# ADOLESCENTS' PERCEPTIONS OF THE RELEVANCE OF BARRIERS TO VOLUNTARY COUNSELLING AND TESTING (VCT): A RURAL EASTERN CAPE HIGH SCHOOL STUDY

*by*

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DECLARATION

I hereby declare that all the parts of 'ADOLESCENTS' PERCEPTIONS OF THE RELEVANCE OF BARRIERS TO VOLUNTARY COUNSELLING AND TESTING (VCT): A RURAL EASTERN CAPE HIGH SCHOOL STUDY' are a result of my own academic endeavour and therefore my own work. All the sources used and or quoted are indicated and acknowledged in the references section of this study. This dissertation has not been submitted before for any degree at any other university.

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## ABSTRACT

Rural Eastern Cape has been noted as recording counter statistics to the national South African HIV and AIDS prevalence levelling off. The role of Voluntary Counselling and Testing (VCT) as a major preventive programme and the perceived barriers that would prevent rural adolescents from using it were explored at a high school in the Eastern Cape (N=178). About 20, 8% of the adolescent respondents in grade 10, 11 and 12 self reported that they had been tested while 79, 2% had not been tested and 55, 1% reported that they had never heard of VCT before. Quantitative analysis of the perceived barriers was done using the T-test and the Chi -square for the age range, grade and sex variables. There were no significant differences noted for age range and grade perceptions of barriers. The adolescents concurred on the need for family support in order to facilitate the acceptance and subsequent uptake of VCT, and on the existence of psychosocial stigma at school and among peers. Specific attention need to be paid to increasing access to and awareness of VCT among rural adolescents. A prerequisite need for context specific, gender sensitive efforts to alleviate perceived barriers to VCT among rural high school adolescents is highlighted. It would appear that there is a requirement for integrating the family support role in getting HIV, AIDS and VCT messages to rural adolescents. Adolescents in themselves are perceived as negatively stigmatizing peers and therefore should be a focus of sustained efforts against barriers to VCT usage.




**Key Words: HIV and AIDS: Barriers; VCT; Eastern Cape; Adolescents.**

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# CHAPTER ONE: INTRODUCTION

Human Immunodeficiency Virus (HIV) infection has continued to spread its tentacles in the face of concerted efforts to fight it. Since the start of the epidemic, HIV has infected more than 60 million people worldwide, cost the lives of more than 20 million people and presently 32 million people live with HIV and AIDS (Acquired Immune-Deficiency Syndrome) most of whom are children, according to the United Nations AIDS Organisation (UNAIDS, 2008). There is a strong possibility that there are perceived barriers that hinder use and access to programmes meant to curtail the rapid spread of the HIV and AIDS pandemic and the present study attempts to highlight these barriers for the adolescent age group in the marginalized rural settings.

The World Health Organisation (WHO, 2002) espouses that the dynamics and intensity of the HIV epidemic have resulted in opportunities as well as imperatives to increase access to HIV counselling and testing, and knowledge of HIV status. According to Macphail, Pettifor, Moyo and Rees (2009) HIV and AIDS is still a major public health problem among South African youth and of concern is the fact that a large proportion of these youths have never been tested for HIV and are not aware of their status.

HIV and AIDS counselling is a process of exchange and provision of necessary HIV and AIDS knowledge and information between counsellor and counselee. Voluntary Counselling and Testing (VCT) is a process combining both counselling and testing; a sequential stage process of pre-test counselling, HIV testing, post-test counselling and follow up counselling enabling people to make an informed choice about being tested for HIV (UNAIDS, 2000; 2004). The use of VCT has, however, been subject to individuals perceptually weighing the potential benefits of

knowing HIV status against the potential harm such as stigma and discrimination as Rodham, Brewer, Mistral and Stallard (2006) espouse.

Despite campaigns to encourage use of VCT, few young people in Sub-Saharan Africa have been tested for HIV according to Macphail *et al.* (2009). It is believed that young people encounter significant obstacles receiving sexual and reproductive health services and lack access to the services they need to protect themselves from sexually transmitted infections (Koster, Kemp & Offei, 2001). UNAIDS (2000) proposed the study of barriers to Voluntary Counselling and Testing (VCT) that provides a framework for development of appropriate HIV and AIDS prevention programs. South Africa among other regional countries embarked in aggressive HIV and AIDS prevention and education programmes to counter beliefs and cultural mores that were inhibiting HIV and AIDS prevention (Tobias, 2001; Kalichman and Simbayi, 2004). Macphail *et al.* (2009) advocates for a refocusing of programmed strategies towards marginalized groups such as young women who do not have access to antenatal care and young men who are less users of routine clinical care.



There has been a continued dramatic growth rather than a reduction in HIV incidence over the years, especially among youths, who stand accused by studies of shunning VCT services and are regarded as the greatest drivers of the epidemic as implied in South African research by Horizons (2001); Hutchinson and Mahlalela (2006). A research report compiled by the Human Sciences Research Council (HSRC), Medical Research Council (MRC), National Institute for Communicable Diseases (NICD), and Centre for AIDS Development Research Evaluation (CADRE) has indicated a stagnating trend in the youth and early adult HIV and AIDS prevalence (2008). Kelly, Freeman, Nkomo and Ntlabati (2008) contend these shifts are among the encouraging outcomes of the comprehensive response programmes to HIV and AIDS. It is

wondered, whether marginalized rural youths' perceptions of barriers to VCT have particularly thawed, as an aspect instrumental to this shift.

Macphail, Pettifor, Coates and Rees (2008) noted the reduced HIV risk behaviour and use of care and support services among adults accessing VCT. HSRC *et al.* (2008) particularly notes the slowdown among youths' HIV prevalence in urban areas. Macphail *et al.* (2009) also state that there seems to be evidence pointing out that having been tested for HIV among South Africans is associated with living in an urban area among both men and women and that accessing testing among rural youths remains a challenge. It can be noted that perceptions and behaviour change are not only constructed at the level of the individual, but are constrained, influenced, and facilitated by the ecology in which the individuals live out their social and sexual lives as Macphail *et al.*(2008) points out. Ecological theory highlights the importance of studying groups of people in context rather than generalising arbitrarily across larger populations. The role of context and availability of testing facilities that may be providing limited experiences in the rural youths need to be fully unravelled.



CADRE (2001) found out that although implicit knowledge of HIV and AIDS and accompanying behavioural responses is high, confusion reigns about key aspects of the epidemic among high risk groups, such as fear of stigmatisation, fear of death, fear of rejection, ignorance with regards to HIV and AIDS, lack of testing facilities and believing that there is no cure. CADRE (2001) also noted the pervasive belief in the South African society that young people have not particularly responded to the challenges of HIV and AIDS. Young people are believed to be constrained from benefitting in HIV and AIDS programmes because of personal and societal factors that act as barriers to essential HIV prevention messages. Stigma and discrimination have thus become major barriers to the effective use of VCT by young people.

On the other hand, UNAIDS (2006) contend that VCT has become one of the most common means of preventing, detecting and improving access to care and support for HIV and AIDS. In essence, VCT is touted as one of the best strategies for HIV prevention (Baggaley cited in UNAIDS, 2000; Van Dyk and Van Dyk, 2003).

However, VCT has squared up against perceived barriers which have limited their successful implementation. Although Macphail *et al.* (2008) contend that there is a growing youths' perception that knowing one's status is important, they also highlight that among South African adolescents, there are a range of individual, environmental and socio-cultural existential factors and these may account for the large proportion of youths that has never been tested and by implication not aware of their status. Van Dyk and Van Dyk (2003) outline the barriers relating to problems with facilities or to psychosocial obstacles that negatively impact on people's willingness to participate in VCT programmes. Ahmed, Bankole, Biddlecom, Munthali, Ouderogo and Woog (2003) point out that young people weakly internalize advantages of VCT and emphasise on the barriers. Parker and Oyosi (2001) as quoted in Abebe (2006) also contend that programmes developed have not been sufficiently prioritized, nor have they been penetrated deep into rural community life. Inconsistencies between urban and rural population HIV prevalence rates as HSRC *et al.*, (2008) point out, are a case in point.



Santrock (2000) outlines that the adolescent dilemma is to use or misuse independence, to move away from normative standards against choosing own values and making important life decisions. Stress is characteristic of this stage as it is a time of testing, experimentation and attaining autonomy. The dynamism of adolescent personality factors are often powerful in influencing the adolescent response to programmes and have particularly made it difficult to

comprehensively study the predictors of VCT uptake among youths. Adolescents are seen as more susceptible to barriers to VCT as they are deemed less developed and less experienced in dealing with life problems (Rodham *et al.* 2006; Ahmed *et al.* 2006). It is assumed that the capacities to cope with the tasks of adulthood are dependent to a large extent on the foundations laid in earlier adolescence.

Baggaley (2000) and Tobias (2001) note that children are treated separately in other life settings, the legal age of consent places restrictions that are culturally embedded, and these factors act as barriers further discriminating against children in health matters. VCT is arguably and primarily an adult oriented and adult serving programme as Tobias (2001); Koster, Kemp and Offei (2001) argue. While the right to know is appropriate for the sexually active, the adolescent is generally not among those morally and culturally accepted as sexually active. Sex is tabooed in adolescence yet VCT promotes testing for all ages. Shaffer (2006) is of the opinion that adolesence as a transitional state between childhood and adulthood, is peculiar and different in western societies and urban settings, where youths freedoms are emphasised. In contrast, rural adolescents are enmeshed and intertwined into their social context. The African rural family is so intimately interlinked that it functions as an entity which makes it difficult for adolescents to make up different and separate perceptions from that of family members.



Barriers to adolescents testing are embedded in physical and psychosocial aspects underlying disclosure, shyness or shame and fear of rejection, cost of health services, negative attitudes from providers including consent issues, and confidentiality (Van Dyk & Van Dyk, 2003). Macphail, Pettifor, Coates and Rees (2008) found out that youths are inhibited through fear of knowing one's status, a feeling of invincibility, and a feeling that testing is for symptomatic individuals and that there are not enough support structures for disclosure of status.

Kloep and Hendry (2002) noted that post modern, fast changing societies are in a state of flux and adolescence as a cultural phenomenon becomes an extended period of response to political, economic and socio-ecological needs. Values and practices depend heavily on the contextual, social and historical period. Rural high school adolescents are conveniently in unfettered environments and repositories of traditional cultural enclaves with distinct backgrounds and that augurs well with evaluative grounded studies.

South Africa's HIV incidence rate is declared the worst in the world (UNAIDS 2006). Any change in this bleak outlook as indicated in latest South African studies, should begin and be validated by changes in perceptions of barriers to VCT. The relevance of barriers to VCT may be different for the urban adolescent whose life space may include many educative sources on VCT, HIV and AIDS issues. Prevailing youth cultures in rural settings are expected to significantly shape adolescent reactions in unique and individualistic ways along the gender and socio-cultural variables as Phillips and Coates (1995) postulated.



## 1.1 Background to research problem

South Africa has had a 'generalized epidemic' until 2007 according to Shisana (2005). This means that the reported statistics about HIV and aids have been focused on national trends without as much focus on subgroup and contexts differences that may exist. Current research indicates that the South African epidemic has levelled off at a prevalence rate of 10, 9% for the whole population, while incidence for rural young people may still be high (HSRC *et al.* 2008). A cornerstone of HIV prevention in South Africa has been VCT and yet past research indicated only one in five South Africans was aware of VCT and had been tested (Kalichman & Simbayi,

2000). However, current statistics (HSRC *et al.* 2008) have struck a positive note, recording successes in national HIV communication outreach, youths' awareness of VCT programmes, increases in condom use and doubling of HIV status awareness. Perceptions of relevance of barriers to testing are envisaged to either decrease or increase resistance to seeking VCT services, where if barriers are perceived strongly, youths opt out of the VCT seeking behaviour or when the barriers are perceived as weak, the youths may try out VCT.

HSRC *et al.* (2008) have thus made startling revelations (for a country touted as hardest hit by the epidemic as indicated by UNAIDS, 2006 and statistics indicating low awareness of VCT as Kalichman & Simbayi 2000 point out) that South Africa may be making real progress in response to the HIV epidemic; outlining that data from the last five years show the epidemic is on the downward trend and that prevalence among women 15-24 continues to show a significant decline. If these findings are anything to go by, then this decline would be a good indicator of the impact of intervention programmes. What would remain unclear though, would be whether there has been a shift in the perception of the previously prevalence impacting barriers by this adolescent group. This is because little is known about the sequence that adolescents take in order to get help for health problems especially those that are often stigmatized such as HIV and AIDS (Ahmed *et al.*, 2003).



According to a World Health Organisation and Cardinal Health report (WHO /CAH, 2009), there are about 1, 2 billion adolescents in the world today, 5, 4 million youths are living with HIV and 40 % of new infections in 2007 were in the 15-24 year age group. United Nations Population Fund (UNFPA, 2008) adds that Sub-Saharan Africa has 61% of youths living with HIV and AIDS. Ahmed *et al.* (2003) further point out that Sub-Saharan Africa suffers the greatest toll where youths have the fast growing rates of HIV and other sexually transmitted infections

(STIs). If latest youths incidence rates are on the downward trend in South Africa (HSRC *et al.* 2008) contrary and therefore not consistent with general world infection rates as stated, there is need to investigate the intervening variables that might have led to these significant changes.

