

**SCHOOL-BASED HIV COUNSELLING AND TESTING:  
PROVIDING A YOUTH FRIENDLY SERVICE**

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**A thesis submitted in partial fulfilment of the requirements for the degree  
of Doctorate in the School of Public Health,**

**Faculty of Community and Health Sciences,**

**University of the Western Cape**

The logo of the University of the Western Cape, featuring a stylized classical building with columns and a pediment, with the text "UNIVERSITY of the WESTERN CAPE" below it.

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**Submitted: November 2012**

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**Prof Geert Van Hove**

# DEDICATION

**To the adolescent in each of us**



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## **KEYWORDS**

HIV counselling and testing

Voluntary counselling and testing

Young people

Youth

Adolescents

School

Youth friendly health services

Adolescent friendly health services



## ABSTRACT

HIV counselling and testing (HCT) is an essential element in the response to the HIV epidemic. There are still major gaps in research about the best ways to provide HCT, especially to young people. School-based HCT is a model which has been suggested for providing HCT to young people in a youth friendly manner. This study was aimed at producing recommendations for providing a youth friendly school-based HCT service using the World Health Organisation (WHO) framework for youth friendly health services. It was conducted in six secondary schools in Cape Town, where a mobile HCT service is provided by a nongovernmental organisation (NGO). It was an exploratory descriptive study, using a mixed-methods approach. Twelve focus group discussions (FGDs) were held with learners to explore their needs with regards to school-based HCT. An evaluation (which consisted of observation of the HCT site, service provider interviews and direct observation of the HCT counselling process) was done to determine whether the mobile school-based HCT service was youth friendly. A learner survey was conducted with 529 learners to investigate the factors that influence the uptake of HCT and to explore learners' behaviours and experiences under test conditions.

In the FGDs, learners said that they wanted HCT to be provided in schools *on condition* that their fears and expressed needs were taken into account. They wanted their concerns regarding privacy and confidentiality addressed; they wanted to be provided with information regarding the benefits and procedure of HCT before testing took place; they wanted service providers to be competent to work with young people, and they wanted to be assured that those who tested positive were followed up and supported.

On evaluation of the mobile school-based HCT service, it was evident that the service did not meet all the needs of the learners nor did it have all the characteristics of a youth friendly health service. The model of 'mass testing' used by the NGO did not fulfil learners' expressed need for privacy with regards to HCT. Service providers were friendly and non-judgemental but had not been trained to work with young people (especially marginalised groups e.g. young men who have sex with men). The information needs of learners were not addressed, and learners were not involved in the provision of the HCT service. Learners who tested positive were not assisted in accessing care and support.

The learner survey revealed a high uptake of HCT (71% of learners) at schools with learners who do not identify themselves as Black, with female learners and older learners being more likely to have had an HIV test. Factors that influenced uptake of HCT were complex, with learners reporting many different motivators and barriers to testing. Of concern was the low risk perception of learners with regards to HIV infection and the fact that learners who tested HIV positive were not being linked up with treatment and care.

Based on the findings of the study, recommendations were made for providing youth friendly school-based HCT. A multisectoral approach, with learner and community involvement, was suggested in order to provide a service which is equitable, accessible, acceptable, appropriate and effective.



## DECLARATION

I declare that *School-based HIV counselling and testing: Providing a youth friendly service* is my own work, that it has not been submitted for any degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged by complete references.

Name: Estelle Lawrence

Date:

Signed: .....



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## LIST OF ACRONYMS

<b>ACTS</b>	Advise, Consent, Test, Support
<b>AIDS</b>	Acquired immune deficiency syndrome
<b>ATTIC</b>	AIDS Training, Information and Counselling Centre
<b>CELSAM</b>	Centro Latinoamericano para Salud y Mujer
<b>DOH</b>	Department of Health
<b>FGD</b>	Focus group discussion
<b>HCT</b>	HIV counselling and testing
<b>HIV</b>	Human immunodeficiency virus
<b>ILO</b>	International Labour Organisation
<b>INRUD</b>	International Network for the Rational Use of Drugs
<b>IPPF</b>	International Planned Parenthood Federation
<b>LGBTI</b>	Lesbian gay bisexual transgendered intersex
<b>LO</b>	Life orientation
<b>MSM</b>	Men who have sex with men
<b>NAFCI</b>	National Adolescent-Friendly Clinic Initiative
<b>NGO</b>	Non-governmental organization
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>PICT</b>	Provider-initiated counselling and testing
<b>PLHIV</b>	People living with HIV
<b>RCT</b>	Randomised controlled trial
<b>SEATS</b>	Service Expansion and Technical Support
<b>STI</b>	Sexually transmitted infection
<b>TB</b>	Tuberculosis
<b>UNAIDS</b>	Joint United Nations Programme on HIV and AIDS
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organisation
<b>UNFPA</b>	United Nations Population Fund
<b>UNHCR</b>	United Nations High Commissioner for Refugees

<b>UNICEF</b>	United Nations Children’s Fund
<b>UYDEL</b>	Uganda Youth Development Link
<b>VCT</b>	Voluntary counselling and testing
<b>WCED</b>	Western Cape Education Department
<b>WHO</b>	World Health Organisation
<b>YFHS</b>	Youth friendly health service





## TERMINOLOGY

*Educator:* teacher

*Learner:* school-going young person

*Life orientation:* “The study of the self in relation to others and to society. It addresses skills, knowledge, and values about the self, the environment, responsible citizenship, a healthy and productive life, social engagement, recreation and physical activity, careers and career choices” (South African Department of Basic Education, 2011b, p.7)



# 1. CHAPTER ONE: INTRODUCTION

In Chapter 1, the background to the study is provided and the research aim, objectives and questions are put forward. The rationale behind doing the research and the contribution the study will make to the field of youth and adolescent health research is explained. The chapter includes a section on my background, which is relevant to the research. The theoretical framework for the research is also presented. The chapter concludes with an outline of the chapters in the thesis.

## 1.1. Background

This section includes background information on the Human Immunodeficiency Virus (HIV) and the epidemic that it has caused, internationally and in South Africa. The procedure for providing HIV counselling and testing (HCT) is described and the school-based model of HCT service provision in Cape Town, South Africa is presented.

### 1.1.1. HIV

#### *The virus*

HIV is a retrovirus which is thought to be a descendent of the Simian Immunodeficiency Virus (SIV), which affects monkeys (Worobey et al., 2010). As the name implies, the virus affects the immune system of humans, making them more susceptible to other infections and certain cancers, which in turn, results in the Acquired Immune Deficiency Syndrome (AIDS). The virus is thought to have originated in Africa between 1884 and 1924 (Worobey et al., 2008), but the world only became aware of its effects when clinicians noted an increase in a rare skin cancer, called Kaposi's sarcoma, in homosexual men in the United States in the 1980s (Hymes, 1981).

The virus is spread in body fluids (e.g. blood and semen) via various modes of transmission, namely sexual intercourse (Royce, Seña, Cates & Cohen, 1996), blood transfusions (Donegan et al., 1990), contaminated needles of injectable drug users (Kaplan & Heimer, 1992) or occupational needle stick injuries (Bell, 1997), and from mother to child during pregnancy (Peckham & Gibb, 1995). Different modes of transmission are more prominent in different parts of the world; for example, in sub-Saharan Africa, sexual intercourse (heterosexual sex, men who have sex with men [MSM], and paid sex) is the primary mode, whereas in East Europe and Asia, the primary mode is contaminated injectable drug use (UNAIDS, 2012).

The WHO has developed a four-stage system of classifying the disease according to the virological and immunological changes that occur in the body once an individual becomes infected with the virus (WHO, 2007). During stage 1 (primary infection), the virus is present in the blood in high numbers,

that is, the viral load is high, and in response to being attacked by the virus, the immune system produces equivalently large amounts of antibodies and lymphocytes (including T lymphocytes, which have the CD<sub>4</sub> protein on their surface). During stage 2 (clinically asymptomatic stage), the viral load drops but the virus continues to be active in the lymph nodes, the body continues to produce T lymphocytes in response to the virus in the blood, and the individual remains infective. During stage 3 (clinically symptomatic stage), the virus mutates and becomes stronger, destroying more T lymphocytes, at which stage, the body struggles to replace the T lymphocytes that are lost. Throughout this stage, the T lymphocyte numbers drop (and therefore also the CD<sub>4</sub> count). During stage 4 (progression from HIV to AIDS), the viral load continues to increase and the CD<sub>4</sub> count continues to fall, leaving the body with a severely weakened immune system, which is susceptible to opportunistic infections and eventually results in death.

### ***The global epidemic***

From the 1980s to the peak of the epidemic, in 1997, with 3.5 million [3.2 million–3.8 million] new infections, the number of people infected with HIV had increased at an astounding rate. Since then, the HIV incidence has decreased slowly to 2.7 million [2.4 million–2.9 million] new HIV infections in 2010 (UNAIDS, 2011b). This fall in new infections has occurred more rapidly in some countries than in others. Recent UNAIDS (2011b) data have shown a fall in 33 countries, 22 of them in sub-Saharan Africa. Despite this decline in new infections, an estimated 34 million people [31.6 million–35.2 million] were living with HIV worldwide in 2010, primarily due to the ongoing large number of new infections and the reduction in AIDS-related deaths because of increased access to antiretroviral therapy (UNAIDS, 2011b).

### ***The epidemic in sub-Saharan Africa***

According to UNAIDS (2011b), sub-Saharan Africa has been the area most heavily affected by HIV, with 68% of all people with HIV living in this region. Despite the drop in the number of new infections, down to 1.9 million [1.7 million–2.1 million] in 2010 from 2.6 million [2.4 million–2.8 million] in 1997, sub-Saharan Africa still accounted for 70% of new HIV infections and almost half of the AIDS-related deaths in 2010 (UNAIDS, 2011b). HIV has always affected women disproportionately in sub-Saharan Africa because of gender-based violence, economic inequalities and biological vulnerability (Wechsberg, Parry & Jewkes, 2010). In 2011, 6 in 10 adults living with HIV in sub-Saharan Africa were women (UNAIDS, 2012).

## *The epidemic in South Africa*

According to the 2011 World AIDS Day Report (UNAIDS, 2011b), South Africa has more people living with HIV (an estimated 5.6 million) than any other country in the world. The annual HIV incidence in South Africa, though still high, dropped by a third between 2001 and 2009, from 2.4% [2.1%–2.6%] to 1.5% [1.3%–1.8%] (UNAIDS, 2011b). Heterosexual sex is the predominant mode of HIV transmission in South Africa, with Black<sup>1</sup> females aged 20–34 years having the highest HIV prevalence (32.7%) followed by Black males aged 25–49 years (23.7%) (Shisana et al., 2009). A study done with young men under the age of 25 in Durban and Johannesburg indicates that South Africa may be experiencing a parallel homosexual and heterosexual epidemic with MSM having an HIV prevalence of 38.3%, more than double that of men in the general population (Metcalf & Rispel, 2009). HIV prevalence in females in the 25-29 year age group is disproportionately high compared to that of males (Shisana et al., 2009). In the last national survey (Shisana et al., 2009), HIV prevalence levels for the population aged 2+ years was reported to have remained stable at 10.9% (similar to levels in 2002 of 11.4% and in 2005 of 10.8%) but to have decreased in the 2-14 year age group from 5.6% in 2002 to 2.5% in 2008 and in the 15-24 year age group from 10.3% in 2002 to 8.6% in 2008.

## *Youth<sup>2</sup> and the epidemic*

Globally, HIV affects a disproportionate number of youth. According to UNAIDS (2010), of the estimated 33.3 million people globally living with HIV in 2010, 5 million were youth of 15-24 years of age. In a recent update of statistics on the epidemic (UNICEF, UNAIDS, UNESCO, UNFPA, ILO, WHO, & World Bank, 2011), it was reported that youth make up an estimated 41% of new infections, that most of them live in sub-Saharan Africa (74%), that most are women, and that most do not know their status.

However, the recent World AIDS Day Report (UNAIDS, 2011b) showed a decline in HIV prevalence among youth (aged 15-24 years) in 21 of 24 countries that have a national HIV prevalence of 1% or

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<sup>1</sup> During the apartheid years the South African government classified people into four major racial groups (Black/African, Coloured/Mixed race, Indian/Asian and White/European). Post-apartheid many South Africans still self-identify and see others according to these groups.

