GENDER-RELATED VULNERABILITY TO SEXUALLY TRANSMITTED HIV INFECTION IN WOMEN HOME CARE WORKERS

By

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DECLARATION

I, Leslie Macleod-Downes hereby declare that the work on which this thesis is based is my original work (except where acknowledgements indicate otherwise) and that neither the whole work nor any part of it has been, is being, or is to be submitted for another degree in this or any other university.

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ABSTRACT

The purpose of this study was firstly to analyse the factors determining the vulnerability of women for sexually transmitted HIV. Secondly, to investigate if the measurement of the empowerment level of the participants could lead to programme adaptations to improve the efficacy of a training intervention. The intervention was an HIV training programme making use of enhancements. Effectiveness was measured in terms of raising the empowerment status while lowering the HIV risk.

The literature suggests that gender-related vulnerability can be described in terms of a level of gender in/equality (predictive of safety versus susceptibility) and HIV risk (indicators of protection versus risk for HIV). Reports also suggest that there might be a direct relationship between the level of empowerment and HIV risk. The factors identified as determining the vulnerability of women for sexually transmitted HIV were integrated into a framework. The literature review identified theoretical constructs underpinning HIV interventions and in particular the application of an empowerment approach.

The research was conducted within an action research paradigm and followed three phases namely: needs analysis (phase 1), planning (phase 2) and implementation and evaluation (phase 3). The participants in the study were registered learners attending a home care training programme at the Robin Trust (a community based, non-profit organisation specialising in the provision of home-based care services and training of home carers). In phase 1 (needs analysis) a questionnaire designed by Albertyn (2000) was used to measure the empowerment status of 84 participants. The findings guided planning of enhancements to a standard HIV educational programme to increase effectiveness. A questionnaire measuring HIV risk was administered to 21 of the 84 participants. The questionnaire had two sections with one collecting qualitative data and the other quantitative date. The questionnaire was designed guided by the framework of factors determining the vulnerability of women for sexually transmitted HIV. In phase 2 this tool was revised. The empowerment questionnaire (Albertyn, 2000) and the revised questionnaire were administered to the experimental group (24 participants) as a pre-test and post-test during phase 3 (implementation and evaluation phase).

The method of developing enhancements, based on identified areas of HIV risk and disempowerment, was found to have potential but requires further testing to

determine reliability and validity. The main finding was that it offered a way of understanding HIV risk in terms of the root of risky sexual practice being disempowerment. It further provided a structure that can guide the choice of appropriate intervention strategies to be added as enhancements to standard HIV educational programmes. The initial findings suggest that critical to this approach is the trainer's ability to be a 'facilitator of empowerment'.

Limitations of the study included the small sample size in the action research paradigm meaning that the findings cannot be generalised. The findings do however have value for the educational programme at Robin Trust. Pertinent findings in terms of the educational programme were that faithfulness is the most desired protective behaviour followed by abstinence and lastly condom-use which continues to be less acceptable to men. HIV testing is attractive to women however stigma inhibits its use. Deeper understanding needs to be gained of the factors determining male support of gender empowerment of women in order to devise culturally sensitive and appropriate programmes for men which will minimise woman's HIV risk.

Further study is required to develop reliable and valid testing instruments of gender-related vulnerability, gender in/equality and HIV risk. Intervention strategies need to be evaluated. Only female participants were included in this study and further research is required to develop effective interventions for men.

Through understanding the factors that impact on men and women determining the gender-related vulnerability of women, it should be possible to develop interventions that empower women and thus lower their HIV risk.

CLARIFICATION OF CONCEPTS and LIST OF ABBREVIATIONS

CLARIFICATION OF CONCEPTS

Ability

In this study the word ability is used to indicate a woman's or women's capability to adopt behaviours that protect against acquiring sexually transmitted HIV infection and includes knowledge, skill, motivation, capacity and power to do so.

Analysis tool : Planning enhancements for empowerment

This tool, named the Power analysis tool, forms a guide for planning the content and the strategies that will be employed during the implementation of the pilot educational HIV intervention (phase 3). (Addendum 9).

Analysis group

The analysis group were the participants who participated in the needs analysis (phase 1).

Factors determining the vulnerability of women for sexually transmitted HIV (questionnaire)

The questionnaire titled "Factors determining the vulnerability of women for sexually transmitted HIV" was applied as part of the needs analysis (phase 1). The questionnaire had two sections with the first collecting qualitative data and given the working title of 'Identification of Factors' and the second quantitative data (named 'Practices informing HIV risk'). During the planning phase (phase 2) section 2 (quantitative questionnaire) was revised and renamed the "Self- report questionnaire: Assessment of HIV risk".

Barriers

Barriers are the factors that either perpetuate or promote the adoption of risky sexual behaviour and can be analysed on three levels named the personal context, the proximal context and distal context (Eaton, Flisher & Aarø, 2003).

Descriptors

Descriptors for each predictor of gender in/equality and the indicators of HIV risk have been collated in an inventory (addendum 1).

Disempowerment

Disempowerment is a status or position opposite to that of empowerment (Sevefjord, Olsson, Kabeer, McFadden, Amfred, Dominques, *et al.,* 2001). The empowerment measurement

questionnaire designed by Albertyn (2000; 1995) it is determined through the identification of a lack of indicators that describe a status of empowerment (Albertyn, 2000).

Empowerment

In this study empowerment is a facilitator and a process that enables a shift in status from a position of disempowerment to one of empowerment. The definition has been derived from the work of Evans (1992), describing it as an individual's "actual and perceived ability to determine the course of one's life and community". Albertyn, (2000; 1995) conceptualises empowerment on three levels (micro-level, interface and macro-level).

Empowerment status

The empowerment status of an individual is described as the "number of indicators of empowerment present in that individual" at the time of measurement (Albertyn 2000).

Empowerment levels

Empowerment, as described by Albertyn (2000), is a process that takes place on three levels. These levels are named as the micro-level (personal sphere relating to feelings, attitudes and skills), interface level (measures the individuals participation and interaction with others) and macro-level level (describes the individual in terms of beliefs, actions and their effects from a world view perspective).

Enhancements

The term "enhancements" refers to the adaptations/additions made to a standard programme to make it sensitive to the specific experiences, circumstances and concerns of a target group (Dushay, Singer, Weeks, Rohena & Gruber, 2001). Dushay *et al.,* (2002) formulated the hypothesis that although a standard intervention would be effective in reducing HIV risk, further reductions would be observed if the message was tailored to address the specific strengths and needs of the target group.

Enhanced HIV training

The enhanced HIV training programme was the adapted Soul City 'Train the Trainer' programme used as a pilot intervention during the implementation and evaluation phase (phase 3) of this study. Enhancements were applied to the Soul City "Train the Trainer" programme to increase effectiveness in terms of raising empowerment and lowering HIV risk.

Experimental group

The experimental group were the participants who participated in the implementation and evaluation phase (phase 3).

Level of gender

(A status/level/position of gender equality versus gender inequality)

Being of the female gender can determine the authority or power a woman has within a sexual relationship. This describes a position of gender in/equality. The measurement is cross-sectional and can be applied longitudinally to monitor, through the identification of predictors, shifts in status between two poles of either of gender equality or gender inequality.

Gender disempowerment

Gender disempowerment is a status where women have no or limited control over factors within a sexual relationship. It describes a position of gender inequality linked to an increased susceptibility to sexually transmitted HIV. Amongst other negative consequences, a status of gender inequality predisposes women to HIV.

Gender empowerment

Gender empowerment describes the relative position of authority or power a woman who has control over identifiable factors within a sexual relationship. It describes a position of gender equality linked to a decreased incidence of sexually transmitted HIV.

Gender-related vulnerability

Gender-related vulnerability informs the health status of a woman, in particular, her risk for sexually transmitted HIV. It is linked in the literature to being biologically female, socio-economic as well as political factors. Conditions that script roles that devalue women and distribute gender power unfavourably to men contribute. The resultant vulnerability is associated with an increased risk of sexually transmitted HIV, violence (Jewkes & Abrahams, 2002) and other conditions increasing the morbidity and mortality of women.

Factors

Factors determine the vulnerability of women for sexually transmitted HIV and can be analysed on three domains or levels namely micro-level (personal factors), interface-level (immediate environment) and macro-level (cultural and structural factors) and it is their complex interaction that culminates in either risky or safe sexual practice.

Facilitator

A facilitator makes it easier, or less difficult, or more achievable to adopt safe sexual practices that lowers the risk of acquiring sexually transmitted HIV infection. In this study empowerment is described as the facilitator that decreases HIV risk.

Human Immuno-deficiency Virus (HIV)

Infection as a result of acquiring Human Immuno-deficiency Virus and is abbreviated as HIV.

Home-based care training programme

This is a 4-month long home-care training programme that includes theory and practical training at the Robin Trust.

Indicators - empowerment

Empowerment indicators are evident in the individual and describe that person's empowerment status. The indicators can be used to monitor the process of empowerment or to evaluate the outcome following an empowerment intervention (Albertyn, 2000).

Indicators - HIV risk

Indicators differentiate between a position of high or low risk of acquiring sexually transmitted HIV. Low risk is associated with protective practices and high risk with risky practices. The indicators can be used to monitor a shift in HIV risk or to evaluate the outcome of an intervention to lower HIV risk. In this study the indicators have been drawn from the literature and still need further study to conclusively describe their reliability and validity as measures of HIV risk.

Inhibitors

Any factor that hinders, restrains or prevents the adoption of safe sexual practices is an inhibitory factor that acts as a barrier to safe sexual practice.

Inventory of descriptors

The inventory provides a list of the measures used and a description of each one (addendum 1).

Measurement category

The measurement category describes the measure applied to determine the predictors and indicators linked to a given factor.

Participant

A learner participating in the home care training programme of Robin Trust, meeting the selection criteria, and forming part of the selected study group.

Peer education

Peer education is used to cover the participation of lay community members in the HIV educational programme called the Soul City "Train the Trainer" programme. It is facilitated as two-day programmes within the 4-month long home care training programme at Robin Trust.

Protective behaviours

A protective behaviour lowers the risk of acquiring HIV as it keeps safe from or guards against being infected with sexually transmitted HIV.

Robin Trust training sites

There are currently three established training sites from which Robin Trust offers a home care training programme, namely Cape Town (Western Cape), Port Elizabeth (Eastern Cape), and Hlomo-Hlomo (Kwazulu-Natal).

Predictor

A predictor suggests either a position of being vulnerable or safe relative to acquiring sexually transmitted HIV. (Amirkhanian, Kelly, Kukharsky, Borodkina, Granskaya, Dyaltlov *et al.*, 2001; Barnett & Whiteside, 2000). Predictors have been identified through the literature and further study is required to conclusively determine their validity and reliability as a measure of gender in/equality.

Risk

Risk is used in the context of predisposing an individual to acquiring sexually transmitted HIV.

Safe sexual practice

Safe sexual practices are protective to an individual in that they are low risk activities in terms of acquiring sexually transmitted HIV. Examples of protective behaviours include abstinence, mutual faithfulness and condom-use.

Self- report questionnaire: Assessment of HIV risk

This was the name given to the revised questionnaire used in phase 3 (implementation and evaluation) to measure HIV risk (see addendum 6).

Sexually acquired

Sexually acquired describes the transference of the HIV virus through sexual contact between two people of the opposite sex.

Soul City

Soul City is a South African national peer education model using a cascade strategy to reach the many South Africans needing accurate and relevant HIV/AIDS training. The training programme addresses key issues relating to acquisition of knowledge and skills related to providing care for those infected and affected, adopting preventive strategies to reduce the spread of HIV infection and development of positive attitudes towards those infected and affected. The Soul City "Train the trainer" peer educator programme forms part of the 4 month Robin Trust home care programme runs for 2 days during the first month of training (Soul City Institute for Health and Development Communication, 2003).

Status

Status describes a relative position or level of empowerment, gender in/equality, and HIV risk.

Table 1: Key concepts used in study

Status/level/relative position	Definition	Questionnaire applied for measurement purposes
Empowerment	Measured through indicators on three levels demonstrating control over factors determining the course of an individual's life. These measures have been tested by Albertyn (2000) and found to be valid and reliable measures.	Empowerment questionnaire (Albertyn, 2000).
Vulnerability (same as gender-related vulnerability)	The literature describes women as being vulnerable due to gender-related factor. Factors leading to vulnerability make it more or less likely that the morbidity and mortality associated with ill-health will have an adverse effect on the given individual, group or community (Barnett & Whiteside, 2000). Based on findings in the literature and requiring further study to determine measures that are valued and reliable.	Not tested in this study.
Vulnerability of women to sexually transmitted HIV	Identified through predictors and indicators describing gender-related vulnerability and level of HIV risk. Based on literature - requires further testing for reliability and validity.	Section 1 of questionnaire: Factors that determine vulnerability status of women for sexually transmitted HIV - needs analysis (phase 1). Section 1 named the quantitative tool: Identification of factors.
Level of gender in/equality	Describes control over factors within a sexual relationship through identification of predictors. Predictors based on the literature and requires further study to assess their validity and reliability as measures.	Not independently tested in this study.
HIV risk	Described through identification of indicators. Indicators have been identified as part of the literature review. Further testing required to determine their reliability and validity as measures.	• Section 2 is the quantitative data collection tool: Assessment of HIV risk. • Self-report questionnaire: Assessment of HIV risk

Susceptibility

Susceptibility refers to a predisposition to infection (Barnett & Whiteside, 2000). The concept can be applied at any level and to individuals, groups, communities, societies or a nation. Susceptibility to HIV will determine the speed and extent of the spread of HIV (Barnett & Whiteside, 2000).

ABBREVIATIONS

Anti-HIV drugs:	Approved medications used to prevent transmission of HIV, or treat infected persons
DOH (SA):	Department of Health (South Africa)
DOH (UK):	Department of Health (United Kingdom)
HIV:	Human Immuno-deficiency Virus
HIV test:	Test to determine HIV sero-status
HWSETA:	Health and Welfare Seta
SCIHDC:	Soul City Institute for Health and Development Communication
SGB:	Standard Generating Body
STI's:	Sexually transmitted infections
VCT:	Voluntary counselling and testing (for HIV)

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- To Louisa Williamson, who has been my sounding board and fellow-traveler.
- My parents, Jean and Bill Bensimon.
- My daughters, Robyn and Priscilla.
- My husband, Jeff.
- God... "His love urges me on".

DEDICATION

THIS STUDY IS DEDICATED TO MY FAMILY
JEFF, ROBYN, PRISCILLA, SOPHIE & JOEL

My studies began when my children were very young and they have always given me their love and support, as well as, the space and the time required for studying. My parents have always been there for my girls and myself as were the very special women, Gladys Moerane, Primrose Mtetwa and Cindy Tasana, who assisted with caring for Robyn during her illness.

Over the time of this study many important milestones have been achieved for us as a family that have included Priscilla completing her schooling and commencing at University. Two years ago Robyn passed away and this year on 16 September 2004 she would have been 21 years old. Since Robyn's death, Jeff and I have married with Sophie and Joel becoming part of my life. At the beginning of this year Priscilla and I moved to England to make our home with Jeff. With the completion of this study I find I am turning the page in the book that is my life to a new chapter and as I do that I want to thank all my family, friends and colleagues for walking alongside me.

CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF TEXTBOXES

CHAPTER 1

STATEMENT OF THE PROBLEM

1.1 INTRODUCTION

"The man is like pumpkin... it spreads all over the garden" and "a woman is like a cabbage ... she must stay at home like an angel." This is how a woman described differing culturally prescribed gender roles. Gender and factors arising from it, such as gender roles and gender power balance are key variables contributing to women's risk status for acquiring sexually transmitted HIV (Garbus, 2003; Buvé, Bishikwabo-Nsarhaza & Mutangadura, 2002). As gender inequality is being viewed as the core factor for women being unable to negotiate safe sex it has lead to the posing of the question "... is female empowerment equivalent to an AIDS vaccine in Africa?" (Willan, 2002:1)

The literature is unanimous in its description of the severity of the impact of HIV on women and the role gender plays in their susceptibility to HIV (Buvé *et al.*, 2002; Gilbert & Walker, 2002; Umerah-Udezulu, 2001). This vulnerability is described in terms of females being biologically more susceptible to HIV and certain practices increasing vulnerability (Buvé *et al.*, 2002; Gregson, Nyamukapa, Garnett, Mason, Zhuwau, Carael *et al.*, 2002; Willan, 2002; Gray, Wawer, Brookmeyer, Sewankambo, Serwadda, Wabwire-Mangen *et al.*, 2001). However, there is no specific measure of gender-related vulnerability or a demonstration of the direct link to HIV risk status (Gilbert & Walker, 2002).

Studies demonstrate that after a decade of HIV/AIDS prevention messages and behaviour change campaigns, people have heard the message, know the risks but still HIV/AIDS remains an unchecked pandemic in South Africa (Petersen & Swartz, 2002). This has led to the understanding that the HIV epidemic will not be slowed by merely telling women to change their sexual behaviour but rather through gender equality giving equal power in sexual relations (Garbus, 2003; Willan, 2002; Gilbert & Walker, 2002). This has resulted in a shift to an empowerment approach in HIV interventions recognising that women are contextualised people (Wechsberg, Lam, Zule & Bobashev, 2004; Fahlberg, Poulin, Girdano & Dusek, 1991). By addressing issues around sexuality, family, culture, empowerment, self-esteem and negotiating skills, while being sensitive to different community settings, barriers limiting women's choice regarding their sexual practices can be overcome.

Albertyn (2000; 1995) demonstrated the value of adopting an empowerment approach within an adult education programme and developed a tool for monitoring changes in empowerment status in participants and thus evaluating efficacy of programmes. In this study, the focus is on exploring whether the empowerment approach can be applied to the development of enhancements to a standard HIV educational programme to increase its effectiveness. The effectiveness of the enhancements was evaluated through measurement of the desired outcome of the intervention, namely, raising the participant's empowerment status while decreasing the level of HIV risk. Based on this scenario the problem statement, as well as the aim and objectives were formulated.

1.2 PROBLEM STATEMENT

Gender is a critical determinant of the vulnerability of women for sexually transmitted HIV.
It is described in terms of risky behaviours and factors related to being a woman. As a result, behaviour modifications strategies are commonly implemented. Their outcome is measured in terms of change in self-reported sexual behaviour. This approach is too simplistic, as it does not address the causes of vulnerability linked to factors described collectively under the umbrella of "gender".

1.3 PURPOSE

The purpose of the study was to design a strategy for enhancing a standard HIV educational programme to increase effectiveness in raising empowerment status and lowering HIV risk. Enhancements were selected based on the findings of empowerment status and HIV risk level, assessed during a needs analysis. The training programme would be implemented using an empowerment approach and effectiveness evaluated by measuring changes in empowerment status and HIV risk.

1.4 AIM AND OBJECTIVES

1.4.1 Aim

To determine if the identification of the factors determining the vulnerability of women for sexually transmitted HIV could lead to:

- A description of the empowerment status, level of gender-related vulnerability (expressed as either gender in/equality) and HIV risk of a group of female, adult learners as a needs analysis.
- The implementation of a planned, targeted HIV educational intervention, using the findings from the needs analysis to guide the planning of enhancements to a HIV educational programme to improve the efficacy of the intervention.
- Evaluation of the effectiveness of the HIV educational programme in terms of an increase in empowerment status and a reduction in HIV risk.

1.4.2 Objectives

To realise the above aim, the following procedural objectives were formulated for each phase of the study:

1.4.2.1 Phase 1: Needs analysis:

To collect base-line data on the empowerment status and the factors determining the vulnerability of the learners on a home-based care training programme to serve as a needs analysis. The data was used to inform the adaptation of a standard HIV educational programme to a targeted intervention to enhance the efficacy of adopting safe sexual practices. The needs analysis also guided the revision of the structured questionnaire (applied in phase 3). The objectives of this phase were:

1.4.2.1(a) To measure the empowerment status of a group of participants (hereafter named the analysis group), at three Robin Trust sites (Port Elizabeth, Hlomo-Hlomo and Cape Town) as a once-off test. Participants had similar characteristics to those of the participants, named the experimental group, who took part in the pilot intervention (phase 3).

1.4.2.1(b) To identify the factors determining the vulnerability of women to sexually transmitted HIV.

1.4.2.1(c) To measure learners' current practices influencing their HIV risk using a self-report design.

1.4.2.2 Phase 2: Planning:

1.4.2.2(a) To enhance an existing HIV educational programme (Soul City 'Train the Trainer' programme) to address the identified areas of disempowerment and HIV risk.

1.4.2.2(b) To revise the questionnaire used to measure sexual practices of participants during phase 1 (needs analysis) for use during implementation and evaluation (phase 3).

1.4.2.3 Phase 3: Implementation and Evaluation:

During phase 3 (implementation and evaluation) the pilot HIV intervention programme was conducted with a group of 24 learners, named the experimental group, at the Robin Trust in Cape Town. All the participants were registered for the 4 month-long home-based care training programme within which one activity was the two-day HIV educational programme named the Soul City "Train the Trainer" programme. As the first activity on the first day of the programme the empowerment questionnaire (Albertyn, 2000) and the self-report questionnaire: practices influencing HIV risk status were administered as a pre-test giving base-line data.

The 2-day enhanced HIV educational programme was held during the 1st month of training with the researcher acting as course facilitator. During the remainder of the programme, an allocated Trainer, not the researcher, facilitated all aspects of the training. The second, third and fourth month of the programme provided time for the learners to consolidate knowledge and gain practical skills related to home-based care. During this period regular informal training sessions were held which allowed for the exchange of ideas, knowledge and skills between course facilitators and learners.

As the stated goal of the intervention was to empower and lower the HIV risk of the participants, the programme's effectiveness was measured by evaluating the empowerment status of learners and their HIV risk status as the last activity of the four-month home-care programme. With this in mind the objectives for phase 3 were:

1.4.2.3(a) To implement the HIV educational programme as a pilot intervention programme. The pilot programme included enhancements targeting the identified areas of disempowerment and HIV risk.

1.4.2.3(b) To evaluate the effectiveness of the pilot intervention programme in terms raising the participants' empowerment status and lowering their HIV risk.

1.5 DELIMITATIONS

1.5.1 This study was limited to women, aged 18 years and older, who was part of the selected group on a Robin Trust home care training programme at established Robin Trust training centres.

1.5.2 The one-to-one interviews were conducted in English. It was anticipated that participants would be fluent in English as it is an entrance requirement that all learners can speak and write English, however, an interpreter was available.

1.5.3 Only protective behaviours and risk factors for sexually transmitted HIV between people of opposite sexes (heterosexual transmission) were included.

1.5.4 Neither the adaptation of the home care-training programme or the home care-training programme was evaluated. The outcome of the programme was measured in terms of the individual learner's empowerment status and HIV risk.

1.5.5 Consideration was only given to protection against sexually acquired HIV infection even though safe sexual practices decrease the risk of acquiring other sexually transmitted diseases. This limitation was set as in the case of some sexually transmitted infections (STI's) factors that are considered less important to the risk of HIV infection are higher risk factors.

1.5.6 The researcher is the head of the Robin Trust, the organisation where the study was undertaken. It is noted that this could potentially influence the study given the role of the researcher within Robin Trust.

1.5.7 This is a cross-sectional design. Sexual behaviour amongst young adults can change and this study only looks at practices over a short period so caution needs to be exercised when extrapolating data.

1.5.8 Questions about sexual practices may bias results towards socially desirable responses. (This is expanded on in point 2.7.4).

1.6 ASSUMPTIONS

1.6.1 With reference to sexually acquired HIV infection, certain practices are protective or safe and adoption of these practices minimise the risk of being infected.

1.6.2 Factors will include those under the control of an individual woman and those for which she requires co-operation for others to adopt.

1.6.3 A home-based care training programme, adapted to address the factors identified in the study that influence women's ability to adopt protective behaviours, can enable women to change their behaviour to lower their risk of sexually acquired HIV infection.

1.6.4 Demographic information collected over the past two years at Robin Trust training sites offering this programme indicate similarities in respect of age, educational qualification and socio-economic background and therefore the assumption is made that this trend will continue over the time of the research.

1.7. RESEARCH REPORT SEQUENCE

Chapter one describes the problem statement and forms the foundation of this study and states the goals and objectives arising out of the problem statement.

Chapter two covers the literature review and has three sections. The first section provides an in-depth exploration of the literature to identify the determinants of the vulnerability of women for sexually transmitted HIV. The second section analyses the application of an empowerment approach to HIV interventions. The third section describes the measurement of empowerment status and HIV risk to monitor and evaluate programme effectiveness.

Chapter three describes the empirical part of the study, which was informed by the literature review. The description of the research methodology covers the three phases of the study namely assessment (phase 1), planning (phase 2) and implementation & evaluation (phase 3).

Chapter four discusses the findings demonstrating the value of a needs analysis to identify the factors that describe empowerment status and the vulnerability of women to sexually transmitted HIV and the use of this information to guide enhancements to target a HIV educational intervention. The efficacy of the enhanced HIV educational programme is described by evaluating the outcomes of the programme in terms of empowerment status and HIV risk.

Chapter five presents the conclusions reached in the study, as well as recommendations for further study.

CHAPTER 2

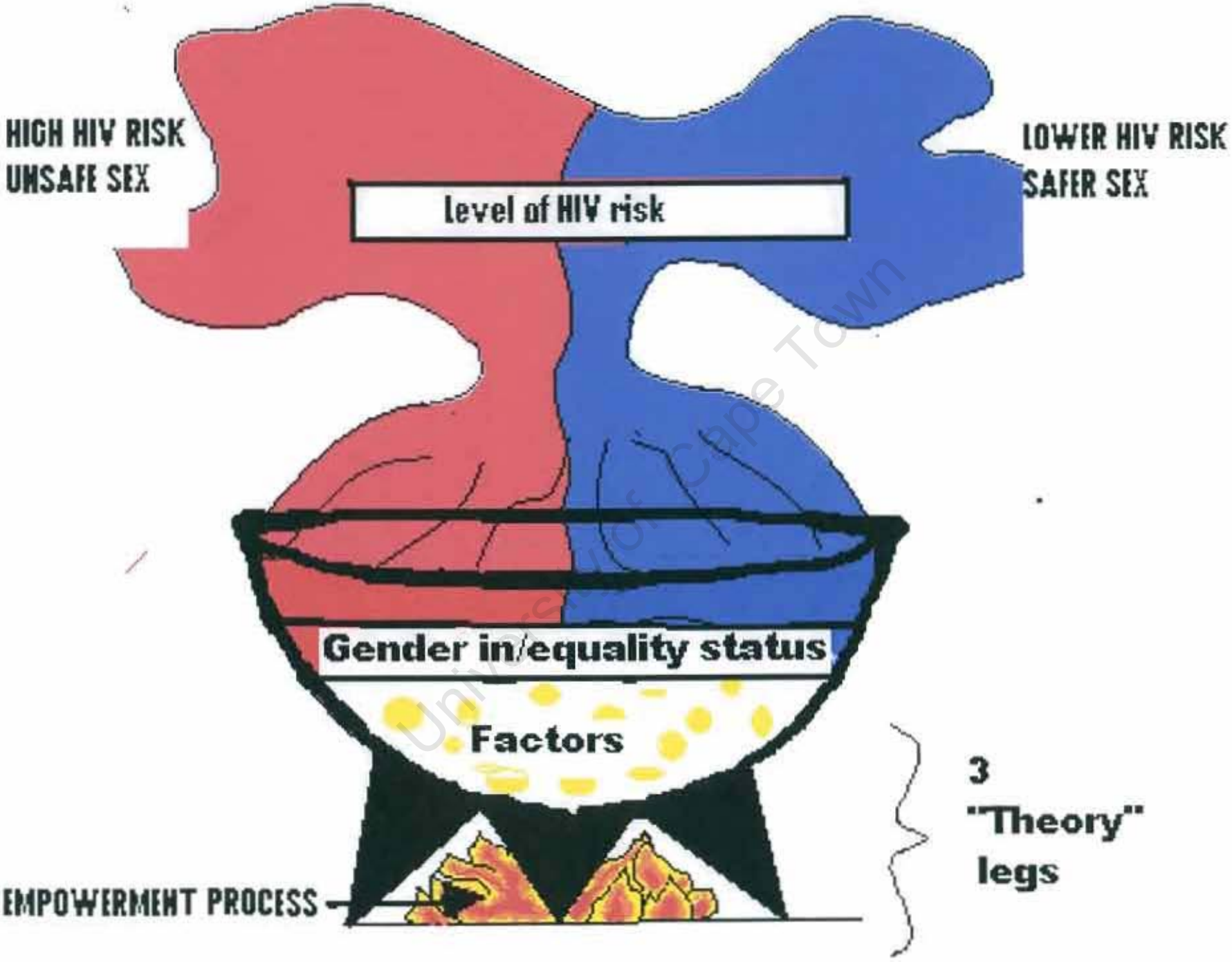
REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

The literature describes women as vulnerable to HIV in terms of biological susceptibility and contributing factors (Gilbert & Walker, 2002; Umerah-Udezulu, 2001). Literature was used to examine this and to determine intervention and evaluation strategies that could be employed to lower the vulnerability of women to HIV. To achieve the planned objectives the literature review was divided into three sections. The first analysed the determinants of vulnerability of women to sexually transmitted HIV. The second section focused on the application of an empowerment approach to HIV intervention. The third section reviewed the evaluation of programme effectiveness when the goal is an increase in empowerment status and a decrease in HIV risk. A conceptual framework was used to guide the review and describes the concepts using the African cooking pot as its inspiration.

2.1.1 Conceptual framework

To traditional African women, the cooking pot is an essential cooking vessel that has three legs to support it as it stands over a fire. In this framework the three legs represent the three legs of literature reviewed. Leg one represents the determinants of gender-related vulnerability of women for sexually transmitted HIV. Leg two represents the application of an empowerment approach to HIV interventions. Leg 3 represents the evaluation strategies for measuring programme effectiveness in terms of an increase in empowerment status and a decrease in HIV risk. The "fire" under the pot is the empowerment process. The "ingredients" inside the pot are the factors. The simmering of the ingredients represents the complex interaction between the factors. The resulting broth is the vulnerability status (gender in/equality). The rising steam represents the HIV risk level (Low versus high HIV risk). While it cannot be drawn into the diagram, the resultant sexual practices can be seen as the nutritional value of the broth with highly nutritional broth being equated with safe sexual practices. The model is displayed below as figure 2.1.



SECTION 1: DETERMINANTS OF VULNERABILITY AND HIV RISK

2.2 HIV RISK LEVEL OF SOUTHERN AFRICAN WOMEN

The critical determinant of the vulnerability of Sub-Saharan women to sexually transmitted HIV is gender related (Amaro, 2000; Preston-Whyte, 1995). Gender is described as the key factor contributing to the rapid spread of HIV in the region due to unequal gender power relationships fuelled by influences of culture that script gender roles negatively, as well as poverty (Buvé *et al.*, 2002; Umerah-Udezulu, 2001; Amaro, 2000; Preston-Whyte, 1995). Further it will be argued that the under-reaction of governments to the epidemic, despite its severity, maintains the status quo that favours men over women in Southern Africa, perpetuating the vulnerability of women to sexually transmitted HIV.

Africa is the continent most severely affected by an epidemic of a sub-strain of the HIV virus, known as HIV-1 (Garbus, 2003; Buvé *et al.*, 2002; Grant & De Cock, 2001; Umerah-Udezulu, 2001; Iwere, 2000). Southern Africa is more affected than western or central African regions and is home to 10% of the world's infections of whom 83% are women (Morris & Williamson, 2001; Iwere, 2000; Caldwell, Orubuloye & Caldwell, 1992). Data from antenatal surveillance and population surveys indicate that the majority of the women infected are teenagers and young women (Garbus, 2003; Gregson *et al.*, 2002; Umerah-Udezulu, 2001). While it is known that heterosexual transmission is common, the difference in the spread of the epidemic is being accounted for by a complex interaction between sexual behaviour and biological factors that affect the probability of HIV transmission (Garbus, 2003; Buvé *et al.*, 2002; Gutierrez, Oh & Gillmore, 2000). Explanations for the high HIV prevalence rate amongst women and for young women becoming HIV positive at a younger age than men point to sexual behaviour patterns determined by culture and socio-economic circumstances (Buvé *et al.*, 2002; Gilbert, & Walker, 2002; Human Sciences Research Council (HSRC), 2002; Umerah-Udezulu, 2001; Gray, Wawer, Serwadda, Sewankambo, Wabwire-Mangen, Paxton *et al.*, 1998). Examples of cultural traditions and socio-economic factors include the sub-ordinate role of woman, impoverishment, declining health and social services, rapid urbanisation, and political and economic instability marked by wars and conflict (Garbus, 2003; Buve *et al.*, 2002; Gilbert & Walker, 2002; Umerah-Udezulu, 2002). Populations in parts of Africa are becoming trapped in poverty as the epidemic results in high mortality rates in the young and economically active group, leading to further impoverishment (Buvé *et al.*, 2001). Interventions to control HIV need to address the sexual practices of individuals, as well as cultural and socio-economic factors in order to lower the HIV vulnerability status of Sub-Saharan women (Buvé *et al.*, 2002).

Given the severity of the situation, the response of governments, communities and individuals is less than would be anticipated (Caldwell *et al.*, 1992). Caldwell *et al.*, (1992) state that understanding the slow response in the face of a pandemic as devastating as HIV/AIDS is central to the battle against it. The main reasons given for this ineffective response include the need to remain silent about AIDS due to the adverse effects that could follow disclosure (Stein, 2003; Caldwell *et al.*, 1992). Silence arises out of the belief that HIV is an illness that is sexual and sinful (Stein, 2003; Caldwell *et al.*, 1992) and is exacerbated by ineffective data collection (Garbus, 2003; Caldwell *et al.*, 1992). Ineffective data collection and reporting of findings makes it difficult for communities to associate AIDS as the cause of illness and death. The resultant inaccurate knowledge and understanding provides opportunity for myths such as the false belief that foreigners bring HIV to Africa and want to infect Africans to bring about the downfall of African people (Kachingwe-Sisya, 2000; Swart-Kruger & Richter, 1997; Caldwell *et al.*, 1992).

The HIV/AIDS epidemic is the largest South Africa has had to confront (Dorrington, Bourne, Bradshaw, Laubscher & Timæs, 2001). Until recently there was little evidence of political leadership from current government leaders addressing HIV (Garbus, 2003; Campbell & Mzaidume, 2002; Schneider & Stein, 2001) suggesting that South Africa is under-reacting to the epidemic. In order to substantiate the need to address HIV/AIDS as a major public health and women's health issue, the impact of HIV on South African women will be considered through an analysis of the factors informing HIV vulnerability status.

2.3 FACTORS DETERMINING THE VULNERABILITY OF WOMEN FOR SEXUALLY TRANSMITTED HIV

This study is an enquiry into the factors that influence women's ability to adopt protective behaviours to lower their vulnerability to sexually transmitted HIV. To enable an analysis of the factors firstly requires clarification of the concepts of gender, empowerment, vulnerability status, gender in/equality and HIV risk.

Gender

Gender is more than the biological differences of being either male of female. It describes the complex diversity of factors producing a great variety of patterns of gender relations across the micro, interface and macro-level. It includes the concept of 'sexism', a term, used to describe the inequality, discrimination and oppression of women on the grounds of their gender (Thompson, 2001). The literature associates gender-related vulnerability with **factors** that increase the susceptibility of women to HIV (Buvé *et al.*, 2002; Garbus, 2002; HSRC, 2002; Willan, 2002; Amaro, 2000; Bowleg, Belgrave & Reisen, 2000; Gutierrez *et al.*, 2000; Preston-Whyte, 1995).

Factors

Factors are described as influencing the ability of women to adopt protective behaviours to minimise their risk of HIV. These factors impact at the level of an individual, group, community or at a societal level. Each factor can be described either as increasing safety or offering protection by either raising or lowering susceptibility to HIV infection (Blum, Halcon, Beuhring, Pate, Campbell-Forrester & Venema, 2003; Gilbert & Walker, 2002; Amirkhanian, Kukharsky, Brodkina, Granskaya, Dyatlov *et al.*, 2001; Campbell & Williams, 1996). A factor can either be a **facilitator or inhibitor**.

Facilitators or inhibitors

A facilitator is an empowerment process that leads to the adoption of protective behaviours (Rose, 2004). An inhibitor is a barrier to the adoption of protective behaviours (Eaton, Flisher, Aarø, 2003). The factor remains constant but the influence of either a facilitator or an inhibitor will determine the **gender-related vulnerability** of a woman or group of women.

Gender-related vulnerability

Vulnerability suggests risk or susceptibility to harm (Ruof, 2004; Spiers, 2000), or a diminished quality of life (Spiers, 2000). Rodgers (1997) stated that the development of tools to measure vulnerability would increase the prediction and prevention of health problems. Therefore the literature was reviewed to identify the relevant factors, predictors and indicators and organise into a framework. The framework (figure 2.3) would guide the drafting of the questionnaire to collect information on sexual practice in this study. The predictors describe a position of either **gender equality or gender inequality** (Dijkstra, 2002) and the consequent vulnerability status of a woman.

Gender in/equality

Gender equality predicts relative safety versus gender inequality which is associated with susceptibility to HIV. In this way the position of gender in/equality determines the **vulnerability status** of a woman or group of women.

Vulnerability status

In the health field the word 'risk' is generally a narrow term used to describe the negative outcome of a risk assessment by an external evaluator (Spiers, 2000). A broader description of risk is inherent in the word vulnerability. It describes a risk status that incorporates factors across the micro, interface and macro-level, as well as, from the perspective of the individual (Spiers, 2000).

Gender equality in associated with a low vulnerability status while gender inequality is associated with high vulnerability status. Vulnerability status determines **HIV risk level.**

HIV risk level

Indicators differentiate between high and low HIV risk. A key determinant of vulnerability and HIV risk is the **empowerment** status of a woman or group of women. Table 2.1 provides a summary of the key concepts.

Table 2.1: Summary of key Concepts

CONCEPT		DESCRIPTION
FACTORS		**Complex interaction between factors** - process influencing factors and outcome.
INHIBITORS (Barriers)	FACILITATORS (Empowerment)	
VULNERABILITY STATUS		**Predictors** describe **vulnerability status**
GENDER INEQUALITY	GENDER EQUALITY	
HIV RISK STATUS		**Indicators** identify **HIV risk level**
HIGH HIV RISK	LOW HIV RISK	

Empowerment

Empowerment is a measurable process and outcome describing control over factors covering all aspects within the life of a person (Sevefjord, Olsson, Kabeer, McFadden, Arnfred, Dominguez, Saadallah, 2001; Albertyn, 2000). **Gender empowerment** describes the power and authority a woman possesses enabling control over factors within a sexual relationship (Mosedale, 2003; Sevefjord *et al.*, 2001; Gutierrez *et al.*, 2000; Preston-Whyte, 1995). Gender empowerment status can be described through the identification of predictors (Bowleg *et al.*, 2000; Gutierrez *et al.*, 2000). Predictors describe a position of gender equality or gender inequality. An empowerment intervention targeted at one level of empowerment can influence empowerment on other levels (Sevefjord *et al.*, 2001; Albertyn, 2000; Fahlberg *et al.*, 1991). Therefore empowerment interventions that raise the overall empowerment status of women can be expected to raise the level of gender empowerment. Gender empowerment is associated with gender equality and gender inequality with gender disempowerment. Gender in/equality determines the HIV vulnerability status which in turn influences **HIV risk status**.

Relationship between empowerment and HIV risk status

Protective behaviours can be acquired through the process of empowerment (Rose, 2004; Wechsberg *et al.*, 2004). As the empowerment status (including gender empowerment) rises, women are enabled to adopt protective behaviours decreasing HIV risk (Wechsberg *et al.*, 2004; Willan, 2002; Amaro, 2000; Preston-Whyte, 1995). This suggests that the relationship between empowerment status and HIV risk can be described as being inversely proportional. Gender lies at the fulcrum of gender-related vulnerability status (gender in/equality). Should vulnerability

increase (describing a status of gender inequality) then the HIV risk level will rise while empowerment status will be lowered and visa versa (see figure 2).

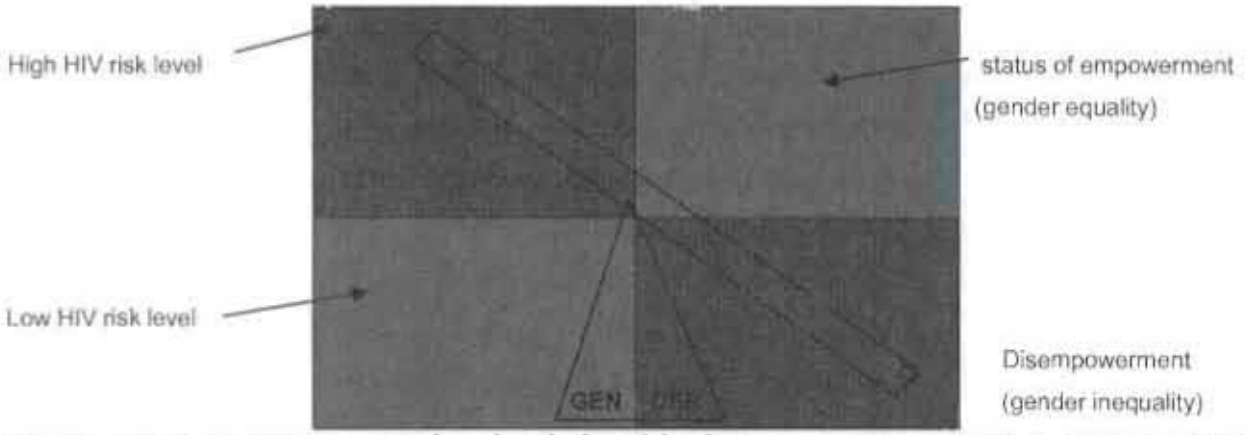


Figure 2.2: Inversely proportional relationship between empowerment status and HIV vulnerability status

Organisation of factors

There is an enormous body of literature describing the factors that determine gender in/equality and HIV risk, necessitating a way of organising the findings. The method chosen was described by Dev (1999) and involves splitting of the information into categories. The factors have thus been grouped using this method.