To what extent have these barriers been drastically undercut by various efforts to deal with them and is there a corresponding change in perceptions among adolescents in the light of the new data available?

## 1.2 Statement of the problem

The problem for research is to find out the relevance of barriers to VCT as perceived by rural high school adolescents and whether the adolescents who have been tested and those not tested perceive the various barriers to VCT as equally relevant.



## 1.3 Rationale and significance of the study

HIV and AIDS has decimated populations and affected developmental efforts, political, social and economic stability (WHO, 2002). According to a UN report of 2005, HIV is seriously affecting progress towards reaching millennium development goals (MDGs) to reduce poverty, reach universal primary education, achieve greater equality and improve child health among other things.

Since the start of the epidemic and particularly more so in the intervening period, massive commitments of new funds to the development of comprehensive responses to HIV and AIDS by governments of affected countries have become more effective. Kelly, Freeman & Ntlabati

(2008) state that success in responding to HIV epidemic has been hard won with researchers having to dig deeper into the socioeconomic and context specific factors to understanding HIV and AIDS. The recorded success of VCT appears to run in tandem to decreasing infection rates in the South African youths in light of current research results (HSRC *et al.* 2008). Macphail *et al.* (2009) warns that against the backdrop of new positive information, campaigns to promote VCT among youths should not be abandoned and instead need intensification to reach rural youths, in settings where health care is less accessible. It is important to note that infection rates for specific age contexts groups such as rural adolescents may still be high contrary to generalized reports.

Adolescents were and may still be considered high risk and feeder groups in the high nodal infection rates of HIV and AIDS (UNAIDS 2000). To study how rural adolescents evaluate barriers to VCT would thus be an unprecedented, primary and targeted intervention and evaluative effort in the ongoing global fight against HIV and AIDS. Drawing together the perceptions of rural youths towards barriers of VCT ensures a multi-level effort by service providers, researchers and policy makers at the individual, community and structural levels (Setswe, 2006). This would lay a framework for the development of comprehensive and holistic approaches in the fight against HIV and AIDS.

The ensuing findings would redirect policy efforts in HIV prevention; juxtaposing adolescent identity to VCT barriers, focusing on reducing these barriers, broadening understanding of adolescents health seeking behaviours and enabling tailoring of VCT services to be age - context relevant. Reducing adolescents' perceived barriers to VCT is envisaged to capacitate youths to militate against the barriers and probably enabling them to be tested.

## 1.4 Research questions

This study seeks to explore the following questions:

a. How do present day tested and not tested rural high school adolescents perceive the relative importance of different barriers to VCT?

b. What are the most/least importantly regarded barriers?

c. Do these perceptions differ with gender variable in adolescents?

## 1.5 Research hypotheses

Two research hypotheses were formulated and stated as follows:

a. Tested and not tested rural high school adolescents do not perceive barriers to VCT as equally relevant.

b. Different genders do not regard barriers to VCT as equally relevant.



## 1.6 Objectives of the study

a. The present study seeks to determine the rural high school adolescent's perceptions of the relevance of barriers to VCT. This enables a critical evaluation of youths' perceptions of barriers to VCT and the strengths of these barriers as nodal decision making factors to youths in VCT uptake.

b. The study will also investigate whether gender has any bearing on the evaluation of the relevance of barriers to VCT in rural high school adolescents. It is envisaged that any intervention programme which does not take account of the widespread marginalisation and

oppression of women will not be effective in combating HIV in Africa as Moses and Plummer (1994) as quoted in De La Rey *et al.* (2007) aptly point out.

## 1.7 Organisation of the research report

The present study is organised in the following manner:

**Chapter One** Introduces the study and discusses background information relevant to the research;

**Chapter Two** Discusses and reviews the literature relevant to the study, highlighting on importance of VCT in HIV prevention, barriers and facilitators of VCT uptake among adolescents;

**Chapter Three** Outlines the research methodology used in the study and procedures undertaken therein;

**Chapter Four** Presents a schedule of the research results; and

**Chapter Five** Outlines the conclusive summary of the discussions of the results and their implications as well as suggested recommendations for overcoming the perceived barriers to VCT among adolescents.



## 1.8 Chapter summary

This chapter introduced the problem for research, outlining the background to the research problem and giving essence to the impact of HIV in youths and their perceptions of barriers to VCT. The characteristics of adolescence and how they fit in the matrix of barriers to VCT perceptions in youths are also discussed. The HIV and AIDS current reported 'levelling' trend in

South African statistics created the impetus that justified and modelled the hypotheses, and objectives of the present study.

# CHAPTER TWO: LITERATURE REVIEW

## 2.1 Introduction

According to WHO (2002), a young person is defined as anyone between the age 10 and 24 years and an adolescent is anyone aged between 12 and 19 years. For purposes of the present study, the latter is used to refer to both youths and adolescents unless otherwise indicated. Boswell and Baggaley (2002) point out that there are 1, 1 billion adolescents in the 10-19 year old age group, of which 85% are in the developing world. 50 % of all new infections take place in this young people group worldwide with more than 7000 new infections every day according to the latter's statistics.



## 2.1 Importance of VCT in HIV prevention

VCT is recognised as one of the effective and paramount strategies for reducing the transmission of HIV in developing countries according to WHO (2002). Macphail *et al.* (2009) further agree by stating the advantages of early entry into treatment and care programs, making antiretroviral therapy accessible before significant AIDS related morbidity and ensuring fewer demands on clinical resources than late treatment presentation. According to Muwanguzi, Mbonye and Maseruka (2008), VCT can stimulate discussion about HIV and AIDS and in turn reduces stigma and discrimination. Similarly, Kalichman and Simbayi (2004) argue that counselling knowledge reduces stigma towards those living with HIV and AIDS and further decreases resistance in seeking VCT. There is growing evidence that VCT is important for primary prevention, an important gateway for care and support of those affected.

Setswe (2006) elaborates on a quantitative review of the effectiveness of 40 adolescent risk reduction interventions by Kim *et al.* (1997), concluding that AIDS risk reduction interventions can be effective ( in about 88% of studies) in improving knowledge, attitudes and behavioural intentions and in reducing risk practices. However, Abebe (2006) pointed out that uptake of VCT services varies greatly between settings and countries: several societal and delivery associated factors like stigma, community mobilisation, confidentiality, availability of treatment, poor quality of services, organisation of testing system and process of testing and receiving results as well as place of testing, all play a part in this variance.

2.3 Barriers of uptake of VCT by adolescents

Rodham, Brewer, Mistral and Stallard (2006) indicated adolescents' perception of risk to be something where the outcome was uncontrollable. This means that it is difficult to foretell how adolescents will perceive a factor that would entail a barrier against them on using VCT. In this regard, barriers to VCT are possible risk inducing factors influencing decisions made by youths when choosing whether or not to use VCT services. VCT has stated advantages of alleviating anxiety, increasing a person's perception of vulnerability, promoting behaviour change and facilitating early referral for care and support and assisting in reducing stigma in the community (Boswell and Baggaley, 2002). Hutchinson and Mahlalela (2006) however point out that barriers still exist to inhibit the uptake of VCT.

Within countries, barriers to VCT variances could be a result of the effect of poverty, long distances, poorly resourced health centres, lack of staff, time limitations; for adolescents – strict school rules, negative attitude and negligence, low self esteem, ignorance about health services location, lack of parental support, stigma and discrimination against AIDS patients and the

perceived lack of confidentiality (Parker, & Oyosi, 2001 as quoted in Abebe, 2006)). Rural adolescents are multiply affected by barriers to VCT as they are far away from VCT services, lacking information about VCT and the fact that VCT may be urban centred, inadequately staffed and culturally inappropriate as HSRC *et al.* (2008) propagate.

Kalichman and Simbayi (2004) note that stigma and accompanying fear of discrimination, pose as realistic and practical barriers to VCT. Alberts, Mbalo and Ackermann (2002) found out that among adolescent respondents, 87 % regarded family matters and relationships and dealing with them as very important. In that study, 70% of the respondents also regarded religious beliefs and convictions as very important in adolescent identity. These findings point to the value of social relationships as determinants of decision making among youths. The importance of the supportive role of society is thus manifest, which if negated will impair implementation of health programmes among others.



Phillips and Coates (1995) notes the role of socio-demographic, behavioural, attitudinal and knowledge characteristics associated with VCT. Van Dyk and Van Dyk (2003) allude to a deep mistrust of health care professionals and rejection as key issues militating against VCT. They also allude to the existence of attitudes and beliefs acting as psychosocial barriers to VCT. Differences exist on what are perceived as the key barriers depending on whom and for what purpose the evaluation was or is being made.

Similarly, adolescents are expected to perceive the barriers of VCT according to the individual challenges, context factors and the period in time (cohort effects) on evaluation. However, barriers perceptions seem to be important in helping understanding and evaluating participation in VCT and any unfolding significant trends in HIV and AIDS pandemic. Significant

relationships have been shown to exist between the perceptions of various factors seen as barriers to VCT and patterns of VCT uptake (Rodham *et al.* 2006).

Macphail *et al.* (2008) list youth barriers to VCT according to the pattern of levels from individual level- beliefs, role of post-stress, behaviour after discovering status; dyadic/small group level- disclosure, care and support resources in families, limited power of women in sexual relationships; organisational level- attitudes of nursing staff, services not appropriate for youth, poor counselling services; community level, fear of stigma and discrimination; to societal/cultural level- lack of youths access to information and resources, and lack of agency for young people. At each level, there are social consequences of HIV infection linked to stigma that appears to be significant barriers to accessing VCT.



Wong, Macleod, Gilks, Higgins and Crowley (2006) in policy reviews of high prevalence countries found out that 84% of country studies distinguished children as a specific group affected by HIV. Wong *et al.* (2006) also point out that as barriers, informed consent was perceived at 63, 2%; child counselling informed consent 54, 4%; lack of service delivery 31; access to VCT 29, 8%; fear of diagnosis 38, 6%; confidentiality 21%; and discrimination /child rights 42, 1%. Genberg, Kavichai, Chingono, Chariyalertsak, Konda and Celentano (2008) on the other hand, stresses that shame, blame, isolation and perceived discrimination have higher internal consistency and reliability as barriers to uptake of VCT. However, they also remark that there are systematic differences across countries and settings which should always be carefully considered. For example, it is highlighted in Essendrup's (2007) findings that students at University of Fort Hare were not significantly affected by barriers to HIV testing in that particular setting.

## 2.4 Facilitators of VCT uptake among adolescents

Maman, Mawambo, Hogan, Kilonzo and Sweat (2001) stated that in view of the ever increasing HIV epidemic in Sub Saharan Africa, the expansion of VCT as an integral part of prevention strategies and medical research is both an urgent need and a reality. Maman *et al.* (2001) postulate that factors such as number of referrals from clinic to community VCT centres, and number of VCT services sites and availability of logistics or facilities and equipment as necessary to facilitate increased uptake of VCT.

There are individual and relational factors facilitating uptake of VCT. WHO (2002), advocated for an environment tailored VCT service that fits practical realities of clients and subsequently for the introduction of youth friendly services. The importance of facilitators to uptake of VCT in the context of present study is that they make a combined multi-factorial mitigation strategy addressing economic, cultural, political, social, gender and power relations that act as barriers to VCT (UNFPA, 2008). In a meta analysis of the impact of adolescent HIV and AIDS prevention programmes on sexual behaviours, Chookaew, Soeken, Harris, Johantgen, Deforge, and Donsey (2004) as outlined by Setswe (2006), found out that HIV and AIDS programmes such as VCT need to be effective for them to have a facilitative impact on adolescents' decision making in sexual health matters. There is need for concentred efforts in making sure these facilitative factors are also present for adolescents in marginalised areas.

## 2.5 Characteristics of adolescents and risk behaviour models

Having addressed barriers to and facilitators of VCT uptake, the following section focuses on risk behaviour models that have been used in understanding adolescent behaviour especially in the area of sexuality.

Health risk and behaviour change theories include the AIDS Risk Reduction Model (ARRM), Stages of Change Theory, the Theory of Reasoned Action (TRA), the Health Belief Model (HBM) and the Attitude Social Influence (ASE) Model. The latter two are most appropriate when dealing with perceptions of factors in decision making.



The Health Belief Model (HBM) postulates that health seeking behaviour is influenced by a person's perception of the threat posed by a mental health problem and the value associated with actions aimed at reducing the threat (Polit & Hungler 1999, in Mphaya, 2006). The model integrates psychological theories of goal setting, decision making and social learning. HBM assumes that a person will take a health related action if that person feels that a negative health condition can be avoided. Perceived barriers refer to one's belief in the psychological costs of the behaviour of undertaking VCT. It is only when the persons realise that they have the capacity to deal with these barriers that they would be able to take the necessary action(s). Mphaya (2006) found out that adolescents utilised the HBM and perceived sexual risks after considering pregnancy and possible contraction of sexually transmitted infections.