<sup>2</sup> The WHO defines 'adolescence' as 10-19 years of age, 'youth' as 15-24 years of age and 'young people' as 10-24 years of age (WHO, 1986)

higher. UNAIDS (2011b) researchers ascribed this decline to behavioural changes such as waiting longer to become sexually active, having fewer multiple partners, and increasing the use of condoms.

Similarly, in South Africa, the HIV epidemic is a major public health problem among youth. In the 2008 South African National HIV Prevalence, Incidence, Behaviour & Communication Survey, levels of HIV infection among 15 to 24-year-olds (despite a decrease from 10.3% in 2005 to 8.7% (CI: 7.2–10.4) in 2008) were reported as being still high, with 15.5% among young women and 4.8% among young men (Shisana et al., 2009).

In South Africa, HIV in youth is predominantly heterosexually transmitted, which has been ascribed to a range of individual, environmental and socio-cultural factors, such as early sexual debut (Glynn et al., 2010; Greenberg, Magder, & Aral, 1992; Pettifor, Van der Straten, Dunbar, Shiboski, & Padian, 2004; Wand & Ramjee, 2012), intergenerational sex (Hunter, 2002; Katz & Low-Beer, 2008; Leclerc-Madlala, 2008; Pettifor et al., 2005; Shisana et al., 2005), multiple concurrent sexual partners (Parker, Makhubele, Ntlatlaba & Connolly, 2007; Pettifor et al., 2005), and inconsistent use of condoms (Moyo, Levandowski, MacPhail, Rees, & Pettifor, 2008; Pettifor et al., 2005).

In the most recent national survey (Shisana et al., 2009), the youth who were interviewed reported many of these high-risk behaviours. Nearly 10% of young people had started having sex before the age of 15, with almost twice the percentage of males compared to females reporting a sexual debut before the age of 15 (11.3% vs. 5.9%). There was also a substantive increase in the percentage of youth who reported having had a sexual partner who was more than five years their senior. This increase in intergenerational sex specifically affects young females, with an increase from 18.5% in 2005 to 27.6% in 2008 (Shisana et al., 2009). The percentage of youth who reported multiple concurrent sex partners did not change between 2005 and 2008; however, a significantly larger proportion of males (30.8%) reported having multiple partners compared to females (6.0%) (Shisana et al., 2009). One of the areas where there has been an improvement is in condom use. A statistically significant increase was shown in the number of youth who reported condom use at last sexual encounter: from 57% in 2002 to 87% in 2008 for young males and from 46% to 73% in young females (Shisana et al., 2009). Shisana et al. (2009) ascribed the decreased HIV prevalence in this age group from 2005 to 2008 to this increase in condom use.

Certain youth in South Africa are at higher risk of acquiring HIV than others, for example, out-of-school youth (Hargreaves et al., 2008), drug users (Plüddemann, 2008), orphans (Operario, Underhill, Chuong, & Cluver, 2011), and youth who have been marginalised, for example, the lesbian-gay-bisexual-transgendered-intersex (LGBTI) community. Despite the fact that the first cases of HIV in South Africa were identified in White homosexual men, few studies have been done focusing on the

LGBTI community. This is probably because HIV is predominantly a heterosexual disease in the sub-Saharan, and so the focus has not been on this community.

As mentioned in the section above, a study done in 2009 suggests that there may be a hidden epidemic in South Africa in MSM (Metcalf & Rispel, 2009). Recently, MSM have been included in South Africa's HIV and AIDS strategic plan (South African National AIDS Council, 2007), and it has been acknowledged that there is limited information about HIV in MSM. Even less is known about the lesbian community. Community studies done in Kwazulu-Natal and Gauteng challenge the belief that lesbians are at low risk of HIV infection, with 13% of Black lesbians, 8% of Indian lesbians and 5% of White lesbians reported being HIV positive in Kwazulu-Natal (Wells, 2006), as did 9% of Black lesbians and 5% of White lesbians in Gauteng (Wells & Polders, 2004). The fact that lesbian women may have bisexual partners, may experience a high incidence of rape, and may engage in transactional sex with men could account for this high prevalence.

### **1.1.2. HCT**

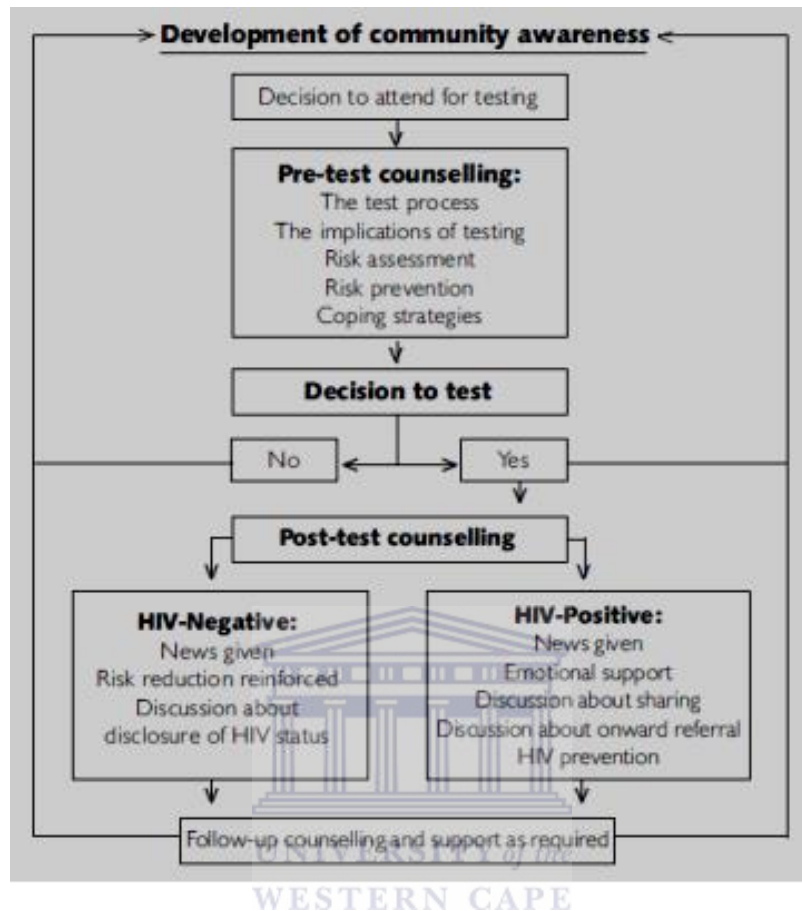
According to the UNAIDS terminology guidelines (UNAIDS, 2011b), the term *HIV testing and counselling* includes both client-initiated counselling and testing (also known as voluntary counselling and testing) and provider-initiated counselling and testing (PICT). These terms are explained below. The terms *HIV testing and counselling* and *HIV counselling and testing* are used interchangeably in the literature. In this study, the term *HIV counselling and testing* (HCT) will be used, as this is the term used in the South African context since 2010. HCT will be used unless referring to a study where the author has specified whether testing was provider or client-initiated.

#### ***The UNAIDS model***

UNAIDS defines HIV voluntary counselling and testing (VCT) as “the process of providing counselling to an individual to enable him or her to make an informed choice about being tested for HIV” (UNAIDS, 2000a, p 3). Since the HIV test became available in 1985, the underpinning principles for conducting HCT have been the “3 Cs”, namely that the testing should be *confidential*, must be accompanied by *counselling*, and can only be conducted with informed *consent* (UNAIDS & WHO, 2004).

According to the UNAIDS model, the VCT process starts with pre-test counselling, whereby the individual is assisted to make a decision about whether to take an HIV test or not and is given the opportunity to assess his or her personal risks for HIV infection. If the individual decides to take the HIV test, he or she then receives test results during a post-test counselling session. During this

counselling session, the person is helped to develop life plans for behaviours that protect self and others from HIV transmission. Figure 1.1 depicts the UNAIDS (2000a) VCT model.



**Figure 1.1. UNAIDS model for VCT (Source: UNAIDS, 2000a)**

In 1997, UNAIDS encouraged countries to include VCT in their HIV prevention and support programmes (UNAIDS, 1997) as the researchers of a number of studies had suggested that VCT could play a role in preventing transmission of the disease through positive behaviour change. At that time, few people had access to treatment for AIDS and so the emphasis of VCT was on creating a personal plan for HIV-negative people to protect themselves and for HIV-positive people not to transmit the virus to anybody else. Whether VCT does result in behaviour change is debatable, and despite international and local focus on HIV testing, major research gaps about the role of VCT still exist. This debate is discussed in Section 2.1.1.

### ***Provider-initiated counselling and testing (PICT)***

Up until 2007, HIV testing internationally had primarily been client-initiated (requiring the client to request the test) and “opt-in” (requiring formal counselling and patient signatures on forms). In 2007 (by which time many more people had access to treatment for AIDS), WHO recommended that

countries also adopt “opt out” PICT in an effort to increase access to HIV testing (WHO & UNAIDS, 2007). With PICT, the health-care provider routinely offers an HIV test, irrespective of the client’s health status or reason for seeking health care. If the client does not “opt out” (i.e. explicitly refuses the HIV test), then simplified pre-test counselling is done and verbal consent is given (Bassett & Walensky, 2010). Although PICT is provider-initiated, testing is still voluntary and is only done if the client gives informed consent.

PICT has a number of advantages: it increases HIV testing rates and, subsequently, early linkage to HIV care, fewer counsellor and counselling rooms are needed, and it normalises HCT for both providers and clients (Leon, Colvin, Lewin, Mathews & Jennings, 2010). Opt-out testing has been criticised for being unethical and restricting patient autonomy (April, 2010). Critics argue that the negative social consequences of testing positive will outweigh the benefits achieved by expanding testing, especially if those who are found to be positive are not referred for antiretroviral therapy (April, 2010). However, there is increasing evidence that PICT can play an important role in scaling up access to HIV testing, care and treatment in high prevalence areas (Topp et al., 2011). Leon et al. (2010) supported PITC in the South African setting, arguing that if the correct balance between normalising HCT and ensuring its ethical application is maintained, then PITC can be an effective, ethical and acceptable method of increasing HCT uptake.

### ***HCT in secondary schools in South Africa***

As recommended by UNAIDS (1997), the South African government included VCT in its HIV and AIDS and STI Strategic Plan for 2007-2011 (South African National AIDS Council, 2007). In February 2010, the South African Department of Health (DOH) expanded its VCT policy to include young people (South African DOH, 2010), and in April 2010, the president of South Africa launched an HCT campaign with the target of testing 15 million people by April 2011 (Motsaledi, 2010). As part of this campaign, the Departments of Basic Education and Health announced, at the beginning of 2011, that they intended to launch an HCT campaign specifically targeting secondary school learners (South African Department of Basic Education, 2011a). This announcement was met with widespread concern from child rights, human rights and AIDS organisations, which argued that the school setting was not conducive to providing HCT in a way that does not violate the rights of young people. In May 2011, the South African Department of Basic Education acknowledged that there were serious legal



and ethical concerns that needed to be addressed before HCT could be rolled out to schools<sup>3</sup>, and since then the school's campaign has been on hold.

However, the National Department of Health's HIV and AIDS and STI Strategic Plan for 2012-2016 (South African National AIDS Council, 2011) includes HIV testing in schools but acknowledges that it is not part of the South African Department of Basic Education's draft HIV and AIDS Strategic Plan for 2012-2016 (South African Department of Basic Education, 2010) and that policies guiding HIV testing in schools still need to be developed.

Before the announcement of the HCT campaign for schools, non-governmental organisations (NGOs) in Cape Town had already been providing an HCT service at some secondary schools and have continued doing so at schools where school governing bodies have given permission for them to continue.

### ***The school-based HCT service provided to secondary schools in Cape Town***

The HCT service provided to secondary schools in Cape Town by one of the NGOs mentioned above is the focus of this study. This particular NGO approaches schools, and those schools that wish to make use of their service are then visited to explain the process and to make arrangements for HCT at the school. On the day of testing, the learners who wish to be tested are tested class by class in the school hall (or similar space). The class arrives in the testing space en masse, the procedure is explained to them, and then those who wish to be tested remain, whilst the rest return to the class. Those who decide to be tested receive individual pre- and post-test counselling and are tested by the nurses, using a finger-prick, rapid HIV test. Results are given to learners 15 minutes after they have been tested. Learners who are found to be HIV positive are referred by the NGO to a health facility of their choice for further management. The team usually tests for a number of days at one school, depending on the size of the school and the demand for testing<sup>4</sup>.