Clustering of factors

The purpose of identifying the factors is to enable a description of gender-related vulnerability (gender in/equality), empowerment status and HIV risk and is sub-divided as follows:

(i) Clusters: the categories

(ii) Factors: in each cluster are related factors which can be split into four sub-categories namely:

- Level or domain of analysis - to be discussed under paragraph 2.4
- Measurement category - a statement of the measure being applied to a factor
- Predictors - describing a position of gender in/equality namely:
  - Gender equality a position of relative safety in terms of HIV risk (identified predictor(s) are facilitators of safe sexual practice)
  - Gender inequality or susceptibility in terms of HIV risk (identified predictor(s) are potential barriers to safe sexual practice)
- Indicators - measure HIV risk and have been collated into an inventory, with descriptors (see addendum 1). The indicators sub-divide to describe a position of either:

- low HIV risk or protection (safe sexual practice)
- high HIV risk or vulnerability (unsafe sexual practice)

For clarity the table below displays the 5 clusters each with their related factors. This is followed by a description of each cluster and its related factors with linked measurement categories, predictors and indicators.

Table 2.2: Clusters with linked factors

CLUSTER 1: DEMOGRAPHIC FACTORS
(Gender*)
Age
Relationship status
School attendance
Educational level
Economic status
Religious affiliation
Ethnicity and race
Geographical location of residence - place of living
Living arrangement
(*Gender is not discussed separately as it is seen at the core of this study but would be measured within this clustering)
CLUSTER 2: CULTURAL AND SOCIETAL FACTORS
Gender power balance
Culturally scripted gender roles
CLUSTER 3: COMMUNICATION
Communication with family, social & occupational group
Communication with sexual partner
Influence of media
CLUSTER 4: PERCEPTIONS
Perception of vulnerability to HIV
Perception of normative behaviour
CLUSTER 5: SELF-EFFICACY
Knowledge related to safe sexual practice
Skills for safe sexual practice
Attitudes and feelings contributing to sound judgement

Each cluster will be discussed describing the related factors and emphasising the measures, predictors and indicators that are applied when assessing the level of vulnerability or HIV risk. Each factor is displayed as a table (table 2.2 – 2.21) and has also been formed into a dendogram (see figure 2.3). In each table the concept is written in full, followed in brackets by the words

used in the dendogram. Words describing the identified concepts are in colour. Green indicates a neutral position; blue is used to indicate safety or protection and red susceptibility or risk.

2.3.1. Cluster 1: Demographic factors

This cluster considers demographic criteria and includes age, relationship status, level of education, school attendance, economic status, religious affiliation, ethnicity, race, geographical location of residence and living arrangement.

2.3.1.1 Age

Half of all people who acquire HIV become infected before they are 25 years old. The peak female prevalence in sub-Saharan Africa is observed in the 20 - 29 year age group. An HSRC study (2002) identified that nationally women between 25 years and 29 years as having the highest prevalence rate. While all females are at risk young women are particularly vulnerable and therefore young girls and women fall into a high HIV risk age category (Gregson *et al.*, 2002; Gilbert & Walker, 2002; Department of Health (South Africa), 2000; UNAIDS, 2000; Gray *et al.*, 1998).

Summary from the literature

Young females are exposed to sexual activity that is both consensual and coerced. It is associated with love, multiple partners, sexual desire, abuse, economic necessity and social pressure (Flisher, Reddy, Muller, Lombard, 2003; Buvé *et al.*, 2002; UNAIDS, 2001; Swart-Kruger & Richter, 1997). Factors placing them at risk are biological immaturity of the genital tract and characteristics of their sexual practices (Gray *et al.*, 2001). These include early sexual debut, multiple partners, a low incidence of condom use and a perception of being "invulnerable" supporting risk-taking behaviour partners (Karim, Magnani, Morgan & Bond, 2003; Swart-Kruger & Richter, 1997). Culture and tradition can place young women at risk. Examples include taboos that block discussing sex with young women yet encourage boys to have multiple partners (Wood, Maepa & Jewkes, sa). Peer influence is greatest for younger women and declines with maturity (Eaton *et al.*, 2003; MacPhail & Campbell, 2001). Alcohol consumption has been cited as increasing adolescents' risk of HIV infection (LaBrie, Schiffman & Earleywine, 2002). Shebeens or taverns (informal liquor stores or bars) are known as places were sex is initiated and a place where potential sexual partners can be met (Garbus, 2003). Garbus (2003) links shebeens and alcohol consumption to inconsistent condom use and unsafe sex.

Following the literature review predictors and indicators were identified specifically relating to age. The predictor is age category with women 31 years or more belonging to a low HIV risk category while younger women fall into a high HIV risk age category. The linked indicators are age, age differential between sexual partners, nature of sexual debut (forced or chosen), age at onset of

sexual activity, the nature of intercourse (forced, coercive or consensual) (Garbus, 2003; Buvé *et al.*, 2002; Campbell & Mzaidume, 2002; Gregson *et al.*, 2002; HSRC, 2002; UNAIDS, 2002; MacPhail & Campbell, 2001; UNAIDS, 2001; Vundile, Maforah, Jewkes & Jordaan, 2001; Wood, Maforah & Jewkes, 1996; Wood *et al.*, sa). These are displayed in table 2.2.

Table 2.3: Age with linked measurement category, predictors and indicators

FACTOR: AGE			
INDICATORS OF RISK	**PREDICTOR OF SUSCEPTIBILITY**	**PREDICTOR OF SAFETY**	**INDICATORS OF PROTECTION**
MEASUREMENT CATEGORY: RISK DETERMINED BY AGE (Risk group)			
Young age Significant age differential (> differential) Forced sexual debut Early sexual onset Forced sex	HIGH RISK AGE GROUP (High risk)	LOW RISK AGE GROUP (Low risk)	Mature age Similar age differential (< differential) Sexual debut chosen Later sexual onset Consensual sexual intercourse
(Flisher *et al., 2003;* Karim *et al.*, 2003; Gregson *et al.*, 2002; Gilbert & Walker, 2002; Vundile, *et al.*, 2001; Jenkins, 2000; Umerah-Udezulu, 2001; Wood & Jewkes, 1998; Araoye & Adegoke, 1996)			

2.3.1.2 Relationship status

Relationship status is predicted by the level of both partners' commitment to the sexual relationship and the degree of decision-making autonomy given a woman.

Summary from the literature

Many HIV positive women became infected through heterosexual intercourse, often husband-to-wife transmission (Umerah-Udezulu, 2001; Preston-Whyte, 1995). Therefore the first predictor describes commitment (faithfulness versus unfaithfulness) (Wongvipat, 2000). Indicators that measure this distinguish between being monogamous opposed to having multiple partners that can be concurrent or sequential, known or unknown and self-reports of the presence of STI's (Gregson *et al.*, 2001; Mbulaiteye, Mahe, Whitworth, Ruberantwari, Nakiyingi, Ojwija & Kamali, 2002; Bui, Pham, Pham, Hoang, Nguyen, Vu & Detels, 2001). Women in a committed relationship, including married women, are at risk as they may incorrectly consider themselves to be in a monogamous and therefore safe relationship (Bird, Harvey, Beckman & Johnson, 2001; Amaro, 2000). STI's are an indicator of unsafe sexual practices as they are associated with risky behaviour (El-Bassel, Witte, Gilbert, Wu, Chang, Hill, Steinglass., 2003; Myer, Morroni, Mathews & Little, 2002; Gray *et al.*, 2001; Cohen, 1998).

Scope for decision-making differentiates between relationships that restrict decision-making compared with ones that allow for autonomous decision-making. Indicators linked describe the

practice of abstinence, marital status, age at first marriage and whether marriage was arranged or partner self choice (Zellner, 2003; Gregson *et al.*, 2002; Mbulaiteye *et al.*, 2002; Willan, 2002; Sevefjord *et al.*, 2001).

Table 2.4: Relationship status with linked measurement category, predicators and indicators

FACTOR: RELATIONSHIP STATUS			
MEASUREMENT CATEGORY: COMMITMENT TO SEXUAL PARTNER (Commitment)			
INDICATORS OF RISK	PREDICTOR OF SUSCEPTIBILITY	PREDICTOR OF SAFETY	INDICATORS OF PROTECTION
Multiple partners Casual sex Sex with a stranger Reports of sexually transmitted infections(s)	UNFAITHFULNESS	FAITHFULNESS	Monogamy No casual sex Sexual partner(s) known No reports of sexually transmitted infection(s)
MEASUREMENT CATEGORY: SCOPE FOR DECISION-MAKING (Scope)			
Enforced abstinence Married, divorced or widowed First marriage at a young age Arranged marriage	RESTRICTED SCOPE FOR DECISION-MAKING (Restricted)	AUTONOMOUS DECISION-MAKING (Autonomous)	Chosen abstinence Single First marriage at a later age Self choice of marriage partner
(El-Bassel *et al.*, 2003; Karim *et al.*, 2003; Zellner, 2003; Buvé *et al.*, 2002; Gregson *et al.*, 2002; Hollander, 2002; Mbulaiteye *et al.*, 2002; Willan, 2002; Bui *et al.*, 2001; Gray *et al.*, 2001; Gregson *et al.*,2001; Heyzer, 2001; Sevefjord *et al.*, 2001; Umerah-Udezulu, 2001; Bowleg *et al.*, 2000; Bujra, 2000; Rankin & Wilson, 2000; Wongvipat, 2000; Jewkes, Penn-Kekana, Levin, Ratsaka & Schreiber, 1999; Cohen, 1998; Preston-Whyte, 1995; Marin B.V., Gomez, C.A. & Tschann, J.M, 1993).			

2.3.1.3 School attendance

School attendance is a predictor of the cultural value attached to being a girl and a mother's belief in education for her daughter. Non-attendance or infrequent attendance leads to economic dependence and lowers future prospects (Grown, Gutpa & Pande, 2005). Adolescent and young women at school are less likely to be engaged in sexual activity. School provides an opportunity for education on sex and HIV, therefore, a lack of formal schooling can been seen as increasing vulnerability to HIV. (Blake, Ledsky, Goodenow, Sawyer, Lohrmann, & Windsor, 2003; Blum *et al.*, 2003; Karim *et al.*, 2003; Buvé *et al.*, 2002; Lum, Kirsten, Ochoa, Hahn, Shafer, Evans & Moss, 2003; Sevefjord *et al.*, 2001; DOH (SA), 2000; Kachingwe-Sisya, 2000; Swart-Kruger & Richter, 1997; Araoye & Adegoke, 1996).

Table 2.5: School attendance with linked measurement category, predicators and indicators

FACTOR: SCHOOL ATTENDANCE			
MEASUREMENT CATEGORY: ATTENDANCE RECORD			
INDICATORS OF RISK	**PREDICTOR OF SUSCEPTIBILITY**	**PREDICTOR OF SAFETY**	**INDICATORS OF PROTECTION**
No attendance Poor attendance record School fees unaffordable Gender bias	NO OR INFREQUENT ATTENDANCE (No/infrequent)	REGULAR ATTENDANCE (Regular)	Attended Satisfactory attendance record School fees affordable No gender bias
(Grown *et al., 2005;* Blake *et al.*, 2003; Mosedale, 2003; Willan, 2002; Sevefjord *et al.*, 2001; Dixon-Mueller, 1998; Araoye & Adegoke, 1996)			

2.3.1.4 Level of education

Educational level is a predictor of gender power and role (Grown *et al.*, 2005). Low educational levels are associated with an increase in vulnerability resulting from fewer life opportunities, poor nutrition and hygiene, higher mortality, lower fertility rates and lower economic development (Kongolo & Bamgose, 2002; Bowleg *et al.*, 2000; Sevefjord *et al.*, 2001).

Table 2.6: Educational level with linked measurement categories, predicators and indicators

FACTOR: EDUCATIONAL LEVEL			
MEASUREMENT CATEGORY: HIGHEST EDUCATIONAL QUALIFICATION (Highest qualification)			
INDICATORS OF RISK	**PREDICTOR OF SUSCEPTIBILITY**	**PREDICTOR OF SAFETY**	**INDICATORS OF PROTECTION**
Less than a school-leaving certificate Work-based experience	LOW EDUCATIONAL LEVEL (Low level)	HIGHER EDUCATION LEVEL (High level)	School leaving certificate Formal training course completed Tertiary level qualification
(*Grown et* al., 2005; Campbell & MacPhail, 2002; Dijksta, 2002; Willan, 2002; Bui *et al.*, 2001; Svenfjord *et al.*, 2001; Bowleg *et al.*, 2000; Dixon-Mueller, 1998)			

2.3.1.5 Economic status

Garbus (2003) suggests that economic status can be directly correlated to HIV prevalence. The highest number of persons infected with HIV being at the lowest economic point; HIV prevalence decreasing with rising economic status. Girls and woman face particular risks of HIV infection because of the interplay between their economic positions and social status influencing the authority given to them for decision-making. Therefore the predictor is income status and the

indicators employment status, income bracket and ability to support dependants (Buvé *et al.*, 2002; Dijkstra, 2002; Gilbert & Walker, 2002; Kehler, 2001; Preston-Whyte, 1995).

Status of financial dependency is a critical factor determining whether sex will be used as a commodity. Poverty and economic dependence increase the likelihood that a woman will be forced to exchange sex for material benefit and often limits decision-making ability and the scope for negotiating safe sexual practice. Sex trafficking is being increasingly associated with South Africa and places victims at risk of HIV. Therefore the predictor is the practice of transactional sex and the indicators describe reports covering exchange of sex for gain, sex trafficking and scope for negotiating safe sexual practice (Buvé *et al.*, 2003; Garbus, 2002; Jewkes & Abrahams, 2002; Wojcicki & Malala, 2001; Gutierrez *et al.*, 2000; Preston-Whyte, 1995).

HIV risk linked to work is the predictor of occupational risk. Indicators differentiate between work associated with HIV risk and workers connected to a particular work associated with workers placing themselves at risk through their personal behaviour, for example, truckers and miners.

Table 2.7: Economic status with linked measurements, predictors and indicators

FACTOR: ECONOMIC STATUS			
MEASUREMENT CATEGORY: INCOME STATUS			
INDICATORS OF RISK	**PREDICTOR OF SUSCEPTIBILITY**	**PREDICTOR OF SAFETY**	**INDICATORS OF PROTECTION**
Unemployed Underemployed Economic dependence No or low income Poverty Insufficient/inadequate means for provision of dependants	FINANCIAL DEPENDENCE (Dependent)	INDEPENDENT MEANS (Independent)	Paid work Economic Independence Middle or upper income bracket Can afford basics Can afford luxuries Means sufficient to be able to provide for dependants
MEASUREMENT CATEGORY: OCCUPATIONAL RISK			
High risk workers High risk work	HIGH HIV RISK OCCUPATION (High risk)	LOW HIV RISK OCCUPATION (Low Risk)	Low risk workers Low risk work

MEASUREMENT CATEGORY: SEX USED AS A COMMODITY			
Exchange for gain **Victim of sex trafficking** **Decreased scope for negotiating safe sexual practice**	**TRANSACTIONAL SEX (Reported)**	**NO TRANSACTIONAL SEX (Not reported)**	**No exchange for gain** **No sex trafficking** **Scope for negotiating safe sexual practice**
Rifkin, 2003 (Zellner, 2003; Garbus, 2002; Campbell & MacPhail, 2002; Dijkstra, 2002; Gilbert & Walker, 2002; Jewkes & Abrahams, 2002; Kongolo & Bamgose, 2002; Willan, 2002; Bui *et al.*, 2001; Kehler, 2001; Sevefjord *et al.*, 2001; Reid, 2000; Preston-Whyte, 1995; van Vliet, Meester, Korenkop, Singer, Bakker & Habbema, 2001; Dixon-Mueller, 1998)			

2.3.1.6 Religious affiliation

Religion can influence the sexual practices of individuals. The teachings of Christianity and Islam appear to have decreased sexual behaviours such as postpartum abstinence and polygamy. Studies have also shown that religious teaching can influence the value men attach to women and influence followers to delay sexual onset and encourage the practice of abstinence. The impact of traditional African beliefs is poorly reported with limited findings suggesting that 'fatalism' and an understanding of ill-health linked to 'angry ancestors' rather than being considered a disease, contributes significantly to the lack of understanding of HIV/AIDS in Sub-Saharan Africa (Blum *et al.*, 2003; Eaton *et al.*, 2003; Potts & Walsh, 2003; MacPhail & Campbell, 2001; Lagarde, Enel, Seck, Gueye-Ndiaye, Piau, Pison, Delaunay, Ndoye, Mboup, 2000; Rankin & Wilson, 2000; Wood *et al.*, 1998; Caldwell *et al.*,1992).

Religious socio-cultural context can influence women's rights through either promoting or limiting equal opportunities. This measure can be applied to a larger socio-cultural context or a particular faith-based organisation. The predictors distinguish between religions guidelines (doctrine) that support gender equality opposed to those that support gender inequality. The indicators describe the level of gender inclusiveness and the indicators describe the attitude to harmful sexual practices such as genital mutilation or polygamy. The predictor of religious teaching distinguishes between teaching that supports/ enables gender equality or contributes to gender disempowerment. Indicators describe religious teaching on gender equality, on practices harmful to women and safe sexual practice.

Table 2.8: Religious affiliation with linked measurement categories, predictors and indicators

FACTOR: RELIGIOUS AFFILIATION			
INDICATORS OF RISK	**PREDICTOR OF SUSCEPTIBILITY**	**PREDICTOR OF SAFETY**	**INDICATORS OF PROTECTION**
MEASUREMENT CATEGORY: INFLUENCE OF SOCIO-CULTURAL CONTEXT			
Gender exclusions Doctrine (religious guidelines) supports gender inequality	DISCRIMINATOR).	NON DISCRIMINATORY	Gender inclusive Doctrine (religious guidelines) supports gender equality

INDICATORS OF RISK	**PREDICTOR OF SUSCEPTIBILITY**	**PREDICTOR OF SAFETY**	**INDICATORS OF PROTECTION**
MEASUREMENT CATEGORY: INFLUENCE OF RELIGIOUS TEACHING			
Teaching describes women as unequal to men Teaching sanctions practices harmful to women Teaching perpetuates or promotes unsafe sexual practices	RELIGIOUS TEACHING SUPPORTS GENDER INEQUALITY (disables)	RELIGIOUS TEACHING SUPPORTS GENDER EQUALITY (enables)	Teaching describes women as equal to men Teaching is opposed to practices harmful to women Teaching supports/promotes safe sexual practice
(Lagarde *et al.*, 2000; Rankin & Wilson, 2000; Caldwell *et al.*, 1998)			

2.3.1.7 Ethnicity and Race

Race can define socio-economic and political status while determining gender roles and this is reflected within South African society with Black, Coloured and White populations having different health profiles. Poverty is associated with being Black in South Africa due to the legacy of apartheid and this determinant is seen as a key factor for the high prevalence of HIV amongst this population group. Outside of the South African context minority groups are described as having unequal access to resources and therefore being at risk for HIV (Cummins, 2003; Garbus, 2003; Gilbert & Walker, 2002; Kehler, 2001; Gutierrez *et al.*, 2000; Parada, 2000; Reid, 2000; Fisher, Neve & Heritage, 1999).

Table 2.9: Ethnicity & race with linked measurement categories, predictors and indicators

FACTOR: ETHNICITY & RACE			
MEASUREMENT CATEGORY: ETHNICITY/RACE AS A DETERMINANT OF ACCESS TO RESOURCES (Access to resources)			
INDICATORS OF RISK	**PREDICTOR OF SUSCEPTIBILITY**	**PREDICTOR OF SAFETY**	**INDICATORS OF PROTECTION**
Black (In South Africa) Minority groups	UNEQUAL ACCESS TO RESOURCES (access)	EQUAL ACCESS TO RESOURCES (access)	Racial group other than Black (for South Africa) Majority groups
(Cummins, 2003; Garbus, 2003; Smith, 2003; Gilbert & Walker, 2002; Parada, 2000; Reid, 2000; Coleman & Mngomezulu, 1999; Fisher *et al.*, 1999; Preston-Whyte, 1995)			

2.3.1.8 Geographical location

Geographical location describes the geographical region and the place of residence. In South Africa geographical location is linked to inequalities in health. Associated vulnerabilities pertinent to the South African context have led to the formulation of the following indicators linked to the predictors of socio-economic area, population's stability and access to health care (Anderson, 2003; Gilbert & Walker, 2002)

- Informal housing or homeless versus formal (Grown *et al.*, 2005, Eaton *et al.*, 2003; Garbus, 2003; Gutierrez *et al.*, 2000).
- Rural or peri-urban location versus an urban one (Cummins, 2003; Eaton *et al.*, 2003; Buvé *et al.*, 2002; Gilbert & Walker, 2002).
- Population mobility (migration) versus population stability (Gilbert & Walker, 2002; (Mbulaiteye *et al.*, 2002; Umerah-Udezulu, 2001).
- High HIV prevalence in a given geographical area versus an area with a low HIV prevalence rate (Ammann, 2003). The assumption underpinning this is that the greater the pool of HIV infection in a given area the greater the likelihood of a member of that community acquiring HIV.

- Political instability and the resultant high crime rate, associated with war has been firmly linked to rising HIV rates in Africa versus an area with political stability (Donovan, 2003; Buvé *et al.*, 2002; Gilbert & Walker, 2002; Bujra, 2000).
- Inaccessible health care services and general services versus accessible services (Grown *et al.*, 2005; Burke, 2004; Buvé *et al.*, 2002; Weir, Morroni, Coetzee, Spencer & Boerma, 2002; Kehler, 2001; Umerah-Udezulu, 2001; Guterriez *et al.*, 2000
- Transport inaccessible versus accessible (Grown *et al.*, 2005; Burke, 2004; Cummins, 2003).
- Condoms inaccessible versus accessible (Zellner, 2003).
- HIV testing unavailable and inaccessible versus available and accessible (HSRC, 2002).
- Anti-HIV drug therapies unavailable or inaccessible versus available and accessible (McCoy, Chopra, Loewenson & Aitken, 2005; Morris & Williamson, 2001).

Table 2.10: Geographical location with linked measurement categories, predictors and indicators

FACTOR: GEOGRAPHICAL LOCATION (INCLUDES REGION AND RESIDENCE)			
MEASUREMENT CATEGORY: ECONOMIC STATUS OF RESIDENTIAL AREA (Residence)			
INDICATORS OF RISK	PREDICTOR OF SUSCEPTIBILITY	PREDICTOR OF SAFETY	INDICATORS OF PROTECTION
Informal settlements Peri-urban Rural	LOW SOCIO-ECONOMIC AREA (↓socio-economic area)	HIGHER SOCIO-ECONOMIC AREA (↑ socio-economic area)	Suburban Urban
MEASUREMENT CATEGORY: POPULATION MOVEMENT			
High HIV prevalence High crime rate Political instability	MOBILE POPULATION (Mobile)	SETTLED POPULATION (Settled)	Low HIV prevalence Low crime rate Political stability

INDICATORS OF RISK	PREDICTOR OF SUSCEPTIBILITY	PREDICTOR OF SAFETY	INDICATORS OF PROTECTION
MEASUREMENT CATEGORY: ACCESS TO HEALTH CARE			
Transport service inaccessible Condoms inaccessible HIV testing inaccessible Anti-HIV drugs unavailable & inaccessible	UNAVAILABLE /INACCESSIBLE HEALTH CARE SERVICES (Inaccessible)	AVAILABLE & ACCESSIBLE HEALTH CARE SERVICES (Accessible)	Transport service accessible Condoms accessible HIV testing available Anti-HIV drugs available and accessible
(McCoy *et al.*, 2005; Cummins, 2003; Donovan, 2003; Eaton *et al.* 2003; Zellner, 2003; Buvé *et al.*, 2002; Garbus, 2002; Gilbert & Walker, 2002; Kongolo & Bamgose, 2002; Mbulaiteye *et al.*, 2002; Oronsaye & Anukam, 2002; Weir *et al.*, 2002; Kehler, 2001; Umerah-Udezulu, 2001; Dixon-Mueller, 1998; Campbell & Williams, 1996; Preston-Whyte, 1995)			

2.3.1.9 Living arrangement

This measures whether the living arrangement offers protection from unwanted sexual assault. Vulnerability is often linked to dependency and this is highlighted by the plight of street children (Eaton *et al.*, 2003; Swart-Kruger *et al.*, 1997). Their HIV prevalence rate in South Africa is 10-25 times the rate of other adolescent groups (Swart-Kruger *et al.*, 1997). Identified risk behaviours include earlier sexual debut, more sexual partners, rape and forced sexual activity as part of survival and lower condom use. Adolescents on the street are often non-school attendees, with higher rates of literacy and less exposure to accurate sex information (Eaton *et al.*, 2003; Swart-Kruger *et al.*, 1997; Wood & Jewkes, 1998).

Table 2.11: Living arrangement with linked measurement category, predictors and indicators

FACTOR: LIVING ARRANGEMENT			
MEASUREMENT CATEGORY: LIVING ARRANGEMENT OFFERS PROTECTION AGAINST SEXUAL VIOLATION (Sexual violation)			
INDICATORS OF RISK	PREDICTOR OF SUSCEPTIBILITY	PREDICTOR OF SAFETY	INDICATORS OF PROTECTION
Home - sexual violation Institution -sexual violation Living on the street	UNPROTECTED AGAINST SEXUAL VIOLATION (Unprotected)	PROTECTED AGAINST SEXUAL VIOLATION (Protected)	Home - offers protection against sexual violation Institution - offers protection against sexual violation Sleeps in a dwelling
(Eaton *et al.*, 2003; Jewkes & Abrahams, 2002; Svenfjord *et al.*, 2001; Wood & Jewkes, 1998)			

2.3.2 Cluster 2: Cultural and societal factors

Cluster 2 is comprised of the factors that will determine gender-related vulnerability and HIV risk linked to cultural and societal factors that have an influence on the interpersonal (gender power balance) and societal level (culturally scripted roles).

2.3.2.1 Gender power balance

Power balance is the predictor and links to the indicators that describe who controls the power, the distribution of power and whether negative consequences of requests for condom-use will be a barrier to safe sexual practice. Male dominance and unequal power distribution linked to risk behaviours include women allowing men to take control of sexual encounters, relinquishing own ability to influence how and when sex takes place, sexual coercion with physical or emotional pressure, violence and rape. Violence, including sexual assault, rape, (including marital rape), place women at an increased risk of HIV infection (Marman, Mbwambo, Hogan, Kilonzo, Campbell, Weiss & Sweat, 2002). This is due to anatomical damage to the female genital area, condom non-use, exposure to multiple partners in 'gang' rape and the situation making sexual negotiation extremely difficult (Campbell & MacPhail, 2002; Kim & Motsei, 2002; Umerah-Udezulu, 2001; UNAIDS, 2001; Vundile *et al.*, 2001; Wood & Jewkes, 1998).

Table 2.12: Gender power balance with linked measurement category, predictors and indicators

FACTOR: GENDER POWER BALANCE			
MEASUREMENT CATEGORY: BALANCE OF POWER BETWEEN SEXUAL PARTNERS (Power balance)			
INDICATORS OF RISK	**PREDICTOR OF VULNERABILITY**	**PREDICTOR OF SAFETY**	**INDICATORS OF PROTECTION**
Partner controlling (Male dominance) Violence/rape/coercion Negative consequences form a barrier to safe sex	UNEQUAL POWER RELATIONSHIP (Unequal power)	EQUAL POWER RELATIONSHIP (Equal power)	Self determination Equal power distribution - No violence/rape/coercion Partner responses do not form a barrier to safe sex
(El-Bassel *et al.*, 2003; Blum *et al.*, 2003; Karim *et al.*, 2003; Jewkes & Abrahams, 2002; Smith, 2003; Zellner,2003; Kim & Motsei, 2002; Gilbert & Walker, 2002; Marman *et al.*,2002; Sevefjord *et al.*, 2002; Umerah-Udezulu, 2001; Wojcicki & Malala, 2001; Bujra, 2000; Pulerwitz, Gortmaker & DeJong, 2000; Wongvipat, 2000; Jewkes *et al.*, 1999; Wood & Jewkes, 1998; Dixon-Mueller, 1998)			

2.3.2.2 Culturally scripted roles

The constitution of The Republic of South Africa states that men and women are equal (1996) and therefore anything limiting this equality is an infringement of rights. The cultural milieu provides the context and describes the culturally prescribed role of women that either upholds or infringes on the rights of women. The value given to the female role portrays women as valued or devalued.

The subordinate female position entrenched in many African societies limits the control women have over their own sexual choices and over their husbands outside of marriage. This vulnerability to HIV is exacerbated by extramarital affairs which may be accepted and even encouraged as a show of masculinity through early sexual initiation and many sexual conquests. Roles that emphasise innocence, virginity, submission to male prerogative, low status, erotic fantasy, myth (cure of HIV by having sex with a virgin), ignorance, lack of knowledge regarding sex and HIV are harmful to women (Buvé *et al.*, 2002; Kim & Motsei, 2002; Umerah-Udezulu, 2001; Bujra, 2000; Jenkins, 2000; Jewkes *et al.*, 1999).

Cultural norms are culturally accepted behaviours arising out of the local belief system. While norms are deeply entrenched they can differ from generation to generation. A norm may be upheld and seen as the ideal behaviour by the older generation but the younger generation may test it beginning the process of change by questioning the status quo (Jewkes *et al.*, 1999). The ability of a woman to act in a way that is contrary to normative culture is influenced by her perceptions, standing within the group and the degree of social connectedness and personal commitment to adopting the change (Blum *et al.*, 2003). When behaviour and the cultural norms correlate, the individual will usually experience comfort, while to act against the norm will often be stressful, requiring personal conviction and courage.

Supportive, caring networks formed by family, friends and health care providers can lower vulnerability by creating an enabling environment that values and promotes individual health. Acceptance of people who are HIV positive can provide a cultural milieu that offers care and support for those in need (Parsons, VanOra, Purcell, Gomez, 2004). This lowers stigmatisation and the burden of secrecy that results when disclosure is not possible (Parsons *et al.*, 2004; Stein, 2003; SCIHDC, 2001; Jenkins, 2000; Reid, 2000; Coleman & Mngomezulu, 1999; France, sa).

Stigmatisation infringes on the human rights of HIV positive people. It can be a barrier for people wanting to know their HIV status through HIV testing or to disclosing their positive sero-status (Parsons *et al.*, 2004). Stigma can have serious consequences such as isolation and neglect, further increasing the burden on women. Many keep silent for fear of being identified which

prevents them from seeking treatment that could prolong life (Garbus, 2003; Lanouette, Noelson, Ramamonjisoa, Jacobson & Jacobson, 2003; Stein, 2003; Umerah-Udezulu, 2001; Mathews, Kuhn, Fransman, Hussey & Dikweni, 1999).

Table 2.13: Culturally scripted roles with linked measurement category, predictors and indicators

FACTOR: CULTURALLY SCRIPTED ROLES			
MEASUREMENT CATEGORY: CULTURAL VALUE GIVEN TO THE FEMALE ROLE (Female role)			
INDICATORS OF RISK	PREDICTOR OF VULNERABILITY	PREDICTOR OF SAFETY	INDICATORS OF PROTECTION
Possession Macho identity of men Media messages portray values that are harmful to women	DEVALUATION OF FEMALE ROLE (Devalued)	VALUATION OF FEMALE ROLE (Valued)	Woman as partner Media messages portray values that are helpful to women
MEASUREMENT CATEGORY: COMPLIANCE FOR HUMAN RIGHTS (Human rights)			
Stigmatisation Social isolation Non-disclosure Rights not respected	HUMAN RIGHTS NOT UPHELD (Non compliance)	HUMAN RIGHTS UPHELD (Compliance)	Acceptance Integration Disclosure Rights (of women) respected
(Parsons *et al.*, 2004; Ammann, 2003; Karim *et al.*, 2003; Kim & Motsei, 2002; Gilbert & Walker, 2002; Gregson *et al.*, 2002; Umerah-Udezulu, 2001; Wilkinson & Wilkinson, 2001; Wojcicki & Malala, 2001; Bujra, 2000; Kachingwe-Sisya, 2000; Wongvipat, 2000; Matthews *et al.*, 1999; Marin *et al.*, 1995)			

2.3.3 Cluster 3: Communication

The third cluster focuses on communication and includes communication with family, friends, colleagues, sexual partners and the influence of media messages.

Communication within the primary group which includes family, friends and work colleagues, determines the level of information girls and women have regarding sexual issues and HIV. The predictor therefore describes whether women are informed or uninformed. Indicators describe communication style, information covering sexual matters, HIV and knowing partners HIV sero-status (Du Plessis, Muller, Poolman, Viljoen, Barnes & Cotton, 2000).

Communication with a sexual partner is predicted by communication style with indicators covering discussion on sexual matters, HIV and practising sex safely (Bird *et al.*, 2001). The influence of media on female empowerment includes the portrayal of women by the media, messages relayed on practices that are harmful to women and sexual practices (Keller & Brown, 2002).

Table 2.14: Communication with linked measurement categories, predictors and indicators

FACTOR: COMMUNICATION WITH FAMILY, FRIENDS AND WORK COLLEAGUES			
INDICATORS OF RISK	**PREDICTOR OF VULNERABILITY**	**PREDICTOR OF SAFETY**	**INDICATORS OF PROTECTION**
MEASUREMENT CATEGORY: INFORMATION LEVEL			
Closed communication with parents/significant adults Closed communication with friends and work colleagues No/limited access to media Poorly informed - sexual matters Poorly informed- HIV	WOMEN UNINFORMED OR POORLY INFORMED (Uninformed)	INFORMED WOMEN (Informed)	Open communication with parents /significant adults Open communication with friends and work colleagues Access to media Well informed - sexual matters Well informed - HIV
CONNECTEDNESS TO PRIMARY GROUP			
Poor identity with primary group Feels unsupported	FEELS UNSUPPORTED (Unsupported)	FEELS SUPPORTED (Supported)	Identifies with primary group Mutual support
(Blum *et al.*, 2003; Eaton *et al.*, 2003; Karim *et al.*, 2003; Gilbert & Walker, 2002, Wood & Jewkes, 1998; Wood *et al.*, sa; Marin *et al.*, 1993)			

Table 2.15: Communication with sexual partner(s) with linked measurement categories, predictors and indicators

FACTOR: COMMUNICATION WITH SEXUAL PARTNER(S)			
INDICATORS OF RISK	PREDICTOR OF VULNERABILITY	PREDICTOR OF SAFETY	INDICATORS OF PROTECTION
MEASUREMENT CATEGORY: PARTNER COMMUNICATION STYLE (Style)			
No/limited discussion on sexual issues No/little discussion on HIV No/ limited discussion of safe sexual practice	CLOSED COMMUNICATION (Closed)	OPEN COMMUNICATION (Open)	Discusses sexual issues Discusses HIV Discusses safe sexual practices
MEASUREMENT CATEGORY: PARTNER HIV RISK STATUS (Risk status)			
HIV status based on appearance Does not know partner(s) HIV status Lack of knowledge of partner(s) current and past sexual partner(s)	HIV RISK STATUS BASED ON APPEARANCES (Based on appearance)	HIV RISK STATUS BASED ON FACTS (Based on facts)	HIV status based on HIV test Knows partner(s) HIV status Accurate knowledge of partner(s) current and past sexual partner(s)
(Eaton *et al.*, 2003; El-Bassel *et al.*, 2003; Karim *et al.*, 2003; Garbus, 2002; SCIHDC, 2000a; SCIHDC, 2002c; Bird *et al.*, 2001; McCarthy, 2001; Wilkinson, 2001; Coates & The Voluntary HIV-1 Counselling and Testing Efficacy Study Group, 2000; du Plessis *et al.*, 2000; Morbidity and Mortality Weekly Report (MMWR), 2000; Wongvipat, 2000; Mathews *et al.*, 1999)			

Table 2.16: Influence of media with linked measurement categories, predicator and indicators

FACTOR: MEDIA MESSAGES			
INDICATORS OF RISK	PREDICTOR OF VULNERABILITY	PREDICTOR OF SAFETY	INDICATORS OF PROTECTION
MEASUREMENT CATEGORY: REPORTING BY MEDIA (Media messages)			
Messages promote practices that harm women Media does not promote safe sex	IRRESPONSIBLE REPORTING	RESPONSIBLE REPORTING ON ISSUES RELATED TO WOMEN	Media advocates against harmful practices Media promotes safe sexual practice
(Agha, 2002; Keller & Brown, 2002; Umerah-Udezulu, 2001; Wongvipat, 2000; Coleman & Mngomezulu, 1999)			

2.3.4 Cluster 4: Perceptions

This cluster is related to how individuals perceive their own vulnerability to HIV and the influence of normative behaviour.

2.3.4.1 Perception of vulnerability to HIV

Studies have shown that an important determinant governing the choice of sexual practice is a woman's perception of her risk. Being in a committed relationship is associated with a perception of low HIV risk and decrease motivation to adopt safe sexual practices although it might increase disclosure of a HIV positive status to a partner (Burke, 2004). Disclosure is frequently linked to a feeling of responsibility to a committed partner (Parsons *et al.*, 2004) HIV/AIDS complacency, can be defined as minimising, discounting and discrediting the threat of HIV/AIDS can lead to inaccurate assessments of personal risk. Knowing someone who has HIV or has died from AIDS is hypothesised to increase awareness of HIV/AIDS and its threat to personal health (Camlin & Chimbwete, 2003; HSRC, 2002). Many South Africans do not know their own sero-status despite having access to VCT (HSRC, 2002). Refusal is most often linked to concerns related to stigmatisation in the event of testing positive (Garbus, 2003). Also women perceiving themselves at a low risk of HIV infection are poorly motivated to have a HIV test (Garbus, 2003; Agha, 2002; Bowleg *et al.*, 2002; Bird *et al.*, 2001; Amaro, 2000; Gutierrez *et al.*, 2000; Reid, 2000; Coleman & Mngomezulu, 1999; Swart-Kruger & Richter, 1997).

Table 2.17: Perception of own vulnerability to HIV with linked measurement category, predictors and indicators

FACTOR: PERCEPTION OF OWN VULNERABILITY TO HIV			
MEASURE: ASSESSMENT OF VULNERABILITY			
INDICATOR OF RISK	**PREDICTOR OF VULNERABILITY**	**PREDICTOR OF SAFETY**	**INDICATOR OF SAFE SEXUAL PRACTICE**
No personal knowledge of a person who is HIV positive or has died of AIDS Denial of own risk behaviours Denial of risk partner's HIV status may offer Denial of risk personal HIV positive status can be to others Never had a HIV test Does not know HIV own status HIV/AIDS complacency (Denies, minimizes, discredits the threat of HIV/AIDS)	INACCURATE ASSESSMENT OF VULNERABILITY (Inaccurate)	ACCURATE ASSESSMENT OF VULNERABILITY (Accurate)	Personal knowledge of some-one who is HIV positive or has died from AIDS Acknowledges own risk behaviours Acknowledges that partner's HIV status a potential risk Acknowledges personal HIV positive status can place other at risk (feels 'responsible') Participated in VCT Knows own HIV status HIV/AIDS awareness (Informed and concerned about the threat of HIV/AIDS)
(Parsons *et* al., 2004; Camlin & Chimbwete, 2003; Eaton *et al.*, 2003; Bird *et al.*, 2002; MacPhail & Campbell, 2002; McCarthy, 2001; Coleman & Mngomezulu, 1999; Wilkinson & Wilkinson, 2001; Bowleg *et al.*, 2002; Coates *et al.*,2000; du Plessis *et al.*, 2000; Wongvipat, 2000; Caldwell *et al.*, 1992			

2.3.4.2 Influence of normative behaviour

The predictor is the influence of peers on safe sexual behaviour. Indicators cover:

- perception of normative behaviour;
- perception of whether the benefits outweigh the costs;
- intention expressed regarding the adoption of safe sexual practice

(Eaton *et al.*, 2003; Karim *et al.*, 2003; Marin *et al.*, 1993; Amirkanian *et al.*, 2001; MacPhail & Campbell, 2001).

Table 2.18: Perception of normative behaviour with linked measurement category, predictors and indicators

FACTOR: PERCEPTION OF NORMATIVE BEHAVIOUR			
MEASURE: INFLEUNCE OF PEERS ON SEXUAL PRACTICES (Peer influence)			
INDICATORS OF RISK	**PREDICTOR OF VULNERABILITY**	**PREDICTOR OF SAFETY**	**INDICATORS OF PROTECTION**
Perception of normative behaviour promotes/ per perpetuates unsafe sexual practice. Perceived costs outweigh benefits. No intention to practise safe sex	THE INFLUENCE OF PEERS IS NEGATIVE (negative)	PEERS INFLUENCE SAFE SEXUAL PRACTICE (positive)	Safe sexual practice perceived as normative behaviour. Perceived benefits outweigh costs Intention to practice safe sex
(Eaton *et al.*, 2003; Karim *et al.*, 2003; Flisher *et al.*, 2002; MacPhail & Campbell, 2001)			

2.3.5 Cluster 5: Self-efficacy

Self-efficacy describes the confidence and competence to practise safe sex and covers the application of knowledge, skill competence and the attitudes and feelings influencing decision-making.

2.3.5.1 Application of knowledge

Knowledge has already been an indicator under communication. Here knowledge describes the application of accurate, complete and applied knowledge as evidenced by safe sexual practice tested through self-reports (Eaton *et al.*, 2003; Garbus, 2003, Lanouette *et al.*, 2003; Du Plessis *et al.*, 2002; Amirkanian *et al.*, 2001; Swart-Kruger & Richter, 1997; Araoye & Adegoke, 1996).