The ASE model predicts the various health behaviours as elaborated in Nuwaha, Kabetsi, Muganwa and Whalen (2002). Compliance with VCT for HIV is considered to be a result of behaviour intention. Furthermore, the model operates on three psycho-social factors that predict

health related behavioural intention: attitudes, social influences and self efficacy. A person's attitude towards attendance for VCT is a result of the consequences that a person expects from VCT for HIV. Nuwaha *et al.* (2002) further elaborates that social influence is a result of social norms relevant to VCT for HIV, support from others to attend or not to attend for VCT. Self efficacy expectations can be seen as the person's belief of self to attend VCT and ability to cope with barriers that may hinder actual attendance. The implication of the model is that a person's health behaviour can be modified by targeting attitudes, perceptions of social norms, social support, and self efficacy expectations.

While HBM places equal value to the different perceptions, the latter ASE model is complementarily important as it assumes that the psychosocial variables can be changed to influence behaviour. The study by Mphaya (2006) used these models, assuming barriers as more controllable, measurable and practical as an issue for youths relating to a variety of factors that place young people at the centre of HIV vulnerability. Philips and Coates (1995) elaborate that there are no developed and validated testing and risk behaviour models and there is still need to develop models that incorporate the range of factors in testing behaviour such as cognitive biases and heuristics; economic and social context as well as the role of policy incentives in framing individual perceptions and choices. Macphail *et al.* (2008) concluded that barriers related to stigma were particularly significant as reflected in that no mention was made of community care and support for HIV positive individuals as facilitators for testing.



## 2.6 General studies on adolescents and prevalence of uptake of VCT

UNAIDS (2004) postulates that young people are a critical focus for behaviour change programs, since people in the age group 15-24 years make up an estimated one half of all new

infections. It is also stated therein that young people in different parts of the world face different risks and prevention programming must be designed accordingly. According to UNAIDS (2004), the current reach of HIV testing globally remains poor in low and middle income areas, where only 10% of those that need testing have access to it. WHO (2002), postulates that the major challenges for Sub-Saharan youths involve the environment in which testing takes place. The practical realities faced by the youthful client include prevalence of infection, availability of treatment and care, existence of denial and discrimination, socioeconomic status and gender.

Horizons (2001) in Abebe (2006) point out that prevention is urgent in Sub- Saharan Africa, where 30% of young people were HIV positive and prevalence rates exceeded 10%. However, a South African study by HSRC, MRC and CADRE (2005) became precursory to their significant current 2008 report by highlighting that behavioural responses in the country were positive and increasing in relation to condoms and VCT. Abebe (2006) in an Ethiopian study found out that knowledge about VCT was high among youths and 82% were willing to be tested. That only 18% had been tested signifies lack of service availability as a practical barrier. This may mark the basis of significant differences now noted in South African trend because of the availability and accessibility of VCT and its consequent positive perception. As CADRE (2007) points out, significant strides have been taken to deal with stigma in South Africa, as shown in the case of a rural Eastern Cape clinic with an Anti Retroviral (ARV) section staffed by HIV positive people.



VCT has increasingly been adapted for young people and there has been a shift in the acknowledgement of the importance of targeting young people. In South Africa, where one in nine ( 11,4%) of people over two years were estimated to be HIV positive by end of 2007 ( Kalichman and Simbayi 2008), there was a projection that the infection rates would lead to 20% of the population being infected by the time they turned 25 years old. This trend had been

prevailing over the years despite the existence of both information and technology to prevent most new infections.

Ahmed and Fitaw (2006) found out that there were no significant gender differences among males and females in VCT acceptance and rural residents were willing to accept VCT despite its limited accessibility. Similarly, researchers had often argued that young people seek and receive VCT services even where VCT services have not been specifically designed for them (Murphy *et al.* 2002; Muwanguzi *et al.*, 2008).

UNAIDS (2008) clearly indicates an expectation of positive returns in the yield of these efforts and findings such as by HSRC (2008) may therefore, have been anticipated.

Kalichman and Simbayi (2008) on the other hand, found out that more than 25% of people who are infected with HIV are unaware of their status and youths aged 13 to 24 continue to be disproportionately affected by HIV and AIDS and hesitate to VCT services. Kalichman and Simbayi (2008) also compared attitudes towards VCT, controlling for demographics and survey venue and found out that individuals who had not tested for HIV and those tested but did not know their results, held significantly more negative testing attitudes than individuals who were tested and aware of their test results. This indicates that adolescents' perceptions of barriers to VCT are significant shaped by the knowledge base for VCT and the underlying epidemic of HIV and AIDS. Individuals not tested for HIV demonstrate greater AIDS related stigmas, ascribing greater shame, guilt and social disproval to people living with HIV.

## 2.7 Specific South African studies on adolescents and VCT

Van Dyk and Van Dyk (2003) state that South Africans were not opposed to VCT in principle but profess a deep mistrust of health care professionals, and fear of discrimination and rejection by their sexual partners and the community. 87, 3 % South African respondents believed that every person should know his status, while 79% were personally prepared to go for VCT with more than half of them already tested believing that an HIV positive status may lead to a person acting on certain myths in communities. These perceptions are likely to filter to the adolescents with issues of disclosure of status, lack of follow up support, and ability to deal with psychological turmoil further worsening perceptions of barriers in the latter. Kalichman and Simbayi (2008) posit that more than 25 % of South Africans who are infected are unaware of their status and youths continue to be disproportionately affected by HIV and AIDS and hesitate to seek services. Other current studies indicate on the contrary that there is a significant increase in uptake of VCT among youths and the previously rising infection rates are on the decline among youths in South Africa (HSRC *et al.* (2008). Setswe (2006) linked positive change to modification of sexual behaviour through education, postponing initiation of sexual intercourse, use of school based sex education, and targeted methods such as skills training.



The South African National Department of Health widely publicised HSRC *et al.* (2008) findings in various public media - television, radio (SABC news) and newspapers on 10 July 2009 as an official view. The study reports a gradual decline in HIV prevalence among women under 15-19 years form 15, 9% in 2005 through 13, 7% in 2006 to 12, 9% in 2007. These findings suggest changes in behaviour among youths but do not specify the modifying components instrumental to this change. Setswe (2006), points out that the effectiveness of

programmes relate to changes in normative beliefs and thus the need to study perceptions held by groups about such programmes.

However, Macphail *et al.* (2009) in bivariate analyses of sexually experienced male and female youths found out that HIV testing was associated with ages 20-24 years, non black race, urban residence, and completing high school for both sexes. There is need to evaluate the sustainability and generalisability of the HRSC *et al.* (2008) national study results through looking at uptake of VCT services among the youths in the 13-18 age group, of predominantly black race, rural /non urban residence, and still in high school.

2.8 VCT in the context of rural Eastern Cape

HSRC *et al.* (2008) notes a decrease in HIV prevalence among women in Eastern Cape metropolitan areas of Nelson Mandela Metro, Alfred Nzo and Cacadu and a slight increase noted in the clinics serving rural nodes like Amatole, Chris Hani and Ukhahlamba districts. This poses the problem of extrapolation of results to general population and also points to possible differences in younger women's perceptions between the rural areas and the information saturated urban areas. It is possible that barriers to VCT are perceived differently in terms of their relevance between these settings. The need to further investigate this rural inconsistency is therefore highlighted in the Eastern Cape, which is the focus of the present study.

Sternberg (2008) in O'Shaughnessy (2008), points at complex traditions and pervasive socio-political beliefs in the Eastern Cape Province. Sternberg (2008) is reported as noting the rural Eastern Cape system and patterns, where advantages of VCT are known but barriers in complex attitudes against it remain. AIDS is perceived through a myriad of beliefs and the mere mention

of testing echoes the stigma that follow it as just wanting to be tested can be tabooed. Sternberg (2008) is also reviewed as having noted that some people in the Eastern Cape are sceptical about HIV drugs. Sternberg thus points to the fact that the AmaXhosas fear VCT as revealing, causing a visible illness and an ugly death that follow HIV positive diagnosis. Male machismo as supported by patriarchy where males assume dominancy and engage multiple partners was also highlighted. O'Shaughnessy (2008) highlights the pervasive shame and denial of the epidemic among adolescents who stand to be morally judged from being sexually active when they test for HIV. Sternberg (2008) is also reported to have pointed to heavily overworked nursing staff that treats people badly possibly rebelling against huge workloads and perpetuating denial of the existence of the epidemic in the area.

The impetus of the present study is to highlight adolescents' perception to barriers to VCT explore whether they have changed for rural adolescents in contexts such as the Eastern Cape highlighted in Stenberg (2008), in light of the new twist and positive trend as highlighted in HRSC *et al.* (2008). Trends persisting in other African states run contrary as noted in Zubairu, Abubhakor, Mohammed and Muktah (2008) who found for Nigeria over the same reporting period. Macphail *et al.* (2008) notes several studies (Horizons, 2001; Kenya study by Parker and Oyosi as quoted in Abebe 2006, 2000; Nyawo *et al.*, 2005) showing that elsewhere in sub-Saharan Africa, HIV testing is generally low among youth, although the desire for testing remains strong. The need to further broaden the basis of current South African studies need not be overstated as a way of cautiously guarding progress in dealing with the HIV and AIDS epidemic.

## 2.8 Chapter summary

This chapter discussed literature highlighting the importance of VCT in HIV prevention, highlighted common barriers and facilitators to VCT uptake for adolescents. Characteristics of adolescents and the impact of risk models particularly the HBM were also reviewed followed by an elaboration on the general studies as well as specific South African studies on VCT uptake.

# CHAPTER THREE: METHODOLOGY

## 3.1 Introduction

The present study was primarily a baseline explorative study on adolescents' perceptions of barriers to VCT and used a cross- sectional survey method. This chapter describes the research design, sample under study as well as procedures followed in conducting the study. It also discusses assessment instruments administered to collect data.

## 3.2 Study context and population



The study was based in the IsiXhosa speaking former Transkei area of the Eastern Cape Province of South Africa, which is situated 140km from East London city. This is a rural development community, typically an African rural township whose main source of income is subsistence agriculture and also depending on relatives working in the surrounding developmental nodal points of Idutywa, Mthatha, Butterworth and Willowvale. Participants for the study found at a school in this area would therefore be drawn from an area where black African traditional ways of life are dominant. This is a relatively impoverished, physically underdeveloped and densely populated rural area. The schools are generally ill equipped and are located at a distance from one another with educational circumstances not comparable to urban settings, where better modern services are offered.

The community lives within an hour's walk to the nearest public health facility and public school. There are well serviced tarred roads and an abundance of public transport connecting the community to these facilities. The community is served by one main hospital at Butterworth and

several health centres at 25 to 50 km apart on average. There is no private hospital or clinic serving this community. VCT is available at the main public hospital and all the clinics refer to the main health centre in cases where VCT is deemed medically necessary. VCT is offered as a free service at the main hospital, which provides both preventative and 'curative' (Anti Retroviral drugs) services. HIV prevalence statistics for the area are not available but Cadre (2007) points out that the Eastern Cape general area had an HIV prevalence rate among adults 15-49 years estimated at 15,5% in 2005.

The chosen school for the study is situated 7 km from the nearest clinic and community centre and is approximately 35 km from the main hospital. The school is historically disadvantaged, but has had a facelift due to it being named after a senior politician's mother, making it more appealing for secondary school adolescents from the surrounding areas. As a matter of consequence, most students squat in nearby homes to attend school as they cannot walk from their distant homes villages on an everyday basis. Alberts, Mbalo and Ackerman (2003) describe the adolescent attending school in a similar Eastern Cape rural area to be in an isolated, socio-economically less developed community, with ways of life possibly more traditional and a pace of life that is slower than in urban centres.



3.3 Sample

The Technical Senior Secondary School under study has grade 10 to 12 classes. Consequent of the rural setting, the grades 12s consisted of a significant number of students above 18 years and the age range of 18 and above was therefore also incorporated in the study.

The total sample consisted of 178 grades 10, 11 and 12 9 (N=178) rural secondary school students of which 71 (39.9%) were males and 107 (6O.1%) were females (Figure 1).