## **1.2. Rationale**

As mentioned in Section 1.1., HIV is a major public health problem amongst young people in South Africa (Shisana et al., 2009). In accordance with UNAIDS (1997) recommendations, one of the ways that the South African government had tried to address this problem was to include HIV testing in the

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<sup>3</sup> <http://www.timeslive.co.za/local/article1063135.ece/School-HIV-tests-on-hold>

<sup>4</sup> NGO project manager, personal communication, 2010

National HIV and AIDS and STI Strategic Plan for 2007-2011 (South African National AIDS Council, 2007), with a specific focus on young people. Despite an increase in HCT from 2005 to 2008 in South Africa (Shisana et al., 2009), in a study done in 2009 (MacPhail, Pettifor, Moyo, & Rees, 2009), the results showed that only 32.7% of males and 17.7% of females between the age of 15 and 24 years reported having been tested for HIV.

According to Boswell and Baggaley (2002), one of the reasons that young people do not choose to be tested is because formal health services (where HCT is provided) are often not youth friendly. Since the 1990s, much has been written about the barriers young people face in accessing health services, and attempts have been made to remove these barriers and to provide health services to young people that meet their specific needs. In 2002, the WHO developed a set of recommendations encouraging the development of youth friendly health services (YFHSs) worldwide (WHO, 2002). These recommendations are discussed in Chapter 2. A number of models for providing YFHSs have been suggested, including integration into primary health-care services, school and college health-care services, TB and antiretroviral therapy services, and sexually transmitted infections and family planning services. Also mooted has been the provision of YFHS at youth centres or as a mobile service in the private sector or as a home-based service (Boswell & Baggaley, 2002).

As mentioned in Section 1.1, a mobile school-based model has been implemented by an NGO in Cape Town since the mid-1990s, in an attempt to make the service youth friendly and thereby increase young people's uptake of HCT. Little has been published about this school-based model of HCT service provision and the service has not been evaluated. During this study, I explored whether the mobile school-based model was acceptable to learners, whether it was youth friendly, and how learners experienced this service.

### **1.3. Research aims, objectives and questions**

The aim of this study was to make recommendations for providing a youth friendly school-based HCT service. This aim gave rise to a number of questions, which outlined the research process:

1. What are the expressed needs of learners with regards to school-based HCT service provision?
2. Is the mobile school-based HCT service youth friendly?
3. What are the factors that influence learners' uptake of HCT?
4. What are the testing behaviours (i.e. number of times tested, time since last test, where tested) of learners who have tested?
5. What are the testing experiences of learners who have tested?
6. What care and treatment have learners who tested HIV positive accessed?

The specific objectives were:

1. To explore the expressed needs of learners with regards to school-based HCT service provision.
2. To explore whether the mobile school-based HCT service is youth friendly.
3. To determine the factors that influence uptake of HCT in learners.
4. To describe the testing behaviour of those learners who have been tested.
5. To describe the experiences, during testing, of those tested.
6. To describe the care and treatment that HIV-positive learners have received.

#### **1.4. Significance of the study**

This study is significant as it addresses an issue which is presently both topical and relevant in South Africa – HCT in schools. It will contribute to the current debate around the ethics and feasibility of providing HCT in schools. The resulting recommendations for providing a youth friendly health service, which is the outcome of this study, can be used by government and NGO providers of HCT in schools.

One of the most important contributions this study will make is to afford young people a voice which has been lacking in the discussion regarding the provision of HCT in schools. Because I followed an emancipatory research approach, young people in this study were not simply regarded as research subjects but also as a source of knowledge, with their own insights and understandings (Jones, 2004) regarding school-based HCT. The findings will also contribute to the body of research on the sociology of childhood, where young people are seen as active participants in the social structures and processes of their lives (Prout & James, 1997).

Finally, this research will add to the limited existing literature regarding models of HCT provision to young people and the factors that influence the uptake of HCT by young people in developing countries.

#### **1.5. My background**

Who I am and my life experiences will affect how I see and do things. How I collect and interpret my data cannot be removed from who I am. I am a forty-something, lesbian, middle-class woman of colour (who has issues with being labelled Coloured because of all the other labels attached to that label). I am an appreciator, an initiator, a truth seeker, a problem solver.

I am a medical doctor who discovered, in her third year of training, that she no longer wanted to do Medicine but was not brave enough to stop. The biomedical model taught at medical school never felt

right to me. Fortunately, in my fourth year, I was introduced to Family Medicine and Community Health, with a much more holistic approach to Medicine, in which I did a diploma straight after completing my internship.

I worked in a community health centre in Cape Town for 2 years, then at a clinic in Soweto for a year. It was here that I was introduced to Public Health, and realised that my interest lay in preventing diseases and not curing them. I completed a master's degree in Public Health (through distance learning) whilst I was working as a Resident Medical Officer in a private hospital in the United Kingdom for 6 months and then doing locum work for a general practitioner in Cape Town for a year. Before I completed my master's degree, I started working in School Health (DOH, Western Cape), drawn by the health promotion component of the job. I then combined my work and studies and for my master's research and I decided to explore whether secondary schools in Khayelitsha, Cape Town were meeting the needs of learners infected with and affected by HIV.

Through my work as a school doctor, I was introduced to the concept of Health Promoting Schools<sup>5</sup>, and have adopted the systems approach of this concept in almost everything I do. I also started seeing myself as an advocate for the child (and now through my PhD, an advocate for young people). I have always had a fondness for young people, from the church youth group I ran in my early twenties to the 13-year-old during my internship, who kept getting admitted in a diabetic coma because he struggled with being different to his peers and wanted to "try without his insulin", to the 14-year-old during my Obstetrics block, who would not part her legs when it was time to deliver and was told by the nurses that she should have thought of keeping her legs closed 9 months before, to the 17-year-old on Ritalin who I have been seeing since he was 8 years old and who now has his first girlfriend and has lost all interest in his schoolwork, to the 16-year-old recently 'out' gay young man who was part of a school-based project I was involved in, who asked my advice about dating a man 10 years his senior. I view adolescence as a time of great turmoil *and* opportunity.

I ran a weekly 'lesbian-friendly' womyn's clinic at an NGO serving the lesbian-gay-bisexual-transgendered-intersex (LGBTI) community on a voluntary basis for a few years. The primary service provided at the clinic was HIV testing, and I was involved in both counselling and testing of clients. This experience highlighted for me the difficulties lesbian women experience when visiting formal

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<sup>5</sup> WHO describes a Health Promoting School as a school "which is constantly strengthening its capacity as a healthy setting for living, learning and working" (WHO, 1998, p. 2)

health facilities and the need for spaces where lesbian women can discuss issues pertaining to sexual health.

I have been for HIV testing, once for insurance purposes, once as part of medical treatment (on both these occasions I was not counselled), and once at an HIV and AIDS conference “for the experience” (I had already embarked on my PhD research). For the first test, I did not think I was at any risk of being infected, so it was an emotionless experience. For the second test, I spent an anxiety-ridden week waiting for the results (rapid tests were not available then). The third test I spent educating the counsellor—she was unable to give me advice on how to protect myself from acquiring HIV as a lesbian.

I have never considered myself an academic or a researcher. I am a clinician, an implementer of projects, a “person on the ground”. I embarked on this PhD journey because I had the opportunity to do this research using a scholarship. I hoped I could make a difference in the lives of the people in my country, so here I am, 4 years later, writing a chapter on “My background” as part of my PhD thesis.

## **1.6. Theoretical framework**

The theoretical framework of this research is based on the characteristics of an adolescent friendly<sup>6</sup> health service, as described in the WHO document “Adolescent Friendly Health Services – An Agenda for Change” (WHO, 2002). WHO describes an adolescent friendly health service as being accessible, equitable, acceptable, appropriate and effective. They recommend that health services for adolescents should have policies, procedures, facilities and staff that are adolescent friendly and should include youth and community involvement (WHO, 2002). See Appendix I for the list of characteristics of an adolescent friendly health service which were drawn up at a WHO Global Consultation in 2001 and discussions at a WHO expert advisory group in Geneva in 2002 (WHO, 2002). These characteristics will be discussed in more detail in Chapter 2.

## **1.7. Outline of thesis**

Chapter 1 is the introduction to the thesis and includes the background to the study, the rationale for this research and the contribution that the research makes. The research aim, objectives and questions

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<sup>6</sup> The terms *adolescent friendly* and *youth friendly* health services are used interchangeably in the literature. In this study I have used the term *youth friendly* as the participants of my research include young people up to the age of 24 years.

are put forward and the theoretical framework used is introduced. A description of my background, relevant to the study, is also given.

Chapter 2 is the literature review, which includes sections on (1) HCT: its role, barriers to and motivators for HCT uptake in young people and models of HCT provision to young people; and (2) YFHS: why a YFHS is needed, characteristics of a YFHS, models for providing a YFHS, and the effectiveness of a YFHS.

Chapter 3 provides an overview of the methodologies used in this research and includes the research designs and the research setting. A brief description of the methodologies used in the research is given: the qualitative component consisting of focus group discussions (FGDs) with learners and an evaluation of the school-based HCT service and the quantitative component consisting of a learner survey.

Chapter 4 covers the first research question, “What are the expressed needs of learners with regards to school-based HCT service provision?” This chapter includes a detailed description of the methodology (FGDs) used to answer the research question. The findings of the content analysis of the FGDs are presented and discussed. The chapter concludes with a discussion of the limitations of this part of the study.

Chapter 5 deals with the second research question “Is the mobile school-based HCT service youth friendly?” This chapter gives a detailed description of the methodology, which was an evaluation consisting of observation of the HCT site, interviews with service providers, and direct observation of HCT counselling sessions. The findings of the evaluation are presented, and the youth friendliness of the HCT service is discussed.

Chapter 6 is concerned with the remaining research questions regarding HCT uptake in learners and their behaviour and experiences during testing. In this chapter, the methodology (survey) is described in detail, the results of the survey presented, and the findings in relation to the literature discussed.

Chapter 7 integrates the findings of the qualitative and quantitative components of the study and consists of a discussion of the findings of Chapters 4-7.

Chapter 8 consists of a summary of the research, the key findings, the significance of the study, the recommendations that emerge from the findings and a conclusion.

## 2. CHAPTER TWO: LITERATURE REVIEW

The purpose of the literature review is to assess, critically, and to summarise the existing knowledge on a research topic in order to situate the research problem within the current body of knowledge (Polit & Hungler, 1997). This allows the researcher to identify the gaps in the existing knowledge that the new study will try to address and, therefore, will highlight the relevance and the significance of the study (Delpont & Fouché, 2005). This literature review will identify the key debates and gaps in previous research regarding HCT in young people and will present the assumptions underlying the youth friendly health services framework.

The literature was searched using the electronic databases PUBMED, Cumulative Index to Nursing and Allied Health Literature (CINAHL), Science Direct, and PsychARTICLES. Three searches were done using the following search terms (in different combinations): (1) youth, adolescents, HIV testing, HCT, VCT; (2) youth friendly health service and adolescent friendly health service, and (3) equity, equitable, access, accessibility, acceptable, acceptability, appropriate, appropriateness, effective, effectiveness, performance, indicators, and health system. Where appropriate, the 'related articles' search tool was also used. The reference lists of all selected documents and articles, from the previous searches, were checked to identify any relevant materials. Finally, the generic Internet search engine Google ([www.google.com](http://www.google.com)) was used to source additional information in the grey literature whenever necessary.

### 2.1. HCT

This section will present the debate surrounding the role of HCT. The barriers and motivators for uptake of HCT in young people will be discussed and models of providing HCT will be described.

#### 2.1.1. The role of HCT

##### *Promoting behaviour change*

There is a dearth of studies examining the impact of HCT on young people's behaviours. Studies that have been done were conducted in industrialised countries on high-risk groups and may not reflect the situation in developing countries where the epidemic is generalised. Research among adults in developing countries which explores whether HCT is an effective strategy for promoting behaviour change that reduces the risk of HIV transmission is conflicting. A meta-analysis done by Weinhardt, Carey, Johnson & Bickham (1999), focusing primarily on industrialised countries, supported HCT as an effective strategy for behaviour change for adults infected with HIV but showed no change in behaviour in uninfected adults. A more recent meta-analysis, published by Denison, O'Reilly,

Schmid, Kennedy, and Sweat (2008) and reviewing studies conducted between 1990 and 2005 in developing countries, demonstrated a moderate effect of HCT on unprotected sex and inconclusive evidence with regards to the effect of HCT on the number of sex partners of an individual.