Table 2.19: Knowledge related to safe sexual practice with linked measurement category, predictors and indicators

FACTOR: KNOWLEDGE RELATED TO SAFE SEXUAL PRACTICE			
MEASUREMENT CATEGORY: APPLICATION OF KNOWLEDGE (Application)			
INDICATORS OF RISK	**PREDICTOR OF VULNERABILITY**	**PREDICTOR OF SAFETY**	**INDICATORS OF PROTECTION**
Inaccurate or insufficient knowledge is a barrier to safe sexual practice Participation in risky sexual practices	KNOWLEDGE OF SAFE SEXUAL PRACTICE NOT APPLIED (Not applied)	KNOWLEDGE OR SAFE SEXUAL PRACTICE APPLIED (Applied)	Accurate & comprehensive knowledge facilitates safe sexual practices Adopts safe sexual practices
(Lanouette *et al.*, 2003; Zellner, 2003; Amirkhanian *et al.*, 2001; Wojcicki & Malala, 2001; du Plessis *et al.*, 2000; MacPhail & Campbell, 2001; Araoye & Adegoke, 1996)			

2.3.5.2 Practice

Self-efficacy refers to the confidence and competence of an individual to carry out a specific behaviour. It is an important predictor of whether the behaviour will be attempted (Rose, 2004; Eaton *et al.*, 2003). Skills include resisting sexual advances, negotiating condom use and correct and consistent condom-use (Eaton *et al.*, 2003). Alcohol use is associated with increased sexual risk behaviour, such as condom non-use (Eaton *et al.*, 2003; Karim *et al.*, 2003; Morrison, Gillmore, Hoppe, Gaylord, Leigh & Rainey, 2003; LaBrie *et al.*, 2002; Wood *et al*).

Table 2.20: Skills for safe sexual practice with linked measurement categories, predictors and indicators

FACTOR: SKILLS FOR SAFE SEXUAL PRACTICE			
MEASUREMENT CATEGORY: SKILL COMPETENCE FOR SAFE SEXUAL PRACTICE (Competence)			
INDICATORS OF RISK	**PREDICTOR OF VULNERABILITY**	**PREDICTOR OF SAFETY**	**INDICATORS OF PROTECTION**
Inconsistent condom use Incorrect use of condoms Alcohol or substance abuse	DOES NOT APPLY SKILLS (Incompetent)	APPLIES SKILLS (Competent)	Consistent condom use Correct condom use No evidence of alcohol or substance abuse

INDICATORS OF RISK	PREDICTOR OF VULNERABILITY	PREDICTOR OF SAFETY	INDICATORS OF PROTECTION
MEASUREMENT CATEGORY: SEXUAL NEGOTIATION SKILLS (Negotiation)			
Unassertive: reports inability to say 'no' (Unassertive) Inability to negotiate safe sex	INEFFECTIVE SEXUAL NEGOTIATION SKILLS (Ineffective)	EFFECTIVE SEXUAL NEGOTIATION SKILLS (Effective)	Assertive: reports being able to say 'no' to sex (Assertive)
(Anderson, 2003; Blum *et al.*,2003; Camlin & Chimbwete, 2003; El-Bassel *et al.*, 2003; Flisher *et al.*, 2002; Karim *et al.*, 2003; Morrison *et al.*, 2003; Gregson *et al.*, 2002; La Brie *et al.*, 2002; Bui *et al.*, 2001; Wojcicki & Malala, 2001; Marin *et al.*, 1993)			

2.3.5.3 Attitudes and feelings contributing to sound judgement

Attitudes relating to self play an important role in sexual choices. Low self-esteem and feelings of poor self-worth have been linked to early sexual debut and a need to have multiple sexual partners as a way of affirming themselves (Eaton *et al.*, 2003). Self-esteem and self-confidence increase assertiveness (Rose, 2004). Rose states that feelings of self worth and confidence give a feeling of being safe to make choices for behaviours that are protective (Rose, 2004).

Table 2.21: Attitudes & feelings contributing to sound judgement with linked measurement category, predictors and indicators

FACTOR: ATTITUDES & FEELINGS CONTRIBUTING TO SOUND JUDGEMENT			
MEASUREMENT CATEGORY: JUDGEMENT INFLUENCING DECISION-MAKING (Judgement)			
INDICATOR OR RISKS	PREDICTOR OF VULNERABILITY	PREDICTOR OF SAFETY	INDICATORS OF PROTECTION
Low self esteem Low self-worth Seeks affirmation through sexual relationships	IMPAIRED JUDGEMENT (Impaired)	SOUND JUDGEMENT (Sound)	Appropriate, healthy self-esteem Values self (feelings of self worth) Does not seek affirmation through sexual relationships
(Blum, Halcon, Buehring, Pate, Campbell-Forester, Venema, 2003 ; Eaton *et al.*, 2003; MacPhail & Campbell, 2001; Wojciki & Malala, 2001; Wongvipat, 2000; Campbell & Williams, 1996; Marin *et al.*, 1993)			

2.4 LEVEL OF ANALYSIS

The factors that inform the vulnerability and HIV risk status of women for sexually transmitted HIV can be analysed on three levels namely micro-level, interface-level and macro-level. The micro-level describes personal factors, the interface level includes interpersonal, immediate living conditions and organisational factors and the macro-level discussed structural and cultural factors. The table below (table 2.22) is based on the work of the Eaton *et al.*, (2003) and Albertyn (2000, 1995) and has been applied to describe the level or domain of analysis used to determine the vulnerability of women for sexually transmitted HIV.

Table 2.22: Levels of analysis

LEVELS OF ANALYSIS		
MICRO-LEVEL	**INTERFACE LEVEL**	**MACRO-LEVEL**
Perception of own vulnerability to HIV Self-efficacy which includes: • Knowledge related to safe sexual practice • Skills required for safe sexual practice • Attitudes and feelings contributing to sound judgement	Relationship status Gender power balance Living arrangement Communication within family, social & occupational group Communication with sexual partner Influence of media Perception of normative behaviour	Culturally scripted roles Religious affiliation Geographical location Economic status Socio-political status comprised of five factors namely: • Gender* • Ethnicity & Race • Age • School attendance • Educational level *Gender is not discussed separately as it is seen at the core of this study

The factors listed on this table are identical to those described previously in this review. They have now been grouped according to the level or domain of analysis. The factors are displayed, according to these levels in the Framework of factors determining the vulnerability of women for sexually transmitted HIV (figure 2.3).

2.4.1 Framework of factors determining the vulnerability of women for sexually transmitted HIV

The literature review enabled the identification of the factors and their linked inhibitors and facilitators (paragraph 2.3), as well as the level of analysis (paragraph 2.4). These components have been collated and developed into a framework. The framework is attached as figure 2.3.

2.5 FACILITATORS AND INHIBITORS OF SAFE SEXUAL PRACTICE

The study began by asking why women adopt risky sexual practices when they have the knowledge of safe sexual practices. Sexual practices are determined by factors that either act as facilitators or inhibitors to safe sexual practice. The same factor can either be a facilitator (predicting a status of safety) or an inhibitor (predicting a status of susceptibility) depending on the influence of empowerment status. In this study, guided by the work of Albertyn (2000, 1995), empowerment is seen as the agent facilitating safe sexual practice. The work of Eaton, *et al.*, (2003) is drawn on for the description of the inhibitors as barriers that either perpetuate or promote unsafe sexual practice. The domains of analysis described by Eaton *et al.*, (2003) are similar and comparable to the levels used by Albertyn (2000, 1995) and those used in this study. This allows for synergy enabling the development of the enhancements to the HIV educational programme based on these studies (paragraph 3.4.2.1). A discussion will follow on barriers but as empowerment is reviewed as part of the second section of the literature review it will not be considered here but rather under paragraph 2.6.1.3.

Barriers to safe sexual practice

Eaton *et al.*, (2003), after reviewing literature, designed a framework to describe the barriers to safe sexual practice. The barriers were identified and organised into three domains of analysis that were named personal factors (barriers within the person), proximal context (barriers within interpersonal relationships and immediate organisation) and the distal context (barriers associated with cultural and structural factors). The critical element is that these domains overlap and reciprocally influence one another with their complex interaction making it difficult to overcome barriers to safe sex. To highlight the complexity of factors culminating in unsafe sexual practice, an example based on the factors identified in the literature in this study, coupled with the understanding of the interaction between the factors gained from Eaton *et al.*, (2003), could be as follows. A woman may decide not to request a condom (factor: self-efficacy), despite feeling vulnerable to HIV (factor: perception of vulnerability) because she fears if she does not acquiesce to sexual demands she will be abandoned (factor: relationship status). She cannot risk abandonment by her partner, as she is financially dependent on her partner (factor: economic status).

The following table display the three levels and the barriers as suggested by Eaton *et al.*, (2003). For clarity this table has been enlarged upon by the researcher and is attached as an addendum (see addendum 7).

Table 2.23: Barriers (Eaton *et al.*, 2003)

PERSONAL FACTORS (Barriers within the individual)	PROXIMAL FACTORS (Barriers related to interpersonal factors and immediate environment)	DISTAL FACTORS (Barriers associated with cultural and structural factors)
Young Age (less than 35 years) Female gender Early removal from schooling Low level of education Ethnicity/ race - Black (in SA) Perception of risk Inaccurate or incomplete knowledge Low self-efficacy Perceived costs outweigh the benefits of safe sex No or poorly conceived intentions to practice safe sex Early sexual debut Low self-esteem	Inability to negotiating condom use No communication or ineffective communication with sexual partners, family, friends or work colleagues Coercive, male dominated relationships Male placing female partner at risk by having multiple partners Peer pressure Barriers within the physical and organisational environment: Lack of access to condoms Low access to the media Lack of recreational facilities Living on the streets Being in prison	Prescriptive cultural roles that are oppressive to women Poor sense of identity Structural factors such as: Urban versus rural conditions Place of residence Poverty

The influence of barriers and empowerment on safe sexual practice

The comparability between the level descriptors used in the work of Eaton *et al.*, (2003) and Albertyn (2000,1995) enables articulation and synthesis that collectively provides a theoretical construct to explain why women who are disempowered cannot overcome the barriers to safe sexual practice thus engage in risky practices. At the same time the effect of empowerment, acting as a facilitator, enabling women to overcome barriers to enable safe sexual practice is demonstrated. An example of empowerment as a facilitator could be as follows: if a young woman has multiple partners she might know the facts about HIV and safe sex. This knowledge base might not lead to a change in behaviour, as their need to be affirmed is high driving them to multiple partners. A strategy to change this will be an empowerment approach that builds self-esteem and feelings of self worth.

Textbox 1: Summary of section 1 of the literature review: determinants of HIV vulnerability

Factors are determinants of gender in/equality and inform HIV risk level.

Identification of predictors and indicators linked to each factor enable a description of the HIV risk of women to sexually transmitted HIV.

The first section of this review has considered the determinants of gender-related and HIV vulnerability risk. The second section will discuss the application of an empowerment approach to HIV interventions.

SECTION 2: APPLYING AN EMPOWERMENT APPROACH TO HIV INTERVENTIONS

2.6 HIV EDUCATIONAL INTERVENTIONS

It is evident from the literature that the theory underpinning HIV educational interventions is a determinant of its effectiveness (Petersen & Swartz, 2002). For this reason the three main theoretical perspectives informing many programmes will be analysed. The purpose is to demonstrate the historical process and the circumstances that have led to the adoption of an empowerment approach. Peer education will be examined as an educational method incorporating empowerment theory.

2.6.1 Health promotion

In the absence of a cure or vaccine for HIV/AIDS the cornerstone of intervention programmes has been prevention aimed at preventing the spread of the HIV virus (Van Vliet *et al.*, 2001). Health promotion is a well-accepted philosophy of care having gained world-wide support from the health community following the first International Conference on Health Promotion which culminated in the formulation of the Ottawa Charter for Health Promotion (Petersen & Swartz, 2002; WHO, 1986). In this charter health is described as the process enabling people to increase control over their health. Health is defined as a state of 'physical, mental and social well-being' with individuals and groups attaining this through access to required resources, an ability to adapt to their environment and with access and availability of comprehensive health service (WHO, 1986) There are five key concepts in the charter namely building healthy public policy, creating supportive environments, strengthening community action, developing personal skills and re-orientating health services (WHO, 1986).

The Ottawa Charter built on work started at Alma Ata in 1978 and has been deepened and broadened (Kickbusch, 2003; Rifkin, 2003; WHO, 1986). Implementation has been in the form of health reforms one of which was the adoption of the primary health care approach (WHO, 1986).

Both the Ottawa Charter and the primary health care approach emphasise the concepts of community participation, empowerment and health education (WHO, 1986).

HIV interventions broadly follow one of three schools of thought. The first is the behavioural approach, the second social theory and the third encompasses empowerment.

2.6.1.1 Behavioural approach

Many interventions are based on behavioural theories (Burke, 2004; Agha, 2002) such as the Theory of Reasoned Action described by Fishbein & Azjen, the concept of self-efficacy derived from Social Learning Theory of Bandura and the Health Belief Model of Janz & Becker (Karim *et al.*, 2003; Agha, 2002; Swart-Kruger & Richter, 1997). The cornerstone assumption of these models is the understanding that education leads to behaviour change with emphasis being given to health promotion, information and the enhancement of communication skills to enable negotiation and adoption of protective behaviours (Petersen & Swartz, 2002; UNAIDS, 1999; Swart-Kruger *et al.*, 1997).

Evaluation of effectiveness of behavioural programmes

Studies based on behavioural theory assume HIV/AIDS education can alter the sexual behaviour of the participants (Agha, 2002). Measurements of success cover the acquisition of knowledge of HIV/AIDS, condom use and decreased reporting of risk behaviour such as multiple partners. Reported results have been mixed, with many noting that a significant number of participants did not change their behaviour and adopt safer sex practices (Karim *et al.*, 2003; Campbell & MacPhail, 2002; Petersen & Swartz, 2002). Zellner (2003) reports that when efforts to increase condom use focus directly on increasing condom use rather than improving the accuracy of HIV/AIDS knowledge results improve.

Critiques of behavioural models

Behavioural interventions fail to account for persons with limited personal and social powers who cannot exercise freedom of choice. The capacity to oppose unwanted sexual activity, as well as the ability to control experiences varies across individuals and communities. Behavioural intervention programmes, underpinned by the biomedical model of disease, minimise the role of social causes of illness. Contributors to ill-health such as an unequal or sometimes poorly resourced health care service, poverty, malnutrition and other diseases are not adequately explained (Petersen & Swartz, 2002; Swart-Kruger *et al.*, 1997).

2.6.1.2 Social approach

Social perspectives view health as an outcome of social, economic, cultural and ecological conditions (Burke, 2004; Smedley & Syme, 2001; Fahlberg *et al.*, 1991). This broadens the concern for health from a medical position to one of public health - the responsibility of all sectors of society (Smedley & Syme, 2001; WHO, 1986). The World Health Organisation (1986), in its definition of health, brought the social determinants of health to the forefront. WHO (1986) also described the need for a developmental approach addressing the multiple levels of health delivery. These factors have subsequently been emphasised by South African researchers in relation to HIV (Eaton *et al.*, 2003; Campbell & Mzaidume, 2002; Petersen & Swartz, 2002). Social approaches, however, fail to adequately address the unequal power differential, which continues to fuel the HIV/AIDS epidemic in South Africa (Petersen & Swartz, 2002). The need to address gender issues in order to bring about effective prevention programmes has led to the application of applying empowerment theory to HIV interventions.

2.6.1.3 Empowerment approach

The term empowerment has a broad range of meanings due to its mixed origins, having roots in psychology, feminist thinking and in adult education, where it draws heavily from the work of Paulo Freire (UNAIDS, 1999a). For the purpose of this study empowerment refers to one's 'actual and perceived ability to determine the course of one's life and community' (Lee in Evans, 1992: quoted by Albertyn, 1995:12). It is conceptualised from the perspective of an individual on three levels (Sevefjord *et al.*, 2001; Albertyn, 2000, 1995; Fahlberg *et al.*, 1991) and can also be operationalised at the level of the individual, an organisation or of groups/community (Mosedale, 2003).

Empowerment is a foundational element in participatory learning strategies and many community development projects (Rifkin, 2003). Feminist thinking has expanded empowerment theory to encompass gender empowerment; out of critique of the cognitive-behavioural models that assume that behaviour is largely under an individual's control (Mosedale, 2003; Amaro, 2000). Behavioural theory fails to account for external factors such as being a woman, gender roles and scripts that shape choices, expectations and factors not under the women's physical control (Wongvipat, 2000). Within this school of thought relationship power is seen as a crucial variable influencing women's ability to engage their partners in HIV-related protective behaviours (Karim *et al.*, 2003; Buvé *et al.* 2002:5; Heyzer, 20001; Preston-Whyte, 1995). The gender-based power dynamic is seen as resulting out of oppression, preventing women from initiating and sustaining sexual risk reduction in their relationships (Karim *et al.*, 2003; Buvé *et al.*, 2002; Amaro, 2000). Three key dynamics of oppression are named: silencing (lacking the means to dialogue and decision-making), violence and fear of violence and internalised oppression (a process leading oppressed groups to be marginalised) (Amaro, 2000).

In terms of the gender dynamic and HIV risk reduction women, particularly those of colour and poor, are seen as the oppressed and the oppressors are described as men and the 'androcentric' society which 'acts upon' woman (Gilbert & Walker, 2002). Other characteristics given to the oppressors or dominant group include power, legitimate leadership, and authority (Amaro, 2000). When applied to HIV, men are seen as the holders of knowledge and definers of gender roles including prescribing acceptable behaviour (Buvé *et al.*, 2002; Campbell & MacPhail, 2002; Gilbert & Walker, 2002). The ability of women to adopt protective behaviour is characterised by two opposing positions that are either a status of empowerment (protective to HIV) or disempowerment (susceptibility to HIV). The position will be determined by the amount of power, control over resources and scope for decision-making given to a woman (Rifkin, 2003; Gutierrez *et al.*, 2000; Albertyn, 1995). Empowerment gives 'choice' and empowerment programmes seek to enable those denied it to acquire it (Sevefjord *et al.*, 2001).

2.6.1.3 (a) Enabling individual choice

Empowerment is a process that "restores people's capacity to act with others to improve the quality of life" (Fahlberg *et al.*, 1991:186). The concept is described within literature on health promotion (Iverson, Sahay & Ashbury, sa; WHO, 1986) and covers topics such as informed decision-making (WHO, 1986), community development through empowerment (Iverson *et al.*, sa; Rifkin, 2002) and health equity (Rifkin, 2002). Individuals who are disempowered experience a sense of hopelessness, inferiority and powerlessness (Albertyn, 1995) and this is usually resulting from a lack of resources or an inability to make choices (Bester, 2002; Buvé *et al.*, 2002; Gilbert & Walker, 2002) resulting in poor health outcomes.

In health literature the relevance of empowerment is easily understood by examining the concept of power/powerlessness (Iverson *et al.*, sa). Empowerment interventions, through a process of active participation, are designed to empower an individual to act or choose (Mncube, 2003; Bester, 2002; Calvo & Pouliquen, 1999; Albertyn, 1995; Fahlberg *et al.*, 1991). Personal empowerment is the outcome or the result when an individual has taken the action they desired and achieved it (Iverson *et al.*, sa).

In terms of gender empowerment, gaining and maintaining 'choice' is the strategy for addressing gender inequalities in power within sexual relationships. Gender empowerment is the key to women's ability to protect themselves from HIV infection (Karim *et al.*, 2003; Buvé *et al.*, 2002; Gutierrez *et al.*, 2002; Willan, 2002; Amaro, 2000; Pulerwitz *et al.*, 2000; Preston-Whyte, 1995).

2.6.1.3 (b) Gender empowerment

Choice is at the heart of gender empowerment and opens the door to self-determination. Having basic needs met is a pre-requisite to enabling women, particularly poor women, to exercise sexual choice freely rather than be placed in situations were sexual exchange is a strategy for survival (Preston-Whyte, 1995, Swart-Kruger 1992). It would be naïve and simplistic to see the power relationship between men and women as a see-saw and label women powerless and men as powerful as this could negate the very real micro-decision making ability women exercise in their everyday lives (Kongolo & Bamgose, 2002; Wojcicki & Malala, 2001). Rather as Wojcicki & Malala (2001) (quoting Scott, 1990:5) states that "sexual negotiation is formed by constellations of unequal relationships", pointing to the complexity of the intertwining factors that come together to form sexual behaviour (Wechsberg *et al.*, 2005; Eaton *et al.*, 2003; Gutierrez *et al.*, 2002; Wojcicki & Malala, 2001) and gender in/equality. In this study predictors identify a position of safety (gender equality) versus one of susceptibility (gender inequality) and are displayed in figure 2.3.

2.6.1.3 (c) Developing an enabling environment

When considering community empowerment the definition of a community as a rigid structure is restrictive. Parker, Margolis, Eng & Henriquez-Roldan (2003) suggest conceptualising community members as a diverse set of collaborators/partners with different but essential sets of skills and resources to contribute to public health practice - a view supported by Rifkin (2003). A community empowerment model assumes that self-empowerment is not sufficient to change behaviour. It is important to therefore promote communities collectively identifying and acting on factors affecting them. These models will describe the sexual risk behaviour of members being determined by the interaction of factors on three levels namely within themselves, their immediate environment and at community level. At community level structural and cultural barriers forming obstacles to safe sexual behaviour need to be broken down in order to provide an enabling environment for female empowerment (Dixon-Mueller, 1998). To bring change that will enable unrestricted sexual choice requires a redress or redistribution of power, control, skills and confidence to women within an environment that fosters community commitment to improving individual health (Rifkin, 2003; Campbell & MacPhail, 2002; Pulerwitz *et al.* 2000, Fisher *et al.*, 1999; Dixon-Mueller, 1998; WHO, 1986). This necessitates that interventions embrace a participatory approach and address the critical components named as **c**apacity-building, **h**uman rights, **o**rganisational sustainability, **i**nstitutional accountability, **c**ontribution and **e**nabling environment (Parker *et al.*, 2003; Rifkin, 2003; WHO:1986). Rifkin (2003) took the first letter of each of the concepts and formed the acronym "**CHOICE**" and used this to name a model for explaining the link between empowerment, equity and health. The model is displayed below with cross references to other studies that reported similar findings.

Table 2.24: CHOICE Model

THE CONCEPTS OF CHOICE (Rifkin, 2003)	DESCRIPTION OF CONCEPT WITH CROSS REFERENCING TO OTHER STUDIES
Capacity Building	Enabling local people to develop and use skills and knowledge to improve their health (Rifkin, 2003; Parker *et al.*, 2003; WHO, 1986). Six areas of skill building have been identified in the literature namely: • communication (Iverson *et al.*, sa) • assertiveness (Iverson *et al.*, sa) • information-seeking (Hilderandt, 1994; Iverson *et al.*, sa) • decision-making (Iverson *et al.*, sa) • coping (Iverson *et al.*, sa) • social support seeking skills (Hildebrandt, 1994; Iverson *et al.*, sa)
Human Rights	Enabling women through the process of exercising their human rights to influence their circumstances (Rifkin, 2003). This would include activities to increase political efficacy and social action.
Organisational sustainability	Ensuring sustainability of health gains, through organisational development (Rifkin, 2003; Parker *et al.*, 2003; Iverson *et al.*, sa; WHO, 1986)
Institutional accountability	Development of mechanisms to ensure resource allocation and decisions benefit those most in need (Rifkin, 2003)
Contribution	Enabling the programme beneficiaries (stake-holders) to contribute to its development (Rifkin, 2003; Parker *et al.*, 2003; SCIHDC Institute for Health and Development Communication (SCIHDC), 2003; Campbell *et al.*, 2002; Ross & Williams, 2002; Muli-Musime, 2001; Hildebrandt, 1994; WHO, 1986)
Enabling environment	Development of an environment that supports equity and stake-holder empowerment to achieve health outcomes (Rifkin, 2003; Parker *et al.*, 2003; SCIHDC, 2003; Calvo & Pouliquen, 1999; Fisher *et al.*, 1999; WHO, 1986; Preston-Whyte, 1995)

Active participation is central to the empowerment process (Mncube, 2003; Bester, 2002; Fahlberg *et al.*, 1991) and requires that research and interventions carry the voice of the 'affected' (Heyzer, 2001; Muli-Musime, 2001; Preston-Whyte, 1995; Fahlberg *et al.*, 1991). Through participation in empowerment interventions that include raising awareness, skill development and collective action against social conditions such as abuse that predispose women to HIV, women can be enabled to address these critical issues (Buvé *et al.*, 2002; Heyzer, 2001; Amaro, 2000; Albertyn, 1995; Fahlberg *et al.*, 1991). Programmes facilitating economic upliftment to decrease financial dependence on male partners (Buvé *et al.*, 2002; Preston-Whyte, 1995), and advocacy which addresses gender biases and inequality and access to services (Buvé *et al.*, 2002; Heyzer, 2001; Muli-Musime, 2001) will give women access to greater resources (Gilbert & Walker, 2002; Albertyn, 2000).

Advocacy campaigns are required to address gender issues including national legislation, policies and budgets for HIV/AIDS prevention, treatment, care and impact mitigation (Buvé *et al.*, 2002; Campbell & Mzaidume, 2002; Heyzer, 2001; Fahlberg *et al.*, 1991). Crucial issues will be the rights of girls and women to legal protection including assurance of land, property and custody entitlements, equal access to treatment and commodities, freedom from harmful customs and practices (Gilbert & Walker, 2002; Heyzer, 2001).

Empowerment requires sharing of power between equals and the process engages the disempowered, who stand as equals with the desire, skills and mandate to receive a share of power, with the party perceived as having it (Albertyn, 2000). Through a learning process that can be facilitated, never 'taught', power is increasingly shared and in so doing a process of transformation or emancipation of the so-called disempowered occurs. Within the adult education field this process has become known as 'transformative learning'.

2.6.1.3 (d) Transformative learning

Empowerment cannot take place without the required conditions for transformation (Rifkin, 2003.) Educational initiatives designed to empower need to create conditions to facilitate this (Albertyn, 2000).

Transformative learning is central to adult education (Albertyn, 2000; Cranton, 1994) with an emphasis on reflection and critical thinking as central activities raising consciousness and allowing construction of meaning of one's own reality (Albertyn, 2000; Cranton, 1994; Mezirow, 1994). Studies indicate that the empowerment process is enhanced through active participation and reflection within a mutually supportive group with a skilled facilitator acting as an 'empowering enabler' (Rindner, 2004; Albertyn, 2000). In the literature the empowerment process is described as a series of steps (Albertyn, 2000; Iverson *et al.*, sa). However, Albertyn (2000) argues that ideally changes occur simultaneously, enhancing one another and continue over the lifecycle representing a 'way of interacting with the world'. The process of empowerment can be monitored in individuals through the identification of indicators (Albertyn, 2000).

Literature from the health field, describe the application of the transformative learning process, which is usually in contexts addressing a disparity in health equity or power and use theoretical constructs from the Participatory Learning and Action approach (Rifkin, 2003). Descriptions include the principles and strategies required for fostering partnership and education strategies that involve and respond to the needs of the individual, group or community in order to influence health practice to achieve desired outcomes (Parker *et al.*, 2003). Peer education, with roots in Participatory Learning theory is one method of bringing transformation through an educational intervention at community level (Campbell & MacPhail, 2002; UNAIDS, 1999).

2.6.2 Peer education

One of the biggest challenges facing South Africa is getting the HIV messages to a diverse population of over 40 million people in a way that effects behaviour change and is cost-effective (Campbell & MacPhail, 2002; UNAIDS, 1999). Peer education, through a cascade or diffusion model can reach many through a community level intervention (Deutsch, Michel & Swartz, 2003; Jha, Nagelkerke, Ngugi, Prasada, Willbond, Moses, Plummer, 2003; Morris & Williamson, 2003; Campbell & MacPhail, 2002; Ross & Williams, 2002). Concomitant benefits reported include reduction in stigmatisation, promotion of community development and lowering of sexually transmitted infections (Ross & Williams, 2002; Jha *et al.*, 2001).

The theory of participatory education has been important to the development of peer education with advocates of this methodology reporting that the horizontal process of peers talking among themselves and determining a course of action results in behavioural change (Campbell & MacPhail, 2002; UNAIDS, 2001; UNAIDS, 1999). Recent studies have demonstrated that diffusion theories and participatory models can be brought together to harness the strengths of both with a peer education programme (Morris & Williamson, 2003). Peer education, as a component of an HIV strategy, when used within a diffusion model will be described as most effective when the coverage includes a large section of the population, forms part of a multimedia, national campaign (Parker *et al.*, 2003; SCIHCD, 2003, Agha, 2002; Campbell & MacPhail, 2002) and incorporates educational strategies that empower and involve men (UNAIDS, 2000). However, when empowerment is a goal, then targeted interventions that address specific needs of specific groups have been shown to yield the best results (Wechsberg *et al.*, 2005).

Due to difficulties such as issues related to capacity, outreach capabilities and structural impediments, peer education has been critiqued and is at times less effective than intended (Parker *et al.*, 2003; Campbell & MacPhail, 2002).

2.6.2.1 Role of peer educators

For an educational intervention to be empowering it needs to include development of appropriate knowledge, skill building, enhancement of feelings of self-efficacy and raise awareness (Albertyn, 1995; Fahlberg *et al.*, 1991). The facilitator needs to develop a milieu of trust to foster the relationship between peers supporting the discussion of sensitive issues in an acceptable manner that is proactive and focused (Deutsch, Michel & Swartz, 2003; UNAIDS, 1999). Peer educators need to be trained to be skilled facilitators who develop into intervention specialists (Ross & Williams, 2002; Iverson *et al.*, sa). Skills training for facilitators should be practical, including the use of lesson plans and learner centred teaching materials to achieve educational objectives (Deutsch *et al.*, 2003; Parker *et al.*, 2003; UNAIDS, 1999). Techniques for creating discussion

should be part of facilitator training to enable them to skilfully assist group participants explore options thereby gaining a sense of mastery over their lives while being a resource and a support (Albertyn, 1995).

The role of peer education includes:

- developing awareness, knowledge, skills and attitudes (Deutsch *et al.*, 2003; Albertyn, 1995, Fahlberg *et al.*, 1991);
- identification of peers in need of assistance and referral to relevant resources (Deutsch *et al.*, 2003);
- role modelling healthy behaviour (Deutsch *et al.*, 2003; Ross & Williams, 2002);
- advocating for gender equity, resources and services for themselves and peers (Deutsch *et al.*, 2003; SCIHDC, 2003; Fahlberg *et al.*, 1991).

2.6.2.2 Peer learners

Peer education, from an empowerment perspective, requires a learner centred approach (Albertyn, 2000) with the learner being viewed as the agent achieving the solution to their problem(s) as this builds self-esteem and confidence (Rindner, 2004; Rose, 2004; Campbell & MacPhail, 2002, Albertyn, 1995). Participants share in the responsibility for creating a learning environment.

2.6.2.3 Learning programme

Content of a course will include essential knowledge to enable informed decisions (Campbell *et al.*, 2002; Albertyn, 1995), development of related skills to give competence and enhance self-confidence (Iverson *et al.*, sa; Albertyn, 1995) and attitudes and feelings. This is achieved through small group strategies, using tasks designed to allow success through attainment of immediate, achievable goals (Albertyn, 2000; 1995) enhanced by educational materials including different media to support the learning process (SCIHDC, 2003; Agha, 2002; UNAIDS, 1999).

Transformative learning has two layers that at times seem in conflict namely the cognitive, rational and objective, as well as, the intuitive, imaginative and subjective. While the emphasis has been on the rationale this needs to be linked to the affective by using feelings and emotions in critical reflection and as a means of reflection.

2.6.2.4. Learning methodology

The learning process will be encouraged by using small group teaching methods, employing experiential strategies while developing mutual support structures (Albertyn, 2000; 1995). Through actively engaging peer learners in informed debates, positive attitudes and skills can be built while strengthening healthy norms (Deutsch *et al.*, 2003; Campbell & MacPhail, 2002; Ross & Williams, 2002; MacPhail & Campbell, 2001; UNAIDS, 1999; Albertyn, 1995). Learning should include:

- Identification of concerns, issues and priorities using a number of needs- based assessment procedures and strategies (Albertyn, 2000).
- Identification of strengths and capabilities as a basis for proactively acknowledging learners' abilities (Albertyn, 2000).
- Mapping of the social support network in terms of both existing sources and support, and untapped, but potential sources of aid and assistance (Albertyn, 2000).
- Learners in the implementation so that they develop abilities to mobilise resources, meet needs and achieve goals (Albertyn, 2000; Fahlberg *et al.*, 1991). When changes can be attributable to the programme as many of the participants must be acknowledged as possible (Parker *et al.*, 2003; Ross & Williams, 2002).
- Development of members from within the group to become future trainers (SCIHDC, 2003)
- Facilitating access to required resources by both peer educators and peer learners (future peer trainers) (SCIHDC, 2003).
- Interactively work towards the desired outcome of the programme in terms of developing the knowledge, skills and attitudes required by peer learners to practice safe sex (Ross & Williams, 2002)
- Planning for booster interventions to re-enforce learning and strengthen impact (Parker *et al.*, 2003; Ross & Williams, 2002)
- Evaluating of the effectiveness of the programme (SCIHDC, 2003). The most common methodology used is a form of pre-test/post-test design evaluating change in knowledge, practice and attitudes (UNAIDS, 1999) but Ross & Williams. (2002) argue for a more rigorous evaluation that includes comparing intervention results between intervention and control groups.

While the approach was being developed health reforms were taking place in response to the Ottawa Charter (Petersen & Swartz, 2002). These reforms have particularly impacted on the focus and priority being given in delivery of health services. The health reforms have had a reciprocal influence on implementation of interventions.

2.6.3 Implementing HIV interventions

The major health reforms are described by the WHO as generations with the second and third generation of health reforms affecting HIV interventions (Petersen & Swartz, 2002). The second generation of health reform followed the Alma Ata meeting of WHO in 1978 at which the concept of primary health care and the agenda of 'Health for All by the year 2000' was described. The Ottawa Charter and later WHO directives gave further impetus by developing a comprehensive approach to health promotion. Currently we are in the third generation of health reform largely driven by failures in the delivery of comprehensive primary health care and economic forces (Petersen & Swartz, 2002). With these changes go a demand driven approach to health care with new buzz words being 'cost-effectiveness' and selection according to priorities called 'basic', 'essential' or 'urgent'. The third generation of health reform has been criticised with Petersen and Swartz (2002) stating that these reforms and the behavioural approach adopted by many projects has contributed to the ineffectiveness of South African interventions in limiting the HIV epidemic.

To-date, in South Africa, reaching areas with limited health services has been slow (Ammann, 2003; Coleman & Mngomezulu, 1999). Variations in sexual practice, language and culture often limit the application of standard HIV prevention programmes. Strategies that are culturally sensitive and ethically acceptable are required (Dushay, Singer, Weeks, Rohena & Gruber, 2001; Smedley & Syme, 2001; Coleman & Mngomezulu, 1999).

Educational strategies need to facilitate community members interacting with people who are HIV positive. Such a strategy will assist people to move beyond having a merely theoretical knowledge of HIV/AIDS and should result in realistic responses to the HIV epidemic. While studies show that many South Africans now know 'facts' related to HIV (Eaton *et al.*, 2003; HSRC, 2002; MacPhail & Campbell, 2001; Wilkinson & Wilkinson, 2001) the epidemic is still growing, showing that behavioural change is lagging. Trained persons are needed to reach the wider community focusing on areas of high prevalence and under-served rural and peri-urban areas (Ammann, 2003). To be effective issues covered need to include:

- Increasing insight and acceptance of HIV awareness and educational messages (Ammann, 2003, Coleman & Mngomezulu, 1999).
- Assisting individuals to understand their vulnerability to HIV is a requirement for translating knowledge into behaviour change (Ammann, 2003; MacPhail & Campbell, 2001; Coleman & Mngomezulu, 1999).

- Destigmatisation of HIV and people who are HIV positive in order to promote caring, positive attitudes and support towards HIV positive persons (Department of Health (UK), 2001).
- Sexual behavioural responses and coping mechanisms in the prevention and management of HIV (Ammann, 2003; Campbell & MacPhail, 2002; Coleman & Mngomezulu, 1999)
- Promoting safe sexual practice (Ammann, 2003; Ross & Williams, 2002; Coleman & Mngomezulu, 1999)
- Promotion of gender equality especially between sexual partners (Coleman & Mngomezulu, 1999).

To Petersen & Swartz, (2002) the way to achieve these goals is through an empowering, developmental approach. Gender inequality lies at the heart of the epidemic in Southern Africa and to address this issue requires interventions leading to gender empowerment.

Empowerment theory can be applied to give understanding to the factors exacerbating the spread of HIV in Southern Africa as it exposes gender-related factors (Buvé *et al.*, 2002; Heyzer, 2001; Pulerwitz *et al.*, 2000; Preston-Whyte, 1995). These include the culturally described role of women and the power differential in the relationship between men and women (Buvé *et al.*, 2002; Gilbert & Walker, 2002; Petersen & Swartz, 2002; Swart-Kruger & Richter, 1997). At the same time it highlights the need for enlarging understanding and knowledge of heterosexual male sexuality and sexual risk-taking. This knowledge then needs to be applied to develop and test prevention approaches targeted to men and couples (Karim *et al.*, 2003; Amaro, 2000; Fahlberg *et al.*, 1991) in order to improve the health of women.

Textbox 2: Summary of lessons from empowerment theory

Summary of lessons from empowerment theory

- Greater understanding of gender-related factors is required (Buvé *et al.*, 2002; Heyzer, 2001; Preston-Whyte, 1995) particularly the expectations of a given community towards their women and the power differential in the relationship between men and women (Buvé *et al.*, 2002).
- Ensuring that research and interventions addressing women carries the voice of the 'affected' through their active and legitimate participation in all aspects of the process (Heyzer, 2001; Muli-Musime, 2001; Preston-Whyte, 1995).
- Development of effective interventions to assist women with a history of abuse, as well as, protect those currently being abused (Heyzer, 2001; Amaro, 2000).
- Enlarge understanding and knowledge of heterosexual male sexuality and sexual risk taking (Amaro, 2000).
- Developing and testing prevention approaches targeted to men and couples (Karim *et al.*, 2003; Bletcher, 2002; Amaro, 2000).
- Include interventions that providing economic upliftment to decrease financial dependence on male partners and the associated constraints (Preston-Whyte, 1995).
- Undertaking gender reviews of national legislation, policies and budgets related to HIV/AIDS prevention, treatment, care and impact mitigation (Heyzer, 2001).
- Focusing information and education efforts to address gender biases and inequality (Heyzer, 2001).
- Guaranteeing the rights of girls and women to legal protection including assurance of land, property and custody entitlements, equal access to treatment and commodities and freedom from harmful customs and practices (Heyzer, 2001).
- Improved availability of and access to prevention services and resources including male and female condoms (Heyzer, 2001).

The first section of this review described the determinants of HIV risk status. The second section considered the value of applying an empowerment approach to HIV interventions. The third section will now cover evaluation of empowerment status and HIV risk.

SECTION 3: EVALUATING EMPOWERMENT STATUS AND HIV RISK

2.7 EVALUATION

In this study two measures have been applied to measure programme effectiveness, namely, empowerment status HIV risk level. In this section literature will be discussed to gain insight into the measurement of empowerment status and HIV risk level.

2.7.1 Measurement of empowerment status

The use of impact indicators to evaluate the effectiveness of an empowerment intervention through the subjective assessment of personal control over an individual's life has been described (Albertyn, 2000, 1995; Sevefjord *et al.*, 2001; Iverson *et al.*, sa). Albertyn (1995) describes the indicators as covering the psychological, cognitive, behavioural, social, political and economic domains identifiable as 'specific outcomes' of the empowerment process. The empowerment status of an individual is a relative value calculated by determining the total number of indicators evident in an individual within their given context (Albertyn, 1995). Albertyn's measurement is across all three levels of empowerment providing the triangulation between the different dimensions of empowerment stated by Sevefjord *et al.*, (2001) to increase the reliability of the measure.

Each measurement is cross-sectional in nature, giving a measure of a learner's current empowerment status, intended to evaluate learner's status longitudinally indicating the direction of change rather than being a specific measure (Sevefjord *et al.*, 2001). Each learner is viewed as a 'case study' and comparisons are not intended (Albertyn, 1995) although the empowerment status of the group can be described (Mncube, 2003; Bester, 2002; Albertyn, 2000).

Limitations in the measurement of empowerment include its cross-sectional nature ('one-off snapshots') and the assumption that change is linear not accounting for individual variations (Rifkin, 2003; Sevefjord *et al.*, 2001). The concept that a cause can be identified for disempowerment and remedied to bring about change is disputed and critiqued as it can be viewed as prescriptive, defeating the objective to enhance a women's capacity for self-determination (Sevefjord *et al.*, 2001). Quantitative measurement is considered by Svefjord *et al.*, (2001) to be too limiting to capture the social change process and they advocate qualitative research methodologies and the use of triangulation to increase validity and reliability.

2.7.2 Evaluation of HIV risk

In the empirical part of this study sexual practices were evaluated as a measure of the effectiveness of an HIV intervention. The literature was used to identify sexually protective behaviours that could be measured through self-reports. Four such behaviours met these criteria namely, abstinence (Eaton *et al.*, 2003; Ammann, 2003; Amirkanian *et al.*, 2001; Umerah-Udezulu, 2001; Largarde *et al.*, 2000), faithfulness (Anderson, 2003; El-Bassel *et al.*, 2003; Karim *et al.*, 2003; Bui *et al.*, 2001; Oronsaye & Anukam., 2002), condom-use (Dorrington, Bradshaw & Budlender, 2002) and HIV testing (Grant & De Cock 2001; Department of Health (UK), 2001; MMWR, 2000). These behaviours will be analysed linking them to the factors that inform HIV risk and sexual practice.

2.7.3 Protective behaviours

Protective behaviours are linked to safety (Rose, 2004) and in the context of HIV will be a behaviour that reduces HIV risk (Bowleg *et al.*, 2000). HIV prevention is sometimes marketed using the catchy acronym 'ABC'. 'A' represents abstinence followed by B: for 'be faithful' referring to mutual monogamy and C: standing for 'condomise' (Cock, Marum, Mbori-Ngacha, 2003). These three protective behaviours as well as HIV testing will be described. This will be done by considering their role within a HIV prevention strategy, as well as, the factors facilitating and those inhibiting their adoption.

2.7.3.1 Abstinence

As a measure abstinence is described as a chosen period of no sexual activity (Karim *et al.*, 2003) and is an indicator of safety while enforced abstinence is an indicator of risk. Abstinence is an indicator of the factor describing relationship status (interface-level) and suggests scope for decision-making.

