
<td>2.6</td>
<td>2.1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>1.8</td>
<td>1.9</td>
<td>1.9</td>
</tr>
</tbody>
</table>

(33 cases of missing education category were not included)
Table 53: Mean risk score for each condom use category by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Infrequent condom users</td>
<td>1.9</td>
<td>1.9</td>
<td>1.7</td>
</tr>
<tr>
<td>Frequent condom users</td>
<td>2.1</td>
<td>-</td>
<td>3.8</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>1.9</td>
<td>1.9</td>
<td>2.1</td>
</tr>
</tbody>
</table>

(189 cases of missing condom category were not included)

Table 54: Mean risk score for each knowledge category by company and region.

<table>
<thead>
<tr>
<th></th>
<th>Western Cape</th>
<th>Eastern Cape / Kwa Zulu-Natal</th>
<th>Gauteng</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WW</td>
<td>TW</td>
<td>WW</td>
</tr>
<tr>
<td>Low knowledge</td>
<td>2.2</td>
<td>3.8</td>
<td>2</td>
</tr>
<tr>
<td>High knowledge</td>
<td>1.6</td>
<td>1.6</td>
<td>1.9</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>1.8</td>
<td>2.2</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Overall, the mean risk scores was 2.5 (out of 10) in all groups which indicates that on average, participants felt they were at low risk of acquiring HIV. Table 45 indicates that there is only a slight difference in mean risk scores between men and women (2.6 and 2.5 respectively. Table 46 indicates that under 35s felt themselves to be at slightly higher risk (2.8) than participants over 35 years of age (2.1). Peer educators and managers scored themselves consistently lower than staff (both 2.3) while staff reported a mean score of 2.6 as shown in table 47 and 48. Table 49 indicates that there is only a slight difference in risk between permanent and casual staff (2.3 and 2.6 respectively). There is only a slight difference in risk scores between those who have been to an HIV training session (2.4) and those who have not (2.8), as shown in table 51. Table 50 indicates a slight difference in risk according to relationship status. Participants in unstable relationships scored slightly higher (3.1) then those in stable relationships (2.2). Table 52 indicates there is only a slight difference in risk between the different education groups. Table 53 indicates that those who use condoms frequently reported a higher level of risk (3.2) than those who use condoms infrequently (2.4). Differences in risk levels between education groups is shown in table 54. Participants with high levels of knowledge
reported themselves at higher risk (3.2) than then those with Standard 8 or lower (2.4). Staff in the North consistently places themselves at higher risk (3.3) than the Western Cape (1.9) or the Eastern Cape/KwaZulu-Natal).

Logistic regression was then used to determine if any of the following variables had a substantial impact on attitude.

Table 55: Full Model Multivariate analysis showing the effect of different factors on condom use.

|                          | Baseline | Adjusted Odds Ratio | P>|z| | 95% Confidence Interval |
|--------------------------|----------|---------------------|-----|-------------------------|
| Age                      | > 35 years | 0.674               | 0.142 | .4 – 1.14 |
| Sex                      | Female   | 0.615               | 0.048 | .38 – 1.0 |
| Peer Educator            | Staff    | 1.098               | 0.797 | .54 – 2.24 |
| Company                  | Truworths | 0.655               | 0.251 | .32 – 1.35 |
| Area 2: EC / KZN         | Western Cape | 1.304              | 0.426 | .68 – 2.51 |
| Area 3: Gauteng          | Western Cape | 2.81               | 0.000 | 1.67 – 4.73 |
| Staff / Managers         | Staff    | 0.741               | 0.269 | .44 – 1.26 |
| Unstable relationship    | Stable relationship | 1.597              | 0.06  | .98 – 2.60 |
| Not in a relationship    | Stable relationship | 1.028              | 0.944 | .48 – 2.20 |
| Training                 | Untrained | 0.966               | 0.895 | .58 – 1.62 |
| Permanent / Casual       | Casual staff | 1.273              | 0.407 | .72 – 2.25 |
| Education                | Low education | 0.847              | 0.557 | .49 – 1.48 |
| Knowledge                | Low level | 1.01                | 0.977 | .64 – 1.57 |
| Condom use               | Poor attitude | 1.197              | 0.449 | .75 – 1.91 |
| Attitude                 | Low risk | 1.009               | 0.968 | .64 – 1.58 |

The model represented in table 55 includes data from 463 participants. The remaining data is incomplete and therefore not included in the model. Overall, the explanatory variables included in the model explain only 7% of the variance in perceived risk of acquiring HIV/AIDS.

Of the 7% of variance that the model explains, the following variables contributed to risk:

- Participants in Gauteng are more than 2.8 times likely to perceive themselves to be at high risk in comparison to staff in the Western Cape. This finding was very significant (p value = 0.000)
• Gender: Men were 39% less likely to perceive themselves to be at risk than women. This finding was significant (p value =0.048).

• Relationship status: Participants in ‘unstable’ relationships were 60% more likely to consider themselves to be at high risk than those in ‘stable’ relationships. This finding approaches significance (p value =0.06).

• Age: Participants over 35 years of age were 33% less likely to consider themselves to be at high risk than participants aged under 35. This finding was not significant (p value = 0.142)

• Company: Participants at Woolworths were 34% less likely to consider themselves to be at high risk than participants from Truworths. This finding was not significant (p value = 0.251).
3.3 Additional Analysis

3.3.1 Other Sources of HIV/AIDS Information

A total of 783 staff were asked where else they had learnt about HIV/AIDS (peer educators and new peer educators about to start their training were not asked this question). Table 55 indicates the other sources of information in order of popularity. Participants could tick as many categories as they wanted.

Table 56: Other sources of HIV/AIDS information used by study participants.

<table>
<thead>
<tr>
<th>Source</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Television</td>
<td>611</td>
<td>78</td>
</tr>
<tr>
<td>Newspapers</td>
<td>491</td>
<td>63</td>
</tr>
<tr>
<td>Radio</td>
<td>368</td>
<td>47</td>
</tr>
<tr>
<td>Books</td>
<td>332</td>
<td>42</td>
</tr>
<tr>
<td>Friends</td>
<td>310</td>
<td>40</td>
</tr>
<tr>
<td>Hospital / Clinic</td>
<td>218</td>
<td>28</td>
</tr>
<tr>
<td>Church / Mosque / Synagogue</td>
<td>191</td>
<td>24</td>
</tr>
<tr>
<td>School</td>
<td>174</td>
<td>22</td>
</tr>
<tr>
<td>HIV/AIDS organisations</td>
<td>160</td>
<td>20</td>
</tr>
<tr>
<td>Other family members</td>
<td>130</td>
<td>17</td>
</tr>
<tr>
<td>Children</td>
<td>51</td>
<td>7</td>
</tr>
</tbody>
</table>

3.3.2 Peer Educators

Important findings are that on average peer educators had each given 5 training sessions since they were first trained. Since attending peer education training, 96% talk more to their family and friends about HIV/AIDS. In addition, 65% of peer educators now discuss HIV/AIDS with their children, 39% decided to have an HIV test and 16% have started to use condoms for the first time.
3.3.3 Quality of Training given by Peer Educators

Before looking in detail at the quality of training, it is important to note that only 329 of the 661 (50%) staff at Woolworths and 3 of the 122 (2.5%) staff at Truworths had attended a training session. Identical questionnaires were given to Woolworths and Truworths staff, however, Truworths staff were instructed to ignore the section on training because no peer education programme exists within the company. Three participants had however received some form of training on an ad-hoc basis and this was recorded. The average number of training sessions attended was 1.9 and a more detailed breakdown is provided below in Table 57. The denominator for the following set of results regarding the quality of training is the total number of Woolworths staff (excluding peer educators) who received training.

Table 57: No of sessions attended (RR = 91%)

<table>
<thead>
<tr>
<th>No. of sessions</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>112</td>
<td>37.3</td>
</tr>
<tr>
<td>2</td>
<td>84</td>
<td>28</td>
</tr>
<tr>
<td>3</td>
<td>49</td>
<td>16.3</td>
</tr>
<tr>
<td>4 or more</td>
<td>55</td>
<td>18.3</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>100</td>
</tr>
</tbody>
</table>

When asked to classify the quality of the training sessions, a large proportion of participants (86%) stated the training was either good or excellent. Only 2% felt that the training was bad or very bad as shown in Table 58.

Table 58: Quality of training sessions

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>150</td>
<td>48</td>
</tr>
<tr>
<td>Good</td>
<td>118</td>
<td>38</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>39</td>
<td>13</td>
</tr>
<tr>
<td>Bad</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Very Bad</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>314</td>
<td>100</td>
</tr>
</tbody>
</table>

Staff who had attended an in-store training sessions were also asked which of the comments shown in Table 59 they agreed with. A large proportion of staff (63%) of staff stated that they think everyone should attend this type of HIV training and 60% thought it was very useful and would like to attend more training sessions.
Table 59: Opinion of training

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is very useful and I would like to go to more training sessions</td>
<td>198</td>
<td>60</td>
</tr>
<tr>
<td>I don’t think that HIV/AIDS is very important in my life</td>
<td>23</td>
<td>7</td>
</tr>
<tr>
<td>I already know a lot about AIDS and don’t need extra training</td>
<td>20</td>
<td>6</td>
</tr>
<tr>
<td>I don’t think that HIV/AIDS should be talked about in the workplace</td>
<td>20</td>
<td>6</td>
</tr>
<tr>
<td>I felt uncomfortable talking about such things</td>
<td>17</td>
<td>5</td>
</tr>
<tr>
<td>I think that the training was good, but one session is enough</td>
<td>36</td>
<td>11</td>
</tr>
<tr>
<td>I did not find the training useful</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>I think that everyone should have this type of HIV/AIDS training</td>
<td>209</td>
<td>63</td>
</tr>
</tbody>
</table>

To try and quantify the usefulness of the training sessions, participants were asked if they had done any of the following after they had attended training.

Table 60: Impact of training sessions

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never used condoms before and decided to start using them</td>
<td>38</td>
<td>11</td>
</tr>
<tr>
<td>Decided to have an HIV test</td>
<td>69</td>
<td>21</td>
</tr>
<tr>
<td>Talk more to people at work about HIV/AIDS</td>
<td>100</td>
<td>30</td>
</tr>
<tr>
<td>Talk to my children about HIV/AIDS</td>
<td>117</td>
<td>35</td>
</tr>
<tr>
<td>Talk to my family / friends about HIV/AIDS</td>
<td>189</td>
<td>57</td>
</tr>
</tbody>
</table>

The percentage of staff who decided to take an HIV test after training is much lower than the percentage of peer educators (21% and 39% respectively).
Chapter 4: Qualitative Research

The peer education programme does not exist within a vacuum; therefore, it is important to understand the parameters in which it operates. The qualitative component of the study was conducted to provide contextual information about the setting in which the peer education programme takes place. Focus groups, in-depth interviews and opened questions in the survey were conducted in each area to allow for in-depth discussion on issues related to HIV education, perceived risk of acquiring HIV, condom use and Woolworth's HIV/AIDS peer educator programme. This descriptive data adds depth to the study and in certain instances seeks to explain the quantitative findings in the previous chapter. It is important to reflect the views of the different employee groups within the organisation. peer educators, management, occupational health practitioners (OHPs), health service co-ordinators and general staff are all stakeholders in the programme and their input is crucial to the future success of the programme.

Focus groups were held during time that was usually allotted to pre-work (8-9am) training sessions that are compulsory for all permanent (full time) staff to attend. Due to the work schedule within stores, it was not possible to randomly select focus group participants, therefore, focus groups consisted largely of full time employees. All groups were therefore, subject to the same bias. One group consisted solely of casual staff at a store in the North. Again this group had already been assembled for customer service training and therefore random selection was not possible. Peer educators were randomly chosen by the regional OHP in the Western Cape. All peer educator participants for the focus groups in the Eastern Cape, KwaZulu-Natal and North were not randomly selected because the sessions were included as part of the quarterly peer educator update sessions organised by the OHPs in each region. Participants in the management focus groups were not randomly selected because the sessions were included in regional store management meetings, which are compulsory for each store manager to attend. While the lack of randomisation infers a potential for bias, it is felt that the participants represented the diverse demographic of staff employed by the company and that each area (North, Western Cape and Eastern Cape / KwaZulu-Natal) was equally represented.