Since 2005, the results of studies have remained conflicting. Some studies show an increase in the practice of safe sex after HCT (Arthur, Nduba, Forsythe, Mutemi & Gilks, 2007; Cremin et al., 2009), while others report an increase in risky sexual behaviour (Kabiru, Luke, Izugbara & Zulu, 2010; Sherr et al., 2007). Arthur et al. (2007) showed a decrease in the number of non-primary partners and an increase in condom use amongst individuals (all above the age of 18 years) who had undergone HCT at government health centres in Kenya. A limitation of this study however is that there was no control group and only a few HIV-positive clients. A cohort study (only 16% of participants were between 15 and 19 years old) done by Cremin et al. (2009) in Zimbabwe, however, did not show an increase in condom use after HCT, but women in the study (especially those who tested positive) did report a decrease in the number of sexual partners they had after HCT. The importance of the findings in this paper is that the study was not based on a trial of HCT, where counselling is often of a higher quality than in a normal day-to-day setting.

In contrast, studies by Sherr et al. (2007) and Kabiru et al. (2010) have shown an increase in risky sexual behaviour after HCT. In Sherr et al.'s study in Zimbabwe, individuals who had undergone HCT reported more casual sex but with an increased use in condoms (Sherr et al., 2007). Kabiru et al.'s (2010) study, done in Kenya with a random sample of youth (18-24 years), using a 10-year retrospective life history calendar, showed, after HCT, a decreased likelihood of unprotected sex among young women who had ever been pregnant, an increased likelihood of unprotected sex and "risky" sexual partnerships in young women who had never been pregnant, and an increase in number of concurrent partners in young men (Kabiru et al., 2010). A limitation of this study is that it is retrospective and therefore open to recall bias. Also, participants did not report on whether they had received pre- and post-test counselling when they had gone for HCT.

The problem with many of the studies that have looked at the impact of HCT on behaviour change is that they have been part of intervention studies and, therefore, do not reflect day-to-day testing. Instead, in these studies, the counselling linked to HCT has been of high quality, so it is unclear whether the same effects would be observed in the general population.

Another factor that needs to be borne in mind is that behaviour change is a complex issue that takes place at multiple levels of influence within the individual's immediate environment, community and society at large (Bronfenbrenner, 1979). Changes in behaviour do not occur in a linear fashion but, instead, follow a spiral pathway, where individuals revert back to old patterns of behaviour based on a number of internal and external factors (Prochaska et al., 1997). Researchers who have explored the



impact of HCT on behaviour change do not take these complexities into account. Also, none of the studies reported outcome measures beyond one year after baseline; therefore, conclusions cannot be made on the long-term impact of HCT.

### ***Entry point for care and treatment***

Besides being seen as a way of preventing HIV transmission through positive behaviour change, HCT has also been advocated as a critical entry point for care and treatment services, including prevention and clinical management of HIV-related illnesses, and psychosocial support (Janssen et al., 2001; Mshana et al., 2006; Nsigaye et al., 2009; Perbost et al., 2005; Sabin et al., 2004). The individuals who know that they are HIV positive can be put on treatment to prevent opportunistic infections, they can get care for HIV associated mental health problems, and they can be put on antiretroviral therapy when appropriate. Not only can the individuals benefit from knowing their HIV-positive status but there are also benefits on a population level. When going onto antiretroviral therapy, the individual's viral load is decreased (De Cock, Crowley, Lo, Granich & Williams, 2009; Sabin et al., 2004) and therefore they are less likely to transmit the virus to others.

Also, a study using a mathematical model predicted that in countries with a generalised epidemic, such as South Africa, a universal programme of compulsory annual HCT followed by immediate treatment with antiretroviral therapy ('test and treat'), regardless of CD4 cell count, could reduce new HIV cases by 95% within 10 years and subsequently end the HIV pandemic within 50 years (Granich, Gilks, Dye, De Cock & Williams, 2009). This study has received criticism, with researchers arguing that the model is based on unrealistic assumptions, that is, that almost all infected individuals accept treatment, that antiretroviral therapy reduces infectiousness by 99%, that drop-out rates remain below 5%, that drug resistance does not evolve, and that risk behaviour is substantially reduced (Dodd, Garnett & Hallett, 2010; Wagner & Blower, 2012; Wagner, Kahn & Blower, 2010). Currently, individuals who are HIV positive are not put on treatment until they need it, because of the toxicity and side-effects of antiretroviral therapy. Garnett and Baggaley (2009) argued that this model raises the prospect of subjecting individuals to potential medical harm for the public good, rather than the individual benefit. Wagner et al. (2010) added that in resource-limited countries, the most ethical strategy would be to provide antiretroviral therapy first to those who are in most need of treatment and not to use antiretroviral therapy as a form of prevention.

#### **2.1.2. HCT – Barriers to testing**

Despite an increase in HCT from 2005 to 2008 in South Africa (Shisana et al., 2008), many people (especially young people) have not been tested for HIV (McPhail et al., 2009). In a national survey done in 2003 (McPhail et al., 2009), only 32.7% of males and 17.7% of females between the age of 15

and 24 years in South Africa had been tested. Also, in a recent study done in Soweto, South Africa, youth had lower odds of HIV testing: 56,1% of 18-23 year olds reported never having a test (Venkatesh et al., 2011), and in a study done in a peri-urban Black community in Cape Town (April et al., 2009), only 15% of 15-19 year olds accepted first-time test encounters, compared to 54% in 20-29 year olds.

Studies have identified a number of reasons why young people do not go for testing, which include problems with accessibility (Delva et al., 2008; Matovu & Makumbi, 2007; McCauley et al., 2004; Peralta et al., 2007; Yahaya, Jimoh, & Balogun, 2010), fear of the negative consequences of testing positive (Delva et al., 2008; Denison, Nalakwanji, Dunnett-Dagg, McCauley, & Sweat, 2006; MacPhail et al., 2008; Matovu & Makumbi, 2007; McCauley, 2004; McCauley et al., 2004; Meiberg, Bos, Onya & Schaalma, 2008; Sherr et al., 2007; Van Dyk & Van Dyk, 2003; Yahaya et al., 2010), the perception that they are not vulnerable to HIV infection (Horizons, 2001a; MacPhail et al., 2008; Peralta et al., 2007), the logistics of being tested (Matovu & Makumbi, 2007; McCauley, 2004; Tuysuzoglu, Corliss, Fitzgerald, Abascal & Samples, 2011; Van Dyk & Van Dyk, 2003; Yahaya et al., 2010;); and health services that are not youth friendly (Boswell & Baggaley, 2002). The issue of youth friendly health services is discussed in Section 2.2. Furthermore, in countries where antiretroviral therapy is not available, the disadvantages to testing outweigh the benefits of testing (WHO, 2002).

Accessibility has been cited as a barrier in a number of studies. Young people have reported not knowing about HCT (McCauley, 2004); not knowing where to test (Delva et al., 2008); having to travel long distances to HCT sites (Matovu & Makumbi, 2007); never being offered a test (Peralta et al., 2007); and there being an inadequate number of HCT sites (Yahaya et al., 2010).

Many young people are afraid of testing positive (Delva et al., 2008; Matovu & Makumbi, 2007; MacPhail et al., 2008) and of the negative consequences of knowing their status, such as rejection by peers and family members (Denison et al., 2006; McCauley et al., 2004; Maman, Mbwambo, Hogan, Kilonzo & Sweat, 2001; Meiberg et al., 2008, Van Dyk & Van Dyk, 2003); and stigma and discrimination (Denison et al., 2006; Horizons, 2001a; Jürgensen, Tuba, Fylkesnes & Blystad, 2012; Matovu et al., 2005; McCauley et al., 2004; Kirumira et al. in McCauley, 2004; Meiberg et al., 2008; Sherr et al., 2007; Yahaya et al., 2010;). Some young people also believe that knowing one's status may accelerate the progression of the disease because knowing one's status causes stress and psychological problems such as depression, anxiety and substance abuse (McCauley et al., 2004; Sherr et al., 2007).

Some young people report not going for testing because they do not feel they need to be tested, either because they have never had sex (McCauley et al., 2004) or they do not think they are vulnerable to HIV infection (Peralta et al., 2007). In the Horizon's study (2001a), young people from Nairobi who felt they were not at risk of HIV infection also reported risky sexual behaviour such as inconsistent condom use. In FGDs in Gauteng, South Africa (MacPhail et al., 2008), young people said that they did not think they needed to be tested if they did not have symptoms of HIV. In a Kenyan study, even though only 7% of youth were tested because they were ill, the community perception was that youth only agree to be tested when they have symptoms (Horizons, 2001a).

The actual procedure of testing has also been cited as a barrier by young people. Many young people said they disliked the invasiveness of having blood drawn (McCauley, 2004; Tuysuzoglu et al., 2011). Cost of testing was also mentioned as a barrier to testing (Van Dyk & Van Dyk, 2003; Yahaya et al., 2010;).

### **2.1.3. HCT – Motivations for testing**

Studies have been done to determine factors which motivate young people to go for HCT. Young people have highlighted the importance of “knowing one's status” (MacPhail et al., 2008; Meiberg et al., 2008), in order to gain access to treatment, to protect themselves, and so as not to infect others (Meiberg et al., 2008). Many reported having tested before getting married (Kabiru et al., 2010; McCauley et al., 2004) or starting a new relationship (Meiberg et al., 2008). Some young people tested because they were concerned that they might be HIV positive, because they had had symptoms of HIV (McCauley et al., 2004, Meiberg et al., 2008) or they had been caring for someone who was HIV positive (McCauley et al., 2004) or they had a parent who was HIV positive (McCauley et al., 2004). Young people also reported that they had been tested in order to plan for their future (McCauley et al., 2004) or it was necessary when applying for a job (Meiberg et al., 2008), for entry into an educational institution, or for insurance purposes (McCauley et al., 2004). Some young women were tested when they went for antenatal care (MacPhail et al., 2009; Meiberg et al., 2008). Young people said they were more likely to go for a test if they could be given same-day results (Christianson, Berglin & Johansson, 2010; Peralta et al., 2007; Tuysuzoglu et al., 2011); if the testing procedure was non-invasive (Peralta et al., 2007; Tuysuzoglu et al., 2011); if confidentiality was ensured (Peralta et al., 2007; Tuysuzoglu et al., 2011), if the test was affordable (Matovu & Makumbi, 2007; McCauley et al., 2004; Tuysuzoglu et al., 2011; Yahaya et al., 2010); and if they could be tested at convenient times (Matovu & Makumbi, 2007).

#### **2.1.4. Models for HCT services**

Various models of providing HCT to young people have been suggested, but there is no ideal model for HCT service provision for young people, as different populations have different needs (Boswell & Baggaley, 2002). In this section, some of these models described in the literature are presented.

**HCT services integrated into primary health-care clinics:** The AIDS Information Centre in Uganda set up a youth friendly corner and attracted more young people for HCT than the clinic could handle (Kirumira et al., as cited in McCauley, 2004). In Haiti, an NGO saw an increase in the percentage of adolescents coming for HCT (from 1% in 1988 to 9% in 1999) when they integrated the HCT service with other primary care services such as STI and TB treatment (Peck et al., 2003).

**HCT integrated into school and college health-care services:** A United States study suggested that HCT offered at a school-based clinic is more accessible and acceptable than HCT offered in formal health settings (Henry-Reid, Rodriguez, Bell, Martinez, & Peera, 1998).

**Mobile school-based HCT services:** Examples of the school-based model for HCT provision include a mobile service in Uganda run by the Kitovu Mission Hospital, which has provided HCT in schools (Boswell & Baggaley, 2002), and the Tholulwazi Uzivikele HCT programme in Manguzi, South Africa, where HCT was offered in schools and drama was used to raise awareness and encourage testing amongst the learners (Pfaff & de Beer, 2011). An NGO in South Africa, Shout-it-Now, offers a unique HCT service to schools. They have 14-member teams that go into schools, set up tents with computers, and take learners through interactive video online HIV education. After the online educational component, learners have the opportunity to meet with an HIV tester. Learners who consent to a test are given a reward in the form of an airtime voucher, which the NGO claims decreases the stigma associated with testing because learners can tell their peers that they are testing to get the reward and not because they are worried about their HIV status. This NGO boasts a 98.25% (42,857 learners) uptake of HCT, with a HIV prevalence yield of 1.02% (Forgrieve, 2012).