The literature describes abstinence as a controversial issue with proponents for and against it as part of a HIV prevention strategy. It is, however, a behavioural choice that can substantially lower the risk of acquiring sexually transmitted HIV (Ammann, 2003; Amirkanian *et al.*, 2001; Umerah-Udezulu, 2001). It is advanced by major religions, in particular for unmarried persons and women (Largarde *et al.*, 2000). Abstinence appears to be a strategy finding greater favour amongst women than men (Eaton *et al.*, 2003; Garbus, 2003). Reproductive health policy in South Africa is promoting the 'dual method' in primary health care settings (Myer *et al.*, 2002). This is a two pronged strategy combining prevention of unwanted pregnancy and HIV advocates the teaming of hormonal contraception with the use of condoms, non-penetrative sex or abstinence (Ammann, 2003; Myer *et al.*, 2002).

In Africa abstinence is often associated with separation of sexual partners in the post-natal period following childbirth or migration due to work or war (Gregson *et al.*, 2001; Bujra, 2000). In this study this form of abstinence is described as enforced abstinence. It is an indicator of risk as the period of enforced abstinence is a time of higher risk for men having extra-marital affairs (Hollander, 2002; Bujra, 2000).

While the literature concurs that abstinence is behaviour of personal choice, it is one that can be denied or taken from women. One example drawn from a South African study documents the difficulty teenage participants have choosing abstinence (Wood *et al.*, sa). An informant described the nurses, who were also participants in the study, responding to her inability to choose abstinence as follows: " nurses say this generation doesn't wait to be given the keys, they give themselves keys by having babies, but you find this (advice) is not practical because it is not possible that our boyfriends simply talk to us and that it ends there - he wants to have sex with you first" (Wood *et al.*, sa).

2.7.3.2 Mutual monogamy

Faithfulness, mutual faithfulness and mutual monogamy all describe the commitment of sexual partners to their relationship. When both partners abide by this principle it is a protective and safe sexual behaviour (Ammann, 2003; Eaton *et al.*, 2003). The difficulty arises when one partner feels safe while not realising that the other is placing them both at risk through having partners outside the relationship. The medical literature remains relatively silent on this strategy (Umerah-Udezulu, 2001) although it is described as being more acceptable than condoms (Eaton *et al.*, 2003) and the behaviour change most often reported as desirable (Garbus, 2003).

Faithfulness (monogamy) is a measure of safety compared to unfaithfulness which predicts behaviours that includes multiple partners (concurrent or sequentially), casual sex, sex with strangers and reports of sexually transmitted infections. Other measures used include lifetime number of partners (Anderson, 2003; El-Bassel *et al.*, 2003; Karim *et al.*, 2003), number of sexual partners - concurrent or sequentially (Bui *et al.*, 2001; Oronsaye & Anukam, 2002) and incidents of casual sex (Anderson, 2003).

2.7.3.3 Condom use

When condom-use is analysed it cuts across the three domains of analysis (micro-level, interface-level and macro-level) providing a way of describing the interaction of factors contributing to either risk or protection (see addendum 8). Condom use is linked to self-efficacy (knowledge, skills and attitudes & feelings) with other predicators and indicators being identifiable including school attendance, educational level, perception of vulnerability to HIV, culturally scripted roles, religious affiliation, geographical location, economic status and socio-political status.

Condoms are the mainstay of prevention (Anderson, 2003; Zellner, 2003) and include the male and female condoms. As part of condom promotion programmes, health information is provided, as knowledge is assumed to be empowering (Zellner, 2003). However, research shows mixed results challenging the assumption that having accurate knowledge about transmission of HIV will increase condom usage (Zellner, 2003).

Richens, Imrie & Copas (2000) warn that large-scale condom use could fail to affect HIV transmission rates as condom promotion can undermine unintended changes in sexual risk perception and behaviour. Condom promotion has the potential to appeal to individuals who practice unsafe sex. They might feel they could continue unsafe practices, such as multiple partners, if they use a condom. This dependence on condoms while maintaining risky sexual practices could lead to an increase in HIV transmissions due to condom failure and the fact that condoms cannot be considered to offer 100% protection.

2.7.3.4 Voluntary counselling and testing

A primary activity of HIV prevention programmes is the limitation of the spread of HIV from infected to uninfected persons. VCT is considered to play an important role in such programmes (Department of Health (UK), 2001; Grant & De Cock, 2001; McCarthy, 2001; Department of Health (SA), 2000; MMWR, 2000; Fylkesnes, sa). VCT provides the opportunity for individuals and couples to know their sero-status and make appropriate decisions, seek support and care, receive guidance as regards risk reduction applicable to their sero-status and sexual activity, make decisions about childbearing and breast-feeding (McCarthy, 2001; Department of Health (UK), 2001; Fylkesnes, sa). Even in areas where VCT is available demand is frequently low (Garbus, 2003; Fylkesnes, sa), as VCT does carry a cost and potentially negative consequences which include family and relationship disruptions, sexual violence, stigma and discrimination (Burke, 2004; Ammann, 2003; El-Bassel *et al.*, 2003; Coates, Grinstead, Gregorich, Heilbron, Wolf & Choi, *et al.*, 2000). These must outweigh perceived benefits to the individual of knowing or disclosing his/her HIV status (Wojcicki & Malala, 2001; Fylkesnes, sa, Mathews *et al.*, 1999). It is essential when promoting HIV testing to clarify that having a test in no way offers protection against the virus.

Findings from a study designed to measure the efficacy of VCT in developing countries with limited resources demonstrated six ways that the practice of VCT can be a protective behaviour namely:

- Through disclosure of sero-positive status to partner (Coates *et al.*, 2000).
- Individuals testing HIV positive are more likely to reduce unprotected sex with primary and non- primary partners (El-Bassel *et al.*, 2003; Exner *et al.*, 2002; Jha *et al.*, 2001).
- Couples receiving joint counselling anc testing reduced unprotected sex (Burke, 2004; El-Bassel *et al.*, 2003;).
- Sero-discordant couples were more likely to reduce unprotected sex than couples where both members are negative.
- HIV testing as part of antenatal screening enables mothers to make decisions to reduce vertical transmission to her baby (Burke, 2004; Dorrington *et al.*, 2002; Cliffe, Tookey & Nicoll, 2001; Department of Health (UK), 2001; Ades, Sculpher, Gibb, Gupta & Ratcliffe, 1999; Gray *et al.*, 1998).
- HIV testing enables the person testing HIV positive to make decisions to enhance the quality of his/her life and access appropriate treatment such as anti-HIV drugs (Seipone *et al.*, 2005;Dorrington *et al.*, 2002; Exner *et al.*, 2002; Morris & Williamson, 2001)

There is no consensus as to whether VCT could be an effective strategy for reducing stigma or if it would perpetuate stigma. Stigma and social isolation of people starts with a HIV positive test result. Ammann (2003) and France (2002) report that if more people had been through the process of testing and the personal reflection associated with this, stigma would be reduced). However, the core issue to consider with testing is the ethical issue of confidentiality, an important human rights issue (HSRC, 2002; Fylkesnes, sa; Mathews *et al.*, 1999).

2.7.3.5 Other protective behaviours

There are other practices/methods being investigated such as microbiocides, male circumcision (Morris & Williamson, 2001) and increasing the acceptability of the female condom (Gollub, 2000). Microbiocides show promise as a strategy which will be under the control of women (Potts, & Walsh, 2003; Mc Cormack, Hayes, Johnson, 2001).

2.7.4 Self-reports on sexual practices

The measurement of a shift from risky to safe sexual practice can be used to evaluate programme effectiveness. This requires collecting sensitive data and relying on self-reports as a primary source of data. This section summarises the literature with regard to the benefits and limitations of self-reports.

Evaluation of effectiveness of interventions on the adoption of HIV-prevention behaviours includes measuring changed sexual practices from ones that are risky to safe sex practices (Agha, 2003; LaBrie *et al.*, 2000; UNAIDS, 1999). To demonstrate this requires reliance on self reported behaviour change. Researchers have addressed the issue of validity pertinent to self-administered questionnaires and self-reported behaviour change with respect to accuracy and honesty acknowledging limitations. These include presentation bias (Karim *et al.*, 2003; Gregson *et al.*, 2002; Bui *et al.*, 2001; Amirkhanian *et al.*, 2001; Largarde *et al.*, 2000; LeBrie *et al.*, 2000; Marin *et al.*, 1993; Obunbanjo & Herbst, 1998) and the Hawthorne effect (Mbulaiteye *et al.*, 2002). Anderson (2003) reports that, despite the 'pitfalls' of self-reported behaviour, it is more effective than interviewer- administered interviews or collection of data using focus groups. Accuracy of recall is also questioned (Smith, 2003; LaBrie *et al.*, 2000). Although knowledge of the law related to knowingly infecting someone with HIV is low it might influence answers in a questionnaire (MMWR, 2000).

Gregson *et al.*, (2001) argue that data on sexual behaviour change collected over a short time period are subjected to a number of limitations. Factors such as holidays, time of the month in relation to receiving wages and intermittent factors related to cultural practices, as well as difficulties related to statistically providing significant evidence are described.

Strategies considered to minimise exaggerated reports include using code numbers rather than names on questionnaires, the researcher not being involved in the administration of the questionnaires and emphasising honesty as well as confidentiality in handling of responses (Smith, 2003; Obunbanjo & Herbst., (1998). Coates *et al.*(2000) suggest asking for self-reports on sexually transmitted infections alongside that of the data on sexual behaviour. The assumption being that this data is more likely to be accurate and that the presence of sexually transmitted infection would indicate risky sexual behaviour. Coates *et al.*, (2000) considered the strong association between self-reported sexual behaviour and the incidence of sexually transmitted diseases would verify the accuracy of reporting.

2.8 CONCLUSION

There is an extensive body of literature demonstrating that to change the tide of the HIV epidemic in South Africa requires gender equality. For this to be a reality in Sub-Saharan Africa female empowerment is required, which in turn will give women access to the resources, information, health care and support services they require to maintain their health and specifically their sexual health.

This literature review contributes to this study by examining three themes. The first addresses the factors informing the vulnerability of women for sexually transmitted HIV. This begins with an overview of the impact of HIV on women in Sub-Saharan Africa. An in-depth analysis of the factors and the barriers to safe sexual practice follows.

The second theme is empowerment, specifically applied to HIV interventions and focuses on HIV education programmes as a method of changing sexual practices. The final theme is evaluation and considers programme evaluation were the stated goal is empowerment and behaviour change.

The knowledge gained through this review has been applied to the research designed methodology that is comprehensively described in chapter 3. Specifically this literature review has informed the design of the questionnaire for investigating the factors that determine the vulnerability of women for sexually transmitted HIV educational programme implemented during this study. The Framework of factors determining the vulnerability of women for sexually transmitted HIV (figure 2.3) is applied to analyse the data obtained on sexual practices and the findings are described in chapter 4.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The previous chapter described the literature review. The first section analysed the factors determining gender-related vulnerability, the second HIV interventions and in particular the empowerment approach. The third section focused on evaluating programmes when a stated goal is raising empowerment status and lowering HIV risk.

This chapter describes the empirical part of the study, a research process with three phases. The phases were the needs analysis (phase 1), planning (phase 2) and implementation and evaluation (phase 3). The needs analysis (phase 1) focused on obtaining base-line measurements describing the empowerment status and level of gender-related vulnerability of the participants for sexually transmitted HIV. Planning covered the adaptation of a standard HIV educational intervention through the use of enhancements. It also included the revision of the quantitative tool used during the needs analysis (phase 1). The revised tool was applied in phase 3. The core activities of the implementation and evaluation phase (phase 3) were the implementation of the pilot educational HIV intervention and evaluation of its effectiveness. Measurement of efficacy was in terms of changes evident in the level of empowerment and HIV risk of the participants forming the experimental group.

3.2 RESEARCH METHODOLOGY

The purpose of this research was to determine whether the identification of the level of empowerment and the factors determining risk for sexually transmitted HIV could be used to guide changes in an HIV educational programme. The desired change was an increase in empowerment status and a shift to safer sexual practices.

This research was located within the empowerment paradigm which has as an assumption that people who are oppressed can be assisted to develop the skills to exert the power required to access resources (Amaro, 2000). This assumption was applied in this study to examine if the incorporation of empowerment into HIV educational programmes could enable participants to gain the skills, resources and power required for adopting safe sexual practices.

The study was undertaken at Robin Trust and the participants were registered learners undertaking one of the four-month home care training programmes selected for the study. Within each of the 4 month programmes is a two-day HIV/AIDS workshop, entitled the Soul City 'Train the Trainer' programme.

3.3 SITUATIONAL ANALYSIS

3.3.1 Background to Robin Trust, South Africa

Robin Trust was established as a Christian charitable and welfare Trust (Non-profit making organisation) in 1993 in order to serve the community by providing support and community/home-based care service within a primary health care model. The Trust aims to uplift people who are educationally disadvantaged through training in health care and nursing, as well as through job creation. Clients are vulnerable people, increasingly children and adults infected and affected by HIV/AIDS.

Robin Trust has rural (Hlomo-Hlomo), peri-urban (Guguletu) and urban sites (Port-Elizabeth and Cape Town). The sites included in the study because they offer home care training and the Soul City 'Train the Trainer' programme were Cape Town, Hlomo-Hlomo and Port Elizabeth. Other activities facilitated at various sites include a home care service, in-patient units for the care of the Aged and a Ward of Compassion for terminally ill children and teenagers. Job creation and an income-generation programme, two keys to long-term sustainability, have been developed as models for application in urban, rural and peri-urban communities (Rockey, 2001).

3.3.2 Home-care training

Robin Trust has, using the standards generated by the Ancillary Health Care Standard Generating Body and by other Standard Generating Bodies (SGBs), aligned this programme to the National Qualifications Framework of South Africa. The programme being offered at Robin Trust focuses on preparing carers for working in a home and providing care for a client who is disabled, frail or ill and has the following components:

- Scope of practice and conduct of a home carer
- Care activities (covering the activities of daily living)
- HIV/AIDS: addressed specifically, but not exclusively during the Soul City 'Train the Trainer' programme.
- First Aid and emergencies
- Common illnesses/diseases

(See addendum 2)

3.3.3 Soul City

Soul City formed an NGO known as the Institute for Health and Development Communication (Soul City) in 1992 (SDIHDC). The organisation has a health promotion focus and subscribes to the principles of the World Health Organisation's Ottawa Charter. Soul City is a social change project, which aims to impact on society at the level of the individual, community and socio-political. Health is not viewed as a product of an individual's choice, but rather as the outcome of an enabling environment in which the structural barriers to achieving health and development are removed (Soul City, 2003).

Soul City has devised a model named the 'Edutainment Model' defined as 'the art of integrating social issues into popular and high-quality entertainment formats, based on a thorough research process' (Soul City, 2003). The vehicles SCIHDC uses include prime time television and radio dramas to engage mass audiences, as well as a community level training programme on HIV/AIDS, such as the one used at Robin Trust.

3.3.4 Soul City HIV/AIDS training

As a response to requests for training and as a way to distribute the Soul City HIV and AIDS materials, Soul City set up partnerships with fourteen provincially based non-governmental organisations all participating in HIV/AIDS training within their field.

The training model used by Soul City is a cascade model with a peer education approach focusing on providing accurate HIV/AIDS information and at the same time training the learner to be a trainer. For this reason the course covers training methods and the use of training materials. (For further information on the Soul City programme see addendum 3)

3.4 RESEARCH PHASES

Two themes flow throughout the three research phases: the evaluation of empowerment status and HIV risk (see table 3.1). An overview of the research phases follows after the table

Table 3.1 Research phases

1 Phase	Questionnaire	Activities
Phase 1 Needs analysis Participants: analysis group	Empowerment Identification of factors Practices informing HIV risk	Base-line measurements
Phase 2 Planning	Revision of questionnaire	Revision of questionnaire Planning of HIV educational intervention
Phase 3 Implementation and Evaluation Participants: experimental group	Empowerment Assessment of HIV risk	Implementation of HIV educational intervention Evaluation

3.4.1 Phase 1: Needs analysis

For this phase of the study the analysis group comprised of eighty four learners from three Robin Trust sites that included students from Cape Town, Western Cape (74), Port Elizabeth, Eastern Cape (7) and Hlomo-Hlomo, KwaZulu-Natal (3). The analysis group had a similar profile to the experimental group, who formed part of the pilot educational intervention, described in phase 3. The following activities informed the needs analysis:

Measurement of empowerment status

In accordance with objective 1.4.2.1.1 the empowerment status of the participants of the analysis group was measured. The empowerment questionnaire, designed by Albertyn (2000), was applied as a once-off test at commencement of the training programme (see addendum 4).

Measurement of factors determining vulnerability

The questionnaire used was titled Questionnaire: Factors determining vulnerability for sexually transmitted HIV (shortened to "Identification of Factors" in table 3.1). The questionnaire had two sections each with a specific purpose (see addendum 5).

Section 1: Qualitative interview tool - Identification of Factors - objective 1.4.2.1 (b)

The first section collected qualitative data describing the factors determining the vulnerability of women for sexually transmitted HIV. The questionnaire was applied to a sample of 21 learners drawn from the 84 participants who had completed the initial empowerment questionnaire.

Section 2: Quantitative data collection tool - Practices informing HIV risk - objective 1.4.2.1 (c)

This questionnaire measured current sexual practices enabling a description of the participants' HIV risk.

3.4.2 Phase 2: Planning

During this phase the data collected during the needs analysis (phase 1) and the literature review guided planning.

Planning of enhancements - objective 1.4.2.2 (a)

Enhancements were developed to increase the effectiveness of a generic HIV educational programme (Soul City 'Train the Trainer programme').

Revised questionnaire: Self-report questionnaire: Assessment of HIV risk - objective 1.4.2.2 (b)

Section 2: Quantitative data collection tool - Practices informing HIV risk was revised to stand alone in order to collect data on current sexual practices influencing HIV risk during phase 3. This questionnaire was named the "Self report questionnaire: Assessment of HIV risk" and shortened in table 3.1 as Assessment of HIV risk (see also addendum 6).

3.4.2.1 Planning of the HIV training programme

Two research-based studies (Eaton *et al.*, 2003; Albertyn, 2000, 1995), in conjunction with the findings from the literature review of this study, informed the planning of the educational HIV intervention. Respectively the frameworks (Albertyn, 1995) and Eaton *et al.* (2003) assisted with understanding the empowerment process (Albertyn, 1995) and the barriers to safe sexual practices (Eaton *et al.*, 2003). A brief overview of each will be given followed by an explanation of the synthesis of the two frameworks leading to the development of the POWER analysis tool.

The theoretical framework on empowerment (Albertyn, 2000, 1995)

The theoretical framework on empowerment (Albertyn, 2000; 1995) provides a method of identifying the concepts and indicators of empowerment. These are displayed as a framework with sub-divisions according to three levels of empowerment (Albertyn, 1995). The three levels: micro-level, interface level and macro-level were further sub-divided into the empowerment outcomes that in turn inform measurable indicators describing empowerment status. The summation of the indicators of empowerment can be expressed as frequencies providing a profile of the participants' empowerment status. The questionnaire designed by Albertyn (2000) used in this study enables the identification of areas of disempowerment. Further, during planning of the enhancements to a standard HIV training programme, Albertyn's framework (1995:69) guided the incorporation of empowerment strategies into the educational HIV intervention (phase 2). The next step required moving from a purely empowerment focus and applying this information to lowering HIV risk in women. Therefore the question asked was "What are the specific barriers to the adoption of safe sexual practice arising out of an identified area of disempowerment?" To answer this question the work of Eaton *et al.,* (2003) was applied.

Identification of barriers to safe sexual practice (Eaton *et al.,* 2003)

The framework for organising the relationship between sexual behaviour, personal factors and the proximal and distal contexts (Eaton *et al.,* 2003) describes sexual behaviour being influenced at three levels: within the person, within the proximal context (interpersonal relationships and immediate physical environment) and the distal context (cultural and structural factors). The complex and reciprocal relationships between these levels are described demonstrating how they culminate in either safe or risky sexual practice. The factors are described by Eaton *et al.,* (2003) from the perspective of forming barriers to safe sexual practice. This study has been based on the work of Albertyn (2000, 1995) and Eaton *et al.,* (2003) in order to answer the next question, namely: how can the factors be determined and used to guide HIV interventions?

Factors determining the gender-related vulnerability

In this study a method of describing the factors through the identification of indicators is suggested. As demonstrated in Table 2.22 (chapter 2) the factors identified in the framework of factors determining the vulnerability of women for sexually transmitted HIV (figure 2.3) can be linked to the domains of analysis described by both Albertyn (2000,1995) and Eaton *et al.,* (2003).

Synergy between the three frameworks of Macleod-Downes, Eaton *et al.*, (2003) and Albertyn (2000; 1995)

This synergy between these provides the theoretical basis of the intervention strategy used in this study. This intervention is in the form of enhancements to a standard HIV educational programme. The enhancements were selected with the purpose of increasing the empowerment status while decreasing the HIV risk status of the participants. The process of selecting enhancements follows three steps. An analysis tool entitled the Planning of Workers Empowerment Results (POWER) was drafted to assist this process (addendum 9). The factors described by the three frameworks are displayed with two columns being left open for recording findings. This was to enable linkages between the described concepts. The purpose of each column will be described.

Power Analysis Tool - the columns

Column 1: HIV risk (Factors as described in the Framework of factors determining the vulnerability of women for sexually transmitted HIV – See figure 2.3).

Column 2: was left open so that the findings in terms of practices that are associated with HIV risk could be inserted into the second column.

Column 3: Barriers to safe sexual practice (Factors as described in the Framework for organising the relationship between sexual behaviour, personal factors and the proximal and distal contexts - Eaton *et al.*, 2003).

Column 4: was for recording areas of identified disempowerment.

Column 5: Empowerment concepts from the Theoretical framework on empowerment (Albertyn, 1995).

Selecting enhancements - 3 steps

Step 1: Recording the findings in terms of HIV risk (Column 2) **and disempowerment** (Column 4).

Step 2: Identification of the enhancement required. With the findings graphically displayed against the concepts from the three barriers it is easy to visualise the factor linked to the practice identified as leading to HIV risk (Column 2). Next the barrier(s) can be identified that forms an obstacle to safe sexual practice (Column 3). Thirdly the areas of disempowerment identified are highlighted which are viewed in this study as the root of risky sexual practice (Column 4). Alongside in the 5th column are the empowerment concepts. Empowerment concepts in line with practices identified as posing HIV risk and identified disempowerment need to be addressed in the form of enhancements.

Step 3: Selection of enhancements

Albertyn (2000, 1995) described measures that can be used to quantify empowerment status using empowerment indicators or outcomes over the three levels of analysis. Responses indicating disempowerment are noted. Empowerment interventions that address the areas of disempowerment are then selected and applied in the form of enhancements. This activity of basing a learning programme on a needs assessment linked to measurement of empowerment was first described by Albertyn (2000, 1995) and used by Mncube (2003) and Bester (2002). Table 3.2 displays the empowerment outcomes as described by Albertyn (2000:104-110) with examples of intervention strategies, based on the work of Albertyn (2000, 1995; Mncube, 2003; Bester 2002).

Table 3.2: EMPOWERMENT OUTCOMES GUIDING INTERVENTIONS
(Albertyn, 2000: 104-110)

MICRO-LEVEL	INTERFACE LEVEL	MACRO-LEVEL
Empowerment enables changes in: **Attitude** through: • change in attitude • motivation • personal control **Feelings** through increases in: • self-respect • self-concept • self-confidence • self-efficacy • dignity • inner strength • individual growth • increase in control over body, • feelings of being powerful **Skills** through: • Increase in personal skills that includes: • confidence • competence • range and depth of skills • paid work • career advancement • control over resources	Empowerment enables changes increasing: **Community participation** • Identity as part of a family, group and community • Support - receiving and giving support • Behaviour including assertiveness and mastery over affairs **Action** • Understanding community action in terms of power and status of groups ,as well as, areas of common concern • Collaborative action to influence change in terms of family and community	Empowerment enables changes increasing **Beliefs** Critical reflection enables: • understanding of place in society • awareness of social problems Contribution reflected in: • command over events • ability to make a difference in the world **Action** Participation reflected in: • readiness to take action • managing social change Change is reflected in: • reconstruction (in the new South Africa) • social change • readiness to take action • Action **Effects** Rights reflected in: • legal rights • political rights Power reflected in: • freedom from policies and orders • increased collective political power
EXAMPLE OF REMEDIAL ACTIONS (Albertyn, 2000:94-97; Mncube, 2003:62,63,112,114,116)	**EXAMPLES OF REMEDIAL ACTIONS** (Albertyn 2000:94-97; Mncube, 2003:62,63,111,112,113)	**EXAMPLES OF REMEDIAL ACTIONS** (Albertyn, 2000:94-97; Mncube, 2003:63, 115; Bester 2002:66)
Self development Building of self-esteem Life skills Stress management Personal skills Leadership skills Budgeting skills Time management	Problem-solving Communication and decision-making skills Improving the quality of relationships in, as well as, outside the workplace Conflict resolution	Knowing your rights including labour law Experiencing productivity and success Entrepreneurial skills

3.4.3 Phase 3: Implementation and Evaluation (objective 1.4.2.3.1 and 1.4.2.3.2)

This phase included the implementation of the enhanced, HIV educational programme as a pilot programme at Robin Trust (Cape Town). The participants (experimental group) were 24 learners all registered for home-based care training (1 November 2003 - 29 February 2004). The phase included evaluating the effect of the enhanced, HIV educational programme and its efficacy in terms of raising empowerment status and lowering HIV risk of the participants.

3.5. SAMPLING

3.5.1 Population

The population for this study was the learners undergoing training for the home-care course at Robin Trust. The following eligibility criteria were applied:

- Be undertaking the home care training programme at Robin Trust.
- Be female (In order to meet the aim of the study - see 1.4.1.).
- Be 18 years of age or older (no upper limit set).
- Have a minimum educational qualification of Grade 9 (9 years of schooling).

3.5.2 Sampling approach

Throughout the study the sample were a selected group of learners registered for home care training at Robin Trust and had given their informed consent. The sampling method varied according to the research activity been undertaken and sampling took place on 3 occasions.

Needs analysis (phase 1): Analysis group

Sample 1: Empowerment status of participants (needs analysis - phase 1)

The analysis group included all participants from three training sites over the period of April 2004 until August 2004. This final analysis group consisted of 84 participants, who form a sample of convenience, from three participating training sites of Cape Town (74), Port Elizabeth (7) and Hlomo-Hlomo (3).

Sample 2: Factors determining vulnerability

The sample for factors was one of convenience drawn from the 84 learners in the analysis group and consisted of 21 participants from the three training sites. All participants completed both sections of the questionnaire. The sample was one of convenience based on those willing to participate and the questionnaire was completed over the period June 2003 to August 2003. The final sample was comprised of participants from Cape Town (16), Port Elizabeth (2) and Hlomo-Hlomo (3).

Implementation and evaluation (phase 3): Experimental group

Sample 3: Empowerment status and HIV risk

Effectiveness of the pilot educational HIV intervention was evaluated by assessing empowerment status and HIV risk using a pre-test post-test design. The experimental group consisted of all of the 24 learners who had given their informed consent. All the participants were registered learners on the home-care training programme commencing 1 November 2003 and ending 27 February 2004 and were part of the training group selected for the pilot intervention programme.

3.6 MEASURING INSTRUMENTS

Through the study three different measuring instruments were used namely:

- Empowerment questionnaire (Albertyn, 2000).
- Factors determining the vulnerability of women for sexually transmitted HIV which has two sections
    - Section 1: Qualitative interview tool - Identification of Factors
    - Section 2: Quantitative data collection tool - Practices informing HIV risk
- Self-report questionnaire: Assessment of HIV risk

3.6.1 Empowerment questionnaire

A structured questionnaire designed by Albertyn (2000) was used to collect quantitative data measuring the empowerment status of the respondents (in phase 1 & 3). The questionnaire was available in English, Afrikaans, Xhosa and Zulu. It is a self-administered structured questionnaire consisting of 61 items using a 4-point likert scale (see addendum 4).

3.6.2 Factors determining the vulnerability

This instrument (assessment of the factors determining the vulnerability of women for sexually transmitted HIV) comprised two sections (see addendum 5). The first section is a semi-structured design for collecting qualitative data during one-to-one interviews. The second section is a structured self-report questionnaire to collect quantitative data. Both sections of this questionnaire were administered to a sample of 21 participants selected from the analysis group as part of the needs analysis (phase 1). This tool was revised during the planning phase (phase 2) and re-administered during the evaluation phase (phase 3) (see addendum 6). During the evaluation process the revised self-report questionnaire (Assessment of HIV risk) was administered as a pre-test and as a post-test to monitor and evaluate the effectiveness of the enhanced HIV educational programme (phase 3).

Development of questionnaire: Factors determining vulnerability status

General comments (applies to both section 1 and section 2)

The questionnaire was designed to assess the vulnerability of the participants for sexually transmitted HIV during the needs analysis (phase 1). The tool was developed after an extensive search of the literature and is based on 5 clusters of 19 factors (see table 2.2). Questions were formulated using this framework as a basis. Development of each section of the questionnaire will be discussed separately.

Section 1 (qualitative interview tool - identification of factors)

The questionnaire was designed to collect qualitative data on the factors determining the vulnerability of women for sexually transmitted HIV. Participants were individually interviewed. Each interview was taped on a cassette, later transcribed and thematically analysed. Four themes were explored: number of sexual partners, protective behaviours, power relationships and stigmatisation of people who are HIV positive. The four themes, based on the literature review are described:

Theme 1 - Sexual partners - number of partners

A decrease in the number of sexual partners has been cited (Mbulaiteye *et al.*, 2002) as an important factor in reducing the incidence of HIV, therefore this theme was explored to assess whether multiple partners are a risk relevant to the analysis group. This theme provided an opportunity to explore cultural and behavioural norms, prescribed gender roles and the protective behaviour of mutual faithfulness (monogamy).

Theme 2 - Safer Sex - What can women do to protect themselves from acquiring HIV?

The question was asked to identify the following:

- The knowledge women have of safer sexual practices
- The protective behaviours women feel able to negotiate
- The response of men to requests for safer sexual practices
- The barriers that women describe to safer sexual practice

Theme 3: Power balance in relationships

The literature highlighted the unequal, power balance between the genders which is seen a key reason for the rapid spread of HIV in Sub-Saharan Africa (Buve *et al.*, 2002). For this reason it is explored as a major theme.

Theme 4: Stigmatisation of HIV positive people

This theme was explored because stigmatisation, linked to a culture of disrespect for human rights, is cited as an important reason for non-disclosure (HSRC, 2002). It is sometimes called the 'second epidemic' and needs to be understood if women are to be enabled to know their own and their partner's HIV status and accurately assess their vulnerability to HIV.

In summary, the purpose of this semi-structured interview schedule questionnaire was to facilitate an exploration of the factors influencing women's HIV risk without limiting the responses to the major themes. This information was analysed and collated with the quantitative information to determine:

- the vulnerability of the analysis group participants for sexually transmitted HIV;
- provide, with the findings on the empowerment status, base-line data to inform the revision of the quantitative data collection tool of the questionnaire; and
- the enhancement of a training programme to address identified learning needs .

Section 2 (quantitative data collection tool - practices informing HIV risk)

This section of the questionnaire used a self-report method of data collection and describes practices of the participants in terms of HIV risk. The data collected contributed towards informing the enhancements required for the educational HIV intervention. During the planning phase (phase 2) the tool was revised to form the self-report questionnaire: practices informing HIV risk which was used as one of the evaluation tools administered during phase 3. Sexual behaviours cited in the literature as reducing the incidence of HIV namely abstinence, faithfulness, condom use and HIV testing, as well as barriers to the adoption of these practices were included. The questionnaire was available in English, Zulu and Xhosa. The Zulu questionnaire was translated by N.P Khumalo (home-care trainer) and checked by S Denysschen (home-care) trainer and a group of home-care learners whose first language was Zulu. The Xhosa questionnaire was translated by Patience Kunene (registered nurse / tutor) and checked by S. Sainsbury (registered nurse / tutor) and a group of home-care learners whose first language was Xhosa. Table 3.3 displays the items on the questionnaire with linked indicators.

Table 3.3 Items included on the quantitative data collection tool - Practices informing HIV risk

Question	Indicator of safety	Indicator of risk
1. Geographical location of Residence (Factor: Geographical location of residence - macro-level)	Suburban residence	Rural or peri-urban Informal settlement
2. Age of participant (Factor: Age -micro-level)	Mature (31 years or more)	Young (30 years or less)
3. Marital status (Factor: relationship status - interface level)	Single	Married, divorced, widowed
4. Number of sexual partners over past year (Factor: Relationship status - interface)	One sexual partner or practising abstinence	Two or more sexual partners
5. Lifetime number of partners (Relationship status - interface)	Two or less	Three or more
6. Faithfulness of (male) partner (Relationship status - interface)	Accurate assessment that he is faithful	Report that he is unfaithful Inaccurate assessment of partner's faithfulness
7. Exchange of sex for material benefit (Economic status - macro-level)	No transactional sex	Transactional sex
8. Condom usage with transactional sex (Self-efficacy - micro-level)	Consistent condom usage	Inconsistent or no condom use
9. Casual sex (Relationship status - interface)	Reports of no casual sex	Reports of casual sex
10. VCT - self (Perception of vulnerability to HIV - micro-level)	Had a HIV test	Has not had a HIV test
11. Sero-status of partner (Perception of vulnerability to HIV - micro-level)	Negative	Positive or does not know result
12. Vaginal infections (Relationship status - interface)	No report of STI's	Reports STI's
13. VCT - .Partners (Communication with sexual partner - interface level)	Partner has had a HIV test	Partner has not had a HIV test or this is not known by the participant
14. VCT - partner's sero-status Communication with sexual partner - interface)	Negative	Positive or not known
15. 1 Partners willingness to use a condom (Self-efficacy - micro-level)	Willing	Unwilling
15.2 Responds to request with anger (Gender power balance -interface)	No	Yes
15.3 Responds to request with blaming /suspicion (Gender power balance -interface)	No	Yes
15.4 Responds to request with name calling (Gender power balance - interface)	No	Yes

3.6.3 Self-report questionnaire: Assessment of HIV risk

Using the knowledge gained from the needs analysis (phase 1) and the literature, the quantitative data collection tool was revised (phase 2). The revised tool was titled self-report questionnaire: practices informing HIV risk. It was administered as a pre-test (on commencement of training) and post-test (on completion of the 4 month course) to measure changes in practices lowering the HIV risk of the participants (phase 3).

Questionnaire development – Self-report questionnaire: practices influencing HIV risk

It was decided, in order to allow comparison between the sample tested during the needs analysis (phase 1) and those completing the questionnaire during the evaluation (phase 3), to keep all the questions asked in the original form but to expand the questionnaire in certain areas as follows:

(i) **Place of residence**: during the qualitative interviews it became evident that many learners identified Cape Town as their place of residence but that many had only moved to Cape Town as adults and often fairly recently. A number had lived in rural areas for most of their lives. In terms of HIV risk the literature shows that there is less likelihood of condom use and greater vulnerability through certain traditional practices amongst rural dwellers (Garbus, 2003). Shebeens and migrancy are associated with increased vulnerability and affect particularly peri-urban areas and informal settlements more than rural ones (Garbus, 2003). For this reason, to gain clarity, the following questions were added:

- How long have you lived at current place of residence?
- What is the name of the place where you have lived for the longest time in your life?

(ii) **Living arrangement**: it is evident from the literature and the qualitative interviews that dependency limits decision-making and that women might cohabit with a man as a means of financial survival and protection (Garbus, 2003). For this reason it was felt that information on marital status alone was insufficient. The following question was added:

- Are you living (a) by yourself (b) with your parents (c) with your husband (d) your boyfriend (e) other ....specify?

(iii) **Age of sexual debut**: was included as information obtained from the qualitative interviews seemed to indicate that women have little choice about sexually activity and girls become sexually active in their teenager years. Later sexual debut has been cited as an indicator of a healthy self -esteem and is considered a predictor of safe sexual practice (Eaton *et al.,* 2003). Being sexually active places a girl/woman at risk and the literature indicates that the first sexual experience is often forced or coerced (Jewkes & Abrahams, 2002) so it was considered important to know from what age the learners have been sexually active.

(iv) **Unfaithfulness**: Participants also admitted to unfaithfulness. As unfaithfulness appears to place many at risk this was tested by asking:

- Over the past 12 months have you been faithful to your partner (a) no (b) yes, always (c) sometimes (d) other…specify.

(v) **Condom usage**: Data from the qualitative interviews pointed to women desiring to remain abstinent or monogamous but this being denied. The male condom is thus the most accessible protective behaviour available. The interviewees reported a range of responses, many negative, from men in response to requests to use a condom. The researcher therefore wanted to explore the prevalence and acceptability of condom usage amongst the learners, as well as their view on the ease of using condoms (self-efficacy). To elicit this information the following questions were added:

- How often do you use condoms when having sex (a) never (b) always (c) sometimes? (testing consistency of use)
- The last time you had sex did you use a condom (a) yes (b) no (c) other…specify? (testing consistency of use)
- What does your partner think about condoms (a) he is happy to use condoms (b) he prefers not to use a condom but uses them when I ask him to (c) he says he won't use a condom (d) other …specify? (testing acceptability to male partner)
- If you ask your boyfriend or husband to wear a condom when having sex with you what would he do (a) wear a condom (b) tell you that you are being unfaithful to him (c) hit or beat you (d) refuse to wear a condom (e) say only prostitutes use condoms (f) other…specify? (Testing response of male partner to a request to use a condom).

(vi) The locus of **decision-making** is a key factor in terms of gender equality within the sexual relationship. To test this, the following questions were added:

- Can you choose whether or not you want to have sex (a) yes (b) no (c) other...specify? (tests locus of decision-making and indicates whether the choice to practice abstinence would be respected)
- In your relationship who makes the decisions about sex (a) you do (b) your partner (c) you and your partner discuss the issue and make the decision jointly (d) other...specify?
- Have you ever been raped (a) yes (b) no (c) other...specify

(vii) **Communication** with a sexual partner was tested by adding the following questions:

- Do you talk to your partner about contraception to prevent pregnancy (a) yes (b) no (c) sometimes (d) other...specify?
- Do you talk to your partner about HIV/AIDS (a) yes (b) no (c) sometimes (d) other...specify?

(viii) The literature demonstrates a strong link between a perceived vulnerability to HIV/AIDS and the decision to adopt protective sexual behaviour. This was tested by asking: Do you think there is a strong possibility you might get HIV (a) yes (b) no (c) why do you say this...space was left for the respondent to write down their answer.

(ix) While South African literature has recently noted a correlation between alcohol and HIV risk it is still infrequently reported in the health literature. The interviewees described shebeens (taverns) as not only being places were people went to drink but a place that men and women sought out casual sexual partners or 'girlfriends'. Eaton *et al.* (2003) state that an individual's perceived ability to carry out a skill can determine whether it is attempted, and as it is known that alcohol can impair motor co-ordination and judgement, a question was included to test whether condoms are used when having sex after drinking alcohol.

- Does drinking alcohol increase the likelihood of you having sex with someone that is not your partner (a)yes (b) no (c) other...specify
- When you have sex after drinking alcohol do you use a condom (a) no (b) yes (c) other...specify?

3.7 DATA COLLECTION

3.7.1 Data collection phases

During the needs analysis (phase 1) as well as the implementation and evaluation (phase 3) data was collected.

3.7.1.1 Needs analysis (phase 1) - analysis group

During the needs analysis phase (phase 1) the data was collected to gain a base-line measure of the empowerment status and the vulnerability of the analysis group for sexually transmitted HIV. The findings were applied to guide enhancements to increase programme effectiveness and for revision of section 2 of the questionnaire (quantitative data collection tool). Data collected included:

- 'Empowerment status' questionnaire (Albertyn, 2000) was administered once off to all the 84 participants in phase 1. Findings were expressed as a total empowerment score, as well as the sub-totals which identified/determined the participants' empowerment status at the micro-level, interface level and macro-level.
- 'Factors determining the vulnerability of women for sexually transmitted HIV': questionnaire was administered to 21 of the total group of participants who formed a sample of convenience. The findings describe the factors determining the vulnerability of the participants for sexually transmitted HIV.

3.7.1.2 Implementation & evaluation phase (phase 3) - experimental group

The effectiveness of the pilot intervention was measured in terms of it increasing empowerment status and decreasing HIV risk status. Therefore the following data was collected:

- The empowerment status of the experimental group was collected to measure the empowerment status of individual participants. The empowerment questionnaire (Albertyn, 2000) was administered prior to implementation of the programme and after implementation to evaluate programme effectiveness in terms of empowering the participants (phase 3).
- The self-report questionnaire (self-report on practices influencing HIV risk) was administered on the first and last day of the training programme and administered by a Trainer, acting as the course facilitator, from Robin Trust. Participants completed the questionnaires without any interference and were encouraged to report accurately by being assured of confidentiality.

3.7.2 Data collection strategies

Data collection took place through individual interviews and completion of self-reported questionnaires.

3.7.2.1 Data collected using an interview strategy.

During the needs analysis (phase 1), section 1 (qualitative interview tool - Identifying factors), forming part of the questionnaire for determining HIV risk was applied during individual interviews.

3.7.2.2 Self reported data

Self-reporting data was collected using the empowerment questionnaire (Albertyn, 2000) and section 2 (quantitative data collection tool - Practices informing HIV risk) of the questionnaire determining HIV vulnerability status, as well as the revised questionnaire for collecting self reported practices: Therefore the assessment of HIV risk in this study relied on self-reported data.

3.8 DATA ANALYSIS

3.8.1 Empowerment status of participants

The data from the questionnaire was analysed by a statistician to provide an empowerment score through measurement of indicators on the micro-level, interface and macro-level. Data was also coded and frequency tables drawn up to obtain descriptive statistics. These findings allowed interpretation as follows:

- Needs analysis (phase 1): each learner's empowerment scores could be considered individually and as a group. The particular value to this study was that the frequency of specific indicators of empowerment was considered to identify the specific areas of disempowerment of the learners displayed as a given study group (in this case that of the analysis group (see addendum 11 & 12).
- Implementation and evaluation (phase 3): data collected from the pre-test and post-test was analysed and the findings are described in chapter 4.