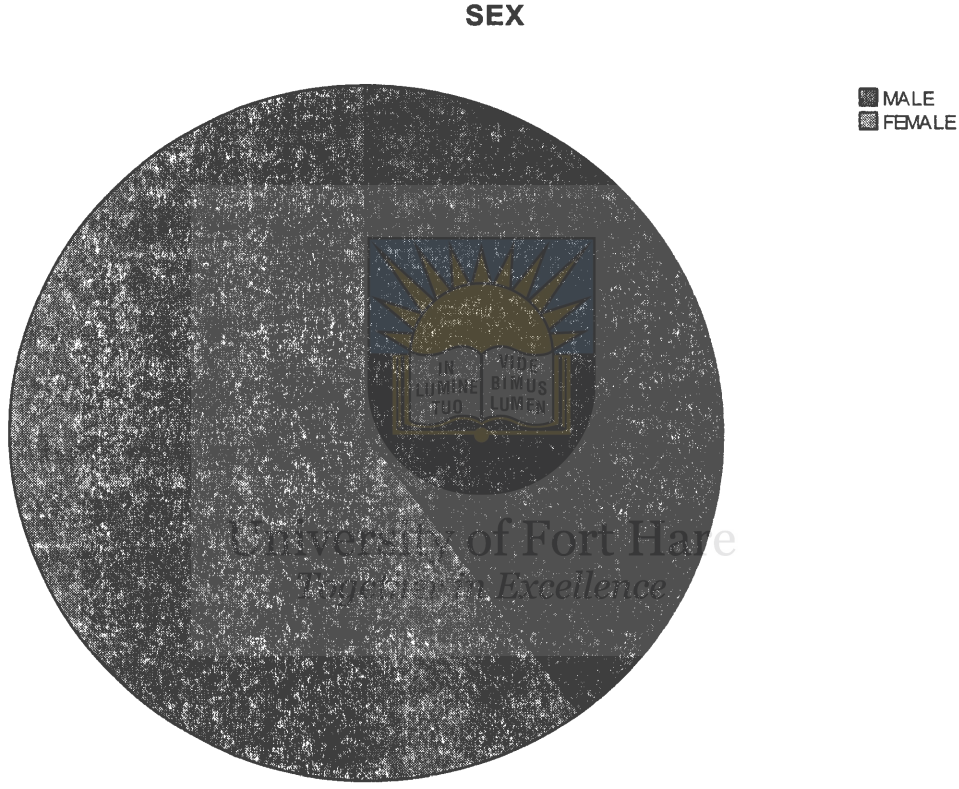


Figure 1. The sex ratio of participants

Of the sample, 131 (73, 6%) were within the 15-17 years age range and 47 (26.4%) were in the 18 years and older age range (figure 2).

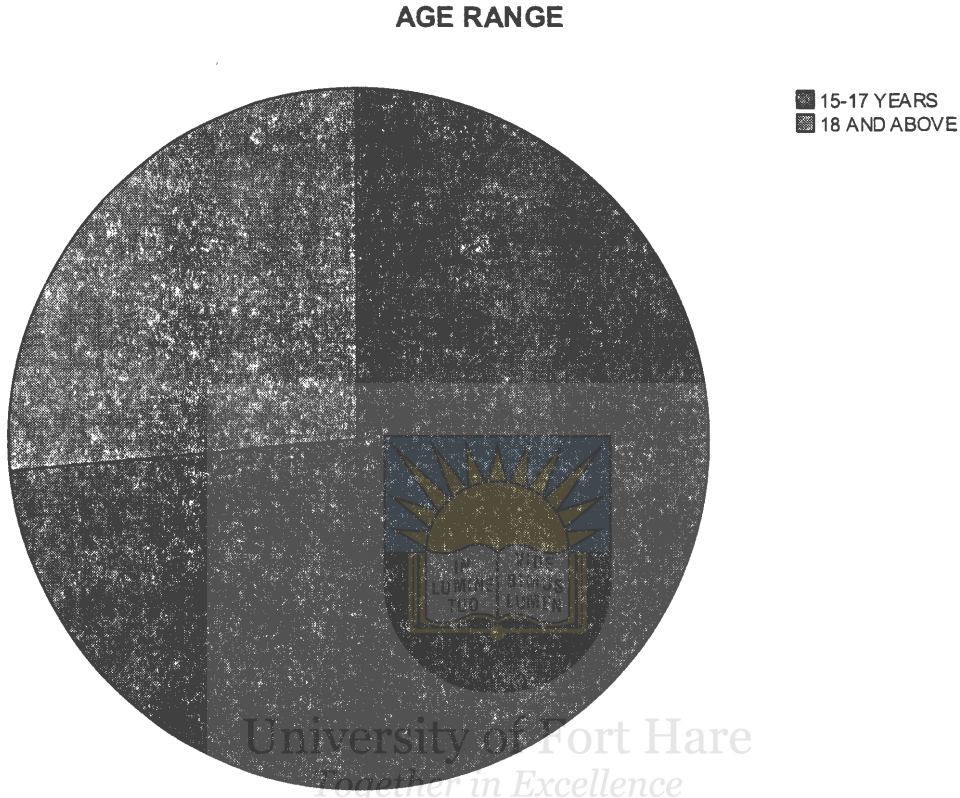




Figure 2. The age range ratio of participants

The year of study or grade ratio of participants was that 42 (23, 6%) students were in grade 10 and 51 (28, 7%) in grade 11 while 85 (47, 8%) were in grade 12 (Figure 3).

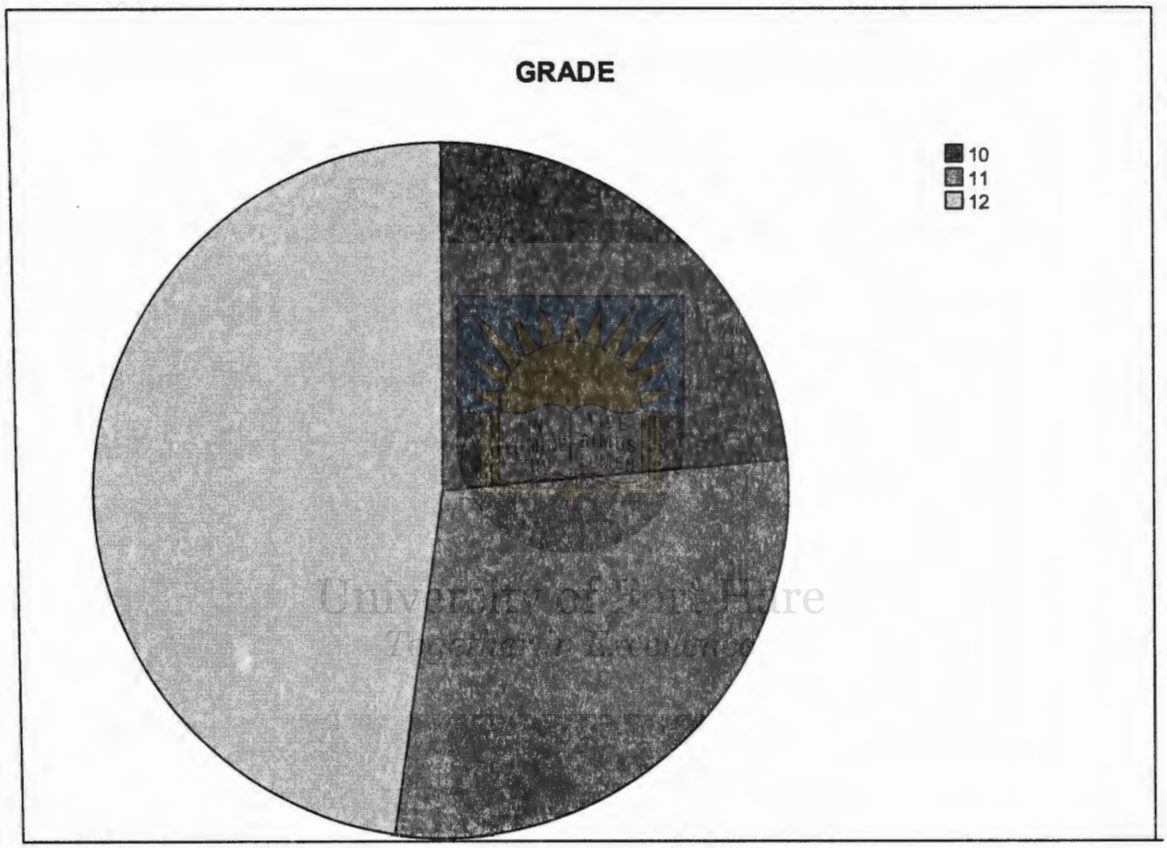


Figure 3. The grade / year of study ratio of participants

3.4 Sampling procedure

The principal of the school was approached first through a mailed letter containing the study information. This was later followed by phone calls to confirm the receipt of the letter and arrange the date for the researcher to collect data once the school agreed to participate in the study. The sample was moulded upon a voluntary participation basis by students at the school and it was also assumed that all of them required parental consent to partake in the present study. Therefore the school was provided with an informed consent letter send to parents through their children prior to the data collection day. The letter of consent informed of the nature and purpose of the study and the parents were asked to countersign the student's consent to participate in the study.



A non probability purposive convenient sampling technique was considered because the study group and the school were selected on the convenience and judgment of the researcher. Sampling and the investigation was conducted using high school students, who were taken as the source population for the present adolescent study. This group captures a large span of individuals in adolescence at the same place dealing with more or less similar issues and from a relatively composite background or culture. A school therefore, provided a convenient pre-organised community of adolescents.



Just being a student at the high school and being in the age range of approximately between 12-20 was therefore the simple inclusion criteria as a respondent in the study. The sample was drawn from grades 10, 11 and 12 classes at the conveniently chosen high school. It was envisaged that these grades would consist of a bulk of the middle adolescent group, capable of articulating and deciding on HIV and AIDS issues.

For the purpose of this study, early adolescence is defined as the 12 to 14 age group while the middle adolescents are in the 15 to 17 age group and the over 18s would then be considered as late adolescents. The total sample size was ultimately 178 (N=178). The proportions of the adolescent, gender and grade to be sampled was not predetermined but rather unfolded on analysis of the answered questionnaires.

3.5 Data collection instrument

A 30 item structured questionnaire (See Appendix C) was used as adapted from essentially the items on stigma and discrimination of the validated and widely used 100 question HIV project ACCEPT Baseline Assessment- Vulindlela model questionnaire (HSRC, 2005). Items chosen from the ACCEPT Baseline Questionnaire were re- ordered on the basis of relevance to the barriers directly relating to VCT; structure, sequence of testing process, protocol and standards of testing clinic (organizational factors) and those factors relating to individual, dyadic or group, community societal/cultural levels as elaborated by WHO policy statement in UNAIDS (2004) and Macphail, Pettifor, Coates and Rees (2008).



The questionnaire contained items constituting psychosocial barriers; misconceptions about HIV positivity; need for family and peer support; comparative aspects of HIV deaths to other deaths; individual risk perceptions; gender aspects and community perceptions of HIV positive people among other stigma and discrimination issues. Issues relating to and amounting to organisational barriers were comprised; staff issues versus youths; distance to, time and costs of VCT; facilities for VCT and testing issues; and `informational issues.

The adapted questionnaire consisted of 2 sections. In Section A of the questionnaire, Structured questions were asked covering demographics; sex, age, race, educational grade or high school level of study. The other significant question asked related to previous exposure to VCT and specifically whether one has been tested or not. In Section B, barriers were put across as items to be evaluated along a "Strongly disagree", "Disagree", "Neither agree nor disagree", "Agree", and "Strongly agree" Lickert scale. These responses are assigned values 1, 2, 3, 4, and 5 respectively. The questions are arranged such that the odds relate to psychosocial barriers to VCT centres and the evens relate to structural and organisational barriers to VCT centres.

The questionnaire was developed and made available in English, which is the official academic language in South Africa. However, supplementary partial Isixhosa oral translations were made directly to students through a translator, whenever they sought clarifications on not understanding any English vocabulary in a sentence, paragraph or instruction.



3.6 Data analysis

Once data had been collected, it was commuted to frequencies of the five scales of how many responded as strongly disagreeing, disagreeing, neither agreeing nor disagreeing, agreeing and strongly agreeing.

The data was then analysed using the SPSS (version 17.0) programme. The significance of the differences between the responses for barriers (organisational and psychosocial) to VCT for those tested and those not tested were therefore best investigated by means of t-test statistical analysis technique. Runyon and Haber (1980) point out that a t- test is chosen when one is

dealing with a normally distributed variable (which in present study is age,) in which the population is unknown. The t -test was used to:

- Test the hypothesis that adolescents tested and those not tested did not perceive barriers to VCT as equally relevant. This gave rise to proportions of those tested and those not tested as a measure of how they perceive each given barrier as relevant. An assessment of overall perceptions of each barrier for each group was established and identifications made of the barriers particularly significant to each group.

In the present study, a normal distribution is obtained because the means and the variances of those tested and those not tested cannot vary together in a systematic way. If they did (i.e. the variance becoming larger when the means get bigger), the underlying population would not be normal and the significance based on this assumption would be invalid.



The Chi-Square (Fischer's exact test) was also used to test the independency of variables gender, age and grade on perceptions of barriers to VCT. Furthermore, in both cases of use of the t- test and the Chi- Square as was necessary, the Statistical Package for Social Sciences (SPSS, version 17.0) was instituted to compute and analyse the data. The Chi-Square was used to:

- Conduct a bivariate analysis to compare adolescents' perceptions of barriers to VCT and the independence of such evaluations to gender, age and level of study.

## 3.7 Ethical considerations

Due to the legal age of consent in South Africa, the study respondents (adolescents) required parental consent as they were, for the most part, less than 18 years of age. Where parental consent was not given, the student was excluded from taking part in the research. The nature of

all HIV and AIDS studies requires careful considerations of ethical issues relating to confidentiality, autonomy and dignity of persons, principle of non-malfeasance and beneficence. The present study was no exception and efforts were made to strictly adhere to and endeavour to enforce these ethical principles. Confidentiality was guaranteed as no names were used on the questionnaire. The study was deemed not to bring any harm to research participants as a direct result of their partaking in the study and therefore the principle of non-maleficence was effectively met.