**Integrated into reproductive health centres:** In Uganda, the Naguru Teenage Information and Health Clinic added HCT to its existing reproductive health services, which resulted in so many young people attending the clinic for HCT that the counsellors had to limit the number of HIV tests to 20 per day (Kirumira et al., as cited in McCauley, 2004). Similarly, reproductive health youth clinics in Cape Town implemented routine “opt out” testing to young people attending the clinics, which led to an increase of uptake of HCT from 3403 in 2005 to 6633 in 2006 (Médecins Sans Frontières, 2010).

**At multi-purpose youth centres:** HCT services are provided at Centre Dushishoze in Butare, Rwanda, where young people are drawn to the centre by being offered classes and activities that appeal to them (Boswell & Baggaley, 2002).

**In the private sector:** In Madagascar, a franchise of private youth friendly clinics offers young people family planning, STI treatment and HCT. These clinics attribute increased use of their service to flexible hours, discreet locations, attractive surroundings, and subsidised fees (Neukom & Ashford, 2003). Boswell and Baggaley (2002) suggested that HCT be provided to young people by private practitioners because in Nigeria, private practitioners have been trained to provide HCT services (Alawuru & Osahwanurhu, cited in Boswell & Baggaley, 2002), so there is the potential to provide HCT to young people in this setting.

**Integrated into TB services:** Boswell and Baggaley (2002) also proposed that HCT be provided as part of TB services. No literature could be found on studies where this model has been used to provide HCT to young people, but other studies have shown that integrating HCT into TB services has increased uptake of HCT in adults; therefore, this model may be an option for young people also. For example, health-care providers at a TB clinic in Kwazulu-Natal, South Africa who offered HIV testing to all TB clients saw an increase in the number of HIV tests done (Wallrauch et al., 2010).

## **2.2. Youth friendly health services (YFHSs)**

There are a number of variations in the definition of a YFHS. The International Planned Parenthood Federation (IPPF) defines a YFHS as one “that attracts young people, responds to their needs and retains young clients for continuing care” (IPPF, 2007). Although YFHSs consider all aspects of the health of young people, of particular concern is their sexual and reproductive health. For services to be considered youth friendly, WHO (2002) has agreed upon a set of overarching characteristics: the service should be accessible, equitable, acceptable, appropriate and effective (See Appendix I).

In this section, the characteristics of a YFHS (as described by WHO) will be discussed. The importance of a YFHS will be established, based on international legislation, the South African context, and the existing barriers that young people experience when accessing health services. Models of providing a YFHS will be explored and the effectiveness of YFHSs will be discussed.

### 2.2.1. Why the need for a YFHS?

#### *Legislation*

The legislation with regards to YFHSs provides the ethical and legal requirement for providing such services to young people. Based upon a human rights perspective, several significant international agreements have been passed that advocate for the provision of YFHSs. These include the following:

- The United Nations Convention on the Elimination of All Forms of Discrimination Against Women (1979), where it was stated that all women should have the right to decide on the number and spacing of their children and that they should have access to the information and means to exercise this right.
- The United Nations International Conference on Population and Development Programme of Action (1994), where governments were urged to remove barriers which prevent young people from accessing sexual and reproductive health information and services.
- The United Nations General Assembly Special Session on HIV and AIDS (2001), where clear goals and targets relating to increasing young people's access to interventions necessary for prevention of HIV were outlined.

As a signatory of the United Nations General Assembly Special Session Declaration (2001), the South African government included increasing access to youth friendly health services as a priority in its strategic plan to prevent HIV among youth (South African National AIDS Council, 2007), and in its National strategic plan on HIV, STIs and TB for 2012-2016 (South African National AIDS Council, 2011) the improved access to treatment for children, adolescents and youth is one of the strategic sub-objectives. Also, under South African law, anyone 14 years or older has the right to receive contraception (Republic of South Africa, 2006).

#### *Special health needs of young people*

“Some 1.2 billion adolescents (10–19 years old) today make up 18% of the world’s population, and nearly 90% live in developing countries. . . . Suicide is the leading cause of death for adolescents worldwide. . . Older adolescent boys in Latin America are most likely to die from homicide. In Africa, the top cause of death for adolescent girls between 15 and 19 years old is complications of pregnancy and childbirth. An estimated 2.2 million adolescents are living with HIV, and about 60 per cent of those are girls, many of whom do not know they are infected.”

UNICEF, 2012

Special attention should be paid to the health needs of young people for various reasons. They are vulnerable in numerous ways which are specific to their age group because of the psychological and physiological changes that accompany this life stage. Psychologically, this is a time when there is a high susceptibility to peer pressure, when there is the tendency to engage in risk-taking behaviour and less ability to negotiate safer sex practices (Melzer-Lange, 1998). Young females are especially vulnerable both physiologically, because they have biologically immature reproductive and immune systems which make them particularly vulnerable to STIs, and socially because of differences in gender norms, having to engage in transactional sex for economic reasons, and being less likely to have negotiating power in intergenerational relationships (Bearinger, Sieving, Ferguson & Sharma, 2007).

In South Africa, young people between the age of 10 and 24 years account for 30% of the population (Statistics South Africa, 2011). According to WHO, South Africa is currently experiencing a “youth health crisis”, partly due to under-nutrition, early child-bearing, high incidence of HIV infection, substance abuse, violence and injuries (WHO, 2012). The National Youth Risk Behaviour Survey of 2008 (Reddy et al., 2010) shows that a significant proportion of South African young people of school-going age are engaging in behaviour that puts their health at risk, for instance, inconsistent condom use, substance abuse, violent behaviour and engaging in sex after using substances.

### ***Barriers to accessing formal health services***

According to Boswell and Baggaley (2002), one of the reasons that young people do not access formal health services and therefore do not undergo testing is that formal health services often do not cater for them. Fears about real or perceived conditions at health centres (Erulkar, Onoka & Phiri, 2005; Lindberg, Lewis-Spruill, & Crownover, 2006; Mmari & Magnani, 2003; Senderowitz, 1999; Wood & Jewkes, 2006), lack of information about health services (Kang et al., 2005; Mmari & Magnani, 2003; Senderowitz, 1999), inconvenient hours of operation of health services (Dehne & Riedner, 2005; Kang et al., 2005; Senderowitz, 1999), cost of health services (Dehne & Riedner, 2005; Erulkar et al., 2005; Kang et al., 2005; Senderowitz, 1999), inaccessibility in terms of long distances young people need to travel to get to health services (Dehne & Riedner, 2005; Kang et al., 2005; WHO, 2002), policies that restrict young people’s access to health services (Mmari & Magnani, 2003; Senderowitz, 1999) are some of the reasons young people do not make use of formal health services.

Young people fear that health workers will be unfriendly and judgemental towards them, especially if they are seeking reproductive health services (Boot et al., 2004; Erulkar et al., 2005; Gleeson,

Robinson & Neal, 2002; Kang et al., 2005; Lindberg et al., 2006; Mmari & Magnani, 2003; WHO, 2002; Wood & Jewkes, 2006). They worry that the services provided will not remain confidential (Booth et al., 2004; Deane, Wilson & Ciarrochi, 2002; Erulkar et al., 2005, Gleeson et al., 2002; Kang et al., 2005; Lindberg et al., 2006; Mmari & Magnani, 2003). Young people also are not always aware of the location of health services or what services are available to them (Deane et al., 2002; Kang et al., 2005; Mmari & Magnani, 2003; WHO, 2002). In some countries, there are policies that restrict young people's access to reproductive health services based on their age or marital status (Mmari & Magnani, 2003).

It is important to note that young people's preferences with regards to YFHS vary widely across different socio-economic and cultural backgrounds. For example, in a study done in Kenya and Zimbabwe (Erulkar et al., 2005), young people rated confidentiality, short waiting time, low cost and friendly staff as the most important characteristics of a YFHS. The least important characteristics included youth-only services, youth involvement and young staff. Therefore, each community must develop its own essential package of health services based on the preferences of the young people who will use the service. Despite the need for flexibility of the essential package offered, WHO stresses that a YFHS must be equitable, accessible, acceptable, appropriate and effective for young people (WHO, 2002). These characteristics of a YFHS are discussed in the next section.

### **2.2.2. The characteristics of a YFHS**

The WHO (2002) recommends that to be considered youth friendly, services need to have the following characteristics:

- Equity: all young people, not just certain groups, should be able to obtain the health services they need.
- Accessibility: young people should be able to obtain the services that are provided.
- Acceptability: the health services should be provided in ways that meet the expectations of young people.
- Appropriateness: the health services that young people need should be provided.
- Effectiveness: the correct health services should be provided in the correct way and should make a positive contribution to the health of young people

These five characteristics are named in the conceptual frameworks that countries and international organisations have developed for monitoring, assessing, and managing health systems. The definitions



and debates around these characteristics in the literature consulted for the study will be discussed in detail below.

### ***Equitability***

Braveman and Gruskin (2003, p. 254) defined equitability in health care as “the absence of systematic disparities in health (or in the major social determinants of health) between social groups who have different levels of underlying social advantage/disadvantage”. In the opinion of Aday et al. (1999), the equity of a health service should be judged by the extent to which the service is shared equally across all groups in the community.

In a WHO report, Whitehead (1991) clarified that equity does not mean that everyone should have the same health status or use the same amount of health service resources, irrespective of need. Instead, she defined equity in health care as “equal access to available care for equal need; equal utilisation for equal need; equal quality of care for all” (Whitehead, 1991, p. 8). By “equal access to available care for equal need”, she implies that everyone should have equal entitlement to the available services and that services should be fairly distributed based on health-care needs and ease of geographical access. By “equal utilisation for equal need”, she implies that where use of services is restricted by social or economic disadvantage, these barriers should be removed. By “equal quality of care for all”, she implies that service providers will deliver services to all people in the community with the same effort and commitment, so that everyone receives the same high standard of professional care. This dimension of Whitehead’s definition, “equal quality of care for all”, corresponds with the WHO definition of an equitable health service being one which does not vary in quality because of personal characteristics such as gender, race, ethnicity, geographical location, or socioeconomic status (WHO, 2006).

Whitehead’s definition of “equal utilisation for equal need” (Whitehead, 1991, p. 8) echoes those of Knowles, James, Leighton and Stinson (1997) and Mooney (1983) who suggested that equity should be defined in relation to access as well as utilisation of a health service. Mooney (1983) pointed out that there is a difference between equity by access and equity by utilisation. He argued that equity of access to a health service is about equal opportunity, irrelevant of whether the opportunity is made use of. Equity of utilisation, however, depends on both supply and demand of a health service. In order for there to be equity in utilisation, the health service needs to be supplied equitably and there needs to be an equal demand for the service.

Authors agree that equity in health care should apply not only to the receipt and utilisation of health services but also to the allocation of health-care resources, the financing of health care, and the quality

of health-care services (Arah, Klazinga, Delnoij, Ten Asbroek, & Custers, 2003; Braveman & Gruskin, 2003; Evans, Tan-Torres Edejer, Lauer, Frenk & Murray, 2001; Gulliford, 2003).

Mooney (1983) explained that equity in financing of health care implies that everybody pays a fair share of the country's total health bill, which would mean that the very poor may pay nothing at all, thus protecting everyone from financial risk when accessing health care. Arah, Westert, Hurst and Klazinga (2006, p. 7) described this as "fair access", that is, the distribution of access to health services across the population, and "fair financing", that is, the distribution of payments across the population for the health service.

Based on these definitions, WHO (2012) has described an equitable health service as one where policies and procedures are in place that do not restrict the provision of health services to young people based on characteristics such as gender, race and religion, and where health-care providers (as well as support staff) treat all young clients with equal care and respect, regardless of their status.

### ***Accessibility***

The WHO (2006, p. 9) described an accessible health service as one which delivers "health care that is timely, geographically reasonable, and provided in a setting where skills and resources are appropriate to medical need". Similarly, Knowles et al. (1997) defined access as the presence or absence of physical (related to supply and availability of health services and distance from health facilities) or economic (related to the cost of seeking and obtaining health care) barriers that people might face when using health services.