3.8.2 Factors determining the vulnerability of women for sexually transmitted HIV

Data analysis was as follows:

Section 1 (qualitative interview tool - Identification of factors): The volume of qualitative data required a structured organisation analysis. The method utilised is termed 'reconceptualisation' using a process of splitting. Data categories were identified developed and data 'slotted' into the formed system. In this way the data was viewed as chosen categories rather than in its original context (Dev, 1993) and for the purposes of this study each category and sub-category is recognisable and has significance (Dev, 1993). The categories were established through the literature review and are displayed as a framework (Framework of factors determining the vulnerability of women for sexually transmitted HIV - figure 2.3). These categories were used as the analysis categories and the findings are reported using the format provided by the framework in chapter 4.

Section 2 (quantitative data collection tool): The responses were summated and frequency tables drawn up. The behaviours were then considered in relation to the literature and categorised as either predicting safety or susceptibility or indicating low or high risk (see addendum 13).

3.8.3 Self-reported practices influencing HIV risk (revised tool)

The data was analysed (as above) by collating the responses into a frequency table. The behaviours were then considered and categorised using the framework of factors determining the vulnerability of women for sexually transmitted HIV as a guide. This enabled an analysis of a practice or sexual behaviour in terms of it predicting safety of susceptibility or indicating high or low risk for acquiring sexually transmitted HIV. As data was collected as a pre - and post-test it allowed comparison between these values and provided an opportunity to evaluate the effectiveness of the enhanced intervention in terms of changing sexual behaviour.

3.9 VALIDITY AND RELIABILITY

Three different tools were used and each was carefully considered in terms of evidencing validity and reliability.

3.9.1 Empowerment status of participants

The structured questionnaire was designed and tested by Albertyn (2000). Mncube (2003), quoting Mouton (2003:49) states that the benefit of using an existing instrument is that it has high measurement validity and reliability and this is the case with Albertyn's empowerment questionnaire.

During the development process Albertyn tested the instrument for readability and understandability. Statistical analysis was used in the process of standardisation (2000). The structured questionnaire was found to be consistent and dependable for collecting data for measuring empowerment of learners evidenced by the similar patterns of responses over the study period and between the results of the structured and unstructured questionnaire (Albertyn, 2000). Subsequently other researchers have used Albertyn's questionnaire and have found it to reflect the change in learner's empowerment status (Mncube, 2003; Bester, 2002).

3.9.2 Factors determining the vulnerability of women for sexually transmitted HIV

This questionnaire was formed after an extensive search of the literature and is based on the categories of factors that either facilitate or inhibit the adoption of safe sexual practices by women (see figure 2.3).

Polit & Hungler (1993) state that triangulation, making use of multiple methods or perspectives to collect and interpret data increases accuracy. In this study there is triangulation between the data collected on empowerment and HIV risk, as well as the use made of qualitative and quantitative data. The comparison takes place using the analysis tool. There is also transparency in that the questionnaires, taped interviews and transcribed interviews can be verified and secondary analysis of the data is possible and in principle the study can be replicated (Polit & Hungler, 1993).

Face validity was tested using a group of home carers for a small pilot study. The respondents were home-care learners and could be considered similar to the participants in the main study. The class lecturer (experienced registered nurse and educator) worked through the instrument

with 20 current home care students in the first month of training. Understanding of each question was checked and workshopped until consensus on the wording and meaning was reached. Following this the translated Xhosa and Zulu versions were given to students and they were requested to give the meaning of the questions in English. It was found that the questions being asked would elicit the range of answers required. The understanding of the students of the questions also reflects the reliability of the instrument.

When considering face validity a question asked is whether the sample was large enough to draw the conclusions being made about the behaviour tested. An expert statistician was consulted who considered the sample size to be adequate (Schutte, 2001)

Content validity was tested by asking an experienced registered nurse, with qualifications in nursing education and primary health care, and a current practitioner in the field of family planning and women's health, to ensure no important questions were left out. Feedback was given that the impact of the rural/urban divide on empowerment status and the resultant ability to ask for protective measures had been omitted. The questionnaire was adapted to incorporate this aspect.

3.9.3 The interviewer - section 1: qualitative data collection tool – (Identification of factors)

The researcher was the interviewer for all the interviews. The following issues were identified as potentially affecting the validity and reliability of the data collected:

- The researcher / interviewer, as Managing Trustee of Robin Trust, was aware of the power differential. In order to minimise this, time was spent before the start of the interview creating rapport between the interviewer and participant by means of general discussion. The structure was explained. Written informed consent was obtained to audio taping and the interview started. This allowed the participants to interact in a relaxed, informal way with the interviewer and in this way barriers were lowered. Further when introducing herself, the role of the interviewer as a learner from the participants was stressed. This seemed to be a role the participants quickly embraced, wanting the interviewer to understand what it is like to be a woman within their communities.
- The cultural taboo related to discussing sex was something the interviewer was aware of but as she was older than the participants and known to be a nurse this appeared to help. Also questions were asked in the third person until it was evident the participant was comfortable talking about themselves in terms of their experiences. The interviewer identified this as the

time when the participant would start to use the pronoun 'I' or make a statement such as 'Let me tell you about myself…'

- Differences in power as regards educational levels could potentially make participants feel inferior and their views less relevant. The strategy of re-enforcing that the interview was about a two way learning process between the facilitators and the participant seemed to break down this barrier.
- Consistency in the interview format potentially reduced variability in the responses to the questions.

Language could be a barrier as the first language of the facilitator was English. It is a requirement of the course that all participants are fluent in English. Although it was a requirement of the course it was recognised that language could be a barrier for participants for whom English was not a first language. Therefore the questionnaire was available in English, Afikaans, Xhosa and Zulu. An interpreter was available; however, the assistance of the interpreter was not requested

3.9.4 Reliability of self-reported data

A self-report method was used for the collection of data related to risk assessment of women for acquiring sexually transmitted HIV. This methodology has a number of limitations that need to be considered. Reliability of a self-report measure is a concern in a study including sexual behaviour (Coates *et al.,* 2000) and face-to-face questions may result in a bias towards socially desirable responses (MMWR, 2000). This is particularly true if the information is considered sensitive or socially inappropriate and could result in a participant giving a socially desirable response rather than a truthful one (Bui *et al.,* 2001). Consent, anonymity and the use of an answer sheet to record simply 'yes or no' are described in the literature as ways of reducing the frequency of untruthful answers (Bui *et al.,* 2001). Confidentiality was maintained. As stated by Hudson (2001) as controversial as it might seem, 'epidemiologists need to listen to their participants in their studies and believe the self-reported behaviour change'.

3.10 ETHICAL CONSIDERATIONS

Questionnaires and interviews were administered with the informed consent of informants (see addendum 10). Any learner could choose not to participate and be excluded from the research but continue on the training programme. The opportunity to withdraw without prejudice at anytime was explained to all participants. In view of the fact that this research covers sensitive and private issues, and that the interviewer [qualitative component] was a Trustee of the Trust, participants were assured of confidentiality during the research process and reporting of the results. Anonymity of participants was assured. Audiotapes of interviews and questionnaires were locked in a safe at Robin Trust (Cape Town) when not in use. All data will be destroyed once the findings have been reported and published. Counselling and support was available to any participant who felt the need for this as a result of her participation in the study.

3.11 CONCLUSION

This chapter has discussed the research methodology employed for the empirical part of this study, as well as the activities undertaken during each of the three phases of the research process. In chapter 4 the findings of the study are presented and discussed.

PRESENTATION OF RESULTS

4.1. INTRODUCTION

4.2 PHASE 1: NEEDS ANALYSIS

4.3 PHASE 2: PLANNING

4.4 PHASE 3: IMPLEMENTATION AND EVALUATION

4.1 INTRODUCTION

Chapter 3 described the general methods employed in the three phases (needs analysis – phase 1, planning – phase 2 and implementation and evaluation - phase 3) of this study namely:

(i) Collection of baseline information;
(ii) Use of findings to enhance a generic training programme being used as an HIV intervention, to target specific learner needs and revise the questionnaire;
(iii) Administration of the revised questionnaire and the empowerment questionnaire to evaluate the effectiveness of the implemented pilot HIV educational intervention (phase 3).

4.2 PHASE 1: NEEDS ANALYSIS

The study group was comprised of 84 participants (the analysis group). Participants were from three Robin Trust sites: Cape Town, Western Cape (74), Port Elizabeth, Eastern Cape (7) and Hlomo-Hlomo, Kwazulu-Natal (3) and part of a home care training group selected for the study between 1 April 2003 until 30 August 2003. They completed two questionnaires describing their empowerment status and vulnerability for sexually transmitted HIV.

During the needs analysis, two different questionnaires were applied to describe empowerment status and the vulnerability of women for sexually transmitted HIV. The findings will be discussed according to the tool applied.

Findings - needs analysis (phase 1)

4.2.1. Empowerment status of the group (see objective 1.4.2.3.2)

The empowerment score of each of the indicators was collated according to frequency distributions demonstrating areas of relative empowerment versus disempowerment. The score was also expressed as a total group score and indicates the group's score on three levels, namely micro-level, interface level and macro-level (see table 4.1).

Table 4.1: Empowerment score of total group (n=84)

Levels	Micro-level (Personal control)	Interface (Interpersonal/ Community)	Macro-level (Larger societal/political environment)	Total
Score totals	75,17%	72,24%	69,69%	72,48%

Empowerment - total score

The highest score (75,17%) was on the micro-level indicating the participants' sense of personal control, followed by the interface level (72,24%). The lowest score was on the macro-level (69,69%) (See table 4.1). The lower score on the macro-level suggests that within the area of social and political action the participants experience a sense of powerlessness. This was evident on examination of individual statements by participants, showing that they strongly agreed with statements such as "My vote in elections won't make much difference". Participants strongly disagreed with the statement "I feel that I have a contribution to make to society" and "I will speak out in a meeting if I am unhappy with what is being said".

These findings correlate with the comments made by Thompson (2001). Thompson analyses the impact of inequalities across three levels that are comparable to that of Albertyn (2000, 1995) and Eaton et al., (2003). He names his method PCS analysis with the letters PCS standing for personal, cultural and structural. He goes further to state that the degree of control or impact an individual can have is also related to the three levels. Therefore a woman will have the greatest control on the individual, followed by the cultural and lastly on the structural level. This is borne out in the results reported above from this study.

Empowerment - frequency distribution+

Table 4.2: Empowerment profile (analysis group n=84)

SUMMARY OF FINDINGS	
STRENGTHS - EMPOWERMENT	**WEAKNESSES - DISEMPOWERMENT**
MICRO-LEVEL	
Vision (proactive) and belief in success Confidence expressed in personal skills and knowledge base Believe they can make changes to improve their situation Feels they have the power to change their own life	Feels unable to attain goals Low self-esteem Locus of control outside of self In need of paid work Self blame evident
INTERFACE LEVEL	
Feels friends know their difficulties Feels part of their community Will speak out if unhappy	Expresses low level of family/ community support Scores low on acting collaboratively
MACRO-LEVEL	
Satisfied with their place in society Feel they have a contribution to make Aware of rights	Believe their vote won't change anything Score low on feeling able to contribute to South Africa Will not speak out when they feel their rights are being infringed upon Feel politically powerless

Frequencies provide an empowerment profile of the group identifying areas of empowerment and disempowerment according to the indicators of empowerment on three levels. Frequency is calculated by totalling each group member's response to each item on the questionnaire. This is calculated based on the participant's response to each of the 61 statements, with weighting (1 - 4) on a Likert scale. According to the distribution of the responses it is possible to draft a profile of the group's empowerment. The frequency table for the analysis group is attached as addendum number 11 and the findings have been interpreted in table 4.2.

Discussion

Using the work of Eaton *et al* (2003) as a basis, a link can be identified when examining the indicators of empowerment to sexual risk practices. Eaton *et al.* (2003) analyse the barriers to safe sexual practice on three levels that overlap with the three levels as described by Albertyn (2000). It is therefore possible to link potential barriers to safe sexual practice to the identified area of disempowerment. The discussion that follows attempts to make the link in order to identify potential barriers to safe sexual practice.

MICRO-LEVEL

Distributions suggesting disempowerment in terms of low self-worth and a locus of control outside of self suggest barriers to safe sex that could result in risky practices such as early sexual debut, multiple partners and condom non-use. These behaviours can result when affirmation is sought through sexual partners resulting in an early sexual debut and multiple partners (Eaton *et al*, 2003). Condom non-use is more likely if the female partner wants to prove her love and trust and links to the high need for affirmation. Therefore strategies that can build the participant in terms of self-worth and self-esteem could be protective.

A sense of fatalism and opportunities such as 'luck' and difficulty in determining the direction of their own life is evident. Participants blame themselves for their lack of achievement. Low scores on the questions covering employment indicate a need for interventions that build skills associated with employment and career advancement. An example of an entrepreneurial skills training programme using an empowerment approach was described by Bester (2002). Preparation for work is part of the Robin Trust programme so was not offered as an enhancement as already in place.

INTERFACE LEVEL

While generally empowerment scores indicated empowerment on this level (72,24%) scores were low in the following categories:

- Team work/collaboration
- Support in the community
- Support in the work-place
- Identification with colleagues

Eaton *et al.* (2003) describes feeling unsupported and ineffective communication as increasing vulnerability to HIV and if this is applied to the above findings it indicates an area of vulnerability in terms of the participants. Being in a relationship requires teamwork to enable effective sexual negotiation and decision-making ability. Therefore communication and coping strategies, as well as skills enabling decision-making and negotiation of safe sexual practice skills need to be part of the enhanced programme.

MACRO-LEVEL

This was the area with the lowest score (69,69%) of the three levels. Responses indicate that participants know their rights yet most of them indicate they do not make a difference at a societal level and feel unable to articulate their concerns. Skills required include advocacy and support and a sense of being a useful member of their community and society.

4.2.2 Findings - Factors determining the vulnerability of women for sexually transmitted HIV

The sample of 21 participants distributed across the three training sites Cape Town (16), Port Elizabeth (2) and Hlomo-Hlomo (3) completed two questionnaires as described in chapter 3 (3.4.1).

4.2.2.1 Section 1: qualitative interview tool - Identification of factors (objective 1.4.2.1.2)
Individual interviews were conducted to collect data to identify the factors influencing the adoption of safe sexual practices. Categories and sub-categories of the factors and their related predictors and indicators had been constructed using the literature as a framework (figure 2.3). The data was analysed and categorised into the category sets described by the framework and in accordance with the method of 'splitting' (Dev, 1993:129) (see paragraph 3.8.2). The structure of this framework will be used for describing the findings.

MICRO LEVEL

The first level of analysis is the micro-level (personal factors) and covers perception of vulnerability to HIV and self-efficacy (knowledge, skills, attitudes and feelings as related to safe sexual practices).

Perception of vulnerability to HIV

The women expressed their lack of 'trust' of men as they considered them unfaithful (10 interviewees). This gave rise to fear of AIDS (Interviewee No.15), feelings of vulnerability (7 interviewees) yet some felt 'not at risk' (3 interviewees) with fourteen interviewees reporting that they did 'want to protect themselves'.

Caldwell *et al.* (1992) state that in order to understand the severity of AIDS, the association between the disease and death must be made. Two interviewees reported learning of AIDS at a funeral (Interviewee 7 & 15). This assisted them to make a strong connection between knowing someone as a friend or relative, who has died from AIDS, and understanding the severity of the disease (described as a 'killer disease') leading to a change to safe sexual practice.

Reports of having a HIV test is considered an indicator that an individual perceives her/himself as vulnerable to HIV. All the interviewees reported knowledge of HIV testing and said they knew where to go for testing. Five (5) interviewees described organisational barriers related to access. Despite this many (66.66%) stated they would not go for HIV testing as they did not want to know their status. This is a concerning trend as women who do not know their HIV status and are HIV positive might spread HIV to their sexual partners and unborn children (Department of Health (UK),

2001; Coates, *et al.*, 2000; Gray *et al.*, 1998). Eaton *et al.*, (2003) report that many at risk individuals have an unrealistically low perception of their risk. Stigma is cited as one reason for denying their potential status as HIV positive.

Self-efficacy

The components of self-efficacy can be drawn as a triangle with attitudes and feelings forming the base of the triangle with the sides being knowledge and skills. Each component sketches a description of an aspect of self-efficacy and will be discussed separately.

Self-efficacy

Knowledge related to safe sexual practice

In order to practice safe sex women need to be firstly well informed about HIV and secondly to apply the knowledge to their own sexual practice. Consideration was given to the source of interviewees' knowledge on HIV and to knowledge of protective sexual behaviours.

Sixteen interviewees stated that their community knew about AIDS. This knowledge is re-enforced by knowing people (friend or relative) with HIV/AIDS (76,2%). Eleven Interviewees reported that this knowledge resulted in them changing their own sexual behaviour. While interviewees considered themselves knowledgeable regarding HIV/AIDS they stated their communities in general are slow to show change in behaviour in response to HIV.

As regards knowledge of protective behaviours, interviewees had knowledge about the female condom although no one used it other than once off for the novelty. One interviewee who did try it said it made her feel like a 'rubbish-bin' and that it was not acceptable to her partner (Interviewee 9). Abstinence was considered a theoretical option as the cost of the consequences was too high. Monogamy was desirable but not considered a realistic expectation. The male condom was the most commonly used protective behaviour but while perceived as an effective protective agent by the women, was poorly accepted by most men with statements such as 'boys refuse them' (interviewee 20) which is confirmed by the literature (Eaton *et al.*, 2002). Participants indicated, as described in the literature, that condoms are not usually used with wives but more often used with extra-marital partners (Garbus, 2003; Willan, 2002; Gregson *et al.*, 2001). Partners who had sufficient knowledge of HIV/AIDS, were more open to condom-use. VCT has been described as a protective behaviour in that it raises awareness of vulnerability to HIV. The 3 interviewees, who reported going with a partner for HIV testing found it valuable in terms of them knowing their partner's sero-status. The literature describes HIV testing as ensuring early access to treatment and an essential component of programmes to limit further transmission (Department of Health (UK), 2001) but this benefit of VCT was not considered by any of the interviewees.

Skills for safe sexual practice

Skills required are based on a foundation of knowledge but require confidence and the ability (skill) to adopt a safe sexual practice (Eaton *et al.,* 2003). Indicators of safe sex include one or more of the following behaviours, namely; abstinence, mutual monogamy and consistent and correct condom use. Alcohol and substance abuse can influence condom use by impairing the intention to practice safe sex and performance of the skill required (Eaton *et al.,* 2003).

Interviewees reported that married women couldn't refuse sex or insist on a condom (47,62%). Men were reported by all participants to be 'unfaithful', with admissions that women are sometimes unfaithful too (28,57%). Abstinence was only seen as an option by an interviewee with a strong Christian belief. Alcohol was associated with decreased inhibitions, unfaithful sexual behaviour (47,62%), and non-use of a condom ('would not think of a condom') (Interviewee 4).

Attitudes and feelings contribute to judgements

Attitudes and feelings contribute either to sound judgement that support safe sexual practice or impair judgement leading to the adoption of risky sexual practices.

Feelings of self-worth and self-esteem contribute to a lowered need for sexual relationships to affirm and consequently a lower number of sexual partners and a later sexual onset (Eaton *et al.,* 2003). Love and trust appear to be used by men to manipulate in order to obtain sex, and more specifically unprotected sex (Eaton *et al.,* 2003). Casual relationships can exacerbate a situation in which women look for affirmation, and may lead to a false sense of affirmation compared to true affirmation in which self-respect and self-worth dominate. The participants listed the following reasons for consenting to sex: having parented a baby together (1 interviewee), trust (1 interviewee), love (6 interviewees) and loneliness (5 interviewees).

INTERFACE LEVEL

The interface face describes the interpersonal factors and the factors within the immediate living environment that can facilitate or form a barrier to safe sexual practice. These factors include relationship status, gender power balance, living arrangement, communication with family, friends and colleagues, communication with sexual partner and perception of normative behaviour.

Relationship status

Relationship status is described by indicators that differentiate between a status of being single, married, divorced, widowed, committed or engaging in casual sex with a known or unknown sexual partner. A predictor of a low risk includes freedom to choose own sexual/marriage partner, first marriage at a later age and autonomous decision-making without restrictions linked to relationship status.

Multiple sexual partners appears to be a well accepted norm for men. Labour migration, trucking and the availability of sex workers have exacerbated this (Garbus, 2003; Smith, 2003). "The man is like pumpkin... it spreads all over the garden" (Interviewee 1) sums up the way the interviewees reported on the unfaithfulness and their lack of trust of men. Polygamy was stated to be "rare" as are arranged marriages yet women did not feel they had decision-making power with respect to choosing sexual partners. Married women had restricted decision-making ability, a view confirmed in the literature (Camlin & Chimbwete, 2003; Garbus, 2003, HSRC, 2002).

Gender power balance

This factor considers the 'balance of power' in the relationship and the indicators are unrestricted scope for sexual negotiation, sexual equality, no sexual violence and the ability to refuse unsafe sex.

Men are considered to have the "upper hand" (Interviewee 2) and while having the balance of power they have lost the "trust of women" particularly as a result of unfaithfulness. Interviewees did describe how they can "talk" to convince a partner of their need for condom use and there were reports of success. Generally women felt single women could make the request for condom use (19 interviewees) but they felt that many men would refuse to use one. Few women felt it was possible for married women to request condom-use with it being described as a "complex issue". Only 4 interviewees thought the man might concede to their request with 7 answering "maybe" and 8 interviewees reporting that the request would be refused. Both single and married women related that the consequence of refusing sex could be anger, being left for another partner or a beating (33,33%). Concern to avoid these consequences is reported as depriving women of the ability to negotiate on sexual matters (Eaton *et al.,* 2002).

Communication with family, friends and work colleagues

Taboos with regard to talking about sex between parents and children are well documented (Eaton *et al.,* 2002) and were also raised by interviewees (interviewees 14 & 15). One spoke of how her parents had not informed her about sex but as the price of lacking information is no longer just pregnancy but AIDS, she will make sure her child is well informed.

Women appear to communicate with one another about HIV/AIDS. Reports of women talking to one another about HIV abounded during the interviews. These discussions provided the interviewees with insights into the disease including transmission and the "suffering" of the person with AIDS. Three interviewees reported being volunteers within the field of HIV to assist with health education (Interviewees 5,7,13).

Communication with sexual partner

A Kenyan study reported that women perceived their partner's behaviour as a risk factor with men agreeing that their sexual behaviour places women at risk for HIV (Camlin & Chimbwete, 2003). The findings concur with this. The interviewees described a generalised mistrust of their partners and were concerned about the risk their partners' behaviour placed on them. Women would welcome knowing their partners HIV risk but felt their partners were unlikely to disclose to them (Interviewees 4 & 6).

While the interviewees did report that traditional practices such as polygamy are rare, the described behaviours such as of unfaithfulness, coercion and violence by men suggests a sub-ordinate and undervalued role for women.

The role of stigma on disclosure, perception of risk and behaviour change is raised by Camlin & Chimbwete (2003). If stigmatisation is a very real threat then people will deny their status (Camlin & Chimbwete, 2003; Eaton *et al.,* 2002) to protect themselves from consequences such as social isolation. This was reported by the interviewees with thirteen interviewees (61,9%) stating that people are stigmatised in their communities, eleven stating that people are afraid of HIV positive people and that people who are known to be HIV positive are 'cut-off' (11 interviewees 52,38%). The response can be severe such as rejection of a child whose mother has died of AIDS (1 interviewee), men responding negatively to their partners disclosure with comments such as she is a "flirt" (1 interviewee) and "could not control herself" (6 interviewees). Interviewees reported infected people saying they were angry (8 interviewees) and will "spread HIV so not alone" (4 interviewees). When participants were asked if they wanted to know their own status fourteen (66,66%) said "no" with interviewee 15 stating that the decision to disclose needs to be carefully considered.

While two interviewees spoke of their rights neither saw them as being able to effect real protection. Interviewee 16 told how a community health worker had taught that 'women must insist on a condom then if beaten they should go to a safe house'. When speaking of an older man insisting on sex with a younger woman it was reported "they (men) don't care about your rights" (Interviewee 13). One interviewee considered forced sex as rape (Interviewee 14).

Influence of normative behaviour

Literature indicates that an individual's perception of normative behaviour influences his/her choices. The following perceptions were noted during the interviews. Interviewees considered it to be:

- Acceptable for men and women to have sex before marriage.
- Acceptable, particularly for boys, to have multiple partners prior to marriage. (Concurs with the findings reported by Eaton *et al.*, 2003).
- Rare for a husband to be faithful (only one interviewee considered her husband to be faithful). This correlates to the HSRC findings that more men than women have multiple partners (2002).
- 'Sometimes' (opposed to consistently) that women are unfaithful.
- Acceptable to have a baby outside of marriage.
- Uncommon to practice abstinence. (Concurs with the report of Eaton, *et al.*, 2003).
- 'Rare' that traditional practices like polygamy and arranged marriage take place. That polygamy is rare was a finding of the HSRC report (2002).
- Harder for boys than girls to oppose peer pressure as greater pressure is placed on boys. (Concurs with the report of Eaton *et al.*, 2003).

MACRO-LEVEL

The macro-level describes the cultural and structural factors informing the HIV risk status namely: culturally scripted roles, religious affiliation, geographical location, economic status, socio-political factors (gender, age, ethnicity/race, school attendance and educational level) and the influence of the media.

Culturally scripted gender roles

The role of women within a given cultural context is often described and prescribed by the cultural value placed on being female and the respect and compliance with human rights. Gender value is determined by culture and practices such as paying a bride price ('lobola') that convey a sense of the women being the property of the man can be harmful to women (Garbus, 2003). Other traditional practices such as genital mutilation can further denigrate women and harm their health. The culturally prescribed role can be in accordance with or in conflict with human rights. Gender roles described by the interviewees portrayed women as the homemakers who have the domestic role while men go out - often to 'party'. Men were described as being able "to do what they please when not with their woman and the woman just stay at home and be the angel" (Interviewee 1). Men are viewed as the dominant partner and as the people who earn the salary.

Religious affiliation

The influence of belief or religion was not specifically explored as one of the themes but as it is described in the literature it is included here (Eaton *et al.*, 2003). One woman, who identified herself as a Christian, expressed that abstinence and faithfulness are her preferred protective behaviours in accordance with church teaching.

Geographical location

Interviewees reported living in sub-economic areas with the majority living within so-called informal settlements. According to the HSRC study (2002) the areas of the highest incidence and prevalence of HIV are the informal settlements suggesting that many of the participants are at risk. While previous studies had indicated that rural dwellers have a high risk of HIV this has been disputed by the HSRC report (2002) which found rural people to have the lowest HIV infection rate. Kwazulu-Natal that had been previously described with the highest HIV rate was only ranked fourth in the HSRC report (2002).

Economic status

Interviewees reported that they planned to delay having children until they are economically secure and this was motivated by the difficulties they had experienced growing up with poverty. The exchange of sex for gain arising out of need caused by poverty (1 interviewee) lack of food, and in exchange for alcohol (4 interviewees) was reported.

Socio-political status

Factors grouped together to form socio-political status are age, gender, school attendance and educational level as well as ethnicity/race. These are the critical determinants of access to resources. Likewise these factors are often associated with powerlessness.

Age

Sexual debut was reported, by one interviewee, as occurring in her community during mid-teenage years "from 14 years old you see them walking with babies" (Interviewee 1). Sexual intercourse appears to be associated with coercion. Interviewees stated that women can refuse sex but that refusal can have "consequences" (Interviewee 3, 6 & 9) that include "being forced" (Interviewee 14,15 & 16), "anger" (Interviewee 15) and being abandoned (Interviewee 20). Young, urban interviewees reported a greater acceptability by boys of condom-use than rural interviewees and this is supported by the literature (Camlin & Chimbwete, 2003; Garbus, 2003).

An age differential between sexual partners greater than 5 years is associated with a high risk of acquiring HIV (Gregson *et al.,* 2003). Older men were perceived by participants as being "more understanding and respectful, as well as having assets: "rich and having a nice car" (Interviewees 3, 8 & 17). The participants felt the motivation for the other girls was "money" (14) and showed disapproval of the girls who participated in such an exchange, reflected by the tone of their voice when discussing this behaviour with the researcher.

School attendance

All participants had attended school with the lowest grade being achieved Grade 10. School attendance is a protective factor in that it keeps scholars occupied, provides opportunity to receive sex education and information on HIV/AIDS. Therefore this is a factor conferring a degree of safety on the participants (Lum *et al.,* 2003).

Education level

Interviewees had educational aspirations for themselves as they believed that a good education provided the opportunity to earn better advance in their careers.

Ethnicity/race

All participants were Black with two participants stating that Zulu was their first language and the rest Xhosa. Garbus (2003) states that even when adjustments are made to exclude socio-economic factors that race remains a "significant determinant" of HIV risk placing all these 21 participants in an "at risk" category.

Influence of the media

The influence of TV and radio was evident with a number of interviewees referring to the media as the source of information on HIV and gender related issues such as violence.

4.2.2.2 Section 2: quantitative data collection tool - Practices influencing HIV risk

Section 2 (quantitative data collection tool) was designed to collect **self-reported data on practices influencing HIV vulnerability status**. Four practices namely abstinence, monogamy, condom-use and HIV testing were identified as measurable and desirable outcomes of an intervention programme. They were therefore included in the questionnaire to assess the current practices of the participants. The findings, together with the findings of section 1, provided a comprehensive description of the participants' HIV risk status, required to guide the enhancements to an educational HIV intervention. Quantitative data was collected in addition to the qualitative data as a method of triangulation, as self-reports on sexual behaviour can be subject to bias (Camlin & Chimbwete, 2003).

The self-reported quantitative data (section 2) will therefore be compared and discussed with reference to the qualitative data collected using the semi-structured questionnaire (section 1) and the findings on the empowerment status of the analysis group.

MICRO-LEVEL

This level describes the factors that are considered personal and includes age, educational level, ethnicity/race, perception of vulnerability to HIV, perception of normative behaviour and self-efficacy (knowledge, skills, attitudes & feelings) in relation to safe sexual practice.

Perception of vulnerability

Women, in order to be motivated to adopt safe sexual behaviours, require an accurate evaluation of personal vulnerability to HIV.

HIV test – personally been for HIV testing

Table 4.3: HIV test - self

	Number of participants (n = 21)	
	N	%
Had a HIV test	12	57,14
Never had a HIV test	9	42,86

Of the analysis group 57,14% had been for testing (see table 4.2). This figure is low considering that many of the participants are of a child-bearing age so would be offered antenatal HIV testing. This suggests that either HIV testing is difficult to access or is not acceptable to the participants. During the interviewees all participants knew about HIV testing and said it was relatively accessible but many stated that they would not go for testing due to the fears of finding out they were HIV positive. This result correlates with that finding.

HIV test - results

Twelve participants reported having a HIV test of whom 10 participants reported the result of their test as "negative", 1 participant as "positive" and 1 participant did not get her result (see table 4.4).

Table 4.4: HIV test result - own

	Number of participants(n=12)	
	N	%
A. Negative	10	83,33
B. Positive	1	8,33
C. Don't know - did not get result	1	8,33

Number of sexual partners in the past 12 months

The response to this question reflects more accurately on current practice and demonstrates abstinence. When compared to the other data such as sexual debut and the number of life-time partners it is possible to identify secondary abstinence – a goal of many HIV interventions. It would appear from these findings that 23,81% of the participants have practised abstinence over the past year with one participant (4,76%) still being a virgin (primary abstinence).

Table 4.7: Faithfulness to partner - own

	Number of participants (n=21)	
	N	%
A. None	5	23,81
B. 1	15	71,43
C. 2-5	1	4,76

From these responses only 1 participant has not been committed to a single partner over a period of 12 months.

Table 4.8: Faithfulness of sexual partner

	No of participants (n=21)	
	N	%
None	8	38,10
1	3	14,28
2-5	2	9,52
Don't know	8	38,10

A finding from section 1 (qualitative - interviews) was of an emphatic response that all men were unfaithful. Eight of the respondents consider their partners to be faithful. Eight are unsure with 5 participants reporting that their partners are unfaithful. It could be suggested that the 8 responses of "don't know" indicate uncertainty on this issue. If the uncertain group is added to the 5 participants who state their partner is unfaithful, then 62% of the group are at risk.

Casual sex

All the participants stated that they do not engage in casual sex.

Presence of sexually transmitted infections (STI's)

Coates *et al.* (2000) suggests asking for self reports on sexually transmitted infections alongside that of the data on sexual behaviour; the assumption being that this data is more likely to be accurate and that the presence of sexually transmitted infection may indicate risky sexual behaviour. Coates *et al.*, (2000:17) suggests that a strong association between self-reported sexual behaviour and the incidence of sexually transmitted diseases would verify the accuracy of reporting and this has been confirmed by the HSRC (2002). In this study only one participant reported having a vaginal infection (indication of a STI).

Gender power balance.

In findings from the interviews (section 1) condoms were found not to be desirable to men, however despite male preference, 18 participants (85,72%) felt able to succeed in negotiating condom use. This suggests participants have the scope for decision-making and the skills for negotiating safe sex including condom-use.

Table 4.9: Response to request to use a condom - partner response

	Number of participants (n=21)	
	N	%
Wear a condom	18	85,72
Accuse me of unfaithfulness	1	4,76
Refuse one	2	9,52

Communication with sexual partner

These findings reflect that 76% of the respondents know whether their partner has had an HIV test (Table 4.10) and 92% of this group (Table 4.11) reported knowing the result suggesting that these respondents have communicated with their sexual partner about HIV and VCT.

Table 4.10: HIV test - partner

	Number of participants (n=21)	
	N	%
Partner had a HIV test	12	57,14
Partner has not had a HIV test	4	19,05
Not known whether partner has had a HIV test	5	23,81

Table 4.11: HIV test result - partner

	Number of participants (n=12)	
	N	%
Positive	1	8,33
Negative	10	83,34
I don't know	1	8,33

MACRO-LEVEL

At the macro-level cultural and structural factors are analysed. This questionnaire included questions covering geographical location of residence and economic status.

Table 4.12: Geographical location

	Number of participants (n=21)	
	N	%
Suburbs	2	9,52
Informal settlements	12	57,14
Rural areas	2	9,53
No response	5	23.81

Rural women were considered to be at greater risk than urban women (HSRC, 2002). This was linked to more traditional, restrictive gender roles for women, traditional mothers less likely to talk about sex with daughters, HIV/AIDS information not always as accessible, poorer health care services, a greater prevalence of poverty and lower levels of education. This has been disputed by the HSRC report that indicates that people living in informal settlements are at greater risk while the risk level for rural people remains high (HSRC, 2002). Townships and rural living are associated with lower economic conditions and a greater the risk of HIV (HSRC, 2002). As the majority of respondents reported living in a rural area of an informal settlement this factor can be seen as a risk.

Economic status

Only the risky sexual practice of exchanging sex for gain was included under economic status with respect to sexual activity in the 12 months prior to the study. No participant reported exchanging sex for gain, although during the interviews the respondents reported this as behaviour they know about but don't practice themselves.

Socio-political status

Age

According to the HSRC (20020) women between the age of 30-34 years (24% of infected women) show the highest prevalence rate for HIV followed by the group of 25-29 years (22% of infected women) and thirdly 35-39 years (18% of infected women). In this study 47% of the participants fall in the category 26 to 34 years so the age of participants places them as falling within a high risk age group.

Table 4.13: Age of participants

	Number of participants (n=21)	
	N	%
Less than 18 years	1	4,76
19 - 21	6	28,57
22 - 25	3	14,29
26 - 34	10	47,62
35 - 40	1	4,76

In summary it would appear that the three cornerstones of HIV prevention namely abstinence, mutual monogamy and condom-usage as a protective behaviour is not an option for all the participants interviewed. The unfaithfulness of their partners appears to be putting women at risk. While women do have negotiation skills and some reported success when communicating with partners, it would appear that the gender power balance still tips strongly in favour of men. The remedy appears to lie firstly with men.

There appears to be congruence in terms of the reliability of the information gained from the qualitative and quantitative data and the empowerment data. The slightly lower reporting of risk behaviours in the quantitative data compared to the qualitative data is probably due to presentation bias.

4.3 PHASE 2: PLANNING

This phase used the findings from the needs analysis to inform the programme adaptations. These enhancements were planned with the goal of increasing the effectiveness of the intervention by enabling learners to adopt safe sexual practices and in so doing lower their HIV risk. The strategy had two components: improving the skills of the trainers and adapting a learning programme to enhance learning in areas of disempowerment identified in the group of learners.

Enhancement of trainer skills

While the content of the educational intervention was considered important, identified areas of disempowerment noted during analysis required an interactive educational methodology. This was to enable the participants to gain a sense of mastery or control over factors within these areas. For this reason part of the preparation in respect of HIV/AIDS training included in the Soul City 'Train the Trainers' programme enhancements were added to effect empowerment within the participants. Trainers went to Soul City to be equipped with teaching skills. This training included the correct use of audio-visual material and the learning materials provided to each learner on the Soul City course. Effective group teaching strategies were taught and the necessity for the learners interacting and driving the learner process through facilitating problem-solving activities, encouraging teamwork and allowing participants to find solutions to problems. At the same time each trainer familiarised with the lesson plans and their specified outcomes.

Planning enhancements – needs analysis (phase 2) – example (not implemented)

During the needs analysis the data collected was for base-line information only. Therefore the description that follows is merely an example of how the findings could be used to select enhancements. This process is described as it was to be used during phase 3 (implementation and evaluation phase.

Using the POWER approach and the POWER Analysis tool as described in 3.4.2 on page 64, the findings from the needs analysis were graphically displayed on the POWER Analysis tool. This enabled the learners' needs to be identified. For the analysis group appropriate enhancement would be as described below.

Micro-level

In order to improve self-worth and self-esteem the main strategy would be the use of the monthly feedback appraisals to allow the participant to see her development and feel achievement through acknowledgement. Feedback would enable the trainer to reflect on the skills and knowledge they had observed the participant to acquire.

- Development of coping skills
- Development of the knowledge and skills required for safe sexual practice

Interface level

As the weakest area identified on this level related to collaboration, the main strategy would be team work to develop a sense of identity and mutual support in the group. Interpersonal skills such as negotiation skills, breaking bad news and handling difficult situations, for example anger, aggression and rejection were explored through group work and role play.

Macro-level

The lowest scores were on this level. The two-day pilot HIV educational programme focuses on skills that enable the participants to feel they are able to contribute to their community and to South Africa. This programme is in the form of a peer education programme so the participants are given the knowledge, skills and materials to assist others in the community prevent HIV/AIDS and cope with living with AIDS.

This same process was followed with the experiential group based on the findings of the pre-test. The identified enhancements were applied to the educational HIV intervention as described in point 4.4.

Planning of enhancements – pilot HIV educational intervention (phase 3)

This activity took place after the pre-test (experimental group). The findings were used to select enhancements to adapt the standard HIV educational programme to address identified educational needs of the group. The process of adapting a standardised programme necessitates what Wechsberg *et al.*, (2004) describe as 'tailor-making'. This process is supported by the POWER approach. While overlap could be expected between the enhancements identified from the analysis and experimental group it was necessary to identify independently the needs of each.

The enhancements described below were implemented during the two day Soul City 'Train the Trainer' Programme.

Enhancements selected – experimental group (phase 3)

Micro-level

Monogamy was the most desired protective behaviour but the reports of unfaithfulness made it necessary to incorporate into the programme teaching to clarify the conditions under which Monogamy could be considered a safe practice.

It was decided to stress the following principles:

- Monogamy is only an effective behaviour if mutually practiced.
- Should be combined with HIV testing and condom–use: initially to use condoms and volunteer for mutual HIV testing. After HIV test, if both HIV negative, partners should continue using condoms for 6 months and then be mutually tested again. If both partners remain HIV negative and monogamous it is considered safe to engage in sex without a condom.
- HIV testing does not prevent HIV/AIDS but assists people to assess their vulnerability to HIV and act responsibly towards their sexual partner(s).
- HIV testing offered alongside counselling (VCT) was encouraged as the literature has shown this to be more effective (Burke, 2004; El-Bassel *et al.*, 2003).

Interface level

Communication strategies (interface level) particularly around sensitive subjects such as HIV testing were included to encourage course participants to have conversations about HIV with their partner, family and friends. This was assisted by the fact that Soul City provides teaching aids in the form of comics and video. This strategy is supported in the literature which states that effective communication optimises diffusion of the 'HIV message' (Burke, 2004).

Macro-level

On the macro level the intervention was to reduce stigmatisation by addressing the myths and presenting facts about the cause and spread of HIV. Further the skills and knowledge required to care for a person with HIV/AIDS competently and compassionately were presented at the two day Soul City course. These care-giving skills were re-enforced over the 4 month programme

4.4 PHASE 3: IMPLEMENTATION AND EVALUATION

The main activity of this phase was the implementation of a pilot intervention in the form of an enhanced, educational intervention. The programme enhancements were based on information gained on the empowerment status and from data on the learners' sexual practices. The effectiveness of the enhancements was evaluated by measuring empowerment status and HIV risk using a pre-test post-test design.

The pilot intervention programme was undertaken with one group of 24 learners (experimental group) at the Robin Trust training centre in Cape Town. On the first day of the four-month programme Albertyn's empowerment questionnaire and the Self-report questionnaire: practices informing HIV risks were applied. The data from the empowerment questionnaire was analysed by compiling a frequency distribution table. This enabled areas of empowerment versus areas of relative disempowerment to be identified. This was further informed by through the findings from the self-report questionnaire regarding the participants' practices that influence their HIV risk.

The pilot HIV intervention programme was held during the first month of the training programme. During the second, third and forth month of the programme, learners had time to consolidate knowledge and develop practical skills related to home-based care. During this period regular informal training sessions were held.

As it was the goal of the intervention to empower and change unsafe sexual behaviour to safe sexual practice the programme's effectiveness was measured by evaluation the empowerment status of learners and their sexual behaviour at commencement and at the end of the four month home care programme. (see addendum 13).