This chapter is split into three sections. Section A contains an overall perspective of the programme and discusses the key issues that impact on its success. Section B looks at
the issues related to the infrastructure of the programme and how it operates at store level. Section C reports on social and demographic factors and personal risk perspectives.

4.1 Section A: Programme overview

4.1.1 Impressions of the Programme

The overall opinion of the programme is that it is worthwhile and of benefit on different levels - to the company, the individual and the wider community. The following comments clearly illustrate staff enthusiasm for the programme and a basic need for HIV awareness.

"I think the course made me realise that AIDS is closer than I thought and made me realise the effects on me, my family and also at work." (Peer educator in the North)

"I think the training was very educational and it has helped me to understand how serious HIV/AIDS really is and how I can educate others." (Peer educator in the North)

"From my schooldays, my fellow students/friends considered AIDS "dirty". Since the session, I understand the disease. I respect people with the disease and actually read the articles and listen to the news on AIDS, whereas previously I hated the topic." (Peer educator in KwaZulu-Natal)

"The sessions make a person think and want to go out there and give a helping hand. The training is very good." (Peer educator in KwaZulu-Natal)

"People are starting to know to go and test themselves and if they are not infected yet, to do something about it." (Staff member in the Eastern Cape)

Not all comments were positive and may help to explain why training has had little impact on level of knowledge as described in the previous chapter. One of the OHPs expressed concerns that the programme is not working effectively and feels that the HIV educational message is not getting across to staff:

"Initially the videos that had staff hiding under the tables - thought this was very effective - scared them. Now they just talk about it and it's 'wissy-washy'. Need to be visually shocking." (Manager in the North)

Analysis of the qualitative information shows that the programme has had a number of positive benefits:
4.1.1.1 Personal empowerment
A peer educator in the Eastern Cape described how the training has helped her to be able to help others on a daily basis in the workplace. Instead of giving people solutions, helping them to find their own solutions. Not all problems might be AIDS related but the course has definitely given her new life skills.

4.1.1.2 Company
Reducing the infection rate amongst staff by promoting safer sex is important as one senior manager pointed out that “productivity and absenteeism will affect the business”.

4.1.1.3 Community
Community work relating to HIV/AIDS is common among the peer educators and is encouraged by the OHPs. One OHP stated “networking is essential to reach as many people as possible.” A store in the North wanted to expand awareness into the communities that staff come from, especially to the youth. The manager of the store actively encouraged staff to take a box of condoms home and distribute them. In addition, the folders given to the peer educators at the start of their training contain overhead projector slides and other useful HIV/AIDS information that can be used outside the work environment. “I lent my HIV&AIDS file to my daughter because she is the project organiser in her school.” (KZN Peer Educator).

The company has organised community events (e.g. Hout Bay Fun Day) to create awareness outside the company.

4.1.2 Need for awareness

"The only thing to fight AIDS at the moment is education" (Eastern Cape Peer Educator)

"Make the people understand that AIDS is here to stay, and with proper education on the subject one could combat the spread of this deadly disease.” (Peer educator in the North)

The comments above serve to highlight two vital facts about AIDS – it is fatal and there is no cure. Staff who participated in the study appear to have grasped this concept and a common theme in discussions was the need to continue education as the first step in prevention. It is however, important to note that knowledge does not always lead to a change in risk taking behaviour.
Lack of knowledge amongst staff is common, even after 3 years of the programme operating in stores. At a large store in the North, few people had attended an in-store training session or who knew who their peer educator was. A peer educator in KwaZulu-Natal, who had just been trained, had conducted two sessions with casual employees. Many of them do not know anything about HIV. They were afraid that they could catch it from kissing or drinking from the same cup as someone with HIV. This finding indicates that improvements are essential to raise levels of awareness.

"People ask questions such as "I had unsafe sex the other night - could I have contracted HIV?" or say things like "AIDS comes from ancestors, and the only cure is to give it to someone else". One man asked "How can I get it - I only sleep with women". (Peer Educator in the Western Cape)

"A lot of people do not know about AIDS - there's a lot of ignorance, that's what worried me the most about it." (Peer Educator in the Western Cape)

"Someone in my family said the other day 'It's all these homosexuals - that's where the whole AIDS thing started'. I told them it's not true - anyone who has unprotected sex can get it." (Peer Educator in the Western Cape)

In contrast to this, some believed that the majority of people know the essential basic information about HIV and it is now time to shift focus and target attitudes of fear and concerns about stigma.

"It's different from 5 years ago. Most people now know that you won't get AIDS just from touching someone or from spitt. It's more exposed now. Important to get over fear." (Staff member in the Western Cape)

The programme also aims to challenge negative attitudes towards people living with HIV/AIDS and to create an atmosphere in which people can feel comfortable to disclose their HIV status if they choose. Such aims take time to achieve but remain important as illustrated by the following comments:

"We are a big company - we do have people with AIDS, but the people don't know who they are and the people who have AIDS might just be scared of what the next person's reaction is." (Staff member in Western Cape)

"Need to educate people to make them more aware of what it's all about so that they accept people for what they are." (Staff member in Western Cape)
“It is important that if someone chooses to confide in you, you know how to react to that because you have the knowledge. How to take it step by step. You need to imagine how that person’s mind is thinking.” (Staff member in KwaZulu-Natal)

Mature members of staff also spoke about the difficulty in openly discussing sex and related issues. Findings revealed that this population group find discussions about sex be either embarrassing or vulgar. As shown in the following comment, there is an urgent need to break down communication barriers in view of the high HIV infection rates. Parents need assistance in learning to discuss sex with their children and equip them with appropriate levels of knowledge to challenge ‘myths’ about HIV/AIDS.

“Unfortunately in the good old 50s and 60s you couldn’t go and talk to your parents about sex. We need to break down those barriers first more than anything else. It’s not a sign of disrespect to have a conversation with your children about sex. It’s a necessary thing. They go to discos and many things happen. Some get drugged without knowing it and a guy can have sex without you even knowing it. I tell my kids don’t forget the condoms when they go out. It’s something you can’t hide from anymore.” (Staff member in the Western Cape)

“People think it’s only the children who are the ignorant ones and we concentrate a lot on the young people, but there is adult people that also disregard it. They think that people of their age group don’t have AIDS.” (Staff member in the Western Cape)

“There are so many misconceptions among the older people whereas the younger people are more eager to be educated.” (Peer Educator in Western Cape)

The type of education provided is also important in terms of impact. Several participants talked about the impact of seeing/speaking to people living with HIV/AIDS.

“AIDS is very important, we have to learn about it. There are programmes on TV which educate you but it’s different to coming across someone who is HIV positive.” (Staff member in the Eastern Cape)

4.1.3 Peer Educator Commitment

All peer educators were asked to explain why they became peer educators and why they continue to do it. Their reasons include personal experience of HIV, a desire to help and educate others and an extension of their leadership roles. Responses clearly indicate a genuine commitment and enthusiasm for raising awareness about HIV/AIDS.
"I wanted to know more about the virus, to share with others, to be supportive to others, to advise and to help." (Peer educator in KwaZulu-Natal)

"Being an informal leader people come to me with problems - so this programme helps me to understand and help where possible." (Peer educator in KwaZulu-Natal)

"I thought it's important to be educated about HIV & AIDS and it would help me to spread the knowledge to the townships and others. Our people still think that AIDS & HIV is just a joke." (Peer educator in KwaZulu-Natal)

"I found that a lot of staff members were talking to me about their problems (work & home) and to me it showed that I can be trusted, give advice and just listen even when I don't have a solution." (Peer educator in the North)

"I want to educate my fellow workers and family more about HIV." (Peer educator in KwaZulu-Natal)

"I was interested to learn more about HIV/AIDS because it is a reality and we have to learn to live with it. The more people we can educate the better." (Peer educator in KwaZulu-Natal)

"I wanted to be a peer educator because I have a couple of close people that already died of AIDS and others suffering with HIV." (Peer educator in KwaZulu-Natal)

"I'm very concerned about my life and other people's lives." (Peer educator in KwaZulu-Natal)

"I want to educate others about HIV/AIDS. To get in contact with youth especially." (Peer educator in KwaZulu-Natal)

The quantitative findings detailed in chapter 2 indicate that the programme is not significantly improving people's HIV/AIDS knowledge. However, the comments listed above demonstrate that the required motivation and dedication to drive the programme exists among the staff on the ground. It is therefore largely a question of implementation strategy, presentation skills and senior level commitment.

Peer education is not only about formal lecture style presentations. The Health Services department at Woolworths actively encourages one-on-one training in informal settings (e.g. tea breaks), which allows individual needs to be addressed in a more flexible manner. Unfortunately, this type of training could not be measured by the study questionnaire.
"Work comes in the one-on-one sessions where people come and ask you questions and people talk amongst each other. That’s where the big difference is. It’s not necessarily the big training sessions or presentation. It’s about everyone knowing who the peer educator is who they can come and talk to. For me it’s not about standing up in front of a big audience it about being able to talk to your buddy next to you." (Peer Educator in the Western Cape)

"A friend at work who has had more than one partner asked advice on being tested. I had to listen without being judgemental and give honest answers.‖ (Peer educator in KwaZulu-Natal)

4.1.4 The Workplace and HIV

Staff firmly believe that the workplace is appropriate for HIV awareness training.

"Good place as we spend most of our time here. Good to have and they carry the message over to casuals who do not attend the meetings. Young people should know about these things." (Staff member in the Western Cape)

Disclosure of HIV status was also discussed during interviews and focus groups. One manager in the North asks his staff about family deaths when they come back from compassionate leave. "They never say its AIDS, it’s always something else e.g. ‘something in his brain popped’". Another manager in the North reported that staff have come forward and said they are HIV positive, but they want it to be kept totally confidential. "They don’t want help from employee assistance programmes [EAP] because they are scared of discrimination‖. This sentiment was repeated by a peer educator in the North, “people are not open and people are very scared to talk”.

Reasons for and against disclosing were also discussed during the focus groups and the overall opinion reflected the rights of the individual to be able to choose to whom and when they disclose.

"Be honest - tell Human Resources, so that if you are sick, management will not think you are being lazy. This is what happened to the HIV positive person in the store. He was off sick a lot but no one knew why and thought he was slacking." (Staff member in the Western Cape)

"It’s a private thing. Up to the person as to whether or not they tell others that they have AIDS. Not everyone is comfortable telling others - it’s their choice." (Staff member in the Western Cape)
4.1.5 Importance of HIV Epidemic

Opinion differed on this topic between those who feel staff are genuinely concerned about HIV and those who feel it has nothing to do with them. The high infection rate in South Africa was one reason for concern.

"Quite frightening to think that 23% of the population has HIV." (Staff member in the Western Cape)

"It is something serious - don't know what's going to happen in the next 10 years - a lot of people will be dying. Don't know if your family is still going to be there. It can happen to anyone at anytime." (Staff member in the Western Cape)

The phrase ‘it can happen to anyone’ was commonly used by participants, indicating a general awareness that HIV is not restricted to specific groups within the population.

"We marry our partners in good faith - we don't say to them to have a blood test before we get married. It can happen while married - you can cheat, your husband can cheat. There really is no safe guarantee. You have to be more open minded and aware." (Staff member in the Western Cape)

Others took a business perspective and stated that HIV will have a major impact on the country’s economy in the future.

"Not just about protecting the workforce, it's also about protecting the economy. Disposable income will be redirected into treatment for AIDS - lead to a slump in sales or there will be a change in demand for products e.g. more black clothing - funerals." (Manager in the North)

In contrast, there was also a widespread feeling that AIDS is not everybody’s problem or even denial that the disease exists.