A number of theories have been offered about what access is and how it works. Ricketts and Goldsmith (2005, p. 275) described two access frameworks: "access as use" and "access as fit". The framework of "access as use" was put forward by Andersen (1995), who noted that access to health services was not only dependent on the characteristics of the population and characteristics of the system that delivers the health service, but that use of the service also gave an indication of the accessibility of a service. Thiede, Akweongo and McIntyre (2007, p. 105) disagreed and argued that measuring the use of a service does not give an indication of the accessibility of the service. Instead, *access* means having the opportunity to use the service as well as the information to make decisions about using the service (this they call "freedom to use"), irrespective of whether a person uses the service or not. They maintained that the aim should be "freedom to use" rather than "equal use". They claimed that equal use is not the same as equal access. A person may have the freedom to use a service but may choose not to use the service because of deep-seated beliefs about different healing systems.

The second framework described by Ricketts and Goldsmith (2005) is the “access of fit” framework. This framework was proposed by Penchansky and Thomas (1981), who described *access* as the “fit” between the client’s needs and the provider’s ability to meet those needs. They suggested five dimensions across which this “fit” could be measured: (1) *availability*, which refers to the extent to which the provider has enough resources (e.g. personnel) to meet the needs of the client; (2) *accessibility*, which refers to geographic access that is determined by how easily the client can physically reach the provider’s location; (3) *accommodation*, which refers to the extent to which the provider’s service is organised in ways that meet the client’s needs (e.g. clinic hours and waiting time); (4) *affordability*, which refers to the client’s ability or willingness to pay for the service; and (5) *acceptability*, which refers to the extent to which the client is comfortable with the characteristics (e.g. sex, age, ethnicity) of the provider (and vice versa).

Ricketts and Goldsmith (2005) maintained that these two frameworks are too static and that the definition of *access* should take into account the dynamic elements of time, anticipation and experience. They argued that these frameworks relate to isolated client-provider interactions and that, in reality, people have many client-provider interactions, and how they react to these interactions depends on how they anticipate the system will react to them, how much they trust the system, and how much benefit they feel they will derive from using the system. Ricketts and Goldsmith stressed the importance of not only looking at the static elements of health service resources and structure but also paying attention to these more dynamic processes of client-provider interactions. Thiede et al. (2007) agreed with this argument and emphasised the importance of exploring the dynamic interaction between client and provider and the ability for both to adapt or improve in order to increase access to health services.

McLaughlin and Wyszewianski (2002 p. 1441) also highlighted the interdependence between Penchansky and Thomas’s (1981) five dimensions, pointing out that the five “As” “form a chain that is no stronger than its weakest link”. They explain that improving one of the As (e.g. availability of resources) may not improve access if the other As are not addressed (e.g. provider-client interaction that influences acceptability).

WHO’s definition of an accessible health service incorporates the definitions given above. WHO (2012) advocates that in order for health service to be accessible to young people policies and procedures should be in place that ensure that health services are either free or affordable to young people (i.e., Penchansky and Thomas’s notion of *affordability*); that point-of-service delivery should have convenient working hours (what Penchansky and Thomas called *accommodation*); that young people should be well informed about the range of health services available and how to obtain them (in line with Thiede et al.’s definition of access to information); that community members should

understand the benefits that young people will gain by obtaining the health services they need and support their provision (Thiede et al.'s distinction between "freedom to use" and "equal use"); and that some health services should be provided to young people in the community (as described by Penchansky and Thomas's *geographic accessibility*).

### ***Acceptability***

The WHO (2006) defines an acceptable health service as one which is patient-centred and takes into account the preferences and wishes of clients and the cultures of their communities. Similarly, Gilson (2007) defined *acceptability* as the social and cultural distance between health systems and their users. She identified three elements of acceptability: the fit between lay and professional health beliefs, the client-provider interaction, and the influence of health-care organisation arrangements on clients' response to services. In order for a service to be acceptable to a user, there has to be a fit between the health belief systems of the two. Gilson explained that often the layperson's interpretations of health and healing do not correspond with the biomedical knowledge system of the provider. The client may not trust the provider's technical competence and treatment because of their differing belief systems and, therefore, will perceive the service as being ineffective. Jacobs, Ir, Bigdeli, Annear & Van Damme (2012) similarly cited community and cultural preferences, attitudes and norms as "acceptability" barriers to accessing health care.

Gilson (2007) also highlighted the importance of the client-provider interaction in the acceptability of a health service. The acceptability of a service is influenced by how the provider behaves towards the client, his/her attitude and way of communicating. Stereotyping of certain groups of clients may affect the way the provider interacts with the client. Jacobs et al. (2012) also mentioned the importance of the interpersonal skills of providers in the acceptability of a health service for its users. Gilson (2007) and Jacobs et al. (2012) suggested that the degree to which the client feels he/she has a voice in the interaction (usually related to low self-esteem) also determines acceptability of the service.

According to Gilson (2007), the fit between the structure and organisation of the service and the routine practices of the client also influence acceptability. Continuity of care and time spent with a provider are important operational structures that affect the client's response to the service. She points out that clients often have concerns that providers are motivated by making a profit and not by client need, and therefore, if there are institutional guarantees of ethical commitment to patient care, clients may find the service more acceptable. This dimension of Gilson's definition of *acceptability* is similar to the dimension of *accommodation* in Penchansky and Thomas's framework, which refers to the extent to which the provider's service is organised in ways that meet the client's needs (Penchansky & Thomas, 1981).

These elements of acceptability described by Gilson (2007) were highlighted in a recent study done in South Africa, exploring barriers to accessing health care (Harris et al., 2011). In this study, the dimension of acceptability was measured by looking at reasons for provider choice, user satisfaction and health system perceptions, including reasons for delayed care. Participants in the study reported not accessing health care at public sector facilities because they thought they would not be treated respectfully (client-provider interaction), they would have to wait in long queues (structure and organisation of the service) and they thought the care was likely to be ineffective (fit between lay and professional health beliefs). Other *acceptability* factors that evoked dissatisfaction in participants included cleanliness, privacy, and confidentiality (Harris et al., 2011).

WHO's (2012) description of an acceptable service to young people contains all three elements of acceptability as defined by Gilson (2007): the fit between lay and professional health beliefs; the client-provider interaction; and the influence of health-care organisation arrangements on clients' responses to services. WHO addresses the first element of "fit between lay and professional health beliefs", by recommending that young people be actively involved in designing, assessing and providing health services, to ensure acceptability of the service. The second element of "client-provider interaction" is addressed by recommending that providers should be non-judgmental, considerate, and easy to relate to. Finally, the third element of "the influence of health-care organisation arrangements on the client's response to services" is addressed by advocating that policies and procedures should be in place that guarantee client confidentiality; the point-of-service delivery should ensure privacy, short waiting times and swift referral; the point-of-service delivery should be appealing and clean; and information and education should be provided through a variety of channels.

### ***Appropriateness***

The most commonly cited definition of appropriateness is that put forward by RAND, an independent United States research organisation. They defined an appropriate service as one which

for an average group of patients presenting to an average US physician ... the expected health benefit (increased life expectancy, relief of pain, reduction in anxiety, improved functional capacity – not necessarily in order of importance) exceeds the expected negative consequences (i.e. mortality, morbidity, anxiety of anticipating the procedure, pain produced by the procedure, time lost from work) by a sufficiently wide margin that the procedure is worth doing ... excluding considerations of monetary cost.

(Brook et al., 1986 p. 3)

Authors have criticised the RAND definition because it ignores the preference of individual patients and does not consider the cost-effectiveness of the service (Hicks, 1994; Sharpe & Faden, 1996; WHO, 2000). Some argued that no health-care system can afford to provide access to all-effective care, and therefore the efficiency (i.e. the effectiveness per unit of cost) of a service needs to be considered before it is deemed appropriate (Hicks, 1994; Sharpe & Faden, 1996; WHO, 2000).

In a report on a workshop about appropriateness of health-care services, the authors (WHO, 2000) acknowledge that appropriateness is a complex issue, resulting in different countries defining it in different ways. However, they point out that most definitions include basic conditions for appropriateness: care which is effective, care which is efficient and care which is consistent with the ethical preferences of the individual, community or society (WHO, 2000). The last condition for appropriateness – care which is consistent with the ethical preferences of the individual, community or society – is similar to Gilson's (2007, p.126) element of acceptability, "the fit between lay and professional health beliefs".

The authors of the WHO report (WHO, 2002) on the workshop about appropriateness of health-care services pointed out the potential for tension between consumers and providers of the service, because for the individual, patient appropriateness is about effective care; on an economic level, appropriateness is about efficiency; and on a societal level, appropriateness is about ethical and ecological preferences (WHO, 2000). They emphasised that the goal of health services is to "provide effective care to persons who can benefit from it in a manner that is acceptable to the consumer and the provider, at a cost that is acceptable to those who pay for it" (WHO, 2000, p.13).

RAND has developed a method for determining the criteria for the appropriateness of services. In a report (Brook et al., 1986), they described how they developed criteria for the appropriateness of seven services (coronary angiography, percutaneous transluminal coronary angioplasty, carotid endarterectomy, hysterectomy, endoscopy, and placement of tympanostomy tubes). To develop the criteria, a panel of experts was asked to individually rank (based on a critical review of the literature) all possible indications for a given service from 1 (inappropriate) to 9 (appropriate). The panel then met to discuss the results and rank the indications a second time. At the end of this process, a service is classified as appropriate, equivocal or inappropriate, on the basis of the indications, risk factors and co-existing illnesses documented in a patient's medical record (Brook et al., 1986).

This method of developing criteria for appropriateness has been criticised for a number of reasons. Lavis and Anderson (1996) argued that the RAND method used to measure appropriateness is invalid because there is no ideal standard against which to validate the method. They add that experts in different countries have different definitions of appropriate service provision and that, when presented with the same research evidence, the assessment of appropriateness of a service varies according to

the year of study, the location of the study and the nationality of the experts (Lavis & Anderson, 1996). Hicks (1994) assessed the process by which the RAND method produces measures of appropriateness as being highly subjective. He claimed that the process is not explicit about the factors that the panellists have taken into account in reaching their judgements, nor does it take into consideration the biases regarding outcome aims and benefits and risks of the service that the panellists may have.

Despite these criticisms, authors generally agreed that criteria need to be established for appropriate services through a process that is open and explicit, that combines critical review of the literature and expert consensus, and that involves local health-care providers as well as consumers (Hicks, 1994; Lavis & Anderson, 1996; WHO, 2000). Researchers (Lavis & Anderson, 1996; WHO, 2000) have advocated that reviews of the effectiveness of practices, such as Cochrane reviews and other meta-analyses, and evidence-based clinical practice guidelines should be used to make decisions about appropriateness of services.

WHO (2012) recommends that in order to provide an appropriate service to young people, the required package of health care which fulfils the needs of all adolescents should be provided either at the point of service or by referral to the necessary facility. According to the definitions of appropriateness discussed above, this would mean that service providers would need to determine what the required package of health to young people should consist of, based on critical review of the literature, expert consensus, and with input from young people.

### ***Effectiveness***

Long (1985 p.11) defined effectiveness as “the degree to which the objectives of a program, care, service, or system are achieved”. Arah et al. (2003 p. 392), in an article exploring effectiveness and quality improvement in the performance frameworks of the United Kingdom, Canada, Australia, United States, WHO, and Organisation for Economic Co-operation and Development (OECD), pointed out that these governments, when defining effectiveness, include in their frameworks the performance dimensions “pertaining to service delivery, achieving desired results and being evidence-based, accessible, appropriate, timely and of high quality”. Similarly, Bankauskaite and Dargent (2007 p. 127) included the dimensions of service delivery, achieving desired results and evidence-based health care in their definition of effectiveness, namely “the degree of achieving desirable outcomes given the correct provision of evidence-based health-care services to all who could benefit”. Aday et al. (1999) also included the dimensions of structure, process and outcomes in their effectiveness paradigm. Their paradigm assumes that the structural elements of a health service influence the processes that take place in the system (including the components and quality of the process) and that these processes subsequently influence the health outcomes and, hence, the

effectiveness of the service. Arah et al. (2003) observed that the WHO and OECD, in contrast, have an economic approach and define effectiveness in terms of efficiency and health outcomes.