Furthermore, the principle of beneficence was highlighted in that what would be gained from the present study would outweigh the potential risk for participants such as individual shame and guilt in having to answer some questions that would have been considered personally abrasive. The participants in this study were treated in all fairness and equality during all the stages of the present study and thereby fulfilling the principle of justice. It was therefore to the satisfaction of the researcher that all possible ethical measures had been instituted for the purposes of the present study.



3.8 Limitations

Convenience sampling does not conform to the statistical principle of randomness and therefore findings from this research may not be generalisable to other settings. Self reporting responses may be biased and open ended questions used qualitatively would provide more information about adolescents' perceptions of barriers to VCT.

## 3.9 Chapter summary

This chapter elaborated on the methodology used in the present research. A convenience sampling method was used to generate a sample of 178 secondary school students, who had to answer a 30 item questionnaire. The study site and population, sample, instrument, research procedure, ethical considerations and limitations of the method were discussed. The next chapter presents the findings or results of the present study

# CHAPTER FOUR: RESULTS

## 4.1 Introduction

The data produced from the questionnaire was quantitative as derived from individual responses for the 30 items of perceived barriers to VCT. The individuals were also classed into groupings of the tested and not tested for evaluative purposes as to how they would respond on every particular item. Age, grade and gender subgroups were also evaluated along similar dimensions. The data was commuted through SPSS (Version 17.0) to descriptive statistics and frequencies for the 5 subscales (I strongly disagree, I disagree, I neither agree nor disagree, I agree, and I strongly agree) based on of how many chose the different specific responses on each item Lickert subscale. This chapter presents the findings of the study.



## 4.2 Descriptive statistics and frequencies of the sample

The following table of results (Table 1) presents the sample's descriptive statistics through the Mean, Median and Mode along the sub groupings of age range, sex, grade, having heard VCT and having made use of VCT to be tested.

Table1. The Mean, Median and Mode for the independent variables

| | AGE RANGE | SEX | GRADE | HAVE YOU HEARD OF VCT BEFORE TODAY** | IF YES, HAVE YOU MADE USE OF VCT SERVICES TO HAVE YOURSELF TESTED** |
|---|---|---|---|---|---|
| N | N=178 | N=178 | N=178 | N=178 | N=178 |
| Mean | 15-17yrs | | Grade 11 | No | No |
| Median | 15-17yrs | female | Grade 11 | No | No |
| Mode | 15-17yrs | female | Grade 12 | No | No |

** 0,567 significant correlation at 0,001 level (2 tailed)

Generally, the 15-17 years age group was most prominent and more females took part in the study and most of the participants were from grade 12 classes (as modes on Table 1 above depicts). Table 2 (below) presents the self reported frequencies and percentages on the questions; Have you heard of VCT before today YES/NO, and if yes have you made use of VCT services to be tested.

Table 2. Frequency distributions of students who have heard / not heard of VCT and those who have made use / not made use of VCT to get tested

A. HAVE YOU HEARD OF VCT BEFORE TODAY

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | YES | 80 | 44.9 | 44.9 | 44.9 |
| | NO | 98 | 55.1 | 55.1 | 100.0 |
| | Total | 178 | 100.0 | 100.0 | |

B. IF YES, HAVE YOU MADE USE OF VCT TO BE TESTED

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | YES | 37 | 20.8 | 20.8 | 20.8 |
| | NO | 141 | 79.2 | 79.2 | 100.0 |
| | Total | 178 | 100.0 | 100.0 | |



Among the students who took part in the study, 80 (44, 9%) had heard of VCT before the study and 37 (20, 8%) had been tested (as shown in Table 2 above). Most of the students at the school professed ignorance of VCT (98 = 55, 1%) and neither had most of them ever been tested for HIV/AIDS (141 = 79, 2%). However, it can be extrapolated that the usage rate of VCT was significantly higher (48%) for those who self reported to have heard VCT (80 heard VCT (Table 2a) and 37 confirm having been tested (Table 2 part B).

Appendix D further outlines the frequencies of responses and percentages on each of the Lickert subscales ranging from strongly disagree to strongly agree for all the 30 items of postulate

barriers to VCT that constituted the study questionnaire. It can be noted that there is low incidence of extremities in responses (strongly agree and disagree). Furthermore there is a higher incidence of ambivalent response (neither agree /nor disagree) which may indicate the incidence of lack of knowledge in the study population.

Statistically, 78% of the respondents perceived that being found positive means certain death; they also perceive on another scale that families would support those found to be HIV positive at 71, 4% and 71, 5% disagreed / strongly disagreed that only women should be tested for HIV and aids. over 60 % of respondents perceive those who sleep around need to be tested (60,7%), that only other people contact HIV(61,2%), disagreed that positive women sleep around(63%) and that HIV positive people have low morals(62,9%) and neither agreed with the notion that the locations of VCT centres are badly advertised(69,7%) nor that they are chaotic(62,3%). The respondents were also ambivalent on how they perceived whether being HIV positive would have negative consequences for a pupil at their school, 40,4% were negative and 401,6% had positive perceptions. Of special note is the greater incidence among the sampled students of the ambivalent response (between 10 to 20%) of neither disagreeing nor agreeing to most statements given as items in the instrument.



4.3 Statistical tests computations - The Chi -square and Means t- test

The Chi-square statistical analysis method was used to compute the independence of sex, age range and grade on the responses to perceived barriers to VCT. The Means t-test was used to highlight the respective relevance of barriers along the gender variable and to compare the perceptions of barriers for those tested and those not tested.

The following presentation (Table 3) is a computation of the chi -square test for independence on whether the variables of sex, grade and age range significantly influence the perception of barriers to VCT.

Table 3. Sex, grade and age range Chi-square test statistics

| | Sex | Grade | Age range |
|---|---|---|---|
| Chi-square | 7.281[a] | 17.337[a] | 39.640[a] |
| df | 1 | 2 | 1 |
| asymp. sig. | .007 | .000 | asymp. sig.000 |

a. 0 cells (.0%) have expected frequencies of less than 5.

b. The minimum expected frequency is 89,0.

Table 3 shows that there were no significant differences between the age ranges or in the grades on their responses on their perceptions of the barriers to VCT. Sex played a part in shaping the perceptions of the adolescent respondents on the barriers to VCT at a significance value of 0.007, alpha level 0,005, df 1 and Chi-Square value of 7,281.The results table presented below (Table 4) highlights the gender based perceptions of the barriers to VCT among the sampled respondents at the high school.

Table 4. T-Test means statistics for males versus females

| | SEX | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| 1.Being found HIV + means certain death | male | 69 | 2.16 | .964 | .116 |
| | female | 105 | 1.95 | 1.023 | .100 |
| 2. The HIV/AIDS testing facilities are badly advertised | male | 70 | 2.31 | .986 | .118 |
| | female | 107 | 2.34 | 1.063 | .103 |
| 3. Families would support people found to be HIV positive | male | 71 | 3.55 | 1.169 | .139 |
| | female | 107 | 3.64 | 1.152 | .111 |
| 4. HIV testing facilities are chaotic | male | 71 | 2.52 | 1.012 | .120 |
| | female | 107 | 2.36 | 1.002 | .097 |
| 5. Only other people contract HIV/AIDS | male | 71 | 2.61 | 1.177 | .140 |
| | female | 107 | 2.38 | 1.121 | .108 |
| 6. It is better not to know one's H status since there is no cure. | male | 71 | 2.42 | 1.306 | .155 |
| | female | 107 | 2.45 | 1.347 | .130 |
| 7. Only people who sleep around need to be tested | male | 71 | 2.63 | 1.365 | .162 |
| | female | 107 | 2.53 | 1.423 | .138 |
| 8. It is too time consuming to be tested for HIV/AIDS | male | 71 | 2.72 | 1.185 | .141 |
| | female | 107 | 2.84 | 1.282 | .124 |
| 9. The whole HIV/AIDS testing campaign spoils the fun of sex | male | 71 | 2.75 | 1.262 | .150 |
| | female | 107 | 2.60 | 1.309 | .127 |
| 10. Staff at HIV/AIDS testing facilities are competent | male | 71 | 2.89 | 1.166 | .138 |
| | female | 107 | 2.89 | 1.022 | .099 |
| 11 .Friends reject people if they are HIV positive | male | 71 | 2.90 | 1.185 | .141 |
| | female | 107 | 3.22 | 1.239 | .120 |
| 12. HIV/AIDS testing facilities are difficult to get to | male | 71 | 2.80 | 1.037 | .123 |
| | female | 107 | 2.88 | 1.242 | .120 |
| 13. Dying from HIV/AIDS is worse than dying in accident | male | 71 | 2.68 | 1.432 | .170 |
| | female | 107 | 2.79 | 1.394 | .135 |
| 14. HIV/AIDS testing is not 100% accurate | male | 71 | 3.00 | 1.309 | .155 |
| | female | 107 | 2.62 | 1.234 | .119 |
| 15. HIV positive women are seen as women who sleep around | male | 71 | 2.59 | 1.190 | .141 |
| | female | 107 | 2.39 | 1.309 | .127 |
| 16. HIV testing areas are risk areas | male | 71 | 2.66 | 1.352 | .160 |

| | | | | | |
|---|---|---|---|---|---|
| for infection with AIDS | female | 107 | 2.83 | 1.356 | .131 |
| 17. HIV positive people are seen as people with low morals | male | 71 | 2.30 | 1.151 | .137 |
| | female | 107 | 2.57 | 1.183 | .114 |
| 18. Nobody wants to be seen by friends at testing facilities | male | 71 | 3.15 | 1.117 | .133 |
| | female | 107 | 3.16 | 1.237 | .120 |
| 19. Being HIV + is negative for a pupil at this school. | male | 71 | 3.06 | 1.157 | .137 |
| | female | 107 | 3.00 | 1.182 | .114 |
| 20. It is too much trouble to be tested for HIV at VCT centres | male | 71 | 2.61 | 1.165 | .138 |
| | female | 107 | 2.17 | 1.232 | .119 |
| 21. It is better not to know the reason of own death | male | 71 | 2.66 | 1.158 | .137 |
| | female | 107 | 2.86 | 1.209 | .117 |
| 22. VCT will not stop HIV/ADS, so why trouble | male | 71 | 3.10 | 1.123 | .133 |
| | female | 107 | 2.67 | 1.257 | .122 |
| 23. People die sometime anyway, no need to test. | male | 71 | 2.69 | 1.214 | .144 |
| | female | 107 | 2.53 | 1.261 | .122 |
| 24. VCT services are expensive youths cannot afford | male | 71 | 2.66 | 1.183 | .140 |
| | female | 107 | 2.73 | 1.278 | .124 |
| 25 The community does not accept HIV positive people | male | 71 | 2.54 | 1.263 | .150 |
| | female | 107 | 2.54 | 1.320 | .128 |
| 26. Youths should also be part of staff at VCT centres | male | 71 | 3.15 | 1.104 | .131 |
| | female | 107 | 3.66 | 1.157 | .112 |
| 27. HIV positive men are seen as womanisers | male | 71 | 2.69 | 1.116 | .132 |
| | female | 107 | 2.67 | 1.301 | .126 |
| 28. If ARVs are accessible youths would go for testing | male | 71 | 3.04 | 1.048 | .124 |
| | female | 107 | 3.15 | 1.219 | .118 |
| 29. only females should be tested for HIV/AIDS | male | 71 | 2.27 | 1.264 | .150 |
| | female | 107 | 1.81 | 1.001 | .097 |
| 30. Fiends think the person being tested sleeps around | male | 71 | 2.85 | 1.316 | .156 |
| | female | 107 | 2.61 | 1.265 | .122 |

It is depicted in Table 4 above that the Means for male respondents were higher for items 1, 4, 5, 7, 9, 14, 20, 22, 23, 27, 29 and 30. The Means for females were higher for items 3, 5, 8, 11, 12, 13, 15, 17, 21, 24, 26 and 28. There was however almost Means equal for items 2, 6, 10, 18, and 19.

Table 5. One –sample statistics

| N | N | MEAN | STD DEVIATION | CRONBACH ALPHA |
|---|---|---|---|---|
| Stigmatisation and labelling | 178 | 2,669 | 4,207 | 0,575 |
| death | 178 | 2,8000 | 2,498 | 0,361 |
| facilities | 178 | 2,545 | 3.016 | 0,363 |
| Non cure | 178 | 2,633 | 3,287 | 0,537 |
| ignorance | 178 | 2,451 | 2,997 | 0,387 |
| rejection | 178 | 3,240 | 2,078 | 0,39 |
| facilitators | 178 | 3,103 | 3,020 | 0,102 |



The items can be categorised into stigma (items 15, 17, 18, 25, 27, & 30), fear of death (items 1, 3, & 21), lack of testing facilities (items 2, 4, 8, 12, &20), believing there is no cure (items 6, 7, 9, & 22), ignorance with regards to HIV (items 7, 5, 16, & 29) and facilitators (items 10, 24, 26, & 28). Cronbach Alpha internal consistency reliability coefficients of these subscales were very low as indicated in Table 5 above. The instrument retained its reliability on the whole with the obtained score 0, 722 indicating that the scale has an acceptable internal consistency. This means that no individual item increases the Cronbach Alpha when it is deleted.