"In our store, the peer educator offered people condoms as they left the store - many were too embarrassed to take one. The reaction was 'why are you giving this to me?' 40% didn't take. I won't get AIDS - I'm married." (Manager in the North)

"Sometimes you talk to different people who take AIDS very serious but some of them they will tell you there's nothing like that." (Peer educator in the North)
4.1.6 Company Commitment

Senior level management at Head Office is perceived to be taking little interest in the programme. One of the most direct communication channels between senior management at head office and staff within stores is a one hour television broadcast each month. It is watched by all company employees during a morning training session that is compulsory for all permanent (full time) staff. HIV/AIDS issues are rarely mentioned in the company broadcasts and the majority of staff who participated in focus groups felt that this issue should be included.

Lack of management attendance at peer educator training has indicated that HIV/AIDS is not a priority within the company. E.g. Training sessions are cancelled if senior management are visiting the store to discuss other areas of the business. This issue was raised during several focus groups and store managers also stated that they would give greater time and attention to peer education if they were instructed to do so by senior management at Head Office. It is important to clarify that Head Office does not mean Health Services within Head Office, it relates to the other areas of the business e.g. Operations, Human Resource and Training departments. One OHP stated that Peer Educator training is not taken seriously by the company i.e. it is not seen as a priority. It would help if people took it seriously; however, they also felt that the type of person chosen to become a peer educator is also very important. A group of store managers in the North described how a business strategy comes from Head Office and is then adapted by each region. They felt that AIDS will have an impact on the business and that it should be part of training plan and modified to be store specific.

"We've got peer education so we feel that something is being done about HIV/AIDS, but the top management don't get actively involved in it. They say AIDS is a problem, lets start the peer education project with the nursing sister in each region and Tony Davidson – let them own it. As far as they are concerned, they are doing something about it, so it's no longer a priority."
(Peer educator in the Western Cape)

"We've got a good policy, but it's lip service." (Peer educator in the Western Cape)

"We don't show that we support our AIDS strategy at all." (Manager in the North)
"Retail operating plan – "the Rocket" has had more exposure than AIDS, AIDS is only on the odd poster. Give the AIDS policy more exposure." (Manager in the North)

"AIDS is not given the same weight or attention as profits, share prices etc." (North Managers)

Both store managers and staff perceive that AIDS is not a major concern in the company's overall business strategy. The peer education programme's lack of penetration within the business is felt to be strongly related to this lack of commitment.

4.1.7 Management involvement in Stores

Management awareness and enthusiasm for the programme is highly variable. Discussions with store managers revealed that the majority have little involvement in training. A number of managers in the Western Cape thought that they were not meant to attend the training sessions, on the understanding that training is solely intended for staff, not management. Peer educators who had the full support and backing of managers are more likely to provide sustainable training programmes and conduct training sessions on a regular basis. Attendance at meetings, providing encouragement, asking peer educators for feedback and ensuring time is allocated to peer education were identified as key tasks for store management to ensure that the training programme is effectively implemented.

"To get more support and buy-in from people, store managers need to take responsibility because they always say 'it's your baby and not our', so if they can come in as well and support us." (Peer Educator in the Western Cape)

"Managers are not involved – if we do have a session, we get unnecessary comments instead of support – we have a criticizing attitude." (Peer Educator in the Western Cape)

"They say "we know enough" but what will they do if we're away one day and someone comes to them (managers) who had a problem with AIDS." (Peer Educator in the Western Cape)

A peer educator in the Western Cape echoed this point. Within stores, he found a difference in the level of commitment offered by management. At one store, the Human Resources manager was very helpful and gave assistance to make the training sessions happen. However, in some stores, managers think that HIV is not important. It is very important to have involvement and support from managers; staff will often then take their
lead from management: "If they see that managers are not concerned, then why should they be?"

Leadership by example is important as one peer educator in KwaZulu-Natal noted “we need to have management buy-in on the programme. It must not seem that the HIV belongs only to us.” Additional comments from other areas prove this to be a common problem in all regions.

“Staff have noticed that they are not there. They excuse themselves conveniently when it is time for training. They should be there irrespective of whether they are management or not. Not everybody knows everything.” (Peer Educator in the Eastern Cape)

“Staff are fine – we have quite a few training sessions with the staff, but we don’t get the co-operation of the managers and whenever they hear it’s about peer education or AIDS, they go and do their emails. The staff see it and ask why the managers are not taking part. Our store manager couldn’t care less. He doesn’t even have control over the other managers; they can do whatever they want.” (Peer Educator in the Western Cape)

In both the Western Cape and the North, it was common for OHPs to report low levels of management involvement within stores. One OHP stated that “management perception is that the peer educators do not have adequate knowledge to do the job, therefore, do not really respect them.” This finding was supported by the managers in the Eastern Cape who questioned the ability of staff members to conduct HIV/AIDS training.

A group of peer educators in the Western Cape felt that managers should undergo a paradigm shift in their thinking. “They need to stop protecting the Woolies name and change to looking at the needs of their staff” (it was felt that management are concerned about what will happen if customers find out that staff are HIV positive). This group decided to go back to their store managers and contract for training time with them and invite the managers to training sessions in an attempt to get them involved. This sentiment was repeated by a group of peer educators in KwaZulu-Natal.

One OHP provided useful insight into the real purpose of the programme and the need to give the initiative time to reach its potential.
"It is important that they teach self awareness to staff – life is about choices. Transformation takes time and it is to be expected that there will be resistance from people to change their behaviour."

4.2 Section B: Operational Aspects

The issues described below have consistently featured in interviews, focus groups and questionnaire comments and give a clear indication of the strengths and weaknesses associated with the peer education programme.

4.2.1 In-Store Training

Peer educators and OHPs both reported restrictions in the amount of training time allocated to HIV/AIDS peer education within stores.

"Our concern as peer educators is that the time given is not enough to present our modules e.g. out of an hour we only get 30 minutes or sometimes less." (Female Peer educator in KwaZulu-Natal)

Another cause of concern was training attendance which varies from store to store. One peer educator felt her biggest problem was "getting staff to attend sessions / my training." (Peer educator in KwaZulu-Natal).

"I don’t know who’s to blame whether it’s us or managers why people don’t come to sessions or why they are not interested. Maybe we need a company wide awareness campaign." (Peer Educator in the Western Cape)

"First problem is about time of training and telling people about HIV and more specifically, must move this to the community at large." (Peer educator in KwaZulu-Natal).

These comments indicate that peer educators require moral or psychological support from managers to maintain motivation and provide a good example to other staff.

In the Western Cape, in-store training sessions are put on the regional training calendar by the OHP to ensure that one training session is completed each quarter. Peer educators are expected to negotiate with managers for additional training or if training is cancelled. In other regions, peer educators are expected to negotiate all their own training sessions / inclusion on the training calendar and report back to the OHP at the next feedback session. Power relations are crucial in the negotiating process and peer educators are
automatically at a disadvantage. The programme co-ordinators at Head Office and the regional OHPs felt that the system employed in the Western Cape should be used in all regions.

In many stores all training sessions, regardless of the topic have been reduced from 1 hour to 30 minutes, which is inadequate for this type of training. Whilst lack of time is the main complaint of peer educators in all regions, OHPs have highlighted lack of initiative on the part of some peer educators, to ask for training time and negotiate with store management. Levels of enthusiasm and commitment to the programme amongst peer educators is variable; however, it is a fair assessment to state that the majority of peer educators are dedicated to HIV/AIDS education. One of the main criteria used by OHPs to determine how well each peer educator performed, was how often they conducted training sessions in addition to their perceived level of enthusiasm to the topic. OHPs reported that many peer educators are content to return to the store after they have been trained on a new topic and only give one presentation before the next quarterly training (training is quantified on a performance worksheet completed by the regional OHP). The problem is that not all staff are able to attend the session and repeats are required to ensure that everyone is covered. This reflects a lack of understanding of the role of peer educators and a lack of support from both management and OHPs when peer educators return to their stores to train their colleagues.

During discussions, an attempt was made to determine a minimum standard that all peer educators should comply with, in terms of time allocated to in-store training sessions. Answers ranged from one hour of HIV training a week to one hour per quarter. Whilst the first suggestion may be unrealistic and potentially over-expose people to HIV education and therefore induce apathy towards the topic, the latter also seems unsatisfactory in a company that has a high turnover and regular movement of staff. In the Western Cape, peer educators felt that all staff should be exposed to all 4 modules (basic HIV/AIDS information, company HIV/AIDS policy, Sexually Transmitted Diseases and HIV testing) twice a year. This requires one hour per month per staff member to be dedicated to HIV.
"The more you give the information to the people, the more it will stay there. If they get into a situation where they are sexually active then they need to know what to do. Need to get the information on a regular basis." (Peer educator in the Eastern Cape)

"Top brands are continually spending money on advertising, continually reinforcing – that’s what we should be doing." (Manager in the North)

One OHP feels that there is inadequate focus on sexually transmitted diseases (STDs). Prevention of STDs plays a vital role in HIV prevention and it was felt that this issue should be given greater emphasis within stores.

Peer educators often invite their regional OHP to training sessions for moral support or to assist with training. Approximately a quarter of the peer educators request support in the Western Cape, compared to half of the peer educators in the North. One OHP reported that they are often asked to go to the stores to help with the training sessions and they often end up taking over as questions are directed at them. This defeats one of the main objectives of the programme, which is to relieve OHPs of HIV training responsibilities at store level.

Many requests for HIV tests come straight to the OHPs with no involvement from the peer educators. This could be an indication that people place more trust in the OHPs than peer educators or it could have been prompted by a training session given by the peer educators. However, in some cases it may also be more appropriate to see a professional rather than a peer educator. This does not undermine peer educators because their main function is not to solve problems, but to provide information and guide people to the appropriate place for help.

4.2.2 Casual Employees

Peer Educators in all regions expressed the difficulty they have in reaching casual staff and are deeply concerned that this group of employees (who constitute two-thirds of staff within the company) are losing out on vital HIV/AIDS training.

"Maybe we need to look at having a set time for casuals – important that each and everyone is covered." (Peer Educator in the Western Cape)
“Every time there is a new group of casuals, the PE should be introduced, just like the store manager I introduced. Be part of the induction. Most permanents are ladies but more casuals are male. They should know about it.” (Peer Educator in the Western Cape)

“Casuals also need to know about HIV/AIDS. They are the younger generations and there is a need to be educated.” (Peer educator from KwaZulu-Natal).

At present casual employees are only trained if peer educators make ad-hoc arrangements with store management to train casual employees at weekends. A number of peer educators have given unpaid time to do so, but this arrangement is infrequent and is inconsistent across stores. Some casual employees attend morning training sessions, but in general this is uncommon because training is conducted before stores open and only permanent staff members are paid for the time they attend training. One peer educator from the North region stated that:

“Casuals should be staffed to attend these trainings. Get people (casuals) from different stores to attend all together where they are treated and taken seriously. The company has to show some commitment as far as casuals are concerned. Get a person who is HIV positive to visit stores / talk to staff.”

Part of the HIV/AIDS training aims to familiarise staff with Woolworths HIV/AIDS policy. The employment policy (discrimination etc.) are clearly to the benefit of both permanent and casual members of staff and it is therefore important to ensure that all casual staff members are included in this training.

Peer educators and staff have expressed concern regarding the lack of medical aid benefits available to casual employees. At present, HIV positive casual staff members are given varying degrees of support. Anecdotal findings show that in some stores, waste food and other financial and emotional support is offered to the affected staff member and their family. Occupational health is provided to all staff within the company, but medical care is only available on the medical aid scheme, which is not open to casual employees. There is however, no policy regarding HIV positive casual staff and stores are not obligated to assist. A peer educator from the North expressed an opinion shared by many within the company.