In their document “Making health services adolescent friendly: developing national quality standards for adolescent friendly health services”, WHO (2012) included in their definition of “effectiveness”, the belief that evidenced-based protocols and guidelines should be used to provide health services, concurring with the definitions of Bankauskaite and Dargent (2007). Their definition of “effectiveness” also includes the recommendation that health-care providers should have the required competencies to work with adolescents and to provide them with the required health services; that health-care providers should be able to dedicate sufficient time to deal effectively with their adolescent clients; and that the point-of-service delivery should have the required equipment, supplies, and basic services necessary to deliver the required health services. This concurs with Aday et al.’s definition of *effectiveness* that assumes that the structures and processes have an influence on the effectiveness of the health service (Aday et al., 1999).

### 2.2.3. Models for providing a YFHS

A number of models for providing a YFHS are described in the literature reviewed. These are presented in this section.

**Hospital-based centres that specialise in adolescent health:** A number of hospitals have developed special adolescent clinics that are held in buildings on the hospital grounds or in the main building itself (WHO, 2002). For example, the Paediatric Infectious Disease Clinic at Mulago Hospital in Kampala has an outpatient adolescent HIV clinic which sees young HIV-positive people on designated days of the week and provides a comprehensive health service that includes reproductive health services and psychosocial support (Kumar, Mmari & Barnes, 2009).

**An YFHS integrated into community based health services:** Services that cater for young people are integrated into existing primary health-care services for the general population. In South Africa, the National Adolescent-Friendly Clinic Initiative (NAFCI) has assisted government-run health facilities to provide adolescent friendly services to young people (Dickson-Tetteh, Pettifor & Moleko, 2001), and in Estonia, youth clinics have been integrated into polyclinics and free-standing clinics (Dehne & Riedner, 2005). In Zimbabwe, the Family Planning Service Expansion and Technical Support (SEATS) project collaborated with the Gweru City Council to establish youth corners at adult clinics, where young people had a private place to talk with peer educators and to read informational materials. Peer educators could refer young people who wanted clinical services to nurses who were specially trained in youth friendly services (Newton, 2000).



**Youth friendly school- or college-based health services:** Health services are provided at schools and colleges during school hours (WHO, 2002). A recent review of the literature by Mason-Jones, Crisp, Mathews and Dhansay (2012), which included studies from industrialised countries (no studies conducted in developing countries were identified), found limited evidence for the effectiveness of school-based health services for reproductive and mental health outcomes, but the evidence did show that adolescents at high risk are reached through school-based health services and that these may be cost effective in reducing health-care costs incurred by hospitalisation.

**Multi-purpose youth centres:** These community-based centres provide a YFHS as well as non-health related services such as recreational and educational activities. For example, the United Nations High Commissioner for Refugees (UNHCR) has established youth friendly centres in refugee camps in Nepal, which provide a venue for socialising, learning and recreational activities, as well as providing information and services relating to adolescent reproductive health and HIV (UNHCR, 2010). In South Africa, loveLife has multi-purpose youth centres, known as Y-centres, which combine indoor and outdoor recreation and sports facilities, computer training, community radio, sexual health education, life skills, counselling, and clinical services for young people (Erulkar, Beksinska & Cebekhulu, 2001).

**Youth friendly pharmacies:** The Centro Latinoamericano para Salud y Mujer (CELSAM) project in Mexico has trained pharmacy staff on adolescent reproductive health, stocked the pharmacies with posters and informational materials, and promoted youth friendly outlets in schools, cafés, bars, and discos, as well as via a telephone hotline and a Web site (Wolfe, 2005).

**Outreach services:** These services try to reach marginalised young people by providing services in settings where young people meet. In Uganda, the Uganda Youth Development Link (UYDEL) offers services such as family planning, treatment of sexually transmitted infections, and HCT to street children and adolescent sex workers at conveniently located drop-in centers and mobile stations in places such as clubs, malls, bars, and other places where young people congregate (Pathfinder, 2005).

#### **2.2.4. YFHSs – do they work?**

Tylee, Haller, Graham, Churchill & Sanci (2007 p. 1571), in a review of YFHS, noted that the “evidence has not yet been translated into the design of YFHS in a comprehensive way”. Although many studies describe YFHSs, few of these initiatives provide evidence for the effectiveness of YFHSs. Most studies have shown that providing a YFHS increases young people’s access to the services (Bhuiya et al, 2004; Brindis et al, 2003; Mathews et al, 2009; Raine, Marcell, Rocca, & Harper, 2003). Tylee et al. (2007) pointed out that only two of these studies were randomised controlled trails (RCT) and that the rest were observational and therefore subject to confounding

factors and other biases. In the RCT done in the United Kingdom where wellness visits were done at nurse-led general practices for 14-15 year olds, young people who were exposed to the intervention were more aware about the confidential and reproductive health services (Walker et al, 2002). In a RCT done in Bolivia, where providers at four pharmacies were trained to provide a youth-friendly service, young people were educated and information materials were made available, there was a significant increase in demand for the service and in condom sales in the intervention group (Save the Children, cited in Tylee et al, 2007).

Fewer studies have been done to determine whether they affect young people's health outcomes. The study mentioned above done by Walker et al. (2002) in the UK, showed a small reduction in health risk behaviours reported by the young people in the study. Similarly a study done in the United States, where peer-led sexual health promotion was introduced to make the service more youth friendly, a decrease in sexual-risk behaviour was reported (Brindis, Geierstanger, Wilcox, McCarter & Hubbard, 2005). A study done in Zimbabwe, where youth friendly protocols were introduced in clinics showed positive changes in women's attitudes towards condom use (Moyo, cited in Tylee et al, 2007). In China training healthcare workers, improving service provision and providing information to unmarried young people age 15-24 years, resulted in an increase use of contraception in the intervention communities, and condom use was more likely to be reported in these communities (Lou, Wang, Shen & Gao, 2004).

Two RCTs have shown improved provider performance where youth friendly interventions have taken place. In Australia general practitioners demonstrated improved knowledge and attitudes after an educational intervention in adolescent health care (Sanci et al, 2000); and in the United States there was increased screening for Chlamydia infections in sexually active young people after a quality improvement intervention at participating clinics (Shafer et al, 2002; Tebb et al, 2005).

The authors of a population-based survey done in Estonia noted that improvements in sexual health indicators of youth (younger age at first sexual intercourse, increased usage of condoms and reliable contraceptive methods, decline in abortion rate among 15-19-year-olds by 61% and their fertility rate by 59%, decrease in the annual number of registered new HIV cases among 15-19-year-olds from 560 in 2001 to 25 in 2009, new syphilis cases from 116 in 1998 to two in 2009, and gonorrhoea cases from 263 in 1998 to 20 in 2009) ran parallel to the development of school-based sexuality education and the introduction of youth counselling centres (Haldre, Part & Ketting, 2012). In contrast a RCT done in Tanzania, which also included a sexuality education component as well as the introduction of YFHSs, showed an improvement in sexual reproductive health knowledge, but only limited change in sexual-risk behaviour and no significant effect on the HIV and STI prevalence (Doyle et al, 2010).

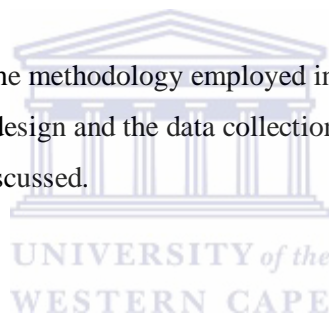
The problem with both these studies is that one cannot attribute the outcomes to the provision of YFHSs, as both interventions included an educational component.

More RCTs need to be conducted to provide evidence for whether a YFHS will benefit young people in terms of access and outcomes.

### **2.3. Summary**

In this chapter, a review of the literature that frames this study was presented. The key debates surrounding the role of HCT in preventing the transmission of HIV are discussed. The barriers and motivators for HCT uptake were explored, and models of providing HCT to youth were described. The importance of providing a youth friendly health service was highlighted, and the characteristics of such a service were described. Models for providing a YFHS, as described in the literature, were presented.

In the next chapter, an overview of the methodology employed in this study will be given. It presents the research paradigm, the research design and the data collection methods used. The research setting is described and ethical issues are discussed.



### 3. CHAPTER THREE: OVERVIEW OF METHODOLOGY

In this chapter, the research aim, questions and objectives are restated. The research design and methods that have been chosen to reach the objectives are presented and the research setting is described. A brief overview of the methodology is given (more detail will be provided in Chapters 4-6).

#### 3.1. Research aim, questions and objectives

The aim of this study was to make recommendations for providing a youth friendly school-based HCT service. The research questions that emerged from the aim were as follow:

1. What are the expressed needs of learners with regards to school-based HCT service provision?
2. Is the mobile school-based HCT service youth friendly?
3. What are the factors that influence learners' uptake of HCT?
4. What are the testing behaviours (i.e. number of times tested, time since last test, where tested) of learners who have tested?
5. What are the testing experiences of learners who have tested?
6. What care and treatment have learners who tested HIV positive accessed?

In order to achieve the aim, the specific objectives were as follow:

1. To explore the expressed needs of learners with regards to school-based HCT service provision.
2. To explore whether the mobile school-based HCT service is youth friendly.
3. To determine the factors that influence uptake of HCT in learners.
4. To describe the testing behaviour of those learners who have been tested.
5. To describe the experiences, during testing, of those tested.
6. To describe the care and treatment that HIV-positive learners have received.

#### 3.2. Research design and methods

The research paradigm which frames this study is *pragmatism*, a world view which is concerned with solutions to problems and what works best to solve these problems (Creswell, 2003). According to Creswell, the pragmatist works towards providing the best understanding of the problem, and will use all approaches necessary to do this. In an attempt to understand what works, pragmatists will use the methods of data collection and analysis which best meet their needs, rather than subscribing to one

method (Creswell, 2003). Coming from a pragmatist viewpoint, I used a mixed-method design with both quantitative and qualitative components. A sequential strategy was used, starting with a qualitative component and followed by a quantitative component (the qualitative component having more weight than the quantitative component). This design is described in more detail below.

A number of research methods were used to reach the study objectives. The qualitative component included FGDs with learners, observation of the HCT site layout and environment, interviews with service providers and direct observation of HCT counselling sessions. The quantitative component was a learner survey. Each of these methods will be described in detail in Chapters 4-6.

### **3.2.1. Qualitative research**

Rosaline (2008) related a story she had heard of two children watching leaves falling from trees in autumn. One child started calculating the rate it took for a leaf to fall in order to predict when the trees would become totally bare. The other child pondered the fact that only some trees lose their leaves in autumn, and noticed the different shapes, sizes and colours of the leaves. Rosaline (2008) explained that in this analogy, the first child has a quantitative research approach and the second child a qualitative approach. Of course, defining the two forms of research is not that simple.

Various definitions have been suggested for qualitative research, and these definitions have changed over time. A much-cited definition is that of Denzin and Lincoln (2005 p.3), who described qualitative research as the “study (of) things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them.” They described qualitative research as “involving an interpretive, naturalistic approach to its subject matter” (Denzin & Lincoln, 2005 p.3). Qualitative researchers use a variety of methods to study their subjects, including case studies, interviews, observation and visual texts (Denzin & Lincoln, 2005). Qualitative research is exploratory, descriptive and rich in nature. It involves asking open-ended questions, for example, asking *why* and *how*, in order to elicit responses that are “meaningful and culturally salient” to the subjects (Mack, Woodsong, Macqueen, Guest & Namey, 2005, p.4).

### **3.2.2. Quantitative research**

In contrast, King, Keohane and Verba (1994, p.3) described quantitative research as research that “uses numbers and statistical methods (and which) tends to be based on numerical measurements of specific aspects of phenomena”. Quantitative research aims to “seek general description or to test causal hypotheses” and “seeks measurements and analyses that are easily replicable by other researchers” (King et al., 1994, p.3). It “answers questions such as ‘How many?’, ‘What are the causes?’, and ‘What is the strength of the relationship between variables?’” (Rosaline, 2008, p. 4).

### 3.2.3. Mixed-method approach

A mixed-method approach to research involves collecting and analysing both qualitative and quantitative data in a single study. Creswell (2003 p.16) described three general mixed-method strategies: *sequential*, where the researcher begins with one research method (either qualitative or quantitative) and then follows up with the other method to elaborate on the findings of the first method; *concurrent*, where the researcher “collects both forms of data at the same time during the study and then integrates the information in the interpretation of the overall results”; and *transformative*, where the researcher uses a theoretical framework as the main approach within the design of the research and which could involve either a sequential or concurrent approach to data collection.