Table 6. Comparisons of Means of; If yes, have you used VCT services to get tested.

Higher means presuppose that a subgroup perceives that item more as a barrier to VCT as compared to the others.

| BARRIER ITEM | YES -TESTED | | | NO - NOT TESTED | | |
|---|---|---|---|---|---|---|
| | MEAN | DEVIATION | F value | MEAN | DEVIATION | Significance df1 |
| 1 | 2,41 | 1,301 | 3,734 | 2.02 | 1.10 | 0,55 |
| 2 | 2,43 | 1,042 | 0,482 | 2,30 | 1,030 | 0,489 |
| 3 | 3,65 | 0.978 | 0,078 | 3,59 | 1,202 | 0.780 |
| 4 | 2,59 | 0,956 | 1,386 | 2,38 | 1,018 | 0.241 |
| 5 | 2,27 | 1,071 | 1,450 | 2,52 | 1,162 | 0,230 |
| 6 | 2,38 | 1,381 | 0,011 | 2,45 | 1,317 | 0,916 |
| 7 | 2,59 | 1,212 | 0,110 | 2,57 | 1,446 | 0.916 |
| 8 | 3,08 | 1,362 | 2,548 | 2,72 | 1,203 | 0,112 |
| 9 | 2,70 | 1,351 | 0,058 | 2,65 | 1,277 | 0,811 |
| 10 | 3,08 | 0,954 | 1,508 | 2,84 | 1,106 | 0,221 |
| 11 | 3,08 | 1,341 | 0,006 | 2,86 | 1,197 | 0,221 |
| 12 | 2,86 | 1,206 | 0,009 | 2,84 | 1,154 | 0,923 |
| 13 | 2,84 | 1,206 | 0,218 | 1,463 | 1,154 | 0,641 |
| 14 | 2,49 | 1,121 | 2,323 | 2,84 | 1,305 | 0,129 |
| 15 | 2,57 | 1,144 | 0,267 | 2,45 | 1,295 | 0,606 |
| 16 | 2,65 | 1,296 | 0,338 | 2,79 | 1,371 | 0,5661 |
| 17 | 2,30 | 1,077 | 0,903 | 2,50 | 1,199 | 0,343 |
| 18 | 2,38 | 3,18 | 0,352 | 3,18 | 1,187 | 0,554 |
| 19 | 2,89 | 1,149 | 0,581 | 3,06 | 1,176 | 0,447 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 20 | 2,57 | 1,381 | 0,400 | 2,33 | 1,181 | 0,987 |
| 21 | 2,78 | 1,084 | 0,000 | 2,78 | 1,228 | 0,987 |
| 22 | 2,95 | 1,201 | 0,333 | 2,82 | 1,228 | 0,565 |
| 23 | 2,59 | 1,212 | 0,000 | 2,60 | 1,253 | 0,996 |
| 24 | 2,57 | 1,168 | 0,552 | 2,74 | 1,257 | 0,459 |
| 25 | 2,38 | 1,187 | 0,722 | 2,58 | 1,321 | 0,397 |
| 26 | 3,35 | 1,160 | 0,413 | 3,49 | 1,163 | 0,521 |
| 27 | 2,54 | 1,169 | 0,599 | 2,72 | 1,244 | 0,440 |
| 28 | 3,27 | 1,262 | 0,941 | 3,06 | 1,123 | 0,333 |
| 29 | 1,97 | 0,897 | 0,017 | 2,00 | 1,189 | 0,898 |
| 30 | 2,51 | 1,121 | 1,004 | 2,75 | 1004 | 0,318 |

NB- Only cases for which IF yes, have you used of VCT to have yourself tested = YES are used in the analysis phase.

Means higher than 3 (central value of 5 point Lickert scale), indicate that those items were perceived as relevant as barriers and facilitators to VCT by the adolescents in this study. Table 6 highlights that those not tested had higher means for items on: Only others will contract HIV and AIDS, It is better not to know one's status because there is no cure for AIDS anyway, Friends reject people if they are HIV positive, HIV and AIDS testing is not 100% accurate, HIV and AIDS testing areas are dangerous because there is risk of being infected with AIDS there, HIV positive people are seen as people with low morals, Nobody wants to be seen by friends and colleagues at HIV and AIDS testing facilities, Being HIV positive would have negative consequences for a pupil at this school, People die sometime anyway, so therefore there

is no need to know one's HIV status, VCT services are expensive and youths cannot afford, and The community does not accept HIV positive people.

On the other hand the means were higher for those tested on; The locations of HIV testing facilities are badly advertised, families would support people found to be HIV positive, HIV testing facilities are chaotic, it is time consuming to be tested for HIV and AIDS, staff at HIV testing facilities are competent, HIV and AIDS testing facilities are difficult to get to, it is too much trouble to be tested for HIV and AIDS at VCT centres, and If ARVs become accessible youths my age would go for testing.


4.3 Chapter summary

This chapter presented the findings of the study through first outlining the descriptive statistics of the sample responses and computed Chi- square and means t- test on gender, age range and grade variables as well as further comparing means for males and females and those for the tested and the not tested. The next chapter discusses the findings of the present study.

# CHAPTER FIVE: DISCUSSION, DATA ANALYSIS AND INTERPRETATION

## 5.1 Introduction

This chapter analyses the results presented in the previous chapter and attempts to give interpretive implications of these findings in terms of rural adolescent's perceptions of the barriers to VCT. The present research is an attempt to explore the current trends in the HIV and AIDS pandemic, concerning the way adolescents in rural areas perceive the barriers to testing. This is against a background of highly publicized reports (HSRC *et al.* 2008) indicating that the incidence of HIV and AIDS is slowing in South Africa. Such generalised reports should become a matter of justifiable scrutiny and concern and they typically have to be validated by further specific subgroup research. It is hoped that the present study on adolescents will contribute to this process of scientific scrutiny in the trends in HIV and AIDS and particularly the use of VCT by youths in rural settings.



## 5.2 Uptake of VCT among adolescents

The results of the present study show an appalling underutilization of VCT services by high school adolescents in a rural community setting. Only 20, 8 % of the respondents had ever used VCT to have themselves tested against the 79, 2% who self reported they had never been tested, while 55, 1% professed complete ignorance of VCT in answering the question, 'Have you ever heard of VCT before today?' This finding is in tandem with earlier studies (Shisana *et al.* 2005; Abebe 2006, Macphail *et al.* 2008; Macphail *et al.* 2009).

Bivariate analysis of those not tested and those tested show that knowing about HIV and AIDS is highly useful in the shaping of perceptions of barriers to VCT. The results indicate that almost one in every two adolescents who had heard of VCT had been tested. A significant correlation between hearing of VCT and getting tested was established (0,567 at alpha level 0,001, 2 tailed). This may suggest that for the informed adolescents, barriers to VCT are remarkably reduced as noted in that those not tested held significantly higher negative attitudes than individuals tested in evaluating expected barriers to VCT and this tally with findings by Kalichman and Simbayi (2008). Adolescents not tested had higher mean scores in items relating to stigma, shame, guilt, myths as barriers to VCT which Kalichman and Simbayi (2008) referred collectively as 'stigmatizing beliefs'.

Higher mean scores for positively framed items may indicate a correspondingly greater and informed perception of barriers to VCT and vice versa for negatively framed items (Table 6). Higher mean scores for positive physical barriers in those tested can be inferred to mean they were self reporting perceptions from an informed standpoint. On the other hand, adolescents tested had lower mean scores on many of the negative psychosocial barriers, possibly because such issues required a higher knowledge of HIV and AIDS, a prerequisite afforded to those being tested in the VCT process. There is also a strong possibility that they were dealing with issues they have already experienced in practical terms and thereby reducing the anxiety and impact of uniformed myths guiding their perceptions.

However, HIV and AIDS occupies a range of overlapping and contradictory frame of references that are strongly influenced by context in which it is experienced as Shisana *et al.* (2005) and CADRE (2007) point out. It is not a certainty that those who are informed would not be inhibited by some other barrier taking precedence in their own life at a particular point in time.

Intra – adolescent age stage differences due to cognitive maturational processes were found to be insignificant. Age range cohort effects and academic grade may not be affecting the prevailing youth discourse in the community under study.

5.3 Gender effects

The Chi square analyses seem to indicate different perceptions of barriers to VCT by gender (Table 3) yet there are non-significant differences found between males and females in VCT acceptance (Ahmed, & Fitaw, 2006). In multivariate T- test analysis of the mean scores for each perceived barrier (Table 4) among the female adolescents, the strongest perceived barriers was the need for family support and the reactions of friends and colleagues, nature of testing facilities need for compassionate staff, time for testing, cost of testing and physical difficulties in getting tested. For male adolescents, their major concerns with barriers to VCT were more for items on VCT spoiling the fun of sex, that only other people contract HIV, that only women should test, that there is no need to test since HIV and AIDS is not yet curable, and HIV and AIDS death being worse than dying in an accident.



It can be extrapolated that adolescent females were more concerned with sentimental support issues from the family and friends as well as economic factors, whilst males were more concerned with egoistic and patriarchal culture ridden perceptions. van der Riet (2009) posits that males are interested in sex for pleasure and virility purposes while female are concerned with social processes that accompany sex such as the stigma of being laughed at. The present study seems to similarly confirm that adolescent perceptions of barriers to VCT maybe culturally and gender (subject) differentiated because of how they would differently conceptualize sex (object) and programmes such as VCT (outcomes) as van der Riet (2009) further elaborates. In

other words, the perception of VCT depends largely on the perceptions of sex and such sex perceptions differ along gender and cultural axes. The Chi-square gender evaluation was marginally significant (0,007 significance level at df1) probably because both sexes perceived more or less equal numbers of items differently and therefore the items counterbalanced each other in the overall gender based analysis of VCT barriers' perceptions.

The adolescents of both genders (as shown in Table 4) equally evaluated the need for competent staff at VCT centres (Mean 2, 89 for both sexes) and the consequences of being HIV positive at their school (Means 3, 06 and 3, 00 for males and females respectively) the need for advertising of VCT (Mean 2,31 for males and 2,34 for females) and that there is no need to know one's status since there is no cure yet for HIV and AIDS (Means 2,42 males and 2,45 females).

5.4 Significant adolescent barriers and non barriers to VCT



A study by Macphail *et al.* (2008) with South African adolescents has indicated that fearing the social consequences of being infected with HIV, believing that testing is for symptomatic individuals and negative attitudes towards health workers act as barriers for the adolescent in relation to VCT. The present study found similar trends except that negative attitudes towards VCT staff were not as significantly pronounced (0,221 significance at 0,001 alpha level). The latter finding may have been confounded by the fact that most respondents were not aware of VCT and had not been tested.

Most of the adolescent respondents evaluated the need for family support to be an important factor that would enable them to consider going for VCT (0, 780 significance level). HSRC *et al.* (2005) found that 90, 7% of family members are willing to take care of a family member with

AIDS. More than 60% (also at 0, 780 significance level) adolescents in present study agreed that there is a need for community and family support those tested for HIV. Absence of such support would constitute a barrier to testing and the respondents feel that such support should be readily available in their community and families. The role and influence of peers on adolescents as a barrier to VCT is also highlighted with 45, 5 % strongly agreeing/otherwise agreeing that friends would reject HIV positive people compared to 35, 4 % who strongly disagree/otherwise disagree.

Contemporary perspectives on the family suggest that the extended family is primary source of social support within an African community as O'shaugnessy (2008) opines. This is as a result of the buffering effect of kin support on life events in the rural setting and more so that adolescents are almost completely dependent on the immediate family on health matters, among other things. The HBM espouses that the family plays a pivotal role in the life of adolescents whose agency on any life decisions is limited and this impacts on their quality of life, education, nutrition, housing and overall well being.



Macphail *et al.* (2009) found out that among Nigerian youths, readiness for testing was associated with knowledge of HIV, knowing source of VCT and perceived risk. They also state that there is an association between adolescent VCT uptake and high risk behaviours. The present study presents a picture of highly VCT ignorant adolescents in a rural secondary school (55, 1%), who devoid of such knowledge, are neither expected to take it up nor to avoid high risk sexual behaviours. This may compromise the fight against HIV and AIDS and is compounded by the possibility of existence of multiple nodes of ignorance in South African rural areas.

It is interesting to note that despite their general lack of knowledge of VCT, the adolescent respondents' perceptions of barriers to VCT seem to suggest a persistence in strongly held

normative and stigmatizing beliefs held in attitudes against women and towards VCT in general (Items 7, 9, 12, 15, 20, 21, 23 and Item 29 in Table 6 all above 0, 6 significance levels), while attitudes towards the HIV positive and VCT staff in particular appeared at a lower rung of relevance levels (0,243 and 0,221 significance levels respectively). This can be attributed to the fact that HIV and AIDS has been around for a relatively long time and some of the initial misconceptions about it may have subsequently fallen away, while culturally held beliefs are deeply embedded and take time to transcend.