“I suggest the company must do something better for the casual staff when they are infected with this disease.”
4.2.3 Peer Educator Selection Process

Current practice is that staff or management either nominates candidates or volunteers are requested to come forward. In the Western Cape, a poster is put up in each store telling staff about the programme. Nominations are either voluntary or chosen by staff. The HR manager in each store interviews the applicants and the regional OHP makes a follow up phone call to each of the stores final candidates to discuss the role of peer educators. Previously, stores managers ordered chosen peer educator candidates to go on the programme regardless of whether they wanted to or not. In other regions, OHPs have no involvement in the selection process and discussions revealed that they are sometimes unhappy with the calibre of staff sent for peer educator training.

In the North, the list of selection criteria is sent out to stores and the stores then send staff to be trained. It is common practice for staff to democratically elect someone to be trained and in most cases, people are selecting someone they trust.

“For the nominations – it worked because both staff and management had trust in that person to be able to bring across the message about the disease.”
(Peer Educator in the Western Cape)

While this is important, one OHP felt that the candidates should also have strong presentation skills, a good level of intelligence and the necessary initiative to think on their feet. It was felt that many peer educators have “fallen off the boat” or doing very little because they were inappropriately chosen as peer educators. One opinion expressed is that medically trained personnel are best equipped to provide explanations and answer questions from staff. This is not seen as a practical solution to training difficulties because the OHPs would have a large number of stores to visit, would not be present in stores outside training times to respond to additional queries and already have a heavy workload. Employees are constantly moving between stores and posts, therefore, it is hard to maintain a ‘core’ group of peer educators who will go through a continuing process of development.
4.2.4 Training for Peer Educators

Lifeline in the Western Cape has expressed the opinion that the Woolworths training course is too short. They have to condense a 20 day course into 2 ½ days. It is felt that a 5 day minimum is required for satisfactory training. Initial training should be followed by regular feedback sessions (one day per month) with structured supervision. Lifeline would also like to see the full company hierarchy represented in the selection of peer educators. The content of the programme is accepted by all parties to be excellent, however, the topics are hurried due to time constraints and there is no inclusion of presentation skills training. The way in which HIV education is related back to colleagues at store level is crucial to the success of the programme and should be addressed in greater detail.

"Good thing about the Lifeline course was the trust we had to instill in each other. It gave an insight into how someone with HIV (or someone in their family) would feel placing their trust in me (i.e. a peer educator)". (Peer educator in the Western Cape)

4.2.5 Programme co-ordination: Health Services

The programme is conducted differently in each area leading to differences in the quality of training, monitoring and feedback. There are a greater number of peer educators per store in the Western cape and Eastern Cape / KwaZulu-Natal in comparison to the North, which may impact on the frequency of training sessions. One OHP feels that the training requires greater structure. At present Health services within Head Office co-ordinate the programme with the expectation that the OHPs in each area will organise the training schedule and conduct follow up sessions with peer educators in their area. While objectives in terms of content, frequency of training sessions and timeline have all been standardised by the Health Services, OHPs still have a high level of autonomy and influence that can assist or obstruct the success of the training programme.

Managers in the North felt that the programme was "rolled out with a bang, but it was not sustained. Look at labour turnover - we experience it with job knowledge. We have to continually re-train people because of labour turnover." Also felt that "the nursing sisters are trying, but each have about 20 – 30 stores to look after."
4.2.6 Condoms

Free condoms run out quickly in most stores and are popular with staff. “We run out of condoms in the store – not filled up quickly enough” (Staff member in the North).

It is possible that staff will be asked to pay for condoms in the near future when free supplies from the Government have run out. When asked how they would feel if they were charged (e.g. 3 condoms for R2) a mixed reaction was observed. The majority of staff indicated that this would be inappropriate because the condoms are free at the moment and it would be unfair to expect staff to pay in the future. It was also felt that some people would be less likely to use condoms if they were not free. It was however, noted that the proposed price is cheaper than at a chemist and that if people have established a routine of condom use, they will continue to use condoms even if they have to pay.

One peer educator in the Western Cape pointed out that people who have been in the same relationship for a long time will find it hard to start using condoms because it implies a lack of trust. Peer educators reported that colleagues often ask them how they are supposed to introduce condoms into an established relationship.

Issues related to gender and age were also raised by peer educators. A peer educator in the Eastern Cape said she is not being judgmental, but she had spoken to male friends and feels that it is mainly men who refuse to use condoms. Another discussed the acceptance of condoms among young people.

"Don't think the youngsters are keen to use condoms. They are living a different lifestyle." (Staff member in KwaZulu-Natal)

A lively discussion on condom use at one store in the North revealed that staff would like to see more ‘exciting’ condoms in stores. In addition, men within the group explained that people may forget to use condoms when they have too much to drink. Women in the group thought this was a poor excuse, but that it is also up to women to remember and that everyone should always carry a condom. When asked why some people don’t like to use condoms even when they know all about the risk of HIV/AIDS, a variety of reasons were given including fear, spoiling the enjoyment of sex (“you don’t eat a sweet with the wrapper on”) and that condoms are not comfortable.
4.2.7 Medical Aid

Many peer educators expressed the opinion that the level of medical aid cover for staff who are HIV positive is unsatisfactory. However, they did acknowledge that if premiums were raised, people might start to resent the healthy paying for the sick.

"We also have to be realistic – you get what you pay for. We have options, we chose, we take what we can afford or what we think we need. The new medical aid package was designed to try and be effective for everybody. We are paying a little bit more for a little bit less because the cost of everything has gone up. But speaking realistically without involving emotion, you choose your medical aid according to your medical problems. It also only covers full time staff, so where does that leave your casuals?" (Peer educator in the Western Cape)

At present the medical aid available to staff does not cover anti-retroviral therapy to treat HIV positive members.

4.2.8 HIV Testing

The majority of participants felt that everyone should get tested but that it should be their choice of the individual. Below are some of the comments given by peer educators in KwaZulu-Natal and the North as to why people should be tested for HIV.

Those who support testing for all:

"Because of unfaithful partners"

"This can help everyone understand and fight to control the problem early and maybe it won't spread so widely."

"First we'll have the exact figure of infected people and it would be easier to educate all the infected. By so doing we would limit more infections."

"I think that every single person should be tested. Also married people that are embarking on a new relationship should be tested. Also married people who have extramarital affairs."

"It is important to know so that if your result is positive you can take the necessary precautions and change your lifestyle to extend your lifespan."

"I think a peer educator should be tested because you must practice what you preach."
In contrast ...

"It is a personal decision."

“No, this could only be done with consent and on an individual's feeling."

“Yes and No. Yes because you want to know. No because society will reject you."

HIV testing is one of the four core modules presented in the stores by peer educators. An explanation of the test, window period, who should go for the test and where they can go are all discussed. Peer educators understand the importance of testing and 29% reported taking an HIV test for the first time following the training course they attended. In comparison, only 11% of people who were trained in the stores by the peer educator decided to go for a test for the first time. Peer educator enthusiasm for testing is clear, however, this message has not filtered through to the majority of staff in the stores.
4.3 Section C: Socio-demographic factors and perceptions of risk

4.3.1 Age

Qualitative research reflected the quantitative finding that older people are less likely to use condoms than younger e.g. "my husband will never use that. My husband is faithful - I'm faithful." A peer educator in the Western Cape said that she understands why people who have been married for a long time do not want to use condoms "people are not going to start using condoms after 32 years of marriage".

"The permanent staff tend to be older and married. They seem to think that it does not have anything to do with them. This is not a good sign as people cannot automatically assume that marriage will protect them." (Peer educator in the Western Cape)

Older staff felt that HIV awareness was more relevant to younger people. Peer educators reported that in some stores, young people were more eager to ask the peer educators questions about sex and HIV in comparison with older staff members.

"It's up to us to give knowledge to youngsters. We've got information and pictures to show to people. The photos are quite shocking. If this is the first time you hear about these things then it's going to touch you." (Staff member in KwaZulu-Natal)

"We have lots of young people in our store - the reaction is 'can I come and speak to you on my own later on'." (Peer Educator in the Western Cape)

The last comment also highlights the importance of one-on-one interactions within the peer educator programme.

4.3.2 Gender

Distinct differences in male and female attitudes towards HIV were noted during store visits and focus group sessions. In general, women were more open and willing to discuss HIV and tended to place 'blame' on men for not using condoms.

"At the end of the day they don't suffer - the girl is left with the baby. When the man pulls up his zip, he's still a gentleman." (Staff member in the Western Cape)
4.3.3 Culture

People tend to see themselves in terms of old apartheid ‘racial’ classifications. This information was not collected in the study questionnaire as it was felt that this is not important in training, however, it did feature in qualitative discussions. Generalisations were made about different population groups, especially in relation to condom use.

“Mostly blacks don’t want to use condoms. AIDS is more in black culture than in us [coloured]. They don’t want to use condoms - they may even hit you if you tell them that they must use condoms. Why not? Lobola for the children. Not allowed to use them. If they find out that you are using the injection or the pill, they get cross. Any kind of contraception is bad." (Staff member in the Western Cape).

A staff focus group in the North described how black people over a certain age (35+) were not brought up knowing about condoms and they do not see why they should use them now. This group are perceived to sleep around and not wanting to use condoms. It was also common for white staff to see HIV as something that was more likely to affect the black population because of poor education levels and men having many partners. Managers in the North felt that staff knowledge is low and that staff believe ‘it’s just a white conspiracy to scare us’. That’s what they think in the townships and the rural areas.”

“Different cultures don’t believe in that type of thing - using condoms. You really have to go all out to train them up and make them aware. Since I became a peer educator I have made it my business to watch programmes like that on TV and read up on it and educate my two kids at home. I’m very open with them. Depends on the person whether they want to accept it, but it’s hard work trying to get it across to some people.” (Peer educator in the Western Cape)

In contrast, a number of staff felt that culture was not an important factor in terms of who is most at risk of acquiring HIV.

“It’s not just a coloured thing or an African thing, it’s everybody’s problem.” (Peer Educator in the Western Cape)

Culture was also seen as a factor that relates to difficulty in discussing sex and HIV openly. While this may be true, other determinants such as age, social class and level of education are also important.
"It will take time for blacks and coloureds. It's taboo to talk about sex in our [coloured] culture. Most kids who are now affected - their parents are from the oppression times." (Peer Educator in the Eastern Cape)

4.3.4 Religion

The role of religion was also discussed. One staff member from the North felt that "we must all pray and God will give us the answers". Another woman in the group felt that God is not solely capable of decreasing HIV infection rates. "God needs help. If you pray to God, but go to bed with someone and don't use a condom, you cannot expect God to save you". Also talked about the bible in relation to how people with HIV/AIDS should be treated. "Must help you neighbour even if he has HIV".

4.3.5 Attitudes towards people living with HIV/AIDS

When discussing staff attitudes towards people with HIV/AIDS, one OHP felt that there is still a great deal of stigma associated with a positive diagnosis. People always want to know how the person acquired the infection and are quick to make judgements. The need to accept people with HIV and view it in the same light as other chronic and fatal conditions were also discussed by staff.

"Need to accept these people. We can get AIDS tomorrow - our children, our families could get AIDS tomorrow so we need to treat them the way we want to be treated ourselves." (Staff member in the Western Cape)

"Like cancer - everyone should be treated the same." (Staff member in the Western Cape)

One group of staff members in the North were asked how they thought society in general treats people with HIV. It was felt that people with HIV are often pushed away. They felt the solution is to educate people so that they are not afraid of getting HIV just from touching that person, "we need to love them". This attitude was later overridden by the male members of the group who wanted to see the introduction of 'harsh measures' e.g. deporting people with AIDS "sending them back to the countries they have come from" or sending away HIV positive people in general, even if they are family and friends. Another member of the group pointed out that people with HIV would then be unlikely to get tested and come forward. It was acknowledged that HIV positive people are more
likely to suffer in silence and not get the help they need or tell the people they sleep with that they have HIV/AIDS.