Bryman (2006 p.106) described various reasons for researchers to use a mixed-method approach, the commonest being *enhancement*, where one method of research (qualitative or quantitative) is used to augment the findings of the other method; *triangulation*, where qualitative and quantitative research is combined in order to corroborate each other; *completeness*, where both methods are used to “bring together a more comprehensive account of the area of enquiry”; and *illustration*, where qualitative data is used to clarify quantitative findings.

In this study, the mixed-method approach (sequential strategy) was used for enhancement and triangulation (the findings from the survey augment and corroborate the findings of the FGDs and the evaluation of the HCT service). The FGD was also used to enrich the quality of the survey. The findings of the FGDs enabled me to include variables in the survey that I otherwise would have overlooked. They assisted me to amend an instrument used successfully in other locations, so that it could be accessible to local young people. It gave me insight into how young people think and talk about HCT, thus helping to phrase survey questions.

### 3.3. Research setting

I chose Cape Town as the setting for my research as this is where I live and work. I was introduced to the NGO that provides a mobile HCT service in schools through my work as a school doctor. The NGO had collaborated with the Western Cape Education Department and was working in public secondary schools in one of their urban education districts (not the district that I was working in). The six schools that participated in the study were located in this education district.

### 3.3.1. The school as setting

Horowitz et al. (2003) made a number of recommendations to researchers for gaining entry to schools when conducting school-based research. They recommended connecting with a member of the school staff who has an interest in the subject being researched and who can understand the importance of the research. This is essential in order to gain trust from the school community in which one wants to do research. I gained entry to the schools via the NGO that was providing the HCT service at the schools. The project manager introduced me to the Life Orientation (LO)<sup>7</sup> teacher who was responsible for co-ordinating the HCT service at each of the schools. The relationship with this key teacher was of great importance in the success of my study (not only in the conduction of the FGDs but also in the conduction of the learner survey). He/she assisted with obtaining permission from the school management team to do the research, gave advice when planning logistics (e.g. best time to conduct FGDs), and organised the venue for the FGDs.

As recommended by Horowitz et al. (2003), when negotiating with the school principals, I provided written information about the research which was brief, clear and without research language and jargon. I explained the research goals, how the proposed research would be conducted, how the participants would be recruited and how consent would be obtained. I assured them that confidentiality would be ensured and gave them copies of the ethical approval obtained from the University of the Western Cape and the permission to conduct the study given by the Western Cape Education Department.

When working with the school, as advised by Horowitz et al. (2003), I remained cognizant of the daily demands placed on the school staff and tried to be as flexible as possible with regards to the research procedures so as not to interfere with the normal activities of the school.

### 3.3.2. The schools

*School A* is set in an informal urban area, where the majority of learners who attend the school live. This informal settlement was established in the 1980s when many rural populations moved to Cape Town. This community is predominantly Black and Xhosa-speaking. Only 33.14% of the population

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<sup>7</sup> Life Orientation is “the study of the self in relation to others and to society. It addresses skills, knowledge, and values about the self, the environment, responsible citizenship, a healthy and productive life, social engagement, recreation and physical activity, careers and career choices” (South African Department of Basic Education, 2011b, p.7).

are employed, and 89.98% of households have an annual income of less than R19 200. Nearly 90% of people living in this area live in freestanding brick houses (43% of which are occupied rent free), only 43.18% have electricity, only 43.96% have water piped into their homes (the rest have a tap in their yard), and 97.96% have access to flush toilets (most households share a flush toilet) connected to the city's sewerage system (City of Cape Town, 2003).

**School B** is 35km away from School A but is similar in many ways. It is also set in an informal urban area, where the majority of learners who attend the school live. The community is also predominantly Black and Xhosa-speaking. Only 41.41% of the population are employed, and 82.26% of households have an annual income of less than R19 200. However, nearly 50% of people living in this area live in shacks<sup>8</sup>, only 8.40% have water piped into their homes (the rest have a tap in their yard or share a communal tap (in some cases more than 200m away from their homes), and only 53.54% have access to flush toilets (some households share a flush toilet, 16% use a bucket system<sup>9</sup> and 24% have no toilet facilities) connected to the city's sewerage system (City of Cape Town, 2003).

**School C** is in a suburb established in the 1920s, in terms of the Urban Areas Act, that was designated for Black South Africans before the apartheid era. One of the largest informal settlements in the country is part of this area. The community is still predominantly Black and Xhosa-speaking. Only 50.72% of the population are employed, and 71.53% have an annual household income of less than R19 200. Of the total population, 20% live in freestanding brick houses, whilst 30% live in shacks. Approximately 66% of homes have electricity, 35.36% have an inside tap and 62.68% have flush toilets connected to the city's sewerage system. Many of the learners who attend the school no longer live in this suburb due to forced removals from the informal settlement to make way for a housing project in the area. These learners are bussed in to the school from areas (with similar socio-economic conditions) 20 km away (City of Cape Town, 2003).

**School D** is 3km away from School C, in a former Coloured township<sup>10</sup>, where the community is still predominantly Coloured and Afrikaans-speaking. Most of the learners who attend the school also live in this area. Nearly 70% of the dwellings are freestanding brick houses and the rest of the population live in semi-detached houses or in shacks in the backyards of other residents. Only 66.13% of the

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<sup>8</sup> Unauthorised makeshift dwellings usually constructed with wood and corrugated metal.

<sup>9</sup> A system used in communities that lack water-borne sewerage. Traditionally a 20-25 litre bucket sits under a wooden frame, which is emptied by municipal workers when it is full.

<sup>10</sup> A segregated urban living area into which non-White South Africans were forced to move during the apartheid era.



population are employed, and 36.13% have an annual household income of less than R19 200. Most households have electricity (99.55%), piped water into their homes (84.07%) and flush toilets (94.54%) connected to the city's sewerage system (City of Cape Town, 2003).

*School E* is in a suburb in Cape Town where the community is predominantly Coloured and either speak English (52.29%) or Afrikaans (46.82%). Nearly 80% of the population are employed, and only 26.06% have an annual household income of less than R19 200. Nearly 80% of the population live in freestanding brick houses, the rest live in townhouses, cluster homes or semi-detached houses, or in shacks, flats or rooms in the backyards of other residents. Most have electricity (98.57%), piped water into their homes (80.15%) and flush toilets (95.03%) connected to the city's sewerage system (City of Cape Town, 2003).

*School F* is in a suburb of Cape Town where the community is predominantly White and English-speaking. The majority are employed (96.4%) and only 9.28% have annual household incomes of less than R19 200. In all, 70% of the population live in freestanding brick houses; the rest live in apartment blocks, townhouses, cluster homes or semi-detached houses. Most have electricity (98.99%), piped water into their homes (95.54%) and flush toilets (97.11%) connected to the city's sewerage system (City of Cape Town, 2003). School F was previously a model C school<sup>11</sup> and has mostly middle-class learners from all racial groups. Many of the Black and Coloured learners attending the school do not live in this suburb but come with their own transport from surrounding poorer socio-economic Black and Coloured areas, because the perception is that school F provides a better quality of education than the schools in the areas where they live.

### **3.4. Ethical approval**

The service providers of the mobile school-based HCT service agreed to be part of the study. The research proposal was discussed with them prior to submission to the Ethics Committee. They were assured of confidentiality and anonymity, and that all data would be kept in a locked cupboard to

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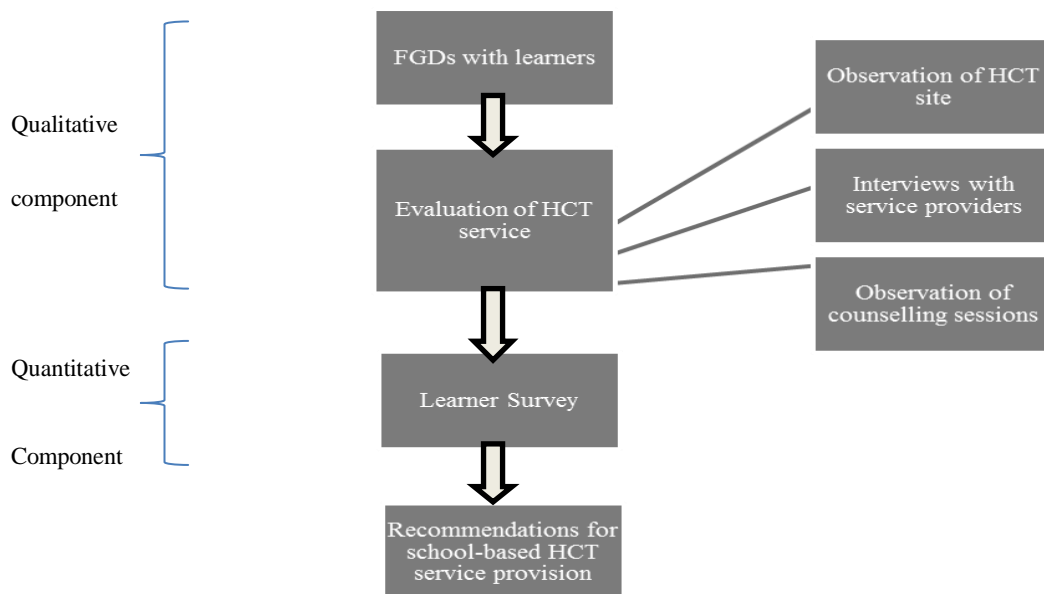
<sup>11</sup> “In 1990, the Minister responsible for white education, Piet Clasé, announced that white state schools would be allowed to change their status from the beginning of 1991 if a large majority of parents voted to do so. Three new school models were available (Pampallis, 1993): Choosing Model A would result in the privatisation of the school. A Model B school would remain a state school but could admit black students up to a maximum of 50% of its total enrolment. A Model C school would receive a state subsidy (in the form of teachers' salaries to a fixed learner:teacher ratio) but would have to raise the balance of its budget through fees and donations. In practice, the subsidy amounted to 75-85% of operating costs. Model C schools could admit black pupils up to 50% of enrolment.” (Motala & Pampallis, 2005, p. 8)

which only the researcher would have access. The objectives of the research were discussed, and it was emphasised that the evaluation was designed not to find fault, but to identify areas where improvements could be made.

Ethical approval was obtained from the University of the Western Cape Senate Ethics Committee (Appendix II) and permission to conduct the study was given by the Western Cape Education Department (Appendix III) as well as from school principals. The ethical considerations are given in detail in Chapters 4-6.

### 3.5. Overview of research methodology

The study was divided into three parts, which are depicted in Figure 3.1. It started off with the qualitative component, consisting of the first part of the study – the FGD with learners. This first part was done in order to reach the objective of exploring the expressed needs of learners with regards to school-based HCT service provision. This was followed by the second part of the qualitative component – an evaluation of a mobile school-based HCT service, to explore whether the service was youth friendly. The evaluation consisted of observation of the HCT site, interviews with service providers, and direct observation of HCT counselling sessions (these three activities were done simultaneously). The qualitative component of the study was followed by a quantitative component, which was the third part of the study – a learner survey to explore the factors that influence their uptake of HCT and to explore their HCT behaviours and experiences. Finally, the findings of both the qualitative and quantitative components of the study were used to make recommendations for providing a youth friendly school-based HCT service.



**Figure 3.1: Overview of methodology**

### **3.6. Summary**

In this chapter, the research paradigm and design were outlined. In keeping with a pragmatist paradigm, a mixed-methods approach was used, with both a qualitative and quantitative component. This mixed-method approach was explained and the research setting was described. The agreement with the NGO and the ethical approval were put forward. An overview of the research methodology with its three parts (FGDs with learners, the evaluation of the mobile school-based HCT service, and the learner survey) was presented. In the following three chapters, the research methodologies of the three parts will be discussed in more detail. In the next chapter, the first part of the study – the FGDs with learners – will be presented.



## **4. CHAPTER FOUR: SCHOOL-BASED HCT – WHAT LEARNERS WANT**

### **4.1. Introduction**

An overview of the methodology was given in the previous chapter, describing the three parts of the study. In this chapter, the first part – the FGDs with learners – is described. This part answers the research question “What are the expressed needs of learners with regards to school-based HCT service provision?” The findings of the first part of the study are presented and then discussed in relation to the literature. The limitations of this part of the study are acknowledged and the chapter ends with a conclusion.

### **4.2. Methodology**

#### **4.2.1. Research design**

This part of the study is exploratory and descriptive, using qualitative methodology.

#### **4.2.2. Study population**

All secondary school learners in Cape Town, South Africa

#### **4.2.3. Sample**