## 5.5 Discussion and implication of the results

Most of the postulate barriers to VCT were viewed as relevant by the adolescent respondents in the study. HSRC *et al.* (2008) state that 90% of youths have been reached by at least one programme and that the change in HIV prevalence is attributable to the successful implementation of serial HIV interventions. They point out a slight increase of prevalence that was noted in the clinics serving rural nodes in the Eastern Cape. It can be argued that this increase, however slight, needs to be further explored in the light of the overall pronouncement that the epidemic is levelling off. This is in consideration that the present study implies a refutation of this fact in light of low knowledge levels about VCT in adolescents such that statistical increases in HIV prevalence in the context of rural Eastern Cape could be more than marginal.

The present research found that over 55, 5% of adolescents at a rural secondary school have not heard of VCT. The ASE model propounds that behaviour can be modified by targeting attitudes, perceptions, social norms, social support and self efficacy expectations. While UNFPA (2008) proposed that by 2010, 95 % of the youths should have information, education, services and life

skills that enable them to reduce their vulnerability to HIV infection, the present research seems to highlight the inevitability of failure of this projection under current rural circumstances for youths. If rural youths cannot access information and services as the present study outlines, their risk of infection could still be particularly high and this may explain the rise in incidence in Eastern Cape rural nodes as indicated in report by HSRC *et al.* (2008). The need to incorporate the HBM and the ASE models is highlighted and calls for sexual modification education, postponing sexual intercourse, use of school based education and targeted skills training as Setswe (2006) propounded.

If over half of the respondents have not heard of VCT before, then the greatest challenge is inevitably the lack of information about VCT and subsequent access to it. It is debatable whether these students then really understood the concept of barriers if they were not knowledgeable about VCT itself.



Family and community acceptance was highly valued by respondents and the general perception was that such support would be available to any possible HIV positive adolescent in this community. Sampled adolescents in the Eastern Cape rural community did not perceive that there would be a lack of support from the family and the community that would in turn translate these factors to constitute barriers to VCT. Attitudinal perceptions on stigma at school and especially by friends still ranked high as barriers to VCT as Nuwaha *et al.* (2002) found out in an earlier study. The present study seems to point to the need of strategic engagement and inclusion of families in passing HIV and AIDS knowledge in the rural home setting thereby transforming the trust bestowed in families as anchors in the fight against HIV and AIDS.

Although we are made to believe that the number of people living with HIV is stabilizing, more young people may still be getting infected everyday because VCT uptake is still low for

adolescents as shown by results in present study. The present study spelt out that the underutilization of VCT services by adolescents should still be a major concern in the fight against HIV and AIDS. It is evident that a lot needs to be done for and with this adolescent group before containment of the HIV and AIDS problem can fully be claimed. The primary goal is to reduce new infections in youths and this can only be achieved when most youths in rural areas are aware and choose to use VCT services.

VCT is possibly the leading way through which claims that such research into the levelling of the epidemic can be evaluated. The importance of the need to ensure that all youths are aware of the VCT services is a prerequisite that cannot be overstated. The present study results also indicate that peers are important in adolescent life decisions and acceptance of VCT in particular and therefore the need to deal with the barriers of shame/shyness, guilt and stigma at school. Furthermore, because no age range or grade and educational level association was found with the use of VCT, there seems to be a need to treat adolescents as single homogenous group facing similar challenges in this life stage. However, gender aspects also need to be considered if barriers to the use of VCT by adolescents are to be addressed effectively.



People are often gullible for any positive signs in any pandemic but such information must be strategically disseminated and well explained. False positive claims would have devastating effects such as wiping gains in reducing risky behaviours among adolescents. Since a cure for HIV and AIDS has not yet been found, there is an imperative to intensify efforts for VCT as both a preventive and treatment programme. Youths in the present study seem to regard unavailability of ARVS as a significant inhibiting factor in their uptake of VCT. Previous studies (UNAIDS, 2006) have called for the linking of VCT and ARV dispensing functions to foster hope especially in sceptical adolescents.

Nuwaha *et al.* (2002), raises a concern that it is not possible to draw definite conclusions on the relative importance of barriers except to note that psychosocial factors continue to play a huge role as shown in quantitative analysis of present study. For, example, besides noting that absence of family support would be a barrier to VCT in youths, it may never be known whether use of family close relations may be useful in the acceptance of VCT as Admassu and Fitaw (2006) seem to suggest.

A lack of equitable HIV service distribution between urban and rural areas has been previously noted (HSRC *et al.* 2008; Macphail *et al.* 2009). Adolescent perceptions of VCT remain disproportionate between urban and rural communities and the present study seems to confirm that lack of information and access to testing among youths remains a major barrier and challenge for rural communities.



## 5.6 Conclusions

The present study was aimed at understanding the factors that may be influencing the acceptability of VCT (barriers) by adolescents in a rural community with a view of suggesting measures for increasing awareness of risk and increasing uptake of VCT among this group.

An appalling lack of access to VCT is highlighted and there is need to improve structural arrangements that would enable rural adolescents to access VCT services, possibly making these services to visit schools in outreach programmes. Breaking the distance barrier by bringing more VCT services nearer to schools will cut down expenses perceived to accompany travelling to distant VCT centres and inevitably increases awareness of the services and possibly make them not underestimate their risk of infection as adolescents in these marginalised communities. Such

outreach programmes also need to be gender sensitive so as to address concerns across genders in the adolescent group of the patriarchal culture- inclined rural communities.

It is postulated that barriers to VCT as exacerbated by lack of information and access will continue inhibiting VCT uptake among adolescents if no remedial action is undertaken. The need for taking information about HIV and AIDS and VCT to the school setting and into curricular should be considered in the light of the fact that adolescents spent most of their time in school, as Setswe (2006) has previously suggested.

In view of the massive structural discrepancies between urban and rural settings, the need to bridge the rural urban divide in terms of information and access to VCT as well as keeping up the momentum of current campaigns to significantly lower barriers' perceptions in rural youths remains absolute. The existing barriers need to be addressed with specificity of context hence the need for comprehensive research in rural areas on a grander scale.



## 5.7 Recommendations

Highlighting perceptions of relevant barriers militating against use of VCT by adolescents gives an impetus on intervention measures that could possibly be put in place to overcome those factors still propagating against VCT uptake. There is need to scale up and sustain an increased uptake of VCT among adolescents. An understanding of rural high school adolescents' perceptions of barriers to VCT may outline needy areas and help in instituting proper support measures for those identified adolescents' needs.

Possible relevant strategies for use with rural adolescents to overcome perceived barriers and to increase uptake of VCT among youths tailoring programmes around HBM and ASE models in order to;

- Making use of children's need to laugh and play through participating in drama, sports, games, song and dance so that they experience the symbols of life in relation to HIV and AIDS.
- Making information about HIV and AIDS and programmes such as VCT abundantly available in the adolescent main point of contact areas such as schools and homes. Youths may need to become active members of AIDS clubs, mobilizes of VCT promotions and as well as positive speakers (Boswell & Baggaley, 2002)
- Encouraging open communication between parents and children in health issues through competitions, parent support groups and guided discussion forums.
- The need to bridge the information gap between the urban and rural areas as highlighted in HSRC *et al.* (2008) through increasing the visibility of messages supporting VCT using school billboards, availing computers and internet services, and possibly playing HIV films and videos for rural adolescent students. This is particularly because of the noted informational role of testing and its efficacy in reducing barriers to VCT.
- The need for more localized programmes that are specifically tailor- made for specific communities and age groups rather than overreliance on national level programmes which may neither be implemented nor get evaluated for their efficacy in marginal communities. This would particularly be helpful for the patriarchal isiXhosa community who Sternberg (2008) is reviewed by O'Shaughnessy (2008) as fearing VCT as something revealing and HIV as visible sickness and AIDS as causing ugly death. Such perceptions of shame denial and stigma are inevitably proliferating to adolescents in the community.

- ❖ There is need for more grounded population based studies that provide direct measure of HIV for overall population including by sex, region, age and race (HSRC *et al.* 2005).

Since the present study seems to point to the existence of specific barriers to VCT among adolescents, the call by Macphail *et al.* (2009) that campaigns to promote VCT among youths should not be abandoned despite evidence of possible in roads in lowering the prevalence of HIV among youths should be heeded. The present study concurs to the need of integrating VCT into rural communities and that this remains the main challenge as Macphail *et al.* (2009) posits.

## 5.8 Limitations



- Subsisting recommendations may auger well for the community studied but may however not be generalisable. The data was from a small and probably non representative sample at one school in the rural Eastern Cape.
- The language barrier and the second language effect could have confounded findings where it is assumed that other students could not fully understand the questions in the English medium which is not their home language. Quantitative studies scrap the surface of a complex underlying phenomenon like HIV and AIDS. Future research can situate adolescents and VCT through utilizing both qualitative and quantitative methods using activity theory in order to fully explore perceptions and contextual meanings.
- Surveys of self reported sexual behaviour may be influenced by social desirability bias as Macphail *et al.* (2009) revealed. Focusing on barriers may highlight on social negatives in HIV testing and this may inadvertently reinforce such thinking among the youths, instead of the required positive orientation.

## 5.9 Chapter Summary

This chapter discussed the findings of the present study. The uptake levels, gender role and important barriers, implications of the study a well as recommendations were given. The role of information in uptake of VCT was noted and more VCT centres for rural areas recommended. The role of VCT as a risk reduction strategy in adolescence was also discussed as well as the need to particularize programmes for contexts and specific genders. Various rural and adolescent compliant strategies of increasing awareness and reducing perceived barriers to VCT were also recommended and possible limitations of findings also elaborated.

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APPENDIX A: LETTER TO SCHOOL PRINCIPAL

University of Fort Hare
*Together in Excellence*

University of Fort Hare
Psychology Department
P Bag X50 Church Street
East London 5200

June 2009

The Principal

Dear Sir/Madam



**RE- PRELIMINARY REQUEST TO CONDUCT MASTERS RESEARCH AT YOUR SCHOOL**

Sir, I am a Masters student in Counselling Psychology at the University of Fort Hare and in partial fulfilment of my studies I have a research component that forms an integral part of my studies.

My research is an HIV/ AIDS related study on Adolescents' perceptions of the barriers to Voluntary Counselling and Testing (VCT). The research topic has been necessitated by recent South African studies suggesting that the epidemic is on the decline particularly among youths. The present study seeks to find whether the adolescents in high school have overgrown stigma and discrimination as barriers to VCT and whether they are now more ready for testing.

Your school has been chosen to represent Eastern Cape adolescents in this review study. I have enclosed the proposal, questionnaire and consent form for your perusal. College referral letters will be sent in due course and I look forward to a discussion on the modalities of when and how the study can be carried out with pupils at your school.

Your co-operation in this regard is highly anticipated and will be appreciated

Yours sincerely,

Jephias Chimunhu
Cell -0746846518

APPENDIX B: PARENTS AND PARTICIPANTS CONSENT FORM

University of Fort Hare
*Together in Excellence*

MASTERS IN COUNSELLING PSYCHOLOGY RESEARCH PROJECT 2009.

Title of study: Adolescents Perceptions of the Relevance of Barriers to Voluntary Counselling and Testing (VCT); A Rural Eastern Cape High School Study.

Background to the study

This study recognizes that HIV and AIDS is impacting heavily on South Africa and VCT has become one of the most important strategies in the fight against the pandemic. Adolescents are an important group in the struggle and your school has been chosen for this ground breaking study. Your opinions on the barriers underlying VCT are hereby being sought. It is hoped the results of this study will constitute a springboard for redirecting effort where necessary in future planning and implementation of VCT programmes.



Participant consent

I hereby agree to participate in the research project outlined above. I acknowledge that I have been informed of the purpose of the study, and wish to proceed as a participant. I understand that my contribution to the research will be used by the researcher to fulfil the requirements of his Masters in Counselling Psychology degree. I have in no way been coerced into this decision.
I understand that it will not be possible to identify me from the questionnaire.
I expect the researcher to treat me with respect.
I will try to answer all questions put to me as honestly as possible.
I understand that I can withdraw at anytime.