While the overall objective is to remove the stigma from HIV, some participants also discussed the difficulty and emotional distress they experience when finding out that someone is positive

"At the moment since I'm still new in the field I think I am a problem because I'm too sensitive and when I come into contact with the infected people I cry a lot." (Peer Educator in KwaZulu-Natal).

4.3.6 Perceived self risk of acquiring HIV

In the quantitative survey, all study participants were asked to give themselves a score between 0 and 10 to describe their level of risk of acquiring HIV (zero = no risk, 10 = high risk). They were also asked to provide a reason to explain their level of risk.

Case 1: "I always trust unto myself since I heard about the deadly killer and saw my friend dying and the sort of symptoms and I realised that I myself should make my mind up and wake up and use condoms." Risk 0. 36 year old male with 2 partners from the North.

Case 2: "Because I went for an HIV test and I was tested negative. So that is when I started using condoms." Risk zero. 21 year old male from Western Cape with two partners who only uses condoms half the times he has sex.

Case 3: "Always use protection when having sex." Zero risk. Young male casual from Western Cape with two partners.

Case 4: "The condom is not 100% safe. Being sexually active, using a defective condom, even with only one partner, puts one at medium risk." Risk 5. 25 year old female from Truworths in KZN.

Case 5: "Men of today cannot be trusted. I do not have a partner, but I am scared that I might meet someone who is HIV positive and be infected." Risk 5. 30 year old female staff member in the North with one child.

Case 6: "I'm having 2 girlfriends. With one of them I don't use condom and the other I use condom but sometimes she's not comfortable with it." Risk 4. 25 year old male in the North.

Case 7: "Both partners that I have are very faithful to me and would not attempt to have intercourse with anyone else." Risk 2. Twenty year old male, casual from Western Cape who has never been to a training session. Has two partners and never uses contraception.
Case 8: "I truly believe that sex without a condom – you can be at risk of getting HIV/AIDS. My explanation is I still want to have a child. That is why I don't use condoms with my lover, except with some other women." Risk 2. 46 year old male from the North involved in two or more relationships with four grown up children. History of sexually transmitted diseases and uses condoms half the time he has sex.

The findings represent differences in personal perception of risk. Case 4 feels she is at medium risk even though she has one partner and uses condoms all the time. In comparison, case 7 also feels he is at low risk even though he has two partners and never uses condoms. Case 8 understands the risks associated of having sex without a condom but continues with high-risk behaviour. Case 2 went for an HIV test which should include one-on-one counselling and discussion on safer sex practices, however, he has continued to practice high risk behaviour by having two partners and only using condoms half of the time. This is a clear indication that knowledge does not always lead to change in behaviour.

The quantitative findings in chapter 2 only explain between 6%-17% of the variance in knowledge, attitudes towards people living with HIV/AIDS, condom use and risk perceptions. The qualitatative findings may explain the remaining variance, although it is not possible to state this with absolute certainty.

Overall the programme is acceptable to staff and there is a high level of motivation, enthusiasm and commitment to the programme amongst the co-ordinators, OHPs and peer educators in stores. Potential reasons for the programmes failure to make a substantial and positive impact were located during the qualitative research e.g. lack of senior level commitment and insufficient training time. Another barrier to success is that training in stores is delivered in a factual manner that does not acknowledge the variety of beliefs, cultural practices or socio-demographic differences that exist within the target population. The findings provide an indication of the complex manner in which knowledge is filtered and incorporated into actual behaviour.
Chapter 5: Discussion and Recommendations

5.1 Key Determinant Factors
In the following section, comments are given regarding the adjusted effect of each factor in question. This measure of "pure" effect is possible as all factors were included in the same multivariate logistic regression model that takes account of other factors simultaneously.

5.1.1 In-store Training
A small, insignificant but positive trend was observed for the impact of training on level of knowledge and attitude towards people living with HIV/AIDS. Participants who attended training sessions were 60% more likely to use condoms (OR = 1.6) than those who did not attend, however, this finding was not significant (95% CI 0.93 - 2.8). A slightly negative, but insignificant trend was observed for the impact of training on perceived level of risk (i.e. people who had attended training thought themselves to be at lower risk than those who had no attended training). This indicates that knowledge does not relate to risk.

It is clear that training has little impact on the main outcome variables. This finding also raises questions about the quality of training provided, however, the survey found that 86% who had attended training thought that the quality of training was good or excellent. It is possible that the number of training sessions (average of 2 per person) is insufficient as discussed in the qualitative findings and that frequent reinforcement of HIV training is required.

Overall, the comments on the quality and usefulness of training by those who attended appear encouraging. It is however, disappointing to note that only half of the sample had ever attended a training session in view of the fact that the programme has been running for 3 years and the average length of time of employment is 8 years. Table 60 indicates that a large proportion (57%) of people who attended training now talk to their family and friends about HIV. It is also encouraging to note that 21% who attended training sessions decided to go for an HIV test.
Table 56 indicates that a large proportion (78%) are exposed to some form of media education in relation to HIV/AIDS. It is therefore reasonable to assume that additional sources of information outside the workplace play a central role in providing knowledge and shaping attitudes. It is possible that this may have enhanced or diluted the effect of training provided within stores depending on the quality and bias of the information people are exposed to. E.g. Catholic church condemning the use of condoms and the government funded 'Love Life' campaign aimed at promoting condom use in young people, both received wide media coverage.

5.1.2 Company
Two major differences were found between the 'exposure' group at Woolworths and the 'control' group at Truworths. Woolworths employees were twice as likely to have a positive attitude towards people living with HIV/AIDS than Truworths employees. This is a good indication that the training programme and display of HIV awareness literature in the workplace may have facilitated a more open environment for discussion about HIV, leading to improved attitudes. In addition, Woolworths employees are twice as likely to be frequent condom users than Truworths employees. This may be linked to the distribution of free condoms to employees at Woolworths.

5.1.3 Regional Differences
One of the most significant findings is that staff in the North (Gauteng) are three times more likely to use condoms than staff in the Western Cape. This difference could be linked to the level of perceived risk of HIV in the region. Participants in the North were three times more likely to think they were at risk of getting HIV than participants in the Western Cape. Kwa-Zulu Natal (KZN) has the highest prevalence of HIV in South Africa at 36% (Department of Health, 2000), however, participants from KZN in this study reported a similar low level of risk as participants in the Western Cape where the prevalence in the general population is substantially lower at 10%.

It is interesting to note that participants in the North were 40% less likely to have good knowledge or a positive attitude towards people with HIV/AIDS in comparison to the Western Cape, in view of their high levels of condom use. This concurs with literature findings (Prohaska et al, 1990 and Reddy, 1996) that knowledge is only one factor in
determining behaviour and that a high level of HIV/AIDS awareness does not necessarily lead to appropriate behaviour change and vice versa.

Participants from Woolworths Eastern Cape / KwaZulu-Natal achieved the highest mean knowledge score of 14.3. Participants in this region were twice as likely to score 14 or more in the quiz than those from the Western Cape. This provides an indication of the quality of the training sessions in each region. Using this information, the North have the worst performance and Eastern Cape/KwaZulu-Natal provide the highest quality of training within the company.

The findings clearly indicate that programme resources are incorrectly targeted and that HIV awareness should be targeted in the North (Gauteng) where employees have substantially lower levels of knowledge and more likely to have negative attitudes towards people with HIV/AIDS, than their colleagues in other areas.

5.1.4 Peer Educators
Peer educators were twice as likely to score 14 or more in the knowledge quiz than staff. This indicates that training given to peer educators is effective. In addition, peer educators reported significantly more positive attitudes towards people living with HIV/AIDS than staff. This provides a firm indication that the training programme for peer educators is effective. However, it is still disappointing to note that all peer educators did not score 17 out of 17 in the basic knowledge section.

5.1.5 Managers
Qualitative research indicates that managers have little involvement in the training sessions, however, the quantitative findings clearly indicate that as a group they have a significantly higher level of knowledge and better attitude towards people with HIV than general staff.

5.1.6 Age
Age was only a significant factor in condom use. The findings show that participants over 35 years of age were 40% less likely to use condoms than those under 35 years of age. It is possible that condoms are more acceptable to people under 35 and that reproduction rates are higher in the older age group.
5.1.7 Gender
Men were 60% more likely to report frequent condom use in their relationships than female staff. In addition, men were 39% less likely to see themselves as being at risk of acquiring HIV in comparison to women. Women may underestimate their risk as the majority consider themselves to be in monogamous relationships and therefore at low risk, when they may in fact be exposed to HIV within this relationship. This reflects the findings in the literature that women are unwittingly placing themselves at risk (Bledsoe, 1991). However, qualitative findings also revealed that women cited the reluctance of men to use condoms as a barrier to behaviour change, which should lead to reporting a higher level of risk than men.

5.1.8 Education
Participants with an education level of standard 10 or higher were twice as likely to score 14 or more in the knowledge quiz than those with a lower level of education. In addition, a high level of education was significantly related to a positive attitude towards people living with HIV/AIDS. These findings indicate that people with a higher level of education may have a greater capacity to retain information and ability to incorporate this knowledge into their belief system e.g. understanding how HIV is transmitted removes the fear from contact with someone who is HIV positive.

5.1.9 Relationship Status
Quantitative findings indicate that participants in ‘unstable’ relationships are 2.7 times more likely to use condoms frequently than those in ‘stable’ relationships. It is also interesting to note that participants not in a relationship were 6 times more likely to report using condoms frequently. It is possible that these individuals reported on past condom use or intended future use. In addition, participants in ‘unstable’ relationships were 60% more likely to consider themselves to be at high risk than those in ‘stable’ relationships which may impact on their choice of contraception (if using) and whether or not they perceive themselves to be at risk of HIV/AIDS.
5.1.10 HIV Testing

HIV testing is encouraged but not monitored by Woolworths due to issues of confidentiality. Staff at Woolworth were only asked if they had decided to take an HIV test following training, therefore, this question does not capture the following: people who had already taken a test or who had taken a test without going to a training session; or those who had taken a test for reasons other than peer educator training. In retrospect it would have been useful to include a general question for all participants to ask if they had ever taken an HIV test. This would have been acceptable because participants would not be asked to disclose the result of the test.

5.2 Study Limitations

5.2.1 Study Design

Randomised controlled trial (RCT) is the gold standard study design for rigorous evaluation studies. However, this study design is an acceptable replacement because an external control group has been included. It is not logistically possible to use a RCT method for this study, therefore, a cross sectional KABP survey was conducted. This type of survey has been used to examine the impact of HIV interventions in other studies as described in the literature review. It is however important to note that this method can be limited because the data reflects the opinions of the individual about their behaviour in absence of his or her relations to other people. Cross sectional studies cannot monitor the changes that inevitably occur due shifting social contexts of everyday life. In addition, it is usually difficult to assess the temporal relationship between exposure and outcome when using a cross sectional study design.

Selection Bias: the study design did not use random sampling due to time constraints and staff availability; therefore, selection bias may have been introduced. Although casual staff member are under-represented in the study, a decision was taken at the start of the study to focus on full time staff because they are the only staff group with compulsory attendance at training sessions.

Information Bias: it is possible that information bias occurred during data collection. Where possible, the study co-ordinator observed the completion of questionnaires, however, in some circumstances this was not possible (e.g. within Truworth stores) and
participants were allowed to take the questionnaire home for completion. This change may have allowed some participants to achieve a higher score in the knowledge section than they would if they had been observed.

5.2.2 Effect of Training
Differences in training within the 'exposure' group (i.e. Woolworths) were not detected. This may be due to contamination from those who had attended training and those who had not. This type of diffuse effect of peer education in the workplace is difficult to measure.

5.2.3 Poor response from Truworths
The response from Truworths was unsatisfactory (only 47% of the intended sample size participated). This was largely due to the method of questionnaire distribution where participants could take the questionnaires home. Participants from Truworths served as an external control and provided one window for comparison between exposed vs. unexposed. However, the study also relies on comparisons based on exposure to the intervention not just between the companies (i.e. Woolworths staff who had never attended training were also included in the 'unexposed' group). This helps to remove the potential bias associated with low response rate from Truworths staff.