Findings from the implementation and evaluation phase (phase 3)

Description of the experimental group

Basic demographic information was collected on the questionnaire for empowerment and the self-report questionnaire on sexual practices and is presented below.

Age

The women registering for a study programme at Robin Trust and similar programmes often have employment as a goal (Mncube, 2003:60) and as the participants are in the age group expected of job seekers, this is an appropriate expectation of the participants.

Table 4.14: Age of participants

Age categories (years)	Number of participants (n=24)	
	N	%
Less than 19	1	4,17
20-29	19	79,17
30-39	2	8,33
40-49	2	8,33
More than 50	0	

Language

Twenty one participants stated their first language was Xhosa, two English and one as Zulu and all had been found during selection interviews to be fluent in English and able to participate in course where English was the language of instruction.

Empowerment status

The empowerment questionnaire (Albertyn, 2000) was applied directly on commencement and as the final activity of the four month training programme. The empowerment measures were used in two ways. Firstly a frequency schedule was drafted to identify areas of empowerment versus disempowerment. Secondly the measures were used to evaluate the effect of the programme on the empowerment status of the participants on the various levels of empowerment.

Empowerment scores

These scores have been tabulated below as a summary (table 4.15) with the detailed schedule of the scores of respondents given as addendum 12.

Table 4.15: Empowerment scores - experimental group

Test	Micro-level	Interface	Macro-level	Total
Pre-test	74,90	74,60	69,50	73,70
Post-test	75,00	74,70	73,20	74,50

While the direction of change was a shift to an increased empowerment status the overall increase was lower than anticipated. The macro-level showed the greatest shift to empowerment (3,70%). The fact that the Soul City programme equips the learner to be a peer educator was felt to contribute to a feeling of being able to assist others and contribute to changes at community level e.g. through the acceptance of people who are HIV positive. The increase in scores on the personal and interface level are slight. In order to understand these, as well as, the low overall empowerment score, the scores of the experimental group were compared to the results found in similar empowerment programmes with comparable learners.

Reasons for the disappointing results could be one or more or a combination of the following factors:

- The intervention was for only two days in the first month of training. In comparison to the other studies, the two-day HIV/AIDS workshop (Soul City 'Train the Trainer' programme) was of a short duration. This suggests that the entire four month long home care programme needs to be considered as the intervention and an empowerment approach adopted throughout.
- During the final week of training of the experimental group (the study group for the pilot intervention programme) there was an incident in the patient care unit at Robin Trust. A serious allegation of abuse by two learners towards an elderly resident was made by a visiting relative. This led to the suspension of the two accused learners while the allegation was investigated. Following a thorough and fair investigation both learners were cleared and it was shown that the accusation had been malicious and false. While all efforts were taken to support those involved it impacted negatively on the perception of some of the learners and brought up counter accusations of racial discrimination. The matter was resolved as speedily as possible while ensuring that correct and fair processes were undertaken. While this matter was still in process the final evaluation had to be completed. It is the view of the researcher that this could have affected the scores.
- The pre-test scores of the experimental group were higher in this study than in the studies of Mncube (2003) and Bester (2002). The higher base-line scores indicate that the group was relatively empowered on commencement of training. It could be suggested that at higher levels of empowerment the results would be less dramatic.

- The training programme is a peer education model and a trainer who had recently returned from a Trainers' course at Soul City was the co-facilitator of the intervention programme. This lack of experience might have played a role in the scores suggesting less effective empowerment.
- The Soul City 'Train the Trainer' programme forms two days within a four-month programme. While efforts are in progress to provide all the Robin Trust trainers with the skills required to apply an empowerment approach, trainers were inexperienced in this methodology.
- On some of the reported programmes learners participated in small group sessions and individual sessions (Mncube, 2003; Bester, 2002). The more intensive interaction of the small group and the one-to-one sessions may account for the better results of Mncube (2003) and Bester (2002).
- In the study reported on by Mncube (2003) and Bester (2002) both had been an active participant in the research procedure, a fact that Bester (2002) states might have had a 'positive effect' on the group's empowerment status. In this study the researcher only participated for the two-day period of the HIV/AIDS workshop and had no further planned contact with the learners.
- Wechsberg *et al.,* (2004) state that the effect of an empowerment intervention at post-test is similar to that of a standard intervention. The difference is most noticeable three months post test. This is because interventions tailored to develop 'concrete solutions within personal contexts' influence other life changes that facilitate independence. This effect is not observed in the short term but rather in the longer term the effect of being self sufficient is experienced. This report from the literature suggests that the scores should not be considered discouraging and the method ineffective. Rather further study is required and post-post test needs to be undertaken three months after the educational intervention has been completed.

Findings: Self-report questionnaire: Assessment of HIV risk

The questionnaire was applied to identify the participants' vulnerability to acquiring sexually transmitted HIV. Data was collected using a self-report questionnaire with a pre-test and post-test design and analysed according to the categories and sub-categories in the framework displaying the factors determining vulnerability status (see 2.4.1). Four practices, namely, abstinence, faithfulness, condom-use and HIV testing were examined. The findings will be discussed according to the three domains of analysis.

MICRO LEVEL

On the micro-level analysis is of personal factors and covers perception of vulnerability to HIV and self-efficacy.

Perception of vulnerability to HIV

At the pre-test 14 of the 24 respondents (58,33%) had been for a HIV test and at the post-test one further participant had had a HIV test. At the pre-test, 13 knew the result of their test (92,86%) and at the post-test all who had been tested knew their result. Fifteen respondents suggested they feel vulnerable to HIV after the programme (post -test). Only one participant at the pre-test stated that she did not know her test result with all the other participants stating that they were sero-negative. Concerning statements included a respondent stating that she did not feel vulnerable as her test was negative. Another reported she knew she was vulnerable as she had unsafe sex. Further there was anxiety expressed over assisting some-one who was bleeding

Self-efficacy

Three factors were tested and this included knowledge related to safe sexual practice, skills for safe sexual practice and attitudes and feelings that contribute to sound judgement. The knowledge component examined the application of knowledge and is demonstrated through self-reports of using condoms. Skills include consistency of use, perceived ease of use, the effect of alcohol intake on use and negotiation skills for condom use. Attitudes and feelings were considered in terms of judgement.

One participant reported practising abstinence and therefore stated she did not need condoms. Condoms are not used by all participants, with five participants reporting that they never use condoms at both the pre- and post-test. The number of participants reporting consistent condom-use increased from 50% at pre-test to 66,67% at the post-test. All the sexually active participants, including the one who at pre-test had reported that condoms were difficult to use, reported at post-test that condoms were easy to use. From pre- to post-test the consistent condom-use increased by 16%.

Responses to whether alcohol intake increased the likelihood of risky sexual behaviour was 'yes' for 29,16% of the participants at the pre-test and this dropped to 20,83% of the participants at the post-test. Two of the participants reported stopping drinking alcohol during the time between the pre- and post-testing occasion.

This was not a change in behaviour actively sought as part of the programme. This change in behaviour may be, in part, due to some of the content of the programme that covered living with HIV (Soul City Workbook 1 - Living with HIV and AIDS). Within this section alcohol abuse is discouraged, as it is destructive to the immune system. However, the strong link between alcohol-intake, condom non-use and casual sex found during the needs analysis (phase 1) makes a decline in alcohol use a desirable protective behaviour. A shift to a decreased use of alcohol therefore can be described as lowering HIV risk of the participants.

One test of a woman's ability to apply sexual negotiation skills was found in reports of being able to refuse sex. Over the period of the training programme one more participant than at pre-test, felt able to say "no".

Acceptability of condom-use to male partners was measured in this study in terms of the participants' view of the response anticipated if her partner was requested to use a condom. All of participants said that their male partner would use a condom if requested although 30% stated their male partner would prefer sexual intercourse without a condom. These figures correlate with the number of participants who reported using a condom at last sexual encounter (69,56%) suggesting a link between condom use and the acceptability of condom use to the male partner. Six said their partner would comply even though he did not like to use condoms. This implies that the participants feel able to negotiate condom use and that the reason for non-use is partly their choice.

In summary the gender empowerment status and HIV risk status of the experimental group on the micro-level is suggestive but not indicative of being safe (Scores between 50% and 75%). This means that while the trend in sexual practices at this level is towards safety, participants are still at risk. This applies, in particular, to the 30% of participants who do not use condoms, the 20% of participants who are more likely to have casual sex after drinking alcohol and the 37,50% of participants who do not know their HIV sero-status.

INTERFACE LEVEL

The interface level tested relationship status, gender power balance, living arrangement, communication, influence of the media and normative behaviour.

Relationship status

Eighteen (75%) of the participants stated they were single and six (25%) married. One unmarried participant stated that she has never had sex (primary abstinence) and three other participants reporting abstinence over the past 12 months (secondary abstinence). Faithfulness to a sexual partner increased over the period of the training programme from 17 participants (70,83%) to 23 participants (95,83%) at the post-test. This choice, to be faithful to a partner was reported by Eaton *et al.,* (2003:8) to be the most frequently reported intention to reduce HIV risk and was the greatest shift in sexual practice found in this study. At the pre-test there was one report of a STI but by the post-test no participant reported the presence of a STI.

Gender power balance

Gender power describes the distribution of power within the relationship and indicators describe who controls decision-making and the presence or absence of barriers that can restrict the scope for decision-making.

In response to a question relating to decisions about sex, the shift over the period of the training programme was to joint decision-making (increase of 8,34%). Negative consequences of refusing sex or risky practices can be a barrier to safer sex. Participants' responses indicate that at the pre-test, four participants sometimes experienced domestic violence while at post-test only two reported this. Strategies for dealing with violence and the community resources available to women were considered in the programme and might therefore have contributed to the decline in the number of women in a relationship where violence is a feature. Responses to condom use that can be perceived as negative such as being accused of being unfaithful remained fixed over the period of the training programme suggesting this is an accurate reflection of male response to a request for condom-use. {{{ This finding is reported in the literature (Eaton *et al.,* 2003; HSRC, 2002). }}} Prof Kapp had a question mark here. Is it supported by Eaton. What is reported?

Living arrangement

Living arrangements that do not offer protection from sexual violation predispose girls and women to HIV risk. Dependency decreases the ability of women to refuse sexual advances. All the participants expressed economic dependency with 25% living with their husband, 33% with family and the reminder with a boyfriend or friends or alone. Of this group all did not specify the exact nature of the relationship. Whether or not the women felt safe or able to refuse sex without fear of being turned out of their dwelling place was not explored in this study.

Communication with partner

Key measures were communication about sex and HIV and whether the participant knew her partner's HIV sero-status. In the post-test communication about contraception was lower than in the pre-test. However, in the post-test the number of participants reporting on communicating about HIV increased (12,5%). This could be attributed to the training programme which included communication strategies and provided materials to assist in communicating with a sexual partner about HIV. One possibility for the decline in communication about contraception could be that the reported increase in condom use which negated the need to discuss this topic.

An increased number of participants reported knowing whether their partner has had an HIV test and the result of that test at post-test. Over the period of the training programme the number of partners having a HIV test remained the same, but four more participants reported knowing their partners' status. This suggests that the increased ability to communicate about HIV might have enabled or motivated the participants to enquire about their partner's HIV status. At the pre-test, two participants reported having a partner who was HIV positive and at the post-test only one reported this. The reason for this is unknown and could include death of a partner, a change in partner or an error at pre-test.

In summary , based on the post-test scores the vulnerability status and HIV risk status of the participants was predicted with respect to safety (position of gender equality) in terms of their faithfulness to their partner (95,83%), lack of casual sex (100%), no reports of STI's, marital status as single (75%), joint decision-making (95,94%), low incidence of violence (8,33%) and perceived negative consequences of requesting condom use (17,39%). Scores indicating safety (low HIV risk) include the practice of abstinence (five respondents) and communication on partner's HIV status (58,33%). The area requiring caution in interpretation is faithfulness as it requires both partners to be faithful for this practice to be considered safe.

MACRO-LEVEL

This domain of analysis includes structural and cultural factors informing HIV risk status.

Geographical place of residence

Prof Kapp: Style??{{{Historically many of Cape Town's suburbs have had a predominance of a particular racial group living in the area in accordance with the previously racially biased laws under apartheid in South Africa (Cummins, 2003).}}} While this is no longer law, certain suburbs can still be divided along these lines with the socio-economic standards varying accordingly. Therefore the residential areas where the participants live will determine their access to heathcare and other services. The majority of students reported living in traditionally Black areas which included townships known to be made up of large informal settlements with examples stated in the pre-test information including Khayelitsha (11), Langa (3), Gugulethu (1) and Nyanga (1). Other areas included previously known coloured areas given as Mitchell's Plain (1), Eerste Rivier (2), Kalksteenfontein (1) and Kuilsriver (1). All the aforementioned areas would be considered to be peri-urban sites and the other named areas are, apart from Stellenbosch (1), were urban and "grey" suburbs (previously white dominated but currently with mixed populations) i.e. Mowbray (1) and Observatory (1). While, on registration with Robin Trust, learners were living in Cape Town, eight stated that they had been resident here for less than eight years with the remaining 16 learners having lived here for longer than two years.

Longest place of residence

The literature reports differences in terms of HIV knowledge and safe sexual practices such as condom use between rural and urban South Africans (HSRC, 2002). In order to establish whether the course participants were long-term Cape Town residents, or had spent the greater part of their life elsewhere, a question on the questionnaire asked for the place where they have lived the longest.

Ten participants named areas within the urban and peri-urban area of Cape Town (Western Cape) as the place at which they had lived the longest. The rest of the group named Kwazulu-Natal (2), Eastern Cape (10), and Gauteng (2). Thirteen participants were from an urban or peri-urban area (10 participants were from Cape Town, two participants from Johannesburg, onerparticipant from Durban) and eight participants from rural towns in South Africa.

Economic status

A dependent economic status increases HIV risk, while an independent economic status offers protection in that a woman who is economically independent has greater scope for autonomous decision-making.

Previous employment

Participants enrol on the home-care training programme as they perceive that it will lead to greater employment opportunities. On registration participants were unemployed or in casual employment. An analysis of their economic dependence, which has income as one indicator, demonstrates that the participants have no or little independent economic means. Prior to registration for home care training, 67% of the respondents had never earned while 23% had been employed, although unemployed at the time of registration.

At the time of registering as learners at Robin Trust all the participants were unemployed. Previously eight had employment as domestic workers (2), tea lady (1), machinist (1), at large food retailers (2) and as clerical workers (2). The remaining 16 participants reported that they had never been employed.

Source of income

The purpose of this question was to assess whether the participants felt economically dependent, a risk factor for HIV. At pre-test 67% and at post-test 75% of the participants had no income and 50% had one or more children.

Transactional sex

All participants stated at both pre-test and post-test that they do not exchange sex for gain.

Socio-political status (gender, age, ethnicity/race, level of schooling and educational level)

Age

Seventy-nine percent of participants of the experimental group were women in the age bracket of 19 years to 29 years, with 8% between 30 and 39 and two participants (8%) between the age of 40 and 49 years of age. Twenty-three participants (96%) reported their first sexual encounter prior to registering on the course, which is not surprising, as the youngest participant was 19 years of age. This group is potentially at risk as, apart from one participant who did not respond, they have all been sexually active at some period in their lives. The participants' average age group corresponds with the national data identifying this group as having a high prevalence rate for HIV placing them in an at risk age group.

School attendance and educational level

All learners had a minimum of grade 10 (10 years of schooling) with 71% having completed Grade 12 (12 years of schooling) or higher.

Scores on the macro-level scores indicate vulnerability (gender inequality) in terms of geographical location and economic status, as well as in terms of age.

Summary of findings from experimental group

The greatest increase in gender empowerment status and lowering of HIV risk status was on the interface level, followed by the micro-level with the greatest vulnerability being on the macro-level. It is expected that scores should increase on the macro-level following the course when participants are able to apply their new skills and knowledge in a paid work situation. This benefit would be captured by a post-post-testing occasion. This was not planned for this study and therefore it is a recommendation for further such studies.

4.5 DISCUSSION

The findings will be discussed with reference to the goal of the educational HIV intervention, namely, to raise empowerment status and lower HIV risk status of the participants. Four key behaviours, each of which can be analysed over the domains of analysis (micro-level, interface-level and macro-level) and are considered in the literature to offer protection against acquiring sexually transmitted HIV, were selected. These four behaviours are abstinence, faithfulness, condom-use and HIV testing. The ability to analyse these behaviours over the three levels is demonstrated in an example (addendum 8). These practices refer to critical behavioural or reproductive outcomes determining HIV risk status. They describe whether participants have ever had sex, lifetime number of partners, more than one sexual partner over a relatively short time period such as three or four months, used condoms at first, last sex, consistency of condom-use, knows own and partners HIV sero-status (Karim *et al.*, 2003; HSRC, 2002).

4.5.1 Self-reported changes in sexual practice lowering HIV risk

Abstinence

Abstinence is referred to as a period of no sexual activity and as a protective behaviour includes both primary (never had sex) and a reverting to abstinence for a period of time after previously being sexual active (HSRC, 2002).

The findings from the needs analysis indicated that it is more likely that single girls will have the ability to negotiate abstinence (52.38%) although it could have negative consequences such as

abandonment. Interviewees also expressed that while in theory it is possible, on a practical level it is difficult to apply. Results from the experimental group indicate that 20,84% reported no sexual activity for the prior 12 months although they all reported a minimum of one sexual partner (41.66%). This trend of reverting to abstinence after a period of sexual activity was also noted in the HSRC (2002) study. The finding that 20% of the experimental group were not currently sexually active despite the majority of them being young women concurs with the finding of Flisher, *et al.* (2003) who reported in a study on young Cape Town women that they were less sexually active than perceived.

Faithfulness

Participants in the analysis group overwhelmingly described men as unfaithful, but agreed that women can also be unfaithful. Faithfulness is a protective behaviour that is appealing to women. This is supported by a finding from Eaton *et al.,* (2003), who found that faithfulness was more acceptable as a safe behaviour than condom use. The concern would be that women practising faithfulness might not have a faithful partner thereby placing her at risk. Being faithful might also decrease the woman's perception of her risk making her less likely to adopt other protective behaviours such as condom-use.

Multiple partners are at times accepted as a norm for young men and boys and Flisher *et al.* (2003) caution against this. In their study they demonstrate how fewer school-going children are sexually active than perceived and that generally they do not have multiple partners. They state that perception of normative behaviour influences the behaviour of peers. For this reason Flisher *et al.* (2003) advocate that in education the factual evidence from research that points to multiple partners not being the 'norm' for young people are reflected to youth.

Condom-use

In this study, although single women felt they could negotiate condom-use, it was their perception that is was less acceptable to married men. Women also report negative consequences of asking for condom use, yet the experimental group reported that all participants could request condom-use and their partner would agree, even though 30% stated their partners preferred sex without a condom. This result suggests that condom-use is within the scope of sexual negotiation available to women but, for reasons not explored in this study, women choose to go with the preference of males in condom-use. Despite this finding overall condom-use rose by 16% from pre- to post test. As condom use reduces unwanted pregnancy and the incidence of STI's (HSRC, 2002) it has further benefits to women's health.

Alcohol use

Alcohol use can impact on abstinence, faithfulness and condom-use in that it is associated with decreased condom-use and increased casual sex (Garbus, 2003). While it was not planned to decrease alcohol-use, a section of the Soul City HIV/AIDS workshop focuses on the detrimental effect of alcohol, when used in excess, on the immune system and general health. During of the training programme the experimental group reported a 9% decrease in casual sex after drinking alcohol (two less participants) and two less participants reporting drinking alcohol and greater use of condoms after drinking alcohol (increase of 5%).

HIV testing

On commencement of the course 14 (58.33%) of the 24 participants reported having had a HIV test. At post-test one further participant reported having had an HIV test. Between pre- and post-test the number of partners that went for testing remained the same.

Self-reports on sexual practices

It is the view of the researcher that the data collected through the qualitative interviews during the needs analysis was more accurate than the data collected through the self reported risk practices. This would appear to be due to the fact that the questions asked during the interviews were in the third person, testing for general social norms until the person being interviewed indicated she was were comfortable to talk about herself. The quantitative data collection tool asked questions directly and in the first person and appears to have resulted in presentation bias. An example of this is the issue of transactional sex. During the qualitative interviews it was raised as a fairly common behaviour yet during quantitative data collection 100% of the respondents reported no incidence of transactional sex.

4.5.2 Empowerment

The purpose of applying an empowerment intervention was to raise the empowerment status and thereby lower HIV risk of the participants. The intervention was selected through identification of the area of disempowerment giving rise to a particular barrier to safe sexual practice. The results were moderate and seem to suggest that the level of skill of trainers to facilitate empowerment interventions is a crucial determinant.

The discussion has outlined the key issues which will be dealt with in more detail in chapter 5 when the findings, recommendations and conclusions will be described.

CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

5.2 FINDINGS

5.3 LIMITATIONS

5.4 RECOMMENDATIONS

5.5 CONCLUSIONS

5.1 INTRODUCTION.

The study aimed to investigate the factors that influence the adoption of safe sexual practices by women. This would contribute to an understanding of why women engage in unsafe sexual practices despite having knowledge about the risks of unprotected sex. The knowledge gained was used to inform the selection of enhancements to increase the efficacy of an educational HIV intervention and tested in a pilot study during the final phase of the research.

The study had two components namely a literature review, which informed the development of the Framework of factors that determine the vulnerability of women for sexually acquired HIV and an empirical section. The literature suggested that the effect of gender related vulnerability is linked to the relative level of empowerment, which in turn seems to inform HIV risk. The empirical part of the study explored the factors related to the vulnerability of women for sexually acquired HIV, as well as, investigating whether by raising the empowerment status of the participants their HIV risk could be lowered. This was tested during a pilot programme in the form of an enhanced HIV educational intervention.

In this chapter the findings, recommendations for further study and conclusions will be discussed. This will be done according to the phases in the research process.

5.2 FINDINGS

The empirical part of the study had three distinct phases. Phase 1 was a needs analysis, phase 2 the planning phase and phase 3 the implementation and evaluation phase.

5.2.1 Needs analysis (phase 1) – Objectives 1.4.2.1.

During phase 1 a needs analysis was conducted. Base-line data was collected through interviews, self-reports and questionnaires in order to identify factors that affect a woman's ability to adopt safe sex practice, ascertain sexual practices and measure empowerment status of the participants. The findings were used to plan enhancements to an educational HIV intervention and revise the questionnaire. The revised questionnaire was a self-report questionnaire titled: 'Assessment of HIV risk' and was applied during phase 3 (implementation and evaluation phase).

5.2.1.1 Summary of activities and findings

The first questionnaire applied was the Empowerment questionnaire (Albertyn, 2000). The findings from this questionnaire were compared to the qualitative and quantitative data collected using the questionnaire: Factors determining the vulnerability of women to sexually transmitted HIV. Key findings from phase 1 are described below.

5.2.1.1 (a) Measurement of empowerment status – objective 1.4.2.1 (a)

When examining the total group's empowerment scores (n=84) it was found that the mean score was highest on the micro-level, followed by the interface-level and lowest on the macro-level. Upon further analysis of the frequency of responses against the key indicators of empowerment on the three levels it was found that:

- On the micro-level participants felt unable to attain goals, had a low sense of self-worth, low self-esteem and blamed themselves for their perceived lack of progress. They reported needing paid work;
- On the interface-level participants expressed a low level of family/social support and scored low on acting collaboratively;
- On the macro-level participants felt politically powerless and felt unable to make a contribution to South Africa.

Based on these findings enhancements were planned for the experimental phase (Phase 3).

5.2.1.1 (b) Identification of the factors determining the vulnerability of women to sexually transmitted HIV and measurement of participants' current practices - Objective 1.4.2.2 (a) and 1.4.2.2 (b)

This questionnaire had two sections. Section 1 collected qualitative data and section 2 collected quantitative data. Data collected using qualitative methods was found to be less likely to be subject to presentation bias and provided richer data. However, the value of having both methods within the study enabled a comparison between the findings and increased the validity of the findings.

The Framework of factors determining the vulnerability of women for sexually transmitted HIV, compiled from the literature, was used to guide the development of the questionnaire, data analysis and the interpretation of the findings. It was found to be effective in that it provided a way of categorizing the information thematically. Identification of predictors and indicators enabled a description of the gender in/equality status and HIV risk level.

Key findings – participants' reported sexual practices

On the micro-level participants expressed reluctance to go for HIV testing. Married women experienced difficulty in requesting condom-use as it was perceived negatively by husbands. Monogamy, abstinence and condom-use appeared to be acceptable to participants.

On the interface level participants in committed relationships reported low condom usage while participants unanimously stated that men are unfaithful. The inability of married women to negotiate condom use is consistent with the literature and is a matter of concern. Barriers block abstinence as a feasible choice and men do not appear to subscribe to faithfulness to a sexual partner. The most desired preventative strategy for women was monogamy. However, the dangers of being infected by a partner entering a relationship already HIV positive or an unfaithful partner who contracts the virus during the relationship, is concerning.

On the macro level participants expressed social vulnerability as a limiting factor in adopting safe sexual practices.

That objective 1.4.2.1(a) (measurement of empowerment status), 1.4.2.1(b) (measurement of factors determining vulnerability) and 1.4.2.1 (c) (identification of sexual practices) were achieved.

5.2.2 Planning phase (phase 2) - 1.4.2.2

Planning was the second phase. The findings from phase 1 were reflected on to identify areas of disempowerment and HIV risk. To assist with the selection of the most effective empowerment strategy the literature was consulted. Elements were combined from the literature review from this study, the work of Albertyn (2000; 1995) and Eaton *et al.*, (2003) leading to the development of the POWER approach for planning enhancements and the POWER analysis tool. The POWER analysis tool provided a structure onto which the findings could be recorded. The graphic display of findings against the framework facilitated the selection of enhancements for the HIV intervention.

5.2.2.1 Summary of activities and findings

5.2.2.1(a) Enhancements – objective 1.4.2.2(a)

Four programme enhancements were identified and included within the two-day Soul City 'Train the Trainer' course. The first enhancement was the provision of information and time for discussion on monogamy as a protective behaviour and HIV testing. The second focused on communication, particularly between sexual partners. The third addressed stigmatisation by addressing the myths and presenting facts about the cause and spread of HIV. Fourthly, the skills and knowledge required to care for a person with HIV/AIDS competently and compassionately were presented. Planning also included training for the Trainers in the use of the empowerment approach and its application within a HIV educational programme.

5.2.2.1(b) Revisions to questionnaire – objective 1.4.2.2(b)

Revisions were made to the questionnaire to assist in gaining a deeper understanding of sexual practices identified as risky during the needs analysis. Revisions included questions to identify:

- Place of residence – to differentiate between urban and rural dwelling.
- Living arrangement – to identify whether the participant lived alone, with parents, husband or someone else.
- Age of sexual debut.
- Commitment to sexual partner.
- Condom usage –consistency, acceptability to partner, response of partner to requests for condom use and perception of the ease of use of condoms.
- The locus of sexual decision-making.
- Communication with sexual partner – questions covered contraception, HIV sero- status and HIV testing.
- Perceived vulnerability to HIV.
- If there is a link between alcohol, causal sex and non-condom use.

For the reasons described above, it can be shown that objectives 1.4.2.2(a) (enhancement of programme) and 1.4.2.2(b) (revision of questionnaire) were met.

Implementation and evaluation phase (phase 3) – objective 1.4.2.3.

During this phase, the research procedure included the measurement of the empowerment status and sexual practices of the participants, using a pre-test and post-test design in order to ascertain the effect of an enhanced programme on participants (n=12).

5.2.3.1 Summary of activities and findings

The pre-test was applied on the first and last day of the four-month training programme. Key findings are listed below.

5.2.3.1(a) Empowerment status – objective 1.4.2.3(a)

Although the direction of change was one of empowerment with the greatest increase in empowerment scores found on the macro-level, overall the increase in their empowerment status was lower than hoped for.

This increase on the macro-level might be attributed to the fact that the emphasis of the Soul City programme is on equipping the learner as a peer educator. Also further skill building activities enable participants to be care-givers and role models in their community through accepting and providing care for people who are HIV positive. This may contribute to a feeling of being able to assist others and effect changes at community level.

It is the researcher's view that higher increases in empowerment scores could be achieved through. Trainers receiving more focused training in applying an empowerment approach. Post-post-testing is also recommended to capture the empowerment effect associated with life changes that facilitate independence, such as paid employment.

Measurement of learners' HIV risk level – 1.4.2.3(b)

Pre-test findings suggesting factors placing participants at the greatest risk were: a lack of knowledge of the participants regarding their own HIV sero-status, non-use of condoms and casual sex after drinking alcohol. HIV testing was readily available to participants but in some cases avoided due to fears regarding the negative response to being HIV positive. While the post-test results showed that many of the participants were still at risk, a shift in behaviour from risk to protection indicated that the intervention had assisted some of the participants to adopt safer sexual practices.

Post-test results on the interface level indicated increases in communication with sexual partners and women's scope for sexual negotiation.

It is at the macro level that change is most difficult (Thompson, 2001). {{{Scores indicated that the participants are vulnerable on this level. Indicators of vulnerability included geographical location of residence, low economic status and being young women. These factors usually require collective action to bring about change. However, the impact that one person can have through changing her attitude was also demonstrated. The intervention, which aimed to increase a feeling of being useful to others and to address stigmatization, was effective. This was expressed as a feeling of being able to contribute at community level. This enablement was as care-givers to people with HIV/AIDS and through acceptance of people who are HIV positive.

In spite of a small sample size in this study and that generalisation is therefore not possible, the findings suggest that in this group an increase in empowerment status could result in a decrease in HIV risk (Objectives 1.4.2.1) and that this can be achieved through an educational programme enhanced to raise the empowerment status of participants (Objective 1.4.2.3).

SUMMARY OF THE FINDINGS

TEXT BOX 5.1: Summary of findings

- Factors can be identified that describe the vulnerability of women for sexually transmitted HIV.
- The factors are described in the Framework of Factors determining the vulnerability of women for sexually transmitted HIV (figure 2.3).
- Gender-related vulnerability (gender in/equality) may inhibit the adoption of safe sexual practices.
- The literature appears to indicate that gender related vulnerability is inversely proportional to the relative level of gender empowerment.
- Empowerment may reduce gender-related vulnerability, promote gender equality and enable the adoption of safe sexual practices.
- Participants favoured monogamy, condom use and abstinence as protective behaviours.
- Women perceive men as unfaithful, abstinence as not always 'practical' and believe that men prefer sex without condoms.
- To effect change requires health education and social action strategies that address all three domains of analysis. Women can individually bring about change on the micro-level but require co-operation and support of partners, communities and even government to effect changes on the interface and macro-levels.
- The POWER approach and POWER analysis tool assists with identifying appropriate enhancements.
- Enhancements to a training programme may provide an approach for adapting a generic HIV programme to meet the needs of target group.

5.3 LIMITATIONS

The following limitations of this study are noted:

- Only female participants were included in this study. This criterion was set as the purpose of the study was to identify the factors influencing the ability of women to adopt protective behaviours to minimize risk of sexually acquired HIV.
- The data was not tested for statistical significance using a statistical procedure.
- The enhancements, the HIV educational intervention and the effectiveness of peer education as a HIV educational strategy were not evaluated.

5.4 RECOMMENDATIONS

Recommendations are presented in five categories.

5.4.1 Assessing the vulnerability status of women for acquiring sexually transmitted HIV.

- The framework of factors for determining vulnerability status of women for sexually transmitted HIV was used to develop a comprehensive questionnaire to measure vulnerability and the risk of women for sexually transmitted HIV. The questionnaire needs to be further refined and tested for reliability and validity.
- Data collected on factors determining the vulnerability of women for sexually transmitted HIV need to be tested for statistical significance.
- In a further study, the relationship between gender-related vulnerability, HIV risk and empowerment needs to be explored and measured.
- Further study is required to explore whether the gender-related vulnerability of women may be associated with vulnerability that is greater than merely to HIV.
- The role of men in determining the vulnerability of women needs to be understood. A priority area is the need to identify how men view their level of responsibility for the consequences of their sexual behaviour (Dunn *et al.,* 2004). This should provide insight into the male-linked factors that contribute to the vulnerability status of women. This information needs to be applied to intervention programmes focussing on men in order to support the equality of women and reduce their HIV risk. The role of alcohol and shebeens linked to casual sexual encounters needs to be further explored to find the most effective strategy for overcoming this risk area.

5.4.2 Planning for HIV educational programme using an empowerment approach.

- Testing is required to determine the acceptability of the various protective behaviours, so that those with greatest levels of acceptance can be promoted. Greater understanding of practices finding less favour needs to be understood so that barriers can be overcome.
- The POWER analysis tool needs to be tested for reliability specifically regarding its effectiveness for guiding the selection of appropriate enhancements.
- The intervention strategies, identified in the literature (some of which are noted in table 3.2 on page 68) need to be tested for effectiveness in raising empowerment status.
- Programmes for developing the skills of trainers for facilitating HIV educational interventions using an empowerment approach need to be developed and tested.
- The specific attributes of the training experience that raise the quality of the training experience and the outcome need to be fully explored and understood.
- As many of the learners attending training programmes such as the one in this study do so with the goal of preparing themselves for work this variable could affect their empowerment scores when testing them directly after an intervention. It is suggested that the pre-test, and post-test be retained and a post-post-test be applied three months after completion of the training programme. This would capture the empowerment indicator of being in paid work.

5.4.3 Evaluating programme effectiveness in terms of empowerment and HIV risk:

- Programme effectiveness could be evaluated using a control group and an experimental group.

5.4.4 Changes supporting the rights (and health) of women

- This study reinforces the need for changes across the micro-, interface and macro-level to eradicate gender-related discrimination and oppression. Health professionals need to examine their practice to ensure that they challenge sexism and all forms of discrimination. Health professionals occupy positions of power and influence and therefore have the scope to bring about changes (Thompson, 2001). Ways of supporting and developing health professionals to be social activists need to be explored.

5.5 CONCLUSION

The framework of factors determining the vulnerability of women for sexually transmitted HIV describes the complex interaction of circumstances that influence women's ability to adopt protective behaviours. The difficulties are linked to barriers. Empowerment provides a strategy for overcoming these barriers enabling safe sexual practice.

The framework of factors determining the vulnerability of women for sexually transmitted HIV (figure 2.3) provides a structure that can guide data collection, analysis, recording of findings and planning of HIV training programmes. When the framework is used alongside that of Eaton, *et al.*, (2003) and Albertyn (2000, 1995) it appears to provide a comprehensive theoretical construct for planning training programmes using enhancements and an empowerment approach. Men and women need to be included in HIV training programmes that address personal factors, interpersonal factors, organisational factors, cultural factors and structural factors across the three domains of analysis namely the micro-, interface and macro-level. Key role players who hold the power to influence the rights of women and treatment of people who are HIV positive need to support the changes required. South Africa would then become a country where women could freely make sexual choices. Such a comprehensive approach could enable women to choose sexual practice that supports health.

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ADDENDUMS

ADDENDUM 1

INVENTORY OF DESCRIPTORS

ADDENDUM 1

INVENTORY OF DESCRIPTORS
(Ordered according to clusters indicating related factor as shown in chapter 2)

DESCRIPTORS	PREDICTORS & INDICATORS OF RISK	FACTOR	PREDICTORS & INDICATORS OF SAFETY	DESCRIPTORS
CLUSTER 1: DEMOGRAPHIC FACTORS relating to a woman				
		AGE		
Age falls with an age group with a high HIV prevalence. Based on national prevalence data	HIGH RISK AGE CATEGORY predicted by:	**RISK CATEGORY DETERMINED BY AGE**	LOW RISK AGE CATEGORY As predicted by:	Age falls with an age group with a low HIV prevalence. Based on national prevalence data
30 years of age or less (HSRC, 2002)	Young age		Mature age	31 years or more
Age differential of more than 5 years The greater the difference the greater the risk to the woman (HSRC, 2002)	Significant age differential		Similar age differential	Age differential less than 5 years
First experience of sexual intercourse non-consensual	Forced sexual debut		Sexual debut chosen	First experience of sexual intercourse consensual at 18 years or older Median age (South Africa) given as 18 years (HSRC, 2002)
At seventeen years or younger	Early sexual onset		Later sexual onset	Later sexual onset 18 years or older
Rape/non-consensual sex	Forced sex.		Consensual sex.	Sexual intercourse is consensus

DESCRIPTORS	PREDICTORS & INDICATORS OF RISK	FACTOR	PREDICTORS & INDICATORS OF SAFETY	DESCRIPTORS
		RELATIONSHIP STATUS		
Infidelity	UNFAITHFULNESS as predicted by:	**COMMITMENT TO SEXUAL PARTNER**	FAITHFULNESS as predicted by:	Sexual fidelity showing characteristics such as loyalty, trustworthiness and constancy
Concurrent: two or more sexual partners. Usually one partner is the primary partner with the unfaithful partner(s) have secondary sexual relationships Sequentially: has many sexual partners. Associated with casual sex.	Multiple partners		Monogamy	Mutual monogamy is a term used for faithfulness by a committed couple to their relationship or marriage
"one night stand" - no intention of commitment	Casual sex		No casual sex	No reports of casual sex
Sexual partner not known	Sex with a stranger		Known sexual partner	Sexual partner known (Anderson, 2003)
Report or evidence of sexually transmitted infection(s)	Presence of sexually transmitted infection(s)		No sexually transmitted disease(s)	No report or evidence of STI's
Relationship status restricts decision-making ability	RESTRICTED SCOPE FOR DECISION-MAKING as predicted by:	**SCOPE FOR DECISION-MAKING**	AUTONOMOUS DECISION-MAKING as predicted by:	Decision-making scope unrestricted by relationship status
Enforced abstinence between sexual partners due to cultural practice of abstinence following childbirth Or Separation of sexual partners due to war, work, interpersonal conflict between partners or other reason	Enforced abstinence Postpartum abstinence Abstinence resulting from separation		Chosen abstinence	Period characterised by no sexual activity. It is chosen (voluntary) and includes primary and secondary abstinence but excludes enforced abstinence.
A marital status of either married, divorced or widowed.	Being married, divorced or widowed		Single	Never married
Marriage at 17yrs younger	First marriage at a young age		First marriage at a later age	Marriage at 18 years or older
Marriage partner chosen	An arranged marriage		Self choice of marriage partner	Free will choice of marriage partner

DESCRIPTORS	PREDICTORS & INDICATORS OF RISK	FACTOR	PREDICTORS & INDICATORS OF SAFETY	DESCRIPTORS
		SCHOOL ATTENDANCE		
No or infrequent attendance at school	NO OR INFREQUENT ATTENDANCE as predicted by:	ATTENDANCE RECORD	REGULAR ATTENDANCE as predicted by:	Regular attendance at school
This indicator covers school attendance at school-going age for children with the ability to attend school but who did not do so.	No school attendance		Attended (school)	School attendance
Infrequent or limited attendance Report by credible person or evidence seen	Poor attendance record		Satisfactory attendance record	Regular attendance with satisfactory progress at school
School fees unpaid due to a lack of financial means making school fees unaffordable for household	School fees unaffordable		School fees affordable	Household can afford school fees
Schooling for boys valued above girls. Boys go to school and girls remain at home	Gender bias		No gender bias	School valued equally for boys and girls School attendance by girls and boys from the same
		LEVEL OF EDUCATION		
	LOW EDUCATIONAL LEVEL as predicted by:	HIGHEST EDUCATIONAL QUALIFICATION	HIGH EDUCATIONAL LEVEL as predicted by:	
Less than Grade 12 (in South Africa	Less than a school leaving certificate		School leaving certificate or higher	Grade 12 or higher (for South Africans)
Informal training or work-based experience after leaving school	Worked-based experience		Accredited (Formal) training course complete	Formal course after completing school leaving certificate
			Tertiary level qualification	Graduate training Associated with "significantly lower" HIV prevalence (HSRC, 2002)

DESCRIPTORS	PREDICTORS & INDICATORS OF RISK	FACTOR	PREDICTORS & INDICATORS OF SAFETY	DESCRIPTORS
		ECONOMIC FACTORS		
Dependence on another person for finance.	FINANCIAL DEPENDENCE as predicted by:	INCOME STATUS	INDEPENDENT MEANS as predicted by:	Self supporting.
No paid work or in a capacity below their personal potential earning a low wage	Unemployed Underemployed		Paid work	Employed
Relies on others for money resulting in a dependent relationship	Economic dependence		Economic independence	Economic means meets household needs
No income or low income Under R1500.00 per month	No or low income		Middle or upper income bracket	Household needs met
Basic needs of household are not met. Insufficient money for food and clothing. Female headed homes most affected. (Garbus, 2003)	Poverty		Can afford basic needs and luxuries	(HSRC, 2000)
Unable to meet basic needs of dependants	Insufficient/inadequate provision for dependents		Sufficient means to provide for dependants	Can financial provide for needs of dependants
Risk of HIV linked to occupation is high	HIGH HIV RISK OCCUPATION as predicted by:	OCCUPATIONAL RISK	LOW HIV RISK OCCUPATION as predicted by:	Risk of HIV linked to occupation is low
Employees (workers) within an occupational group may be associated with high-risk sexual behaviour. Research shows workers in a specific occupational group are at high risk e.g. military, mining and trucking (Garbus 2003).	High risk workers		Low risk workers	Worker is not participating in an occupation associated with high HIV risk sexual behaviour on the part of the workers (personal choice) such as in trucking
Category of work places worker at high risk for HIV (occupational health risk).	High occupational risk		Low risk work	Routine occupational practice does not place worker at risk Occupation not associated with a high risk to the worker for contracting HIV.