..... .....
Participant's Signature Date

..... .....
Parent/Guardian's signature Date

APPENDIX C

ADOLESCENTS' PERCEPTIONS OF THE BARRIERS TO VOLUNTARY COUNSELLING AND TESTING (VCT) QUESTIONNAIRE

SECTION A

(Please tick the correct box)

Age Range 12-14 years ☐ 15-17 years ☐

Sex: Male ☐ Female ☐

Grade 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐

---

Race: White ☐ Black ☐ Coloured ☐ Indian ☐ Other u ☐

(Please circle the correct answer)

Have you heard of Voluntary Counselling and Testing (VCT) before today YES NO

If yes, have you made use of VCT services to have yourself tested YES NO



**SECTION B**

Below is a list of statements regarding HIV/Aids testing. Read each statement and put a cross (X) over the number (1, 2, 3, 4, 5) which indicates the extent you agree or disagree with the statement.

| | I strongly disagree | I disagree | I neither agree nor disagree | I agree | I strongly agree |
|---|---|---|---|---|---|
| Example | | | | | |
| It is shameful to be tested for HIV/AIDS | ① | ② | ③ | ④ | ⑤ |

By placing a cross on the number 4 indicates the extent you agree with the statement, which in this case is "I agree".

| | I strongly disagree | I disagree | I neither agree nor disagree | I agree | I strongly agree |
|---|---|---|---|---|---|
| 1. Being found HIV positive means certain death . | ① | ② | ③ | ④ | ⑤ |
| 2. The locations of HIV/AIDS testing facilities are badly advertised. | ① | ② | ③ | ④ | ⑤ |
| 3. Families would support people found to be HIV positive. | ① | ② | ③ | ④ | ⑤ |
| 4. HIV/AIDS testing facilities are chaotic. | ① | ② | ③ | ④ | ⑤ |
| 5. Only other people will contract HIV/AIDS. | ① | ② | ③ | ④ | ⑤ |
| 6. It is better not to know ones HIV status because there is no cure | ① | ② | ③ | ④ | ⑤ |
| 7. Only people who sleep around need to be tested for HIV/AIDS. | ① | ② | ③ | ④ | ⑤ |
| 8. It is too time consuming to be tested for HIV/AIDS. | ① | ② | ③ | ④ | ⑤ |
| 9. The whole HIV/AIDS testing campaign spoils the fun of having sex. | ① | ② | ③ | ④ | ⑤ |
| 10.Staff at HIV/AIDS testing facilities are competent. | ① | ② | ③ | ④ | ⑤ |
| 11. Friends reject people if they are HIV positive. | ① | ② | ③ | ④ | ⑤ |
| 12. HIV/AIDS testing facilities are difficult to get to. | ① | ② | ③ | ④ | ⑤ |
| 13. Dying from HIV/AIDS is worse than dying in a car accident. | ① | ② | ③ | ④ | ⑤ |
| 14. HIV/AIDS testing is not 100% accurate. | ① | ② | ③ | ④ | ⑤ |
| 15. HIV positive women are seen as women who sleep around. | ① | ② | ③ | ④ | ⑤ |
| 16. HIV/AIDS testing areas are dangerous because there is a risk of being infeted | ① | ② | ③ | ④ | ⑤ |

| | I strongly disagree ▼ | I disagree | I neither agree nor disagree | I agree | I strongly agree |
|---|---|---|---|---|---|
| 17. HIV positive people are seen as people with low morals. | ① | ② | ③ | ④ | ⑤ |
| 18. Nobody wants to be seen by friends and colleagues at HIV/AIDS testing facilities. | ① | ② | ③ | ④ | ⑤ |
| 19. Being HIV positive would have negative consequences for a pupil at this school. | ① | ② | ③ | ④ | ⑤ |
| 20. It is too much trouble to be tested for HIV/AIDS at VCT centres. | ① | ② | ③ | ④ | ⑤ |
| 21. It is better not to know the reason for ones own death. | ① | ② | ③ | ④ | ⑤ |
| 22. HIV/AIDS testing will not stop the HIV/AIDS pandemic, so why trouble. | ① | ② | ③ | ④ | ⑤ |
| 23. People die sometime anyway, so there is no need know ones HIV status. | ① | ② | ③ | ④ | ⑤ |
| 24. VCT services are expensive and youths cannot afford . | ① | ② | ③ | ④ | ⑤ |
| 25. The community does not accept HIV positive people. | ① | ② | ③ | ④ | ⑤ |
| 26. Youths should also be part of staff at VCT centres. | ① | ② | ③ | ④ | ⑤ |
| 27. HIV positive men are seen as womanisers. | ① | ② | ③ | ④ | ⑤ |
| 28. If ARVs become accessible youths my age would go for testing. | ① | ② | ③ | ④ | ⑤ |
| 29. Only females should be tested for HIV/AIDS. | ① | ② | ③ | ④ | ⑤ |
| 30. Friends and family will think that the person being tested sleeps around. | ① | ② | ③ | ④ | ⑤ |

APPENDIX D

Frequency tables for responses on items (independent variables)

Being found HIV positive means certain death

Families would support with HIV

| | Frequency | Percent | Frequency | Percent |
|---|---|---|---|---|
| I strongly disagree | 56 | 31.5 | 13 | 7,3 |
| 1 disagree | 84 | 47.2 | 26 | 14,6 |
| I neither agree nor disagree | 6 | 3.4 | 12 | 6,7 |
| I agree | 28 | 15.7 | 95 | 53,4 |
| 1 strongly agree | 4 | 2.2 | 32 | 18,0 |
| total | 178 | 100.0 | 178 | 100 |

Only people who sleep around need to be tested

Only other people contract HIV

| | Frequency | Percent | Frequency | Percent |
|---|---|---|---|---|
| I strongly disagree | 50 | 28.1 | 36 | 20.2 |
| 1 disagree | 58 | 32.6 | 73 | 41.0 |
| I neither agree nor disagree | 7 | 3.9 | 25 | 14.0 |
| I agree | 44 | 24.7 | 37 | 20.8 |
| 1 strongly agree | 19 | 10.7 | 7 | 3.9 |
| total | 178 | 100.0 | 178 | 100.0 |

Friends and family will think that the person being tested sleeps around

If ARVs become accessible youths will test

| | Frequency | Percent | Frequency | Percent |
|---|---|---|---|---|
| I strongly disagree | 35 | 19.7 | 18 | 10.1 |
| 1 disagree | 57 | 32.0 | 41 | 23.0 |
| I neither agree/disagree | 31 | 17.4 | 37 | 20.8 |
| I agree | 36 | 20.2 | 68 | 38.2 |
| 1 strongly agree | 19 | 10.7 | 14 | 7.9 |
| Total | 178 | 100.0 | 178 | 100.0 |

The whole HIV/AIDS testing campaign spoils the fun of sex

Friends reject HIV positive people

| | Frequency | Percent | Frequency | Percent |
|---|---|---|---|---|
| I strongly disagree | 36 | 20.2 | 21 | 11.8 |
| 1 disagree | 64 | 36.0 | 42 | 23.6 |
| I neither agree nor disagree | 19 | 10.7 | 34 | 19.1 |
| I agree | 43 | 24.2 | 61 | 34.3 |
| 1 strongly agree | 16 | 9.0 | 20 | 11.2 |
| Total | 178 | 100.0 | 178 | 100.0 |

Dying from HIV/AIDS is worse than dying in a car accident

HIV positive women are seen as sleeping around

| | Frequency | Percent | Frequency | Percent |
|---|---|---|---|---|
| I strongly disagree | 42 | 23.6 | 43 | 24.2 |
| 1 disagree | 53 | 29.8 | 69 | 38.8 |
| I neither agree nor disagree | 17 | 9.6 | 20 | 11.2 |
| I agree | 41 | 23.0 | 31 | 17.4 |
| 1 strongly agree | 25 | 14.0 | 15 | 8.4 |
| Total | 178 | 100.0 | 178 | 100 |



HIV positive people are seen as people with low morals

Being HIV positive is negative for a pupil at this school

| | Frequency | Percent | Frequency | Percent |
|---|---|---|---|---|
| I strongly disagree | 38 | 21.3 | 15 | 8.4 |
| 1 disagree | 74 | 41.6 | 57 | 32.0 |
| I neither agree nor disagree | 20 | 11.2 | 32 | 18.0 |
| I agree | 38 | 21.3 | 57 | 32.0 |
| 1 strongly agree | 8 | 4.5 | 17 | 9.6 |
| | 178 | 100.0 | 178 | 100.0 |

It is better not to know the reason of own death

People die sometime anyway, no need to know one's status

| | Frequency | Percent | Frequency | Percent |
|---|---|---|---|---|
| I strongly disagree | 20 | 11.2 | 37 | 20.8 |
| 1 disagree | 72 | 40.4 | 64 | 36.0 |
| I neither agree nor disagree | 30 | 16.9 | 23 | 12.9 |
| I agree | 39 | 21.9 | 42 | 23.6 |
| 1 strongly agree | 17 | 9.6 | 12 | 6.7 |
| Total | 178 | 100.0 | 178 | 100.0 |

The community does not accept HIV positive people

HIV positive men are seen as womanizers

| | Frequency | Percent | Frequency | Percent |
|---|---|---|---|---|
| I strongly disagree | 49 | 27.5 | 31 | 17.4 |
| 1 disagree | 50 | 28.1 | 64 | 36.0 |
| I neither agree nor disagree | 24 | 13.5 | 28 | 15.7 |
| I agree | 44 | 24.7 | 41 | 23.0 |
| 1 strongly agree | 11 | 6.2 | 14 | 7.9 |
| Total | 178 | 100.0 | 178 | 100.0 |



Only females should be tested for HIV/AIDS

Locations of HIV/AIDS testing facilities are badly advertised

| | Frequency | Percent | Frequency | Percent |
|---|---|---|---|---|
| I strongly disagree | 76 | 42.7 | 32 | 18.0 |
| 1 disagree | 58 | 32.6 | 92 | 51.7 |
| I neither agree nor disagree | 20 | 11.2 | 21 | 11.8 |
| I agree | 17 | 9.6 | 27 | 15.2 |
| 1 strongly agree | 7 | 3.9 | 5 | 2.8 |
| Total | 178 | 100.0 | 177 | 99.4 |

HIV testing facilities are chaotic

It is better not to know one's HIV status since there is no cure

| | Frequency | Percent | Frequency | Percent |
|---|---|---|---|---|
| I strongly disagree | 28 | 15.7 | 53 | 29.8 |
| 1 disagree | 83 | 46.6 | 62 | 34.8 |
| I neither agree nor disagree | 35 | 19.7 | 8 | 4.5 |
| I agree | 28 | 15.7 | 42 | 23.6 |
| 1 strongly agree | 4 | 2.2 | 13 | 7.3 |
| Total | 178 | 100.0 | 178 | 100.0 |

It is too time consuming to be tested for HIV/AIDS

Staff at testing facilities are competent

| | Frequency | Percent | Frequency | Percent |
|---|---|---|---|---|
| I strongly disagree | 27 | 15.2 | 18 | 10.1 |
| 1 disagree | 62 | 34.8 | 50 | 28.1 |
| I neither agree nor disagree | 26 | 14.6 | 54 | 30.3 |
| I agree | 47 | 26.4 | 46 | 25.8 |
| 1 strongly agree | 16 | 9.0 | 10 | 5.6 |
| total | 178 | 100.0 | 178 | 100.0 |



HIV/AIDS testing facilities are difficult to get to

HIV/AIDS testing is not 100 accurate

| | Frequency | Percent | Frequency | Percent |
|---|---|---|---|---|
| I strongly disagree | 20 | 11.2 | 33 | 18.5 |
| 1 disagree | 62 | 34.8 | 54 | 30.3 |
| I neither agree nor disagree | 34 | 19.1 | 28 | 15.7 |
| I agree | 49 | 27.5 | 47 | 26.4 |
| 1 strongly agree | 13 | 7.3 | 16 | 9.0 |
| Total | 178 | 100.0 | 178 | 100.0 |

HIV /AIDS testing areas are dangerous because there is risk being with aids there.

Nobody wants to be infected seen by friends at testing facilities

| | Frequency | Percent | Frequency | Percent |
|---|---|---|---|---|
| I strongly disagree | 41 | 23.0 | 15 | 8.4 |
| 1 disagree | 45 | 25.3 | 51 | 28.7 |
| I neither agree nor disagree | 27 | 15.2 | 20 | 11.2 |
| I agree | 45 | 25.3 | 75 | 42.1 |
| 1 strongly agree | 20 | 11.2 | 17 | 9.6 |
| total | 178 | 100.0 | 178 | 100.0 |

It is too much trouble to be tested for HIV at VCT centres

VCT will not stop pandemic, so why go to the trouble

| | Frequency | Percent | Frequency | Percent |
|---|---|---|---|---|
| I strongly disagree | 53 | 29.8 | 25 | 14.0 |
| 1 disagree | 62 | 34.8 | 60 | 33.7 |
| I neither agree nor disagree | 20 | 11.2 | 24 | 13.5 |
| I agree | 35 | 19.7 | 56 | 31.5 |
| 1 strongly agree | 8 | 4.5 | 13 | 7.3 |
| total | 178 | 100.0 | 178 | 100.0 |

VCT services are expensive and youths cannot afford

Youth should be part of staff at VCT



| | Frequency | Percent | Frequency | Percent |
|---|---|---|---|---|
| I strongly disagree | 33 | 18.5 | 12 | 6.7 |
| 1 disagree | 57 | 32.0 | 31 | 17.4 |
| I neither agree nor disagree | 32 | 18.0 | 28 | 15.7 |
| I agree | 42 | 23.6 | 77 | 43.3 |
| 1 strongly agree | 14 | 7.9 | 30 | 16.9 |
| Total | 178 | 100.0 | 178 | 100.0 |