5.2.4 Questionnaire
The questionnaire used to collect the survey data in this study was piloted in an attempt to ensure that it was appropriate, comprehensive and easy to understand. Changes were made following the pilot, however, the following questions caused confusion in some participants and help was often requested when completing the survey:

- "A pregnant woman with HIV will NOT infect her child during pregnancy or breastfeeding". The answer is false - the use of a double negative was difficult for some people to grasp.
- "A person can get HIV from drops of blood on the ground". The answer is false, however, questions were asked about the amount of blood and how long it had been there. This questions should have been more detailed to avoid confusion.
- "Having a steady relationship with just one sex partner decreases the risk of getting HIV". The answer is true, however, some participants argued that the answer is false.
if the partner is HIV positive. This is a worthwhile point and should have been included in the question.

The problems listed above indicate internal validity problems with the data collection instrument used in the study, however, it is felt that overall, this will have little impact on the study findings.

5.2.5 Exposure Misclassification
Attending a training session is the most important and intensive component of the peer education programme, however, it is not the only component. Peer educators are encouraged to discuss HIV/AIDS related issues in informal situations e.g. during tea and lunch breaks. In addition, a wide variety of educational pamphlets and posters are used within Woolworth stores. The informal component of the programme is not quantified in the survey and therefore, may be a source of contamination i.e. people who have not attended a formal training session may have had access to informal education within the store. It is therefore possible that some misclassification of exposure has occurred.

5.2.6 Statistical Analysis
It is felt that all potential confounders e.g. age, gender and education, were included in the statistical analysis. The overall the results obtained from the survey data are acceptable and the intervention has been found to have no significant impact on HIV/AIDS knowledge, attitudes towards people living with HIV, perceived risk of acquiring HIV or condom use. It is interesting to note that the effect of other confounders was bigger than the effect of the exposure (i.e. training).

The proportion of variance explained by the regression modelling is small because there is no effect and non of the other co-variables studied are big predictors. Therefore, only methods that go beyond the variable set examined would be able to explain the variance and this can only be done qualitatively. The predictor variables included in the model were those deemed to be of greatest interest from the point of view of prevention and intervention programmes and the results obtained are consistent with the ineffectiveness and inefficiency of the intervention.
Despite these generally negative findings, there is a significant and appreciable effect as evidenced by company differences. The qualitative research details implementation inadequacies that may explain the otherwise poor quantitative findings. Infection rates in South Africa are extremely high and as illustrated in the qualitative findings, there is an urgent need for HIV education. The business sector provides an excellent opportunity and has the potential to provide the necessary resources to educate employees on HIV/AIDS prevention. In addition, companies have a social responsibility in addition to economic benefit in assisting staff to achieve and maintain health.

In summary, the effect of the programme on the four main outcomes of interest is weak. The most important and intense component of the programme is attendance at formal training sessions which was not significantly associated with any important outcome. However, the effect of the programme as measured by its absence or presence in Truworths and Woolworths respectively was significant for three of the four outcomes. In addition, only a very small percentage of the outcome variance was explained by the determinant company. This implies that some diffuse determinants which are hard to identify and therefore measure are responsible for these weak effects. Furthermore, knowledge, attitudes and practices (e.g. condom use) are all independent of each, showing no associations either as co-determinants, related outcomes or potential confounding variables. Lastly, a number of other determinants have been shown to be significantly associated with the outcomes of interest. This implies that the study instruments were sufficiently valid to confirm logically plausible associations e.g. age, relationship status, level of education and whether a manager or peer educator or not. Study limitations notwithstanding, these findings add to the overall conclusion that exposure to the peer education programme was not effective. These finds are moreover consistent with much of the health promotion literature in the occupational health arena. There is a general paucity of evaluations of health promotion and prevention programmes and in the few cases where rigorous studies have been done, the results are typically negative.
5.3 Recommendations

The HIV peer education programme at Woolworths will continue to have little impact if it remains unchanged. The following recommendations are aimed at improving the effectiveness of HIV peer education and encouraging safer sex practices among employees at Woolworths by improving the implementation process and requesting additional resources. (Recommendations have been submitted to Health services at Woolworths for inclusion in the current strategy to update the HIV peer education programme).

5.3.1 Leadership

Staff perception of senior level management's commitment and involvement in the peer education process was consistently observed to be poor. The current findings indicate that the leadership of the company is not taking the issue of HIV seriously enough. Insufficient time and resources are dedicated to training within stores and HIV/AIDS is perceived as a low company priority by staff. Woolworths state the 'people are our most important asset', yet there is some skepticism as to how the company are actually making good on this statement. As discussed in chapter 1, commitment to HIV education by senior management was reported to be a key factor for successful interventions [Hyde 1992, Hischman de Salazar 2000, Kinghorn & Steinberg 1999 and Wilson 1998]. Recommendations for improvement are as follows:

- **Commitment to the programme from the CEO downwards.** This requires resources and personal commitment. If genuine commitment is given, this will lead to an increase in HIV training activities at store level. It is also important for board members and other senior personnel to show a personal commitment to the programme and to actively praise and encourage peer educators within stores.

- **Improved communication of all company initiatives related to HIV.** This will raise awareness among staff and confirm that Woolworths see HIV as a priority issue. At present corporate communication of HIV awareness in stores is poor in comparison to initiatives such as the Retail Operations 'Rocket' symbol.

- **Commitment from ALL managers.** This includes compulsory attendance at training sessions, encouragement to peer educators and developing a better understanding of the impact that HIV can have on the company.
• **Half day HIV workshop for all managers.** This has a two-fold purpose: to achieve full management "buy-in" and to equip managers with the basic skills to provide appropriate support to HIV positive members of staff.

• **Include HIV/AIDS training in the Managers in Training (MIT) course:** New management personnel should be fully briefed on relevance of the peer education programme.

### 5.3.2 The Role of the Health Services Team

Study findings indicate that employees hold the Health Services team in high regard. Health Services implemented a vertical programme i.e. it is not integrated within the company's general training scheme, and this has created a feeling of isolation where they have sole responsibility for sustaining and managing the programme. The successful functioning of the programme relies heavily on the dedication of this team and they have a large role to play in driving future changes. Monitoring and evaluating the impact of the is crucial for a successful strategy (Smart, 1999). The following recommendations are split into two sections, the first examines the overall co-ordination role of head office and the second pertains to implementation issues at regional level.

#### Head Office

• **Create partnerships:** Overall responsibility for the programme should remain within Health services, however, there is a need to integrate the programme to ensure sustainability e.g. partnership with Human Resources / Training department to secure the necessary infrastructure to deliver quality training within stores.

• **Review training material:** Co-ordinate with an adult education specialist to improve the quality of information flow from peer educators to colleagues.

• **Monitoring and Evaluation:** Current monitoring systems are inadequate and should be improved so that problems in each region can be quickly identified and resolved. Need to obtain complete list of personnel who have attended training sessions in each region. Each employee should be exposed to the four basic components of the education programme (basic HIV transmission information and facts about AIDS, HIV testing, sexually transmitted diseases and Woolworth's HIV/AIDS policy). Enforcing standards is essential to increase training coverage within stores.
• **Communication**: Improved communication of programme activities and achievements to the board of company directors and other sectors within the business to ensure that HIV remains a high priority within the company.

• **Co-ordination**: Additional resources are required to appoint a programme co-ordinator who will assumes the role of facilitating and monitoring the programme in each region. The current co-ordinators have additional commitments that do not allow time to conduct the recommended improvements to monitoring and evaluation.

**Regional Occupational Health Practitioners (OHPs)**

- Each OHP needs to maintain their profile amongst the peer educators so that they know where to go for help / referrals and get to know the OHPs and feel comfortable discussing problems with them.

- Monitoring should be standardised across the regions to ensure best practice and increase efficiency. E.g. increase level of monitoring and performance feedback to Health Services at Head Office.

- OHPs should take a leading role in ensuring that training time is given to peer educators when they return to their stores. E.g. co-ordinate with training division to include HIV sessions on the regional training calendar.

- Identify stores where education is unsatisfactory and develop strategies to ensure regular training sessions in these stores e.g. ask peer educators from other stores to visit on an ad hoc basis until a replacement peer educator is trained.

- Improved monitoring and evaluation should become key objectives for OHPs. Standardised forms/spreadsheets should be designed and completed on a routine basis to identify problem areas that may require special intervention.

- OHPs are to be discouraged from taking over in-store training sessions or acting as replacement peer educators.

**5.3.3 Peer Educator Selection process**

One OHP stated "we are looking to get more commitment from peer educators". It is therefore vital that the selection criteria are correctly implemented to get the best candidates for training.

• **Standardise the selection process**: Each area should have an identical procedure to the Western Cape. A poster should be put up in each store telling staff about the
programme and selection criteria. Individuals should either volunteer or staff and management make nominations. The HR manager in the store then interviews these applicants. The OHP in the region should also be involved in this selection process and meet final candidates to discuss the expectations of both sides prior to training.

- **Recruitment:** New target of 3-4 peer educators in large stores and 2-3 in smaller stores. The North (Gauteng) region must train at least two peer educators per store which will bring them in line with the Western Cape and KwaZulu-Natal / Eastern Cape. More than one per store is required to so that peer educators can support each other and ensure higher levels of coverage. Dropout levels among peer educators also indicate a need to continually train new peer educators.

### 5.3.4 Training given to Peer Educators

Several improvements are required to increase the efficacy of the programme:

- Increase the length of the initial training course from 3 to 5 days (requires additional resources) to allow for additional presentation skills training and the opportunity to practice the skills learnt.

- Peer educators should be given training on different presentation skills including 'lecture' style presenting and more informal methods e.g. handing out information leaflets and discussing them at tea and lunch breaks. Both type of training can be effective and stimulate discussion about HIV.

- Involve old peer educators when training new peer educators. At present they are separate and this in turn inspires competition, not co-operation.

- Formal feedback on performance including number of condoms distributed per month, posters, and coverage of staff. Need to set minimum targets for coverage. Peer Educators should have a full list of staff and ensure that all permanent and casual are included in the in-store training sessions.

- Opportunity for peer educators to come together from all stores to discuss and share ideas on how to improve HIV awareness within the company.

### 5.3.5 In-Store Training

The findings reveal that while the training given to peer educators by Lifeline and Health Services has a significant impact on level of knowledge, the training given by peer to their colleagues has little impact. Improving the quality of the training delivered has been
addressed in the previous section. The following recommendations are aimed at improving the quantity of peer education training that occurs within stores. This is in line with recommendations found in the literature to reinforce educational information on a regular basis (Zazayoke, 1994b).

- **Key performance indicator.** Peer Education should be an integral part in monitoring store performance. Goals should be set with rewards given for good performance.

- **Inclusion of casual employees.** This group of employees has largely been ignored due to logistical difficulties regarding training. It is essential than provision is made for training of casual employees.

- **Peer educators to give one training session per month (minimum standard).** In-store training is currently only being performed once a quarter (i.e. after every maintenance session). HIV/AIDS will be a critical issue for the private sector in the next 5-10 years as a large proportion of the workforce become infected. It is important to prioritise HIV/AIDS prevention strategies and invest appropriate resources immediately in view of the projected economic impact.

- **Improve monitoring.** Need to keep more detailed records of who has been trained in each store. At present all those who attend fill in a training sheet. This information should be closely examined by peer educators with the help of HR to determine who should be targeted for additional training sessions to ensure 100% staff coverage.

- **Basic standard for noticeboards in all stores.** All stores are supposed to display a wide variety of information about HIV/AIDS, including details of the peer educators so that all staff know whom to contact for information. Unfortunately, this is not a standard procedure in all stores and should become an ‘Operations standard’ i.e. stores who do not display information will be marked down on performance scales. Posters need to be kept up to date and changed at regular intervals. Details about testing, clinics, Woolworths policy and HIV transmission methods should all be included in the display. Health Services should consider standardising the display and updates shown in stores to ensure that basic vital information can be accessed by staff at all times. Alternatively, a competition for best store display may also provide encouragement to update information on a regular basis.

- **Training materials.** A greater diversity of training materials (e.g. videos, leaflets, and quizzes) should be used within stores. All peer educators should be supplied with
their own condom demonstration equipment (dildos, condoms and lubricant). At present stores are sharing equipment.

- Condocans: Peer educators should either take full or partial responsibility in conjunction with operations staff, to ensure that the containers used to disperse free condoms in stores remain stocked at all times.

- Imbizo: Intranet use should be encouraged by peer educators so that staff can look up HIV information on 'Imbizo' themselves.

5.3.6 Reducing Stigma

It is encouraging to note that the majority of staff (62%) had a positive, supportive and non-judgemental attitudes towards people living with HIV/AIDS. Open discussion and disclosure of status can make people more aware of HIV and treat it as a serious issue. It also helps to normalise HIV/AIDS and reduce the level of associated stigma. However, it is important to remember that participants with a high level of knowledge were almost 3 times more likely to have a positive attitude. Encouraging disclosure in areas where people have low levels of knowledge e.g. North, may expose HIV positive individuals to more stigma.

The following recommendations are aimed at reducing the levels of stigma and creating a company atmosphere of openness. It is hoped that this will also encourage people to seek the treatment they are eligible for and therefore maintain their health for longer and reduce level of absenteeism.

- Target basic knowledge training in the North to dispel myths and challenge judgmental attitudes towards people with HIV e.g. "They behaved badly and deserve what they get".

- Ask HIV positive speakers to come to training sessions and share their experiences and create the awareness that this can happen to anyone.

- Encourage HIV positive staff members to become peer educators. This can be beneficial to both staff and themselves. They can help develop a positive attitude in learning to cope with the virus and they have a greater impact because they bring a personal dimension to their training. However, this must type of training must be
done in a positive way that does not make the HIV positive person into a ‘victim’ or exposes them to ridicule or rejection.

5.3.7 Co-ordinated Approach
The impact of HIV will affect all areas of the business and therefore it is logical that all departments (e.g. operations, human resources and training) work towards reducing the number of infections within the company. It is also important to ensure employment equity by co-ordinating between different departments. An HIV committee within Woolworths should be established involving health services, peer educators, human resources, corporate communications, operations etc.

At present Health Services are responsible for both the budgeting and co-ordination of the project. E.g. World AIDS Day activities require both separate budget and planning. Greater involvement from other departments would smooth the pathway to more effective implementation.

- Corporate communications. Awareness campaign must be co-ordinated. Modes of communication include Imbizo, Shoptalk (monthly in house magazine for staff), Smalltalk (monthly leaflet displayed on staff canteen tables) and the company broadcast.
- Integrate the HIV education programme into the operational training calendar. The poor performance of the peer education programme indicates that HIV awareness requires enthusiasm and commitment from all areas of the company. If the majority of sectors within the company view HIV/AIDS as unimportant and low priority, then any future improvements to the programme are likely to be minimal.

5.3.8 Community Involvement
Knowledge acquired in the workplace should also be transferred into the wider community as recommended by in the literature (Barnes & Benson, 2000).

- Woolworths should have an ongoing HIV/AIDS campaign with planned events such the Fun Day at Hout Bay School at the end of 2000. The campaign should be structured in such ways that people want to take ownership of it.
- In 1998 and 1999, peer educators in the Western Cape ran 'family days' of HIV training for Woolworth staff and their families. This should be continued on a regular basis and each region should be split into manageable areas. Initially aim to have one 'family day' every year.
- The new HIV committee should develop a sustainable strategy for community involvement. At present peer educators speak to churches, youth groups etc, on an ad hoc basis. This type of community involvement should be encouraged on a wider scale.

5.3.9 Condom Distribution within Wooltrcu
The findings indicate that levels of condom use are substantially higher in Woolworths than Truworths. It is therefore recommended that free condoms are supplied to all employees of Wooltru, not only Woolworths.

5.3.10 Future Directions
If Woolworths decides to act on the recommendations described above, it is advocated that the peer education programme at Woolworths is re-evaluated 12 months after implementation. If the programme is shown to be effective, it is recommended that the programme continues within Woolworths and is expanded to other company's within Wooltru. It is impossible to determine the true effect of peer education until the programme is correctly implemented with full support from senior management.
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APPENDIX A
WOOLWORTHS
HIV/AIDS SURVEY 2001

Hello. My name is Nicola Sloan and I am a researcher from the University of Cape Town. I'm trying to find out how much Woolworth's staff know about HIV and AIDS. I'd also like to find out if people use condoms when they have sex and some of the reasons why they may or may not like to.

You are invited to complete this ANONYMOUS survey - that means your name will not be recorded and no-one will be able to find out what answers you gave.

Some of the questions are personal because they ask about your sex life. I hope that you will feel able to answer the questions open and honestly - your answers will be kept completely confidential and remember, your name is not on the survey, so no one will know these are your answers.

This kind of research is very important in South Africa today because HIV / AIDS is fast becoming a major cause of death in South Africa. It will help us to find new ways to tackle the problem and understand how people feel about HIV/AIDS.

Remember! This is NOT a test - just answer the questions as honestly as possible. If you do not know the answer to a question, just tick the 'Don't know' option and move onto the next question. If you feel uncomfortable answering some of the questions, then please leave them blank.

I really appreciate your help with this project.

Many thanks,
GENERAL INFORMATION

1. What year were you born in? 19…….  2. What sex are you? Male □ Female □

3. What is the highest level of education you have completed?

None □ Standard 6 □ Standard 8 □ Standard 10 □ University / Tecknikon □
(Grade 8) (Grade 10) (Grade 12) (Diploma)

4. Are you: Permanent Staff □ Casual Staff □

5. What category does you job fit into? Security □ Management □ Staff □

6. Which of the following best describes your relationship status?

Married □ Living with partner □ In a relationship, but not living together □
Casual relationship □ Not in a relationship □ Involved in two or more relationships

7. How many children do you have? (please give their ages)

8. Do you own the home you live in? Yes □ No □

9. How long have you worked at Woolworths (approximately)? ............years ...........months

HIV / AIDS QUIZ: Please circle ONE answer for each of the following questions.

1. AIDS is:

   A a type of medicine  B a bacteria  C an illness

2. AIDS is caused by:

   A pollution in the environment  B a virus  C dirty toilets

3. What does the immune system do?

   A It improves eyesight  B It builds strong muscles.  C It helps the body fight illnesses e.g. 
colds or flu

Which body fluids can carry HIV? Please tick as many answers as you want to.

   Blood  Saliva (spit)  Semen (sperm)  Vaginal fluid  Urine

Please show if you think that the following statements are true or false. If you are not sure, please circle the ‘Don’t know’ option.
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Please answer the following questions by saying whether or not you agree with the following statements. Please answer as honestly as possible.

1. I am comfortable having a conversation with a person who is HIV positive or has AIDS.
   Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree ☐

2. I think people with AIDS should be kept separate from everyone else.
   Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree ☐

3. I would feel ashamed if I found out that someone in my family had HIV or is living with AIDS.
   Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree ☐

4. AIDS is God’s punishment for “perverted and bad behaviour”.
   Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree ☐

5. Only people who sleep around or use drugs get HIV.
   Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree ☐

6. I feel comfortable working with someone who has HIV or is living with AIDS.
   Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree ☐

7. Anyone can get HIV, whether they are old, young, married, single, gay or straight.
   Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree ☐

8. People with HIV or AIDS should be allowed to carry on working as long as they are able to.
   Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree ☐
RELATIONSHIPS AND USING CONDOMS
Some of the questions in this section are very personal. We are sensitive to this fact and do not want to offend you. Please remember that this information is very important to help our understanding of how people respond to HIV/AIDS education. If however, you feel uncomfortable answering any of the questions, please skip the question and hand in the survey when you have completed all the questions you want to.

1. Are you sexually active? Yes ☐ No ☐

2. How many partners have you had sex with in the last month?
None ☐ One ☐ Two ☐ Three ☐ Four or more ☐

3. Have you ever used condoms? Yes ☐ No ☐

4. How often do you use condoms?
Never use condoms when I have sex ☐
Hardly ever use them when I have sex ☐
I use a condom half of the times I have sex ☐
Most of the times I have sex ☐
Every time I have sex ☐

5. If you use condoms, where do you get your condoms?
Pharmacy / Chemist ☐
Shop ☐
Clinic / Hospital ☐
At work ☐
Other (please specify) ☐ ____________________________

6. Are free condoms available to you at the store where you work? Yes ☐ No ☐
7. If you use condoms, please tick the following answers that explain why.
I use condoms to stop pregnancy
I am worried about sexually transmitted diseases
Condoms are cheap
Condoms are easy to use
I don’t want to get/pass on HIV
I learnt that I must always use a condom when I have sex
I only started to use condoms after I heard about HIV and AIDS
Condoms enhance sex (they feel good to use)

8. If you do not use condoms, please tick the following answers that explain why.
I am married
Condoms are difficult to use
Trying for a baby
Suggests lack of trust
Don’t like the way condoms feel
Using other contraception already
Don’t like the rubber smell
Embarrassing buying condoms
My partner won’t let me/don’t want to use them

9. Have you ever been in a situation where you have wanted to use a condom during sex but you partner did not?  Yes  No

10. If you are not using condoms, do you think your partner would agree to use a condom in the future?
Yes  No
If not, why? Want to have children  both partners are faithful

11. Are you using any other contraceptives?
Injection (Depo)  Pill  Withdrawl  Sterilization IUD
Female condom  Diaphragm  Foam/Microbicide  Morning after pill
12. Have you ever had a sexually transmitted disease (e.g. VD, herpes, genital warts)?
   Never □ in the last month □ in the last 6 months in the last year □
   More than 1 year ago □ I’d prefer not to answer the question □

13. If you have had a sexually transmitted disease, did you receive medical treatment?
   Yes □ No □

14. If yes, where were you treated?
   Hospital / Clinic □ Traditional healer □ Pharmacy / Chemist □ Other □

15. How at risk do you think you are of getting HIV? Please circle a number on the scale below

   |   |   |   |   |   |   |   |   |   |   |
   | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

   NO RISK  MEDIUM RISK  HIGH RISK

Please explain your answer

............................................................................................................................
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AWARENESS

1. Do you know who does the HIV/AIDS training in your store? Yes ☐ No ☐

2. Have you ever attended an HIV/AIDS training session at Woolworths? Yes ☐ No ☐

IF YOU ANSWERED ‘NO’, PLEASE SKIP TO QUESTION 8

3. If yes, how many sessions have you been to? One ☐ Two ☐ Three ☐ Four or more ☐

4. What did you think of the HIV/AIDS training?

   Excellent ☐ Good ☐ Satisfactory ☐ Bad ☐ Very Bad ☐

5. Did you learn new information from the training that you didn’t know before? Yes ☐ No ☐

6. Have you done any of the following since going to the training session?

   I never used condoms before and decided to start using them ☐
   I decided to have a test for HIV ☐
   I talk more to the people at work about HIV/AIDS ☐
   I talk to my children about HIV and using condoms ☐
   I talk to my family/friends about HIV/AIDS ☐

7. Please give your general opinion about the HIV/AIDS training you have had in your store:

   It is very useful and I would like to go to more training sessions ☐
   I don’t think that HIV/AIDS is very important in my life ☐
   I already know a lot about AIDS and don’t need extra training ☐
   I don’t think that HIV/AIDS should be talked about in the workplace ☐
   I felt uncomfortable talking about such things ☐
   I think that the training was good, but one session is enough ☐
   I did not find the training useful ☐
   I think that everyone should have this type of HIV/AIDS training ☐
8. Where else have you learnt about HIV and AIDS?