DESCRIPTORS	PREDICTORS & INDICATORS OF RISK	FACTOR	PREDICTORS & INDICATORS OF SAFETY	DESCRIPTORS
Sex for gain	TRANSACTIONAL SEX (reported) as predicted by:	SEX AS A COMMODITY	NO TRANSACTIONAL SEX (not reported) as predicted by:	No sex for gain reported.
Any kind of exchange made for sex (Garbus, 2003) Includes the swopping of sex with teachers & students at school reported widely in South Africa (exchange for progress at school). Garbus, 2003	Exchange for gain		No exchange for gain	No exchange of sex for gain reported.
Commercial trade of women and girls (Garbus, 2003)	Victim of sex trafficking		No sex trafficking	No link to sex trafficking Not a victim of sex trafficking No commercial trading of women linked to a given women
Due to the fact that sex is a commodity and is "being paid for" limits the scope the woman has to negotiate safe sexual practice. Women report decreased scope 'or sexual negotiation.	Decreased scope for negotiating safe sexual practice		Scope for negotiating safe sexual practice	Unrestricted scope for requesting safe sexual practice reported.
		RELIGIOUS AFFILIATION		
When measure applied to a socio-cultural context or narrowed to a particular 'faith-based organisation it is found to disempower women	RELIGIOUS SOCIO-CULTURAL CONTEXT DISCRIMINATORY as predicted by:	INFLUENCE OF SOCIO-CULTURAL CONTEXT	RELIGIOUS SOCIO-CULTURAL CONTEXT NON-DISCRIMINATORY as predicted by:	When measure applied to a socio-cultural context or narrowed to a particular faith-based organisation it is found to support equal opportunities (gender equality).
Women excluded from specified religious activit·es on the basis of gender Men and women are not equal	Gender -based exclusions		Gender inclusive	Women can participate in all religious activities Women and men participate as equals in religious activities
Religious guide lines (doctrine) supports gender inequality within religious socio-cultural context	Doctrine supports gender inequality.		Doctrine supports gender equality	Religious guide lines (doctrine) supports gender equality within religious socio-cultural context

DESCRIPTORS	PREDICTORS & INDICATORS OF RISK	FACTOR	PREDICTORS & INDICATORS OF SAFETY	DESCRIPTORS
Religious teaching that disempowers women is described as disabling	INFLUENCE OF RELIGIOUS TEACHING DISABLES as predicted by:		INFLUENCE OF RELIGIOUS TEACHING ENABLES as predicted by:	Religious teaching which empowers women is described as enabling
The sub-ordinate role (women less than men) perpetuated	Religious teaching describes women as unequal to men	INFLUENCE OF RELIGIOUS TEACHING	Religious teaching describes women as equal to men	Equality of the sexes promoted through teaching
Any practice that is in any harmful to women is included and covers polygamy and genital mutilation and roles of sub-ordination limiting women reaching their personal potential e.g. excluding women from education and work opportunities	Teaching sanction of practices harmful to women		Teaching opposes practices that are harmful to women	Advocates for practices that support women's health and welfare
Teaching by religious affiliation does not support safe sexual practices	Religious teaching perpetuates or promotes unsafe sexual practices		Religious teaching supports/promotes safe sexual practice	Religious teaching encourages and assists the practice of safe sexual practice through messages that are accurate and no-judgmental
		ETHNICITY AND RACE		
Access to resources restricted by virtue of race or ethnicity	UNEQUAL ACCESS TO RESOURCES	ACCESS TO RESOURCES	EQUAL ACCESS TO RESOURCES	Access to resources unrestricted by virtue of race or ethnicity
Black (South African)(HSRC, 2002)	Black		Racial group other than Black (for South Africa)	Racial group other than Black (for South Africa). HSRC, 2002.

DESCRIPTORS	PREDICTORS & INDICATORS OF RISK	FACTOR	PREDICTORS & INDICATORS OF SAFETY	DESCRIPTORS
Communities, particularly outside of South Africa, that are minorities have difficulties often associated with cultural differences accessing resources available to larger (majority) groups.	Minority Group		Majority groups	Majority can be determined in various ways including race, language and ethnicity.
		GEOGRAPHICAL LOCATION of RESIDENCE		
Socio-economic status described as the proxy measure of poverty (HSRC, 2002:62)	LOW SOCIO-ECONOMIC AREA as predicted by:	ECONOMIC STATUS OF RESIDENTIAL AREA	HIGHER SOCIO-ECONOMIC AREA as predicted by:	
Informal housing area Informal settlements associated with the highest prevalence rates (HSRC, 2002:59,62)	Informal settlements		Suburban	Suburban areas
Peri-urban areas are characterised by informal settlements	Peri-urban		Urban	Within a city or large town
Rural areas have been associated with greater female disempowerment, less acceptability of condom-use by males and girls being poorly informed about HIV.	Rural			

DESCRIPTORS	PREDICTORS & INDICATORS OF RISK	FACTOR	PREDICTORS & INDICATORS OF SAFETY	DESCRIPTORS
Resident in area for 4 or less years.	POPULATION INSTABILITY as predicted by:	POPULATION MOVEMENT	POPULATION STABILITY as predicted by:	Resident in area for 5 or more years
This includes labour migration, movement along major trade routes, refugees fleeing to South Africa from areas of war in Africa, return of political exiles and liberation army members (Garbus, 2003; HSRC, 2002).	Mobile population		Settled population	Opposed to a migratory population
Statistical evidence of high HIV incidence	High HIV incidence		Low HIV incidence	Statistical evidence of low incidence of HIV in a given geographical region
Crimes such as violence against women and rape place women at risk of HIV (Garbus, 2003)	High crime rate		Low crime rate	No crime or low incidence /prevalence of crime.
Unstable local government structures	Political instability		Political stability	Stable local government structures

DESCRIPTORS	PREDICTORS & INDICATORS OF RISK	FACTOR	PREDICTORS & INDICATORS OF SAFETY	DESCRIPTORS
Inadequate or no access to a basic health care service Transport not available or too costly Services not available in geographical area Service too expensive Service quality poor Lack of confidentiality	INACCESSIBLE OR INADEQUATE HEALTH CARE SERVICES as predicted by:	ACCESS TO HEALTH CARE	ACCESSIBLE TO HEALTH CARE SERVICES as predicted by:	Minimum of basic (primary health care) health care services available
Transport unaffordable. No or inadequate transport.	Transport service inaccessible		Transport service accessible	Transport affordable and available.
Non-availability of affordable, quality condoms (HSRC, 2002)	Condoms inaccessible		Condoms accessible	Can readily access affordable condoms Described as a cornerstone of the DOH (SA) policy and as effective in SA (HSRC, 2002)
Non-availability of an accessible, affordable quality service that maintains confidentiality (HSRC, 2002).	HIV testing inaccessible		HIV testing available	HIV testing available, accessible, cost-effective and part of a quality service that maintains confidentiality (HSRC, 2002).
HIV drugs such ART not available as part of an accessible, affordable, effective health care service (HSRC, 2002)	Anti-HIV drugs unavailable & inaccessible		Anti-HIV drugs available and accessible	HSRC study (2002) reported that South African want to be able to access these medications

DESCRIPTORS	PREDICTORS & INDICATORS OF RISK	FACTOR	PREDICTORS & INDICATORS OF SAFETY	DESCRIPTORS
		LIVING ARRANGEMENT		
Unsafe living arrangement	UNPROTECTED AGAINST SEXUALLY VIOLATED	PROTECTION LIVING ARRANGEMENT OFFERS AGAINST SEXUAL VIOLATION	PROTECTED AGAINST SEXUAL VIOLATION	Safe living arrangement and un-safe living arrangement
Sexual violation within home Includes a person known or unknown to the girl/woman	Home - sexual violation		Home - offers protection against sexual violation	Home - respecting and supporting personal safety rights
Institutional living that does not respect /uphold/ support personal safety and rights of an individual. This includes being in prison or living in a single sex hostel (Eaton *et al.*, 2003).	Institution - sexual violation		Institution - offers protection against sexual violation	Living in an institution that respects and supports personal safety rights
(Eaton *et al.*, 2003) Girls or women living outside of a safe dwelling are at risk	Living on the street		Sleeps in dwelling	Sleeping in a dwelling - not on street - may be in a night shelter
		CLUSTER 2: CULTURAL AND SOCIETAL FACTORS		
		GENDER POWER BALANCE		
The imbalance of power between male and female partners in heterosexual relationships dictates who is in control, the use of violence and the ability of women to negotiate condom-use without fear of negative consequences (MacPhail & Campbell, 2001:15)	UNEQUAL POWER RELATIONSHIP As predicted by:	BALANCE OF POWER BETWEEN SEXUAL PARTNERS	EQUAL POWER RELATIONSHIP As predicted by:	Gender roles and power do not restrict sexual negotiation or decision-making

DESCRIPTORS	PREDICTORS & INDICATORS OF RISK	FACTOR	PREDICTORS & INDICATORS OF SAFETY	DESCRIPTORS
CONTINUATION OF CLUSTER 2: CULTURAL AND SOCIETAL FACTORS GENDER POWER BALANCE				
GENDER POWER BALANCE	Partner controlling	POWER DISTRIBUTION	Self determination	Individual determination (Albertyn, 2000:105)
Abusive relationship towards a sexual partner includes violence, fear of abandonment and verbal abuse	Violence/rape/coercion		No violence/rape/coercion	Unrestricted scope for sexual negotiation Gender equality within sexual relationship
Concedes to risky practices as fears consequences of refusal Feels unable to request safe sexual practice due to perceived greater gender power of sexual partner (Eaton *et al.*, 2003).	Negative consequences form a barrier to safe sex	RESPONSE TO REQUEST FOR SAFE SEXUAL PRACTICE	Partner responses do not a barrier to safe sex	Requests safe sexual practice with fear of negative consequences
CULTUALLY SCRIPTED ROLES				
	DEVALUATION OF FEMALE ROLE	CULTURAL VALUE GIVEN TO FEMALE ROLE	VALUATION OF FEMALE ROLE	
Woman viewed as a possession of the man e.g. with the practice of lobola Male with a macho identity	Possession Macho identity		Woman as partner	Gender equality Woman respected by male as a partner
Any form of media portraying the role or contribution of women as less than that of men.	Media messages portray women as subordinate or inferior.		Media messages portray the female role as equal to that man.	Any form of media message supporting the role and contribution women make as equal to men.

DESCRIPTORS	PREDICTORS & INDICATORS OF RISK	FACTOR	PREDICTORS & INDICATORS OF SAFETY	DESCRIPTORS
CONTINUATION OF CULTUALLY SCRIPTED ROLES				
Lack or observance of respect of women Women's rights are not supported	HUMAN RIGHTS NOT UPHELD as predicted by:	COMPLIANCE FOR HUMAN RIGHTS	HUMAN RIGHTS UPHELD as predicted by:	Observance of human rights
Stigmatisation of HIV positive people within family/community groups forming a barrier to HIV disclosure difficult	Stigmatisation		Acceptance	Culture of respect and support of human rights of women that includes acceptance of persons, by community, who are HIV positive
Social isolation of people who are HIV positive	Social isolation		Integration	Acceptance of people who are HIV positive within a given community evidenced by the support and respect of rights
Secrecy/Silence/non-disclosure when Aware of status as HIV positive	Non-disclosure		Disclosure	Integration of people who are HIV positive into the community

DESCRIPTORS	PREDICTORS & INDICATORS OF RISK	FACTOR	PREDICTORS & INDICATORS OF SAFETY	DESCRIPTORS
CLUSTER 3: COMMUNICATION				
COMMUNICATION WITH FAMILY, FRIENDS AND WORK COLLEAGUES				
Women and girls poorly informed on sexual matters (includes contraception, abortions, pregnancy & sexual practices.)	WOMEN UNINFORMED OR POORLY INFORMED ON SEXUAL ISSUES & HIV As predicted by:	**INFORMATION LEVEL**	INFORMED WOMEN ON SEXUAL ISSUES & HIV as predicted by:	Girls and women well informed about sexual issues that include sexual practice, contraception, abortion etc
Parents or significant others do not inform daughter's about sex or HIV	Closed communication with parents / significant adults		Open communication with parents or significant others	Communicates with parents/adults about sex and HIV
Ineffective communication	Closed communication with friends and work colleagues		Open communication with friends and occupational group	Communicates with family and colleagues about important community issues related to HIV
Has no / limited access to accurate media messages	No/limited access to media		Access to media	Has access to accurate media messages
Women and girls poorly informed on sexual matters (includes contraception, abortions, pregnancy & sexual practices.)	Poorly informed-sexual matters		Well informed – sexual matters	Women and girls well informed on sexual matters.
Women and girls poorly informed about HIV.	Poorly informed HIV		Well informed - HIV	Women and girls well informed about HIV
Does not feel socially connected to family or community. Characterised by frequent moves and few friends	FEELS UNSUPPORTED	**CONNECTNEDNESS TO PRIMARY GROUP**	FEELS SUPPORTED	Community participation (Albertyn, 2000)
Does not identify with primary group	Poor identity with primary group		Identifies with primary group	Feels and empathy between people in the local community. Albertyn (2000) describes this as feeling that the community suffers together
Does not have a supportive social network	Lacks support		Mutual support	A feeling that there is a climate of mutual support within family and community (Albertyn, 2000:107)

DESCRIPTORS	PREDICTORS & INDICATORS OF RISK	FACTOR	PREDICTORS & INDICATORS OF SAFETY	DESCRIPTORS
CONTINUATION OF CLUSTER 3: COMMUNICATION				
COMMUNICATION WITH SEXUAL PARTNER				
Ineffective communication between partners	CLOSED COMMUNICATION BETWEEN PARTNERS as predicted by:	PARTNER COMMUNICATION STYLE	OPEN COMMUNICATION BETWEEN PARTNERS as predicted by:	Effective communication between partners
Ineffective communication (no/ little discussion/ unconstructive communication on sexual issues	No/limited discussion on sexual matters		Discusses sexual issues	Constructive, effective communication between sexual partners on sexual issues
Ineffective communication (no/ little discussion/ unconstructive communication on sexual issues	No/little discussion on HIV		Discusses HIV	Constructive, effective communication between sexual partners on HIV
Partner communication does not translate into safe sexual practice	No/limited discussion on safe sexual practice		Discusses safe sexual practice	Partner communication translates into safe sexual practice
Unable to accurately report on partner(s) HIV status Lack of knowledge of partner(s) HIV status (CAPS 1998) Belief that partners status can be assessed from appearance (Amirkanian *et al.*, 2001)	HIV STATUS BASED ON APPEARANCE	PARTNER HIV RISK STATUS	HIV STATUS BASED ON HIV TESTING	Effective communication between partners
Does not know partner's HIV status	Partners HIV status is unknown		Partners HIV status known	States correctly partner's HIV status
Unable to give an accurate report on partners current and past sexual partners	Lack of knowledge of partner(s) current and past sexual partner(s)		Accurate knowledge of partner(s) current and past sexual partner(s)	Able to give an accurate account of partner's sexual history

DESCRIPTORS	PREDICTORS & INDICATORS OF RISK	FACTOR	PREDICTORS & INDICATORS OF SAFETY	DESCRIPTORS
CONTINUATION OF CLUSTER 3: COMMUNICATION				
REPORTING BY MEDIA				
Irresponsible reporting does not take cognoscente of the media's influence on informing and influencing individuals groups and communities. In context of this study irresponsible reporting has negative consequences for women.	IRRESPONSIBLE REPORTING: as predicted by:	**MEDIA'S INFLUENCE ON WOMEN'S EMPOWERMENT**	RESPONSIBLE REPORTING: as predicted by	Responsible reporting takes cognoscente of the media's influence on informing and influencing individuals groups and communities. In context of this study responsible reporting supports and promotes the well being of women.
Media supports practices that are harmful to women e.g. genital mutilation	Messages promote practices that harm women		Media advocates against harmful practices	Access to media as a source of HIV information (HSRC, 2002)
Media supports practices that are harmful to women e.g. male domination	Media does not support safe sexual practices		Media promotes safe sexual practice	Media messages provide accurate information on safe sexual practice

DESCRIPTORS	PREDICTORS & INDICATORS OF RISK	FACTOR	PREDICTORS & INDICATORS OF SAFETY	DESCRIPTORS
CLUSTER 4: PERCEPTIONS				
PERCEPTION OF OWN VULNERABILITY TO HIV				
Inaccurate perception of being at low HIV risk	INACCURATE ASSESSMENT OF VULNERABILITY	PERCEPTION OF VULNERABILITY	ACCURATE ASSESSMENT OF OWN VULNERABILITY	Accurate perception of HIV risk
No connection made between illness, death and HIV/AIDS (Caldwell *et al.*, 1992)	No personal knowledge of a person who is HIV positive or has died of AIDS		Personal knowledge of some-one who is HIV positive or has died from AIDS	Connection between knowing some-one with HIV/AIDS and a serious illness that is potentially life-threatening made (HSRC, 2002)
Reports risky sexual practice	Denial of own risk behaviours		Acknowledges own risk behaviours	Acknowledges own life-style can lead to risk
Denies that risky sexual practice of sexual partner places risk on personal sexual relationship	Denial of risk partner's HIV risk status may offer		Acknowledges that partner's HIV risk status a potential risk	Accurate assessment of HIV risk regarding partner Acknowledges that partner's HIV status a potential risk factor
	Denial of risk own HIV positive status can be to others		Feels responsible	Acknowledges personal HIV positive status can place others at risk
Does not have a HIV test for reasons that include perception of being at low risk, fear of stigma (HSRC, 2002)	Never had a HIV test		Participated in HIV testing	Has had a HIV test
Does not know own HIV sero-status (HSRC, 2002)	Own HIV status unknown		Knows own HIV status	Knows own sero-status
Denies, minimizes, discredits the threat of HIV/AIDS	HIV/AIDS complacency		HIV/AIDS awareness	Informed and concerned about the threat of HIV/AIDS

DESCRIPTORS	PREDICTORS & INDICATORS OF RISK	FACTOR	PREDICTORS & INDICATORS OF SAFETY	DESCRIPTORS
PERCEPTION OF NORMATIVE BEHAVIOUR				
Perception of social norms can lead to the adoption of unsafe sexual practice (Flisher *et al.*, 2003:540; MacPhail & Campbell, 2001:12)	INFLUENCE OF PEERS IS NEGATIVE as predicted by:	**INFLUENCE OF PEERS ON SEXUAL PRACTICES**	INFLUENCE OF PEERS IS POSITIVE as predicted by:	Perception of social norms can lead to the adoption of safe sexual practice
Unsafe sexual practices perceived as social norm (Flisher *et al.*, 2003:540)	Perceptions of normative behaviour promotes / perpetuates unsafe sexual practice		Safe sexual practice perceived as normative behaviour	Social norms are perceived as safe sexual practice
Cost of protective sex outweighs perceived benefit so unsafe practices pertuated	Perceived costs out way benefits outweigh benefits		Perceived benefits outweigh costs	Perceived benefit outweighs costs of adopting safe sexual practices
Intention described as preceding safe sexual practice. So when there is no intention the likelihood of practicising safe sex is decreased (Eaton *et al.*, 2003)	No intention to practice safe sex		Intention to practice safe sex	Intention, described as preceding safe sexual practice, reported.
CLUSTER 5: SELF-EFFICACY				
SELF-EFFICACY: KNOWLEDGE RELATED TO SAFE SEXUAL PRACTICE				
Incorrect, inaccurate or incomplete knowledge associated with unsafe sexual practice (HSRC, 2002)	KNOWLEDGE OF SAFE SEXUAL PRACTICE NOT APPLIED as predicted by:	**KNOWLEDGE RELATED TO SAFE SEXUAL PRACTICE**	KNOWLEDGE ENABLES SAFE SEXUAL PRACTICE as predicted by:	The application of accurate, complete and applied knowledge as evidence by safe sexual practice tested through self reports.
Lack of knowledge/ inaccurate/incomplete knowledge of HIV	Inaccurate or insufficient knowledge is a barrier to safe sexual practice		Accurate and comprehensive knowledge facilitates safe sexual practice	Has complete and accurate knowledge of HIV and safe sexual practice (HSRC, 2002:82)
Lack of knowledge or inaccurate knowledge of sexual issues	Participation in risky sexual practices		Adopts safe sexual practices	Reports safe sexual practice - evidence of applying knowledge of safe sexual practice

DESCRIPTORS	PREDICTORS & INDICATORS OF RISK	FACTOR	PREDICTORS & INDICATORS OF SAFETY	DESCRIPTORS
SELF-EFFICACY: SKILLS FOR SAFE SEXUAL PRACTICE				
Lacks competence & confidence to apply skills for safe sexual practice	INCOMPTETENT / DOES NOT APPLY SKILLS as predicted by:	**COMPETENCE FOR SAFE SEXUAL PRACTICE**	COMPETENT / APPLIES SKILLS as predicted by:	Applies skills required for safe sexual practice with confidence and competence
Never or sometimes (opposed to always) uses condoms (Karim *et al.*, 2003)	Inconsistent condom use		Consistent condom use	With every sexual encounter always uses a condom
Incorrect use such as incorrect application Condom failure	Incorrect use of condoms		Correct condom use	Correct application of condom
Intake of alcohol reduces or inhibits condom use and leads to casual sex	Alcohol or substance abuse		No evidence of alcohol or substance abuse	Alcohol use does not decrease condom use or increase incidents of casual sex
Unable to communicate with sexual partner about preference for safe sexual practices	INEFFECTIVE SEXUAL NEGOTIATION SKILLS as predicted by:	**SEXUAL NEGOTIATION SKILLS**	EFFECTIVE SEXUAL NEGOTIATION SKILLS as predicted by:	Able to communicate with sexual partner about sexual issues and preference for safe sex (Eaton, *et al.*, 2003:9).
Cannot say 'no' to sex	Unassertive: reports inability to say "no"		Assertive: reports being able to say 'no' to sex	Feels able to say no to sex
Reports lacking the skills to ask for safe sexual practice	Inability to negotiate safe sex		Able to negotiate safe sex	Has the skills required to say "no" in an assertive manner
SELF-EFFICACY: ATTITUDES & FEELINGS CONTRIBUTING TO SOUND JUDGEMENT				
Attitudes and feelings impair judgement /sexual decision-making ability	IMPAIRED JUDGEMENT as predicted by:	**JUDGEMENT (INFLEUNCING SEXUAL DECISION-MAKING)**	SOUND JUDGEMENT as predicted by:	
Lack of a personal feeling of control in terms of own destiny, individual determination and self-efficacy	External locus of control		Internal locus of control	Feeling of control of destiny, individual determination and confidence in skills (Albertyn, 2000:105).
Low self esteem associated with HIV risk as characterised by early sexual debut and multiple partners (Eaton *et al.*, 2003)	Low self esteem		Appropriate self-esteem	Healthy self esteem - good opinion of self
Attaches low value to self	Low self-worth		Values self	Healthy feelings of self worth
Seeks affirmation through sexual relationships	Seeks affirmation		Does not seek affirmation	Does not seek affirmation through sexual relationships

ADDENDUM 2

ROBIN TRUST COLLEGE HOME CARE COURSE LECTURES

ADDENDUM 2

ROBIN TRUST COLLEGE
HOME CARE COURSE
LECTURES

MONDAY	Topic	Time	Method	Time
Tea break 10.30 Lunch 12.30-13.30 Finish 15.30	Code of conduct	20 min	Overhead	
	Rules of Robin Trust	40 mins	Lecture	
	Qualities of careworker	40 mins	Student interaction	
	Communication	40 mins	Role play	25 min
	Patient Assessment	40 mins	Dem.	20 min
TUESDAY	Documentation	40 mins	Overhead	
	Fluid Balance	40 mins	Interaction	40 min
	Intake & Output charts	40 mins	Practice	20 min
WEDNESDAY	Balanced Diets	40 mins	Practice	20 min
	Meal planning	20 mins	Group work	40 min
	Constipation	20 mins	Lecture	
	Diarrhoea	20 mins		
	Vomiting	20 mins		
THURSDAY	INFECTION	40 mins	Overhead	
	Cross infection	40 mins	Lecture	
	Standard precautions	40 mins		
	Hand washing	20 mins	Practice	40 min
	Gloves	20 mins	Practice	
	Immunity	40 mins	Overhead	
FRIDAY	First Aid principles	20 mins	lecture	
	Shock	20 mins		
	Haemorrhage	20 mins		
	Epilepsy	20 mins		
	TEST	60 mins		
MONDAY	Burns	20 mins		
	Recovery position	20 mins	Lecture	20 min
	Geriatrics	45 mins	Lecture & group	20 min
	Frail care	40 mins	Lecture	
TUESDAY	Alheimers	20 mins		
	Falls & Fractures	20 mins		
	Incontinence	20 mins	Overhead	
	Catherters & catheter care	40 mins	Prac. & model	
	Safety in the home	20 mins		
WEDNESDAY	Mouth & teeth care	40 mins	Dem. & prac	40 min
	Thrush and mouth complications	40 mins		
	Nail care (hand & foot)	40 mins	Dem & prac	40 min
	Hair washing	20 mins	Dem & prac	20 min
THURSDAY	Feeding patients	40 mins	Dem & prac	20 min
	Beds & bedmaking	20 mins	Dem & prac	40 min
	Lifting & positioning	20 mins	Dem & prac	25 min

	TEST	90 min		
FRIDAY	Fullwash	40 mins	Dem & prac	45 min
	Pressure care	20 mins	Dem & prac	20 min
	Wheelchair transfer	20 mins	Dem & prac	20 min
	Medicines – rules	45 mins		
MONDAY	Administration & care of meds	20 mins	Group work	25 min
	TPR	40 mins	Dem & prac	40 min
TUESDAY	Hyper / Hypothermia	20 mins	lecture	
	CPR demonstration	40 mins	Dem & prac	60 min
WEDNESDAY	Choking	20 mins	Dem & prac	20 min
	Diabetes – basic	60 mins	Lecture	
THURSDAY	Entertaining a patient	20 mins	Group work	
	Basic wound care	40 mins	Lecture dem	
FRIDAY	Stroke	40 mins	Lecture & video	20 mins
	Heart Attacks	20 mins		
	TEST	60 mins		
MONDAY	TB workshop	180 mins	Lectures & group work	
	Soul City HIV / AIDS	360 mins	Group work &	
TUESDAY	workshop		discussion	
	Soul City HIV / AIDS	180 mins	Group work &	
WEDNESDAY	workshop		discussion	
	Water / in community	40 mins	Lecture	
THURSDAY	Disposal of waste	40 mins		
	Pit latrines	20 mins		
	Health in community	20 mins	overhead	
FRIDAY	Revision day	180 mins	Group & lecture	
MONDAY	Examination	120 mins		

ADDENDUM 3

SOUL CITY

TRAINING MODEL

ADDENDUM 3

SOUL CITY – TRAINING MODEL

The training model used by Soul City is a cascade model, focusing on training trainers to use the Soul City HIV and AIDS materials.

The model operates as follows:

1. Soul City trains three master trainers from each of the partner organisation; with training focusing on 'How to use the Soul City HIV and AIDS materials'. Trainers have access to the Soul City HIV and AIDS material for their training courses.

2. Master trainers train other trainers from their organisation and affiliates. Training still focuses on 'How to use the Soul City HIV and AIDS materials'. These trainers have access to the Soul City HIV and AIDS materials for their training courses.

3. Trainer train community facilitators and teachers on how to use the Soul City materials. These trainers and community facilitators have access to the Soul City HIV and AIDS materials for their training and teaching work.

Soul City training programmes are operational in all provinces in South Africa and at all levels. The decentralised, targeted approach should mean that the training provided is appropriate and effective as it meets the given need of the requesting organisation and is able to take into account the issues that affect a specific area or province.

The HIV and AIDS Action Pack – Soul City's HIV and AIDS education and training materials are aimed at a broad range of different learners and trainers who are involved in education or training around HIV/AIDS and all the issued that are related to it. The materials are based on the stories form Soul City series 1, 2 and 3. They provide the facilitator with a range of flexible and easy to use learning materials that can be used to meet the many different needs of learners and trainees who want to find out more about HIV and AIDS.

The Soul City HIV and AIDS materials are made up of:

(a) Leaner materials:

1. Two comics

Two full colour comics names George's Story and Simanga's Choice raise many different issues around HIV and AIDS, such as transmission, prevention, stigma and discrimination, the HIV test, workplace issues, choices about children and care and support. Information pages after each chapter build on the HIV and AIDS information in the stories.

2. Three Soul City workbooks

Three workbooks linked to the soul City comics provide in-depth information about issues. The workbooks also encourage learners to develop skills by providing information and activities around three important aspects of HVI and AIDS:

- Living with HIV and AIDS (Workbook 1)
- Women, children and HIV and AIDS (Workbook 2)
- Caring for a person with AIDS (Workbook 3)

The workbooks are suitable for use in a training situation where participants need to work through information and skills, while thinking about their own attitudes and practices around HIV and AIDS.

(b) Facilitator support materials

1. Facilitator Guide

The HIV and AIDS Use Guide tells the facilitator more about the Soul City materials and how to use them. It offers guidance on planning and facilitating learning sessions around HHIV and AIDS> The guide encourages learner-centred, interactive teaching and learning.

2. The Soul City posters (flipchart)

Eight, full-colour posters are supplied in a flipchart format. Characters from the Soul City stories illustrate some of the key learning messages about HIV and AIDS. More information for facilitators about the key learning points, is carried at the back of the poster. The posters can be used with learners who have few (or no) literacy skills, and are suitable for using

with small groups, where learners only have a short time to work through the issues. It should take about an hour to look at and discuss each of the posters on the flipchart.

3. Teacher support and reference material

The "AIDS in our community" and the 'Living positively with HIV and AIDS" handbooks provide the basic facts about HIV and AIDS, as well as information about how to live positively with HIV and AIDS. They are available as teach support material or as reference material for learners.

4. HIV/AIDS Training Video

The Soul City HIV and AIDS training video named the "Story of Lizzie and George", follows the story of these two characters from Soul City, and how they cope when they find out that they are HIV positive. The video has been adapted for use in the training room, and raises a broach range of issues for discussion.

5. Availability and Affordability of training materials

The Soul City HIV and AIDS materials are freely available to anyone who wants a set. They are distributed for Soul City through a local publisher.

- Materials are available free to non-governmental organisations, though they are required to pay for the postage.
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Materials can be customised according to the needs of organisations that request this.

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7. Study Group

Twenty-four learners who commenced the home care training programme on 1st November 2003 at robin Trust, which included the two day Soul City "Train the Trainer" programme, formed the study group.

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ADDENDUM 4

EMPOWERMENT QUESTIONNAIRE

ADDENDUM 4 : Empowerment questionnaire

Questionnaire no. □□□□□

	PLEASE READ EACH OF THE FOLLOWING STATEMENTS AND MARK IN THE BLOCK WHETHER YOU STRONGLY AGREE, AGREE, DISAGREE OR STRONGLY DISAGREE. WE ARE INTERESTED IN HOW YOU FEEL AND THERE IS NO RIGHT OR WRONG ANSWER. *NCEDA UFUNDE EZI ZIVAKALISI ZILANDELAYO UKUZE WENZE UPHAWU KWISITHUTYANA NGASINYE UKUBA INGABA UYAVUMELANA NGAMANDLA, UYAVUMELANA, AWUVUMELANI, OKANYE AWUVUMELANI NGAMANDLA. SINOMDLA NGENDLELA OZIVA NGAYO NGAPHEZULU AKUKHO KUJONGWA KULUNGA NOKUNGALUNGI KWEMPENDULO ZAKHO.*	**STRONGLY AGREE / UKUVUMELANA NGAMANDLA**	**AGREE / UKUVUMELANA**	**DISAGREE / UKUNGAVUMELANI**	**STRONGLY DISAGREE UKUNGAVUMELANI NGAMANDLA**
1	The good things in life are passing me by. *Izinto ezilungileyo ebomini ziyandidlula.*				
2	When I see a new opportunity, I go for it without hesitation. *Xa ndibona ithuba elitsha ndiyalithatha ngaphandle kwamathandabuzo.*				
3	I find it difficult to adapt to change. *Ndifumanisa kunzima ukuziqhelanisa notshintsho.*				
4	If I am successful, it will only be due to luck. *Ukuba ndiyaphumelela kuya kuba ngethamsanqa kuphela.*				
5	If I feel unhappy, I would work to change the situation. *Xa ndiziva ndingonwabanga, ndingasebenzela ukuba ndiyitshintshe loo meko.*				
6	My work efforts are unsuccessful. *Imizamo yam yomsebenzi ayiphumeleli.*				
7	I feel as if my attempts end in failure. *Ndiziva ngathi izinto endizizamayo ziphela zingaphumeleli.*				
8	Even though I try, I feel unsuccessful. *Nangona ndizama ndiziva ndingaphumeleli.*				
9	I have little control over what happens in my life. *Ndinolawulo oluncinane kwizinto ezenzekayo ebomini bam.*				
10	My future is in my own hands. *Ikamva lam lisezandleni zam.*				
11	I find it difficult to carry out plans that I make. *Ndifumanisa kunzima ukuthwala izicwangciso endizenzayo.*				
12	I feel useless if people treat me badly. *Ndithi ndizive ndingekho ntweni xa abantu bendiphethe ngendlela engeyiyo.*				
13	I feel humiliated if people find fault with me. *Ndithi ndizive ndithotyelwe phantsi xa abantu bethe bafumana isiphoso ngakum.*				
14	People mess me around. *Abantu badlala ngam.*				
15	I feel unsure of myself. *Ndiziva ndingaqinisekanga ngesiqu sam.*				

		STRONGLY AGREE / UKUVUMELANA NGAMANDLA	AGREE / UKUVUMELANA	DISAGREE / UKUNGAVUMELANI	STRONGLY DISAGREE UKUNGAVUMELANI NGAMANDLA
16	I am dissatisfied with myself. *Andanelisekanga ngesiqu sam.*				
17	I feel tense when I am with strangers. *Andikhululeki xa ndinabantu endingabaziyo.*				
18	My moodiness influences my work. *Ukungatyhileki kwam kuthi kube nefuthe emsebenzini wam.*				
19	I feel as if nothing will ever change in my life. *Ndiva ngathi akukho nto inokuze itshintshe ebomini bam.*				
20	I am dissatisfied with my body. *Andaneliseki ngumzimba wam.*				
21	I find it hard to be disciplined in regard to my health. *Ndifumana kunzima ukuziluleka ngokubhekisele empilweni yam.*				
22	It is difficult for me to take the lead in a group. *Kunzima kum ukuba ndikhokele eqeleni.*				
23	I prefer to be told what to do. *Ndikhetha ukuxelelwa into emandiyenze.*				
24	I am a good worker. *Ndingumsebenzi olungileyo.*				
25	I am making little progress in life. *Ndiqhubela phambili kancinci ebomini.*				
26	I find it difficult to cope when there are conflicting demands in my home and in the community. *Ndifumana kunzima ukumelana neengxwaba-ngxwaba zekhaya nezasekuhlaleni.*				
27	I find it hard to cope with life's problems. *Ndifumana kunzima ukumelana neengxaki zobom.*				
28	It is difficult for me to organise it if there is someone I would like to meet. *Kunzima kum ukuququzela xa kukho umntu endifuna ukudibana naye.*				
29	I plan my own future. *Ndilucwangcisa ngokwam ikamva lam.*				
30	If things go wrong, I think I am to blame. *Xa izinto zingahambi kakuhle ndiye ndicinge ukuba yonke yam.*				

		STRONGLY AGREE / UKUVUMELANA NGAMANDLA	AGREE / UKUVUMELANA	DISAGREE / UKUNGAVUMELANI	STRONGLY DISAGREE / UKUNGAVUMELANI NGAMANDLA
31	The money I earn seems to disappear. *Imali endiyifumanayo iphelela emoyeni.*				
32	I am unaware of exactly what I spend my money on each month. *Andiziqwalaseli izinto endithi ndiyisebenzise kuzo imali yam nyanga-nyanye.*				
33	I think I'll be stuck in these current circumstances for the rest of my life. *Ndiyacinga ukuba ndizakukhinkxeka kwezi meko ubomi bam bonke.*				
34	I discuss important issues with other people in my community. *Ndixoxa imicimbi ebalulekileyo nabanye abantu ekuhlaleni.*				
35	I am uninvolved in what goes on in my community. *Andizifaki kwizinto ezenzekayo ekuhlaleni.*				
36	If someone in my community is suffering, the community will support him/her. *Xa kukho umntu osokolayo ekuhlaleni, abantu basekuhlaleni bathi bamxhase kangangoko.*				
37	I believe in supporting the people in my community. *Ndiyakholwa kukuxhasa abantu basekuhlaleni.*				
38	I have little in common with the people in my community. *Incinci into endifana ngayo nabantu basekuhlaleni.*				
39	My friends are unaware of my abilities. *Abahlobo bam abaziqondi izinto endinokukwazi ukuzenza.*				
40	I am scared to make my needs known. *Ndiyoyika ukuba iimfuno zam zaziwe.*				
41	It is hard to mix with other people on different levels of society. *Kunzima ukuzidibanisa nabantu abakumgangatho owahlukeneyo emibuthweni.*				
42	Not much is achieved when groups in my community try and work together. *Akukho nto ingako ethe yaphunyezwa xa amaqela asekuhlaleni ezama ukusebenza kunye.*				
43	The members of my immediate family find it hard to work together to achieve their goals. *Amalungu ekhaya lam afumanisa kunzima ukusebenza kunye ukuze akwazi ukuphumeza iminqweno yawo.*				
44	I enjoy working with other people to improve things in my community. *Ndiyakonwabela ukusebenza nabanye abantu ukuphucula izinto ekuhlaleni.*				
45	I am afraid to speak out about things that bother me. *Ndiyoyika ukuthetha phandle ngezinto ezindikhathazayo.*				

		STRONGLY AGREE / UKUVUMELANA NGAMANDLA	AGREE / UKUVUMELANA	DISAGREE / UKUNGAVUMELANI	STRONGLY DISAGREE UKUNGAVUMELANI NGAMANDLA
46	I have difficulty solving my family's problems. *Ndinobunzima bokusombulula iingxaki zekhaya.*				
47	Most of my problems I can do nothing about. *Amaxesha amaninzi andikwazi kwenza nto ngeengxaki zam.*				
48	I find it difficult to make decisions. *Ndifumana kunzima ukwenza izigqibo.*				
49	I am uninterested in political issues in the country. *Andinamdla yemicimbi yezopolitiko elizweni lam.*				
50	I leave the political and social problems to the politicians to solve. *Iingxaki zopolitiko nezokuhlala ndiziyekela kubantu bezopolitiko ukuba bazisombulule.*				
51	I am unhappy with my place in society. *Andonwabanga yindawo yam ekuhlaleni.*				
52	My vote in elections won't make much difference. *Ivoti yam kunyulo ayinakwenza mahluko ungako.*				
53	I feel that I have a contribution to make to society. *Ndiziva ndifanelekile ukuba ndibenenxaxheba endiyenzayo ekuhlaleni.*				
54	I would take action if my needs were not being met. *Ndizakuthatha intshukumo ukuba iimfuno zam azihlangatyezwa.*				
55	I make a contribution to building this country. *Ndithatha inxaxheba ekwakheni elilizwe.*				
56	We as consumers can do little to prevent the rising cost of living. *Thina njengabathengi akukho nto ingako esinokuyenza ukukhusela ukunyuka kwamaxabiso.*				
57	I am unaware of my rights. *Andiwaqondi kakuhle amalungelo am.*				
58	I will speak out in a meeting if I am unhappy with what is being said. *Ndizakuthetha phandle entlanganisweni xa ndinganeliseki yinto ethethwayo.*				
59	I am uninvolved in politics. *Andinanxaxheba ndiyithathayo kwezopolitiko.*				
60	I ignore petty orders. *Andiyihoyi imiyalelo emincinane.*				
61	I feel powerless to ever change circumstances. *Ndiziva ndingenamandla kwiimeko ezisoloko ziguqu-guquka.*				

THANK YOU / *NDIYABONGA*

ADDENDUM 5

QUESTIONNAIRE

FACTORS DETERMINING VULNERABILITY

ADDENDUM 5 : Factors determining vulnerability of women

Questionnaire No. .....

NAME / *IGAMA*	
SURNAME/*ISIBONGO*	
DATE/ *USUKU*	

IT WOULD BE APPRECIATED IF YOU WOULD ANSWER THE FOLLOWING QUESTIONS AS OBJECTLY AS POSSIBLE. PLACE AN x IN THE BLOCK INDICATING YOUR CHOICE NEATLY. WHERE MORE THAN ONE IS CHOSEN, BOTH ARE AUTOMATICALLY DISCARDED.

KUZOBONGEKA UKUPHENDULA KWAKHO LEMIBUZO ELANDELAYO NGEMPOKOPHELO NJENGOKULINDELEKILE. SEBENZISA UMSIZI OCIJILE UKUZE UHLIKIHLE IBHOKISI OLIKHETHILE NGOBUNONO NANGOKUGCWELE. LAPHO KUMELE UNGAKHETHI NGAPHEZULU KWELILODWA.

1	Your gender / *Ubulili?*	Male/ *Isilisa* ☐ Female/ *Isifazane* ☐
2	Your language/ *Ulwimi Olusebenzisayo?*	English/*Isingisi* ☐ Afrikaans/ *Isibhunu* ☐ Xhosa/ *Isixhosa* ☐ Other (please specify)/ *Olunye (siza usicacisele)* ☐ .....
3	Your Age / *Iminyaka yobudala bakho?*	19 or younger / *19 noma ngaphansi* ☐ 20 – 29 ☐ 30 – 39 ☐ 40 – 49 ☐ 50 – 59 ☐ 60 or older / *60 noma ngaphezulu*
4	Your ethnic group / *Ubuzweakho*	Black/ *Umnyama* ☐ Coloured / *Ulikhaladi* ☐ Indian / *Ungumdiya* ☐ White / *Ungumlungu* ☐
5	Your educational level/ *Ibanga ogcine kulo ukufunda?*	Std 5 (grade 7) or less/*Ibanga lesihlanu (5)* ☐ Std 6 – 10 (grade 8 – 12) / *Ibanga lesithupha (6)* ☐ Diploma / *Istifiketi sezifundo* ☐ Graduate / Uyisifundiswa esineziqu ☐ Other (please specify) / *Okunye onako (uyacelwa Ukuba uzacise)* ☐

OVERVIEW OF QUESTIONNAIRE

SECTION 1

Questions in this section will be asked to the participant during a one-on-one interview. The interview will be taped on a cassette tape and later transcribed and analysed.

Information to be given by the researcher to the participant.

This research is to help women protect themselves from getting HIV infection. In order to help women I need to understand the things that make it easy or difficult for a woman in your community to protect herself from HIV infection. To do this I need to ask you very personal questions about sex. I am not asking you about yourself, rather I am asking you to tell me about women in general in your community.
No answer is right or wrong it just must be true for your community.