- Television
- Newspapers
- Books
- Radio

Church
Friends
Children
Other Family
School
Hospital / Clinic
HIV/AIDS organisations

9. In the last month, have you talked about HIV / AIDS or sexually transmitted diseases with anyone?

- Yes
- No

10. If yes, who have you talked about this with?

- Friends
- Work colleagues
- Partner / Spouse
- Family
- Hospital or clinic workers

11. Do you think that you know enough about HIV/AIDS?  

- Yes
- No

12. If not, how would you like to learn more?

- Reading
- Through health workers or clinic
- Television
- One-to-one counselling
- Posters
- Meetings and discussion groups
- Puppet shows

Finally one extra general knowledge question:

What percentage of the WHOLE South African population do you think is HIV positive?  


You have reached the end of the survey. Thank you for taking part and be assured that your answers are anonymous and will be kept completely confidential.
APPENDIX B
WOOLWORTHS
HIV/AIDS PEER EDUCATOR SURVEY
2001

Hello. My name is Nicola Sloan and I am a researcher from the University of Cape Town. I’m trying to find out how effectively the HIV peer educator training is working. An important part of this research is to understand how you, as a peer educator, feel about the training you have received and the training you give to your colleagues in the stores.

You are invited to complete this ANONYMOUS survey – that means your name will not be recorded and no-one will be able to find out what answers you gave.

Some of the questions are personal because they ask about your sex life. I hope that you will feel able to answer the questions open and honestly - your answers will be kept completely confidential and remember, your name is not on the survey, so no-one will know these are your answers.

The first section asks you about your experiences as a peer educator. The answers you give will be very useful in determining how the education programme can be improved in the future.

Remember! This is NOT a test – just answer the questions as honestly as possible. If you do not know the answer to a question, just tick the ‘Don’t know’ option and move onto the next question. If you feel uncomfortable answering some of the questions, then please leave them blank. Please complete the survey on your own without help from others as I am interested in what YOU have to say and not other people.

Please sign the consent form attached to the survey and place it in the envelope provided with your completed survey and put it in the internal post in your store.

I really appreciate your help with this project.

Many thanks,
GENERAL INFORMATION

1. What year were you born in? 19……

2. What sex are you? Male □ Female □

3. What is the highest level of education you have completed?

*None □ Standard 6 □ (Grade 8) Standard 8 □ (Grade 10) Standard 10 □ (Grade 12) University / Tecknikon □

4. Are you: Permanent Staff □ Casual Staff □

5. What category does your job fit into? Security □ Management □ Staff □

6. Which of the following best describes your relationship status?

Married □ Living with partner □ In a relationship, but not living together □

Casual relationship □ Not in a relationship □ Involved in two or more relationships □

7. How many children do you have? (please give their ages)

8. Do you own the home you live in? Yes □ No □

9. How long have you worked at Woolworths (approximately)? ……… years ……… months

10. Which store(s) have you given training to about HIV/AIDS?

1. How long have you been a peer educator? ……… years ……… months

2. How did you come to be selected to be a peer educator?

I asked to become a peer educator □

My colleagues put me forward □

My manager put me forward □

No one else wanted to do it, so here I am □

3. Why did you want to be a peer educator?

........................................................................................................................................................................
4. Which training modules have you attended?

HIV/AIDS ☐ Woolworths HIV/AIDS policy ☐
Sexuality ☐

5. How many times have you given each of the following training modules to the staff in the store(s) where you work?

HIV/AIDS

Woolworths HIV/AIDS policy

Sexuality

Total number

6. On average, how many hours a week do you spend on activities related to HIV/AIDS training (including listening to people and answering any questions they might have)?

………………… hours (approximately)

7. Does being a peer educator interfere with your work in the store? Yes ☐ No ☐

Please describe any situations where this has happened

…………………………………………………………………………………………………………………………

Since becoming a peer educator have you done any of the following:

I never used condoms before and decided to start using them ☐
I decided to have a test for HIV ☐
I talk to my children about HIV and using condoms ☐
I talk to my family/friends about HIV/AIDS ☐

10. What did you think of the HIV/AIDS training?

Excellent ☐ Good ☐ Satisfactory ☐ Bad ☐ Very Bad ☐

11. What problems or challenges have you faced while being an HIV peer educator?

……………………………………………………………………………………………………………………………………
12. Please give your general opinion about the HIV/AIDS training you have had: 
(tick as many answers as you want to)
I enjoyed the training and think it was worthwhile
I don’t think that HIV/AIDS is very important in my life
I think that the training was good, but one session is enough
I don’t think that HIV/AIDS should be talked about in the workplace
The course covered a large amount of useful information
I felt uncomfortable talking about such things
I found the training very difficult
I think that everyone should have this type of HIV/AIDS training

Any additional comments..................................................................................................................
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13. Where else have you learnt about HIV and AIDS?
Television [ ] Newspapers [ ] Books [ ] Radio [ ] Church [ ]
Friends [ ] Children [ ] Other Family [ ] School [ ]
Hospital / Clinic [ ] HIV/AIDS organisations [ ]

Please list any other places you have given training to on HIV and AIDS other than work.
..................................................................................................................
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..................................................................................................................

15. Do you think that everyone should be tested for HIV? Please explain your answer
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16. Please list any suggestions you have for improving HIV/AIDS education to Woolworths staff. (You can also include any other comments you have on the programme).
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133
HIV / AIDS QUIZ: Please circle ONE answer for each of the following questions.

1. AIDS is:

   A a type of medicine   B a bacteria   C an illness

2. AIDS is caused by:

   A pollution in the environment   B a virus   C dirty toilets

3. What does the immune system do?

   A It improves eyesight   B It builds strong muscles.   C It helps the body fight illnesses e.g. colds or flu

Which body fluids can carry HIV? Please tick as many answers as you want to.

Blood  Saliva (spit)  Semen (sperm)  Vaginal fluid  Urine

Please show if you think that the following statements are true or false. If you are not sure, please circle the ‘Don’t know’ option.

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Please answer the following questions by saying whether or not you agree with the following statements. Please answer as honestly as possible.

1. I am comfortable having a conversation with a person who is HIV positive or has AIDS.
   Strongly Agree   Agree    Disagree    Strongly Disagree

2. I think people with AIDS should be kept separate from everyone else.
   Strongly Agree   Agree    Disagree    Strongly Disagree

3. I would feel ashamed if I found out that someone in my family had HIV or is living with AIDS.
   Strongly Agree   Agree    Disagree    Strongly Disagree

4. AIDS is God’s punishment for “perverted and bad behaviour”.
   Strongly Agree   Agree    Disagree    Strongly Disagree

5. Only people who sleep around or use drugs get HIV.
   Strongly Agree   Agree    Disagree    Strongly Disagree

6. I feel comfortable working with someone who has HIV or is living with AIDS.
   Strongly Agree   Agree    Disagree    Strongly Disagree

7. Anyone can get HIV, whether they are old, young, married, single, gay or straight.
   Strongly Agree   Agree    Disagree    Strongly Disagree

8. People with HIV or AIDS should be allowed to carry on working as long as they are able to.
   Strongly Agree   Agree    Disagree    Strongly Disagree
RELATIONSHIPS AND USING CONDOMS

Some of the questions in this section are very personal. We are sensitive to this fact and do not want to offend you. Please remember that this information is very important to help our understanding of how people respond to HIV/AIDS education. If however, you feel uncomfortable answering any of the questions, please skip the question and hand in the survey when you have completed all the questions you want to.

1. Are you sexually active? Yes ☐ No ☐

2. How many partners have you had sex with in the last month?
   None ☐ One ☐ Two ☐ Three ☐ Four or more ☐

3. Have you ever used condoms? Yes ☐ No ☐

4. How often do you use condoms?
   Never use condoms when I have sex ☐
   Hardly ever use them when I have sex ☐
   I use a condom half of the times I have sex ☐
   Most of the times I have sex ☐
   Every time I have sex ☐

5. If you use condoms, where do you get your condoms from?
   Pharmacy / Chemist ☐
   Shop ☐
   Clinic / Hospital ☐
   At work ☐
   Other (please specify) ☐ ..............................................................

6. Are free condoms available to you at the store where you work? Yes ☐ No ☐
7. If you use condoms, please tick the following answers that explain why.

I use condoms to stop pregnancy
I am worried about sexually transmitted diseases
Condoms are cheap
Condoms are easy to use
I don’t want to get / pass on HIV
I learnt that I must always use a condom when I have sex
I only started to use condoms after I heard about HIV and AIDS
Condoms enhance sex (they feel good to use)

8. If you do not use condoms, please tick the following answers that explain why.

I am married
Condoms are difficult to use
Trying for a baby
Suggests lack of trust
Don’t like the way condoms feel
Using other contraception already
Don’t like the rubber smell
Embarrassing buying condoms
My partner won’t let me / doesn’t want to use them

6. Have you ever been in a situation where you have wanted to use a condom during sex but your partner did not?  
Yes  No

7. If you are not using condoms, do you think your partner would agree to use a condom in the future?  
Yes  No

If not, why? Want to have children  both partners are faithful
8. Are you using any other contraceptives?

- Injection (Depo) [ ]
- Pill [ ]
- Withdrawal [ ]
- Sterilization [ ]
- IUD [ ]
- Female condom [ ]
- Diaphragm [ ]
- Foam / Microbicide [ ]
- Morning after pill [ ]

9. Have you ever had a sexually transmitted disease (e.g. VD, herpes, genital warts)?

- Never [ ]
- in the last month [ ]
- in the last 6 months in the last year [ ]
- More than 1 year ago [ ]
- I'd prefer not to answer the question [ ]

10. If you have had a sexually transmitted disease, did you receive medical treatment?

- Yes [ ]
- No [ ]

11. If yes, where were you treated?

- Hospital / Clinic [ ]
- Traditional healer [ ]
- Pharmacy / Chemist [ ]
- Other [ ]

12. How at risk do you think you are of getting HIV? Please circle a number on the scale below

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

NO RISK

MEDIUM RISK

HIGH RISK

Please explain your answer

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Finally one extra general knowledge question:
What percentage of the WHOLE South African population do you think is HIV positive?

......% 

You have reached the end of the survey. Thank you for taking part and be assured that your answers are anonymous and will be kept completely confidential.
APPENDIX C
CONSENT FORM


Purpose of Research: The University of Cape Town have been asked to conduct this important study which will investigate if HIV education in the workplace improves people's awareness of HIV/AIDS and if it affects people's decisions to use condoms.

Description of the Research Project: If you agree to participate in the study you will be asked to complete a questionnaire about HIV / AIDS, what you think about people living with AIDS and whether you use condoms. Some of the questions are about sensitive issues such as your sex life. Please remember that all answers will be anonymous and kept completely confidential.

Expected Benefits to you and others: This information will be very useful in determining if HIV education programmes are effective and how they could be improved in the future.

Your rights: Your employment rights will be unaffected if you choose NOT to participate in the study. While it is hoped that you will participate in this important study, it is your personal choice if you wish to take part in the study – this is NOT a required part of your work.

Confidentiality of information collected: Your name will not be written on the questionnaire to ensure that the survey is anonymous. You will not be identified in any reports on this study.

Contact person: You may contact the following people for answers to further questions about the research and your rights.

Nicola Sloan, Dept. of Public Health, UCT Tel: 021 406 6487
Prof. J. Myers, Dept. of Public Health, UCT Tel: 021 406 6300

Consent of the participant: I have read the information given above. I understand the meaning of this information and I hereby consent to participate in the study.

PLEASE SIGN BOTH SECTIONS BELOW. CUT OFF THE BOTTOM SECTION. YOU WILL KEEP THE TOP SECTION. REMEMBER - ONLY PUT YOUR INITIALS ON THE BOTTOM SECTION NEXT TO YOUR SIGNATURE.

Printed name of Participant ___________________ Signature ___________________

Date: _______________ Study Number _______________

Initials of Participant ___________________ Signature ___________________

Date: _______________ Study Number _______________

Study Title: Evaluation of a peer education programme in HIV/AIDS prevention