1. Theme 1: Partners - no of sexual partners

1.1. Question: Please tell me in detail how many sexual partners people in your community are allowed if they are:

1. **Unmarried/male**
2. **Unmarried female**
3. **Married male**
4. **Married female**

		YES	NO	DON'T KNOW	NOT discussed
1.2	**In the opinion of the participant in her community it is:**				
1.2.1	common for young woman to have multiple sexual partners prior to marriage				
1.2.2	the norm for a married women only to have sex with her husband				
1.2.3	usual for married woman to be monogamous (faithful) to their husband				
1.2.4	usual to allow women to choose freely their sexual partners				
1.2.5	Accepted that women are coerced into sexual relationships?				
1.2.6	usual before marriage for men to have many sexual partners				
1.2.7	accepted culturally for a man to have more than one wife				
1.2.8	culturally accepted as a norm that married women have girlfriends				

2. Theme 2: Safer sex

2.1. Question: What can women do in your community to protect themselves from acquiring HIV?:

		YES	NO	DON'T KNOW	NOT discussed
2.2	Choice of abstinence?				
2.2.1	Can women voluntary choose to abstain from sex if single?				
2.3	Faithfulness of partners				
2.3.1	Can women choose to be monogamous?				
2.4	Can a women request a condom to be used?				
2.4.1	Can women ask their partner to use a condom?				
2.4	How will a partner respond to a request for a condom to be used?				
2.4.1	Will he use one?				
2.4.2	Will he use one with violence?				
2.4.3	Will he use one with anger?				
2.5	VCT				
2.5.1	Can people in your community go to the clinic to have a blood test for HIV?				
2.6	Other ways to stop getting HIV				
2.6.1	Name any other ways women use to stop themselves getting HIV?				

3. Theme 3: Power balance in sexual relationships

3.1. Question: Can women make sexual choices in your community?

		YES	NO	DON'T KNOW	NOT discussed
3.1.1	Are women forced to have sex in your community?				
3.1.2	Will a woman be physically hurt e.g. hit if she refuses to have sex when a man wants her to have sex with him?				
3.2	What happens if a woman makes a man angry?				
3.2.1	Will he leave her?				
3.2.2	Will he beat her?				
3.2.3	Other....specify				

4. Theme 4: Stigmatization of HIV positive people

4.1. Question: What would people say if it is known that someone is HIV positive in your community

		YES	NO	DON'T KNOW	NOT discussed
4.2	**Are People with HIV stigmatised in your community?**				
4.2.1	The person with HIV will be accepted				

QUESTIONNAIRE

ENGLISH / XHOSA

SECTION 2 / ICANDELO 2

1. I LIVE IN: /

NDIHLALA:

(Fill in places name) /
(Gcwalisa apha)

_____

2. HOW OLD ARE YOU? / IMINYAKA YAKHO MINGAPHI?

a)	18 years or younger / Ilishumi elinesibhozo inangaphantsi	
b)	19-21 years / Ilishumi elinesithoba ukuya kumashumi amabini ananye	
c)	22-25 years / Kumashumi amabini anesibini ukuya kumashumi amabini anesihlanu	
d)	26-34 years / Kumashumi amabini anesithandathu ukuya kumashumi amathathu anesine	
e)	35-40 years / Kumashumi amathathu anesihlanu ukuya kumashumi amane	
f)	41 years or older / Kumashumi amane nangaphezulu	

3. ARE YOU? / INGABA?

a)	Single / Awutshatanga	
b)	Married / Utshatile	
c)	Divorced / Wohlukene Nomyeni Wakho	
d)	Widowed / Ungumhlolo okanye umhlolokazi	
e)	Living with your boyfriend / Uhlala nesithandwa sakho	
f)	Other... specify / Okanye olunye uhlaliswano...cacisa	

4. **HOW MANY MEN HAVE YOU HAD SEX WITH IN THE PAST 12 MONTHS? / MANGAPHI AMADODA OTHE WALALA (ISONDO) NAWO KWEZI NYANGA ZILISHUMI ELINESIBINI ZIDLULILEYO?**

a)	None / Ayikho	
b)	1 / Inye	
c)	2-5 / Mabini ukuya esihlanwini	
d)	6-9 / Phakathi kwesithandathu nesithoba	
e)	10 or more / Alishumi okanye ngaphezulu	

5. **HOW MANY MEN HAVE YOU HAD SEX WITH IN YOUR ENTIRE LIFE? / MANGAPHI AMADODA OTHE WALALA NAWO (ISONDO) EBOMINI BAKHO?**

a)	None / Ayikho	
b)	1 / Inye	
c)	2-5 / Phakathi kwesibini nesihlanu	
d)	6-9 / Phakathi kwesithandathu nethoba	
e)	10 or more / Alishumi okanye ngaphezulu	

6. **HOW MANY WOMEN, <u>OTHER</u> THAN YOURSELF, HAS YOUR HUSBAND OR BOYFRIEND HAD SEX WITH IN THE PAST 12 MONTHS? / BANGAPHI ABAFAZI NGAPHANDLE KWAKHO ABATHE BALALA (NGESONDO) NOMYENI WAKHO OKANYE ISITHANDWA SAKHO KWINHANGA EZILISHUMI ELINAMBINI ZIDLULILEYO?**

a)	None / Ayikho	
b)	1 / Inye	
c)	2-5 / Aphakathi kwesibini nesihlanu	
d)	6-9 / Aphakathi kwesithandathu nethoba	
e)	10 or more / Alishumi okanye ngaphezulu	
f)	I don't know / Andinalwazi	

7. IN THE PAST 12 MONTHS HAVE YOU EXCHANGED SEX FOR A GIFT, MONEY OR DRUGS? / KWEZI NYANGA ZILISHUMI ELINESIBINI ZIDLULILEYO UBUKHE WALALA (ISONDO) KUBA, OKANYE UZA KUZUZA IMALI, ISOPHO OKANYE IZIYOBISI?

a)	No / Hayi	
b)	Yes / Ewe	

7.1. IF YES, THEN DID YOU..... / UKUBA KUNJALO UBUKO .....

a)	Have sex using a condom / Uye wasebenzisa / wanxiba idyasi isikhuseli	
b)	Have sex without using a condom / Uthe walala (isondo) ungayinxibanga idyasi.	

8. IN THE PAST 12 MONTHS DID YOU HAVE SEX WITH ANYONE YOU HAD ONLY MET THAT DAY OR NIGHT (CASUAL OR ANONYMOUS SEX)? / KWEZI NYANGA ZILISHUMI ELINESIBINI ZIDLULILEYO UBUKHE WALALA NGESONDO NAYE NABANINA OTHE UNOSUKU OKANYE UBUSUKU UBONENE NAYE?

a)	Yes / Ewe	
b)	No / Hayi	

9. HAVE YOU EVER BEEN TESTED FOR HIV? / UBUKHE WAHLOLWA UKUBA AWUNANTSHOLONGWANE KAGAWULAYO?

a)	No, I have never been tested / Hayi, andizange ndahlolwa	
b)	Yes, I have been tested / Ewe, ndahlolwa	
c)	I don't know if I have been tested / Andinalwazi lokuba ndandikhe ndahlolwa	

9.1. IF YOU ANSWERED YES THEN WAS YOUR HIV TEST: / UKUBA UYAVUMA UKUBA WAHLOLWA UKUBA UNENTSHOLONGWANE:

a)	Negative (did not have HIV) / Andinayo intsholongwane	
b)	Positive (do have HIV) / Ndinayo intsholongwane	
c)	I don't know as I never got the result of the test / Andiyazi kuba zange ndizifumane iziphumo zokuhlolwa kwam	

10. HAVE YOU HAD A VAGINAL INFECTION IN THE LAST 12 MONTHS? / UBUKHE WANENTSHOLONGWANE KUBUFAZI BAKHO KWEZI NYANGA ZILISHUMI ELINESIBINI ZIDLULILEYO?

a)	Yes / Ewe	
b)	No / Hayi	

11. HAS YOUR PARTNER 9HUSBAND OR BOYFRIEND) HAD AN HIV TEST?/ INGABA UMNYENI WAKHO OKANYE ISITHANDWA SAKHO SAHLOLWA MALUNGA NENTSHOLONGWANE KAGAWULAYO?

a)	No, he has not been tested / Hayi, zange ahlolwe	
b)	Yes, he has been tested / Ewe, wahlolwa	
c)	I don't know / Andinalwazi	

11.1. IF YOUR PARNTER HAS BEEN TESTED FOR HIV WAS HIS RESULT: / UKUBA UMLINGANE WAKHO WAHLOLWA MALUNGA NENTSHOLONGWANE UGAWULAYO ZITHINI IZIPHUMO ZAKHE:

a)	Positive (has HIV) / Unayo (uyakrokreleka)	
b)	Negative (he has not got HIV) / Akanayo	
c)	I don't know / Andinalwazi	

11.2 IF I ASK MY BOYFRIEND OR MY HUSBAND TO WEAR A CONDOM WHEN HAVING SEX WITH ME HE WOULD: / XA NDIXELELA UMYENI WAM OKANYE ISITHANDWA UKUBA MAKASEBENZISE IDYASI (ISIKHUSELI) XANA SIDIBANA NGESONDO:

a)	Wear a condom / Unxiba idyasi	
b)	Say I think he is unfaithful to me / Undixelelea ukuba andimthembanga	
c)	Hit (beat) me / Usuke andibethe	
d)	Refuse to wear a condom / Akafuni ukunxiba idyasi	
e)	Say only prostitutes ask their men to wear condoms / Usuke athi ngabantu abathengisa ngemizimba yabo kuphela, abayalela amadoda abo ukuba banxibe idyasi	
f)	Other … specify / Okanye ezinye indidi…. cacisa	

ADDENDUM 6

QUESTIONNAIRE

FACTORS DETERMINING VULNERABILITY

ADDENDUM 6 : Self-report questionnaire: Practices influencing HIV risk

QUESTIONNAIRE

ENGLISH

SECTION 1 /

1. **WHAT IS THE NAME OF THE PLACE WHERE YOU LIVE : /**

   : _____

2. **HOW LONG HAVE YOU LIVED THERE? :** _____

3. **WHAT IS THE NAME OF THE PLACE WHERE YOU HAVE LIVED FOR THE LONGEST TIME IN YOUR LIFE?** _____

4. **ARE YOU? /** **?**

a)	Single (never married) /	
b)	Married /	
c)	Divorced /	
d)	Widowed /	

5. **ARE YOU? / INGABA?**

a)	Living by yourself	
b)	With your parents	
c)	Living with your husband	
d)	Living with your boyfriend /	
e)	Other … specify?	

6. **HOW OLD WERE YOU THE FIRST TIME YOU HAD SEX?** _____

I WAS _____ **YEARS OLD**

7. **HOW MANY MEN HAVE YOU HAD SEX WITH IN THE PAST 12 MONTHS? / ?**

a)	None /	
b)	1 /	
c)	2-5 /	
d)	6-9 /	
e)	10 or more /	

8. **HOW MANY MEN HAVE YOU HAD SEX WITH IN YOUR ENTIRE LIFE? /**

a)	None /	
b)	1 /	
c)	2-5 /	
d)	6-9 /	
e)	10 or more /	

9. **IN THE PAST 12 MONTHS HAVE YOU EXCHANGED SEX FOR A GIFT, MONEY OR DRUGS?**

a)	No / i	
b)	Yes /	

IF YES, PLEASE GIVE YOUR REASON FOR DOING IT .....

_____

_____

IN THE PAST 12 MONTHS DID YOU HAVE SEX WITH ANYONE YOU HAD ONLY MET THAT DAY OR NIGHT (CASUAL OR ANONYMOUS SEX)?

a)	Yes /	
b)	No /	

10. OVER THE PAST 12 MONTHS HAVE YOU BEEN FAITHFUL TO YOUR PARTNER (BOYFRIEND OR HUSBAND) ?

a)	No	
b)	Yes, always	
c)	Sometimes	
d)	Other , please specify	

HAVE YOU HAD A VAGINAL INFECTION IN THE LAST 12 MONTHS?

a)	Yes /	
b)	No / i	

11. HOW OFTEN DO YOU USE CONDOMS WHEN HAVING SEX?

a)	Never	
b)	Always	
c)	Sometimes	

12. DO YOU THINK CONDOMS ARE ?

a)	Easy to use	
b)	Difficult to use	
c)	Other .... Specify	

13. WHAT DOES YOUR BOYFRIEND THINK ABOUT CONDOMS?

a)	He is happy to use condoms	
b)	He prefers not to use a condom but uses them when I ask him to	
c)	He says he won't use a condom	
d)	Other .... Specify	

14. IF YOU ASK YOUR BOYFRIEND OR HUSBAND TO WEAR A CONDOM WHEN HAVING SEX WITH YOU WHAT WOULD HE DO?

a)	Wear a condom	
b)	Tell you that you are being unfaithful to him	
c)	Hit or beat you	
d)	Refuse to wear a condom	
e)	Say only prostitutes use condoms	
f)	Other .... Specify	

15. THE LAST TIME YOU HAD SEX, DID YOU USE A CONDOM?

a)	Yes	
b)	No	
c)	Other ... specify	

16. IS YOUR PARTNER (CASUAL, BOYFRIEND OR HUSBAND) EVER BEEN VIOLENT TOWARDS YOU?

a)	Frequently my partner is violent	
b)	Sometimes my partner is violent	
c)	No never	
d)	Other …. Specify	

17. CAN YOU CHOOSE WHETHER OR NOT YOU WANT SEX ?

a)	Yes	
b)	No	
c)	Other … specify	

18. HAVE YOU EVER BEEN RAPED?

a)	Yes	
b)	No	
c)	Other … specify	

19. IN YOUR RELATIONSHIPS WHO MAKES THE DECISIONS ABOUT SEX?

a)	You do	
b)	Your partner (boyfriend or husband) does	
c)	You and your partner discuss the issue and make the decision together	
d)	Other …. Specify	

20. HAVE YOU HAD A TEST FOR HIV?

a)	Yes, I have been tested /	
b)	No, I have never been tested /	
c)	I don't know	

20.1 IF YOU ANSWERED YES THEN WAS YOUR HIV TEST RESULT: /

a)	Negative (I am HIV negative) / Andinayo intsholongwane	
b)	Positive (I am HIV positive) / Ndinayo intsholongwane	

21. HAS YOUR PARTNER (HUSBAND OR BOYFRIEND) HAD AN HIV TEST?/ ?

a)	Yes, he has been tested /	
b)	No, he has not been tested /	
c)	I don't know /	

21.1 IF YOUR PARTNER HAS BEEN TESTED FOR HIV WAS HIS RESULT: /

a)	Positive (He is HIV positive) /	
b)	Negative (He is HIV negative) /	
c)	I don't know /	

22. DO YOU TALK TO YOUR PARTNER (HUSBAND OR BOYFRIEND) ABOUT CONTRACEPTION TO PREVENT PREGNANCY?

a)	Yes	
b)	No	
c)	Sometimes	
d)	Other … please specify	

23. DO YOU TALK TO YOUR PARTNER (HUSBAND OR BOYFRIEND) ABOUT HIV/AIDS ?

a)	Yes	
b)	No	
c)	Sometimes	
d)	Other … please specify	

24. DO YOU THINK THERE IS A STRONG POSSIBILITY YOU MIGHT GET HIV?

a)	Yes	
b)	No	
c)	Why do you say this? Please write you answer here	

25. DOES DRINKING ALCOHOL INCREASE THE LIKELIHOOD OF YOU HAVING SEX WITH SOMEONE THAT IS NOT YOUR PARTNER (BOYFRIEND OR HUSBAND)?

a)	Yes	
b)	No	
c)	Other … specify	

26. WHEN YOU HAVE SEX AFTER DRINKING ALCOHOL DO YOU USE A CONDOM?

a)	Yes always	
b)	No	
c)	Sometimes	
d)	Other … please specify	

ADDENDUM 7

BARRIERS

ADDENDUM 7 : Barriers

INTERGRATION OF FACTORS IDENTIFIED IN THE LITERATURE AS POTENTIALLY A BARRIER TO ADOPTION OF SAFER SEX PRACTICES USING THE FRAMEWORK FOR ORGANIZING THE RELATIONSHIP BETWEEN SEXUAL BEHAVIOUR, PERSONAL FACTORS AND THE PROXIMAL AND DISTAL CONTEXTS (Eaton et al., 2003).

SELF	**PROXIMAL**	**DISTAL**
Personal level	**Interpersonal**	**Culture**
Young Age (less than 35 years) Female gender Low level of education Early removal from schooling due to poverty or because as a girl seen as less deserving than brothers Ethnicity Knowledge and beliefs Inaccurate or incorrect knowledge of HIV, transmission routes and about condoms Perception of risk Low perceived risk a barrier to adopting safer sex practices Self efficacy related to condom use Low self-efficacy evidenced by inability to participate effectively in sexual decision-making with partner, no or inconsistent condom use, little confidence of keeping/maintaining current Perceived costs and benefits Intentions • Intention to abstain • Intention to be monogamous • Intention to reduce number of partners Early sexual debut Pre-marital and extra-marital sexual activity Unfaithfulness (Polygamy) Self-esteem Low self esteem can be evidenced by poor self-image, need for affirmation from others. Behaviours linked to low esteem that might be evidenced are younger age for sexual debut and increased concern about rejection or causing partner displeasure blocking sexual assertiveness For adopting safer sex	Negotiating condom use No communication or ineffective communication with sexual partners regarding past relationships, avoiding or delaying sex, avoiding or planning pregnancy, using condoms to avoid HIV/AIDS or STIs. Coercive, male dominated relationships Evidenced by behaviours including: • Coercion or violence towards a female partner • Control of sexual relationship • Rejection of condom use requests Male placing female partner at risk by having multiple partners Peer pressure Poor self-image and need for affirmation from peers can contribute to vulnerability as can the pressure to conform in order to be accepted by social group. Interactions with adults Communication within family specifically mother or female guardian, father or male guardian and significant others regarding sexual issues such as avoiding or delaying sex about use of contraception Physical and organisational environment Lack of access to condoms Should condoms be difficult to access this would reduce likelihood of use. Attitudes of health professionals that are judgmental or adolescent unfriendly could form a barrier to use. Low access to the media Such as a radio and television in home limiting opportunities to receive accurate information about HIV/AIDS Lack of recreational facilities No or limited recreational facilities linked to increased sexual activity Living on the streets Living arrangement (with biological parents, 1 parent or other eg street) Being in prison Being in prison places men at a high risk for unsafe sex	Culturally prescribed roles Community Connectedness Structural factors Urban versus rural conditions Place of residence (city, large town, small town, village) Poverty: Strong link between economic need and certain risky sexual behaviours such as swopping sex for material benefit as a "survival strategy".

ADDENDUM 8

ANALYSIS OF CONDOM USE

ADDENDUM 8: Analysis of Condom Use.

FACILITATORS AND BARRIERS TO CONDOM USE Anderson, 2003:913; Bird *et al.*, 2001:1; Campbell & MacPhail, 2002:3; Eaton *et al.*, 2003:6,7,9; El-Bassel *et al.*, 2003:963; Garbus, 2003:48 ; Gray, *et al.*, 2001:7; Marin, Gomez & Tschann, 1993:9; Myer *et al.*, 2002:3; Potts & Walsh, 2003:2; Smith, 2003:4; Wood *et al.*, sa:16,17; Zellner, 2003:2,5	
FACILITATORS TO CONDOM USE	**BARRIERS TO CONDOM USE**
MICRO-LEVEL	
Knowing & believing that condoms are not dangerous.	Myths/ inaccurate knowledge may decrease the acceptability of condoms: In a study in the Northern Province teenage informants knew that condoms could be used to prevent sexually transmitted infections and HIV although only a small number had used condoms. Concerns included fear of the condom being "left inside", boys making holes in the condom to make them pregnant and condoms bursting.
FACTOR: SELF-EFFICACY - SKILLS FOR SAFE SEXUAL PRACTICE	
SKILL COMPETENCE	
Confidence or expectation that a condom can be used successfully Greater frequency of condom use is associated with behaviour related to sexual comfort	Lack of confidence or ability to use a condom successfully
SEXUAL NEGOTATION SKILLS	
Ability to negotiate condom-use	Lack of skills required for negotiating use of condom
SELF-EFFICACY: ATTITUDES & FEELINGS CONTRIBUTING TO SOUND JUDGEMENT	
An internal locus of control with appropriate levels of self esteem and self worth guide sound decision-making on condom-use	Negative attitudes: for many Africans condoms suggest unfaithfulness and mistrust so personal safety needs are therefore considered secondary to condom use Psychological symptoms such as depression can lower condom use
FACTOR: SCHOOL ATTENDANCE & EDUCATION LEVEL	
High school or higher education significantly increasing the likelihood of condom use	Lower level of education

PERCEPTION OF OWN VULNERABILITY	
Personal knowledge of someone with HIV/AIDS HIV testing and counselling Women, who are HIV positive, are more likely to use a condom	Perception of invulnerability to HIV
INTERFACE-LEVEL	
FACTOR: RELATIONSHIP STATUS	
MEASURE: COMMITMENT TO SEXUAL PARTNER	
Sex associated with risk such as with non-regular partners, multiple partners, unmarried persons, secondary sexual partners, partners known to have a HIV risk	Being in a committed relationship
MEASURE: SCOPE OF DECISION-MAKING	
Being single	Being in a committed relationship or married
Having personal knowledge of someone with HIV/AIDS	Behaviours linked to anger are reported and act as a deter women from requesting condom use
GENDER POWER BALANCE	
Self determination	Many women find themselves in situations where they at an increased risk of HIV infection and despite the knowledge and desire to protect themselves are unable to do so due to the unequal, gender power balance
Partner responses are not a barrier to safe sex	Negative consequences are a barrier to safe sex: Girls reported boys becoming angry when condom use was suggested causing them to fear a beating and accusations of unfaithfulness. Boys reported forcing girls to sleep with them without a condom. Coercion to stop girls using contraception methods or attending a clinic for contraception included being threatened of a beating.
COMMUNICATION WITHIN FAMILY, SOCIAL & OCCUPATIONAL GROUP	
Informed women are in a position to make sound judgement related to condom use	Uninformed women lack accurate knowledge on condom-use

COMMUNICATION WITH SEXUAL PARTNER	
Couple counselling can increase the acceptability of condom use	Ineffective communication perpetuating or promoting unsafe sexual practice
PERCEPTION OF NORMATIVE BEHAVIOUR	
Having friends who carry and use condoms is associated with increased use Perception of condom use as culturally acceptable	Ridicule by peers Perception of woman who carry condoms as "loose": while being prepared by carrying condoms can enhance condom use, it can be construed negatively
MACRO-LEVEL	
CULTURALLY SCRIPTED ROLE	
Culturally scripted roles that considered a women as a partner and promotes gender equality	A "macho masculine identity": Campbell *et al.* describes how South African miners have developed this identity as a defence to their stressful work situation and how this identity works against condom use. To this group condom-use is associated with negatives named us an uncontrollable sex drive requiring multiple partners, lack of caution in high risk situation, preventing the desired "flesh to flesh" sex and fathering of many children (2002:2,3). Cultural behaviour that considers talking about sex as taboo between parents and children or partner acts as a barrier
RELIGIOUS AFFILIATION	
Religious teaching that supports condom use	Religious teaching that does not support condom use
GEOGRAPHICAL LOCATION	
MEASURE: NEIGHBOURHOOD	
Condom-use has a higher level of acceptability to urban and younger men	Condoms are less acceptable to rural men
ACCESS TO HEALTH CARE	
Access to condoms. A South African study found that most respondents had access to free condoms	Non-availability of condoms: In parts of Africa access to condoms limited
ECONOMIC STATUS	
Being of a higher income status and having financial independence increases the scope of women to negotiate condom use	When sex is a commodity it reduces the scope for negotiating condom use

SOCIO-POLITICAL STATUS	
MEASURE: AGE	
Condom use is more acceptable to younger woman and men	Being older is associated with a decreased likelihood of condom use
MEASURE OF ACCESS TO RESOURCES	
Social environment affects condom use	

ADDENDUM 9

POWER ANALYSIS TOOL

ADDENDUM 9 : POWER analysis tool

FACTORS (From this study)	HIV RISK STATUS	BARRIERS (Eaton *et al.*, 2003)	EMPOWERMENT STATUS	EMPOWERMENT CONCEPTS (Albertyn, 1995; 2000)
MICRO-LEVEL		**PERSONAL FACTORS**		**MICRO-LEVEL**
School attendance Educational level Perception of vulnerability Knowledge related to safe sexual practice Skills required for safe sex Attitudes & feelings contributing to sound judgement		Knowledge and beliefs Perception of low personal risk Self-effcacy Perceived costs outweigh the benefits Low self-esteem Poor sense of self worth		Skills • Personal • Productive activity • Knowledge Attitude • Change in attitude • Motivation • Personal control Feelings • Personal • Control

FACTORS (From this study)	HIV RISK STATUS	BARRIERS (Eaton *et al.*, 2003)	EMPOWERMENT STATUS	EMPOWERMENT CONCEPTS (Albertyn, 1995; 2000)
INTERFACE-LEVEL		**PROXIMAL FACTORS**		**INTERFACE**
Relationship status Gender power balance Dwelling/sleeping place Communication within family, social & occupational group Communication with sexual partner Perception of normative behaviour		Negotiating condom use Coercive, male dominated sexual relationships Physical & organisational environment • lack of access to condoms • low access to media • lack of recreational facilities • living on the street • being in prison Interactions with adults Peer pressure		Action • Understanding community organisation • Collaborative action to influence change Participation • Identity • Support • Behaviour

FACTORS (From this study)	HIV RISK STATUS	BARRIERS (Eaton *et al.*, 2003)	EMPOWERMENT STATUS	EMPOWERMENT CONCEPTS (Albertyn, 1995; 2000)
MACRO-LEVEL		**DISTAL CONTEXT**		**MACRO-LEVEL**
Culturally scripted roles Religious affiliation Media Geographical location Economic status Socio-political status comprised of: Age Gender Ethnicity/race		Culture Structural factors • Urban vs rural conditions • Poverty		Beliefs • Critical reflection • Contribution Action • Participation • Change Effects • Rights • Power

ADDENDUM 10

CONSENT FORM

Robin Trust

Form of consent to participate in a survey on HIV/AIDS

In signing this form I hereby give my consent to be interviewed by an employee of Robin Trust. I understand that the information I give will be part of a research study that will focus on women and their ability to adopt behaviours that will protect them from acquiring sexually transmitted HIV/AIDS infection.

I understand that the interview will take place at Robin Trust and that I will be asked personal questions about myself and about my own personal sexual behaviour. I also understand that the information given will be treated as confidential and that I have a right not to answer any question that may be put to me. I have been informed and understand that if I refuse to answer any particular question, that it will in no way affect my own or my family's relationship with Robin Trust. I also understand that the information I give will not be given to anyone else.

This interview has been granted freely by myself and I understand that the information I give will be used to produce reports and statistics but will in no way identify me. I also accept that I will not receive a direct benefit in any way as a result of participation but that I am contributing towards knowledge that may improve my life and the lives of others. I understand that these results of this research will be given to me once finalised if I request a copy of them.

Should participation in this research raise issues around my own health or feelings that I feel I need to talk through, support will be available from the Robin Trust staff member managing the staff health clinic. This member of Robin Trust staff is not the researcher and information shared at the clinic is confidential.

DATE:_____ Respondent's Signature:_____

Interviewer's Signature:_____

ADDENDUM 11

FREQUENCY DISTRIBUTIONS (ANALYSIS GROUP)

ADDENDUM 11: Frequency Distribution (analysis group)

MICRO-LEVEL	1	2	3	4
ATTITUDE				
Q1	7	19	20	15
Q2	21	32	6	7
Q3	4	17	31	14
Q4	10	9	24	26
Q5	44	25	1	3
Q6	7	16	24	19
Q7	5	16	30	20
Q8	7	8	36	20
Q9	3	16	7	23
Q10	54	9	1	3
	162	*167*	*180*	*150*
		329	***330***	
FEELINGS				
Q11	5	16	22	17
Q12	11	21	15	19
Q13	9	18	21	14
Q14	2	3	10	51
Q15	1	4	18	43
Q16	7	15	20	43
Q17	3	15	20	24
Q18	10	15	17	24
Q19	2	10	17	39
Q20	2	2	19	43
	52	*119*	*179*	*317*
		171	***496***	
SKILLS				
Q21	3	3	21	36
Q22	4	14	32	17
Q23	9	24	23	22
Q24	49	11	2	4
Q25	17	25	9	13
Q26	9	20	25	12
Q27	5	13	26	22
Q28	3	12	22	26
Q29	50	15	0	1

Q30	9	20	20	17
Q31	2	15	21	28
Q32	0	8	21	36
Q33	3	4	21	39
	163	*184*	*243*	*273*
		347	***516***	
INTERFACE				
PARTICIPATION				
Q34	19	8	23	12
Q35	4	20	20	25
Q36	19	22	21	4
Q37	20	28	11	14
Q38	8	11	33	14
Q39	3	3	15	40
Q40	8	16	18	24
	81	*108*	*141*	*133*
		198	***274***	

ACTION				
Q41	5	19	29	13
Q42	2	10	22	22
Q43	8	14	32	17
Q44	42	21	2	1
Q45	6	16	18	26
Q46	5	18	44	15
Q47	3	11	32	21
Q48	6	7	33	23
	77	*116*	*212*	*138*
		193	***350***	
MACRO-LEVEL				
BELIEFS				
Q49	9	20	24	13
Q50	11	22	21	21
Q51	5	12	27	22
Q52	6	4	25	29
Q53	24	30	9	3
Q54	20	31	10	2
	75	*119*	*116*	*90*
		194	***206***	
ACTION				
Q55	27	28	9	2
Q56	5	21	24	17
	32	*49*	*33*	*19*
		81	***51***	
EFFECTS				
Q57	6	8	24	24
Q58	36	23	6	5
Q59	5	28	20	12
Q60	13	17	31	14
Q61	6	22	21	18
	66	*98*	*102*	*73*
		164	***175***	

ADDENDUM 12

FREQUENCY DISTRIBUTION

ANALYSIS GROUP

ADDENDUM 12 : Frequency Distribution (Experimental group)

JUNE 2004

FINAL	**Frequencies**			
MICRO-LEVEL	**1**	**2**	**3**	**4**
ATTITUDE				
Q1	2	4	10	8
Q2	2	1	9	12
Q3	0	10	9	5
Q4	4	2	9	9
Q5	2	1	7	14
Q6	0	11	7	6
Q7	2	6	11	5
Q8	1	8	6	9
Q9	4	6	7	7
Q10	0	0	7	17
	17	*49*	*82*	*92*
		66	***174***	
FEELINGS				
Q11	0	5	14	5
Q12	3	12	6	3
Q13	4	8	9	3
Q14	1	2	12	9
Q15	1	3	6	14
Q16	0	2	8	14
Q17	1	9	11	3
Q18	3	9	7	5
Q19	1	3	4	16
Q20	2	1	10	11
	16	*54*	*87*	*83*
		70	***170***	
SKILLS				
Q21	0	1	14	9
Q22	0	2	18	4
Q23	6	7	9	2
Q24	15	7	1	1
Q25	6	10	6	2
Q26	2	12	6	4
Q27	3	4	12	5
Q28	2	3	12	7
Q29	1	1	6	16
Q30	4	13	4	3
Q31	1	4	14	5
Q32	2	3	10	9
Q33	0	3	6	15
	42	*70*	*118*	*82*
		112	***200***	

INTERFACE				
PARTICIPATION				
Q34	2	5	8	9
Q35	2	2	15	5
Q36	2	3	9	10
Q37	0	0	10	14
Q38	1	9	9	5
Q39	7	9	4	4
Q40	3	5	8	8
	17	*33*	*63*	*55*
		50	***118***	
ACTION				
Q41	1	7	11	5
Q42	2	7	11	4
Q43	0	5	8	11
Q44	0	0	7	17
Q45	1	6	11	6
Q46	1	7	13	3
Q47	0	3	17	4
Q48	1	6	10	7
	6	*41*	*88*	*57*
		47	***145***	
MACRO-LEVEL				
BELIEFS				
Q49	5	7	8	4
Q50	5	13	6	0
Q51	3	3	14	4
Q52	1	2	13	8
Q53	0	0	11	13
Q54	0	2	16	6
	14	*27*	*68*	*35*
		41	***103***	
ACTION				
Q55	0	1	16	7
Q56	3	10	7	4
	3	*11*	*23*	*11*
		14	***34***	
EFFECTS				
Q57	1	5	10	8
Q58	1	1	14	8
Q59	4	10	10	0
Q60	6	11	5	2
Q61	3	9	8	4
	15	*36*	*47*	*22*
		51	***69***	

ADDENDUM 13

TABLES

PRACTICES INFLUENCING HIV RISK

ADDENDUM 13: Tables - practices influencing HIV risk (experimental group)

Findings: Implementation and Evaluation phase (phase 3)

Practices informing HIV vulnerability status

1. Age

Age categories (years)	Number of participants (n=24)	
	N	%
Less than 19	1	4,16
20-29	17	70,83
30-39	2	8,33
40-49	2	8,33
More than 50	0	

2. Age at sexual debut

Sexual debut	Number of participants (n=24)			
	Pre-test		Post-test	
	N	%	N	%
Under 16 years	1	4,17	2	8,33
16 - 18 years	9	37,50	13	54,17
19 -29 years	13	54,16	8	33,33
No answer given	1	4,17	1	4,17

3. Language

Twenty one participants stated their first language was Xhosa, two English and one as Zulu and all had been found during selection interviews to be fluent in English and able to participate in course where English was the language of instruction.

4. Marital status

25% of participants were married and 75% were single.

5. Lifetime number of partners

Lifetime number of sexual partners	Number of participants (n=24)			
	Pre-test		Post-test	
	N	%	N	%
None	0	0	0	0
1	11	45,83	10	41,66
2 - 5	12	50,00	13	54,17
6 - 9	0	0	0	0
10 or more	1	4,17	1	4,17

6. Number of sexual partners in the past 12 months

Number of sexual partners over past 12 months	Number of participants (n=24)			
	Pre-test		Post-test	
	N	%	N	%
None	4	16.66	5	20.84
1	19	79.17	15	62.50
2 - 5	1	4.17	2	8.33
6 - 9	0	0	0	0
10 or more	0	0	0	0
Other...no answer given	0	0	2	8.33

7. Number of casual partners over the past 12 months

Number of casual partners over the past year	Number of participants (n=24)			
	Pre-test		Post-test	
	N	%	N	%
None	24	100	24	100
One				
Two or more				

8. Faithfulness to sexual partner over the past 12 months

Faithfulness to partner	Number of participants (n=24)			
	Pre-test		Post-test	
	N	%	N	%
Always faithful	17	70.83	23	95.83
Sometimes unfaithful	1	4.17	1	4.17
Unfaithful	6	25.00	0	0

9. Reports of vaginal infections over the past 12 months

Reported presence of vaginal infections	Number of participants (n=24)			
	Pre-test		Post-test	
	N	%	N	%
Yes	1	4.16	0	0
No	23	95.84	24	100

10 Scope for decision making: ability to choose whether to have sex

Ability to say no to sex	Number of participants (n=24)			
	Pre-test		Post-test	
	N	%	N	%
Can say "no"(unrestricted)	21	87,5	22	91,66
Unable to say "no" (Restricted)	3	12,5	2	8,34
Other: Specify	1 participant stated "sometimes" 1 participant reported that because she is single, she can "choose, whom she is going to sleep with".			

11. Educational status

Educational level	Number of participants (n=24) Tested at pre-test	
	N	%
Grade 10	5	20,83
Grade 11	2	8,34
Grade 12	12	50,00
More than Grade 12	5	20,83

12. Economic status

Previous employment	Number of participants (n=24) Pre-test	
	N	%
Never employed	16	66,66
Casual (PnP)1	1	4,17
Cleaning/domestic/tea lady	3	12,50
Machinist	1	4,17
Factory (Country Fair)	1	4,17
Clerical	2	8,33

Source of income	Number of participants (n=24)			
	Pre-test		Post test	
	N	%	N	%
None	16	66,65	18	75,00
Father	1	4,17	1	4,17
Guardian	1	4,17	1	4,17
Sister	1	4,17	1	4,17
Husband	3	12,50	2	8,32
Previous employee	1	4,17	1	4,17
Did not answered	1	4,17	0	0

Number of children	Number of participants (n=24)			
	Pre-test		Post-test	
	N	%	N	%
0	11	45,83	12	50,00
1	8	33,33	8	33,33
2	3	12,50	3	12,50
3	1	4,17	1	4,17
4	0	0	0	0
5	1	4,17	0	**0**

13. Transactional sex

Number of times over past 12 months sex exchanged for gain	Number of participants (n=24)			
	Pre-test		Post-test	
	N	%	N	%
Never	24	100	24	100
Once				
Twice or more				

14. Geographical location

Geographical location	Number of participants (n=24)			
	Pre-test		Post-test	
	N	%	N	%
Rural	0	0	0	0
Urban - suburb	3	12,5	3	12,5
Peri-urban	21	87,5	21	87,5

15. Living arrangement

Living arrangement	Number of participants (n=24)			
	Pre-test		Post-test	
	N	%	N	%
Alone	3	12,5	2	8,33
With your parents	10	41,66	8	33,34
With husband	6	25,0	6	25,0
With boyfriend	2	8,34	2	8,33
Other not specified	3	12,5	6	25,0

Distribution of power

Decision-maker	Number of participants (n=24)			
	Pre-test		Post-test	
	N	%	N	%
The participant	1	4,17	0	0
Male partner	2	8,34	0	0
Joint decisions	21	87,5	23	95.84
Other...specify	1 participant at pre-test and post-test stated that she does not have a boyfriend anymore.			

16. Violence from sexual partner

Violence, from sexual partner, experienced	Number of participants (n=24)			
	Pre-test		Post-test	
	N	%	N	%
Frequently	0	0	0	0
Sometimes	4	16,67	2	8,33
Never	20	83,33	22	91,67

17. Rape

Have you ever been raped?	Number of participants (n=24)			
	Pre-test		Post-test	
	N	%	N	%
Never	24	100	24	100
Once				
Twice or more				

18. Negative consequences of request for condom use

Partner response to request for condom-use	Number of participants (n=23)			
	Pre-test		Post-test	
	N	%	N	%
Wear a condom	18	78,26	19	82,61
Tell you that you are being unfaithful to him	4	17,39	4	17,39
Hit or beat you	0	0	0	0
Refuse to wear a condom	1	4,35	0	0
Say only prostitutes use condoms	0	0	0	0

19. Discussion with sexual partner about contraception

Frequency of discussion about contraception	Number of participants (n=24)			
	Pre-test		Post-test	
	N	%	N	%
Yes	20	83,34	20	83,34
No	2	8,33	3	12,5
Sometimes	2	8,33	1	4,16

20. Discussion with sexual partner about HIV

Discussion about HIV with sexual partner	Number of participants (n=24)			
	Pre-test		Post-test	
	N	%	N	%
Yes	21	87,5	24	100.00
No	1*	4,16	0	0
Sometimes	2	8,33	0	0
*1 participant reported at pre-test not having a boyfriend answered "no"				

21. Partner's HIV sero-status

Sexual partner - HIV test	Number of participants (n=24)			
	Pre-test		Post-test	
	N	%	N	%
Has had a HIV test	14	58,33	14	58,32
Never tested	9	37,5	5	20,84
I don't know	1	4,16	5	20,84

22. Partner's HIV status known

HIV test result - partner	Number of participants (n=24)			
	Pre-test		Post-test	
	N	%	N	%
Positive	2	8,34	1	4,16
Negative	12	50,00	13	54,16
I don't know	3	12,5	6	25,0
No response given Response only requested if responded "yes" to previous question.	1	4,16	4	16,66

23. Perception of own vulnerability to HIV

Do you feel at risk for acquiring HIV?	Number of participants (n=24)			
	Pre-test		Post-test	
	N	%	N	%
Yes				
No				

24. HIV testing (own)

	Number of participants (n=24)			
	Pre-test		Post-test	
	N	%	N	%
Had a HIV test	14	58,33	15	62,50
Never tested	10	41,67	9	37,50

25. Result of own HIV test

HIV test - results (own)	Number of participants			
	Pre-test (n=14)		Post-test (n=15)	
	N	%	N	%
Negative	13	92,86	15	100
Positive	0	0	0	0
Result not known	1	7,14	0	0

26. Consistency of condom use

How often do you use condoms when having sex?	Number of participants (n=24)			
	Pre-test		Post-test	
	N	%	N	%
Never	6	25.00	5	20.83
Always	12	50,00	16	66,67
Sometimes	6	25,00	3	12,50

27. Perception of level of difficulty of condom use

Condoms - ease of use	Number of participants (n=23)			
	Pre-test		Post-test	
	N	%	N	%
Easy to use	22	95,65	22	95,65
Difficult to use	1	4,35	1	4,35

28. Partners attitude to condom use

Partner attitude - condom use	Number of participants (n=23)			
	Pre-test		Post-test	
	N	%	N	%
Wear a condom	10	43,48	16	69,57
Wear a condom although he prefers not to use one	13	56,52	7	30,43
Refuse to wear a condom	0	0	0	0

29. Condom use at last sexual encounter

Condom use - last sexual encounter	Number of participants (n=23)			
	Pre-test		Post-test	
	N	%	N	%
Yes	14	60,87	16	69,57
No	9	39,13	7	30,43

30. Association between alcohol intake and casual sex

Increase in casual sex linked to alcohol intake	No of participants (n=24)			
	Pre-test		Post-test	
	N	%	N	%
Yes	7	29,16	5	20,83
No	16	66,66	15	62,50
Other...specify (don't drink alcohol)	1	4,17	4	16,66

31. Association between alcohol intake and non-use of condoms

Do you use a condom after intake of alcohol?	No of participants (n=24)			
	Pre-test		Post-test	
	N	%	N	%
Yes, always	10	41,66	8	33,33
No	6	25,00	6	25,00
Sometimes	1	4,17	1	4,17
Don't drink alcohol	7	29,17	9	37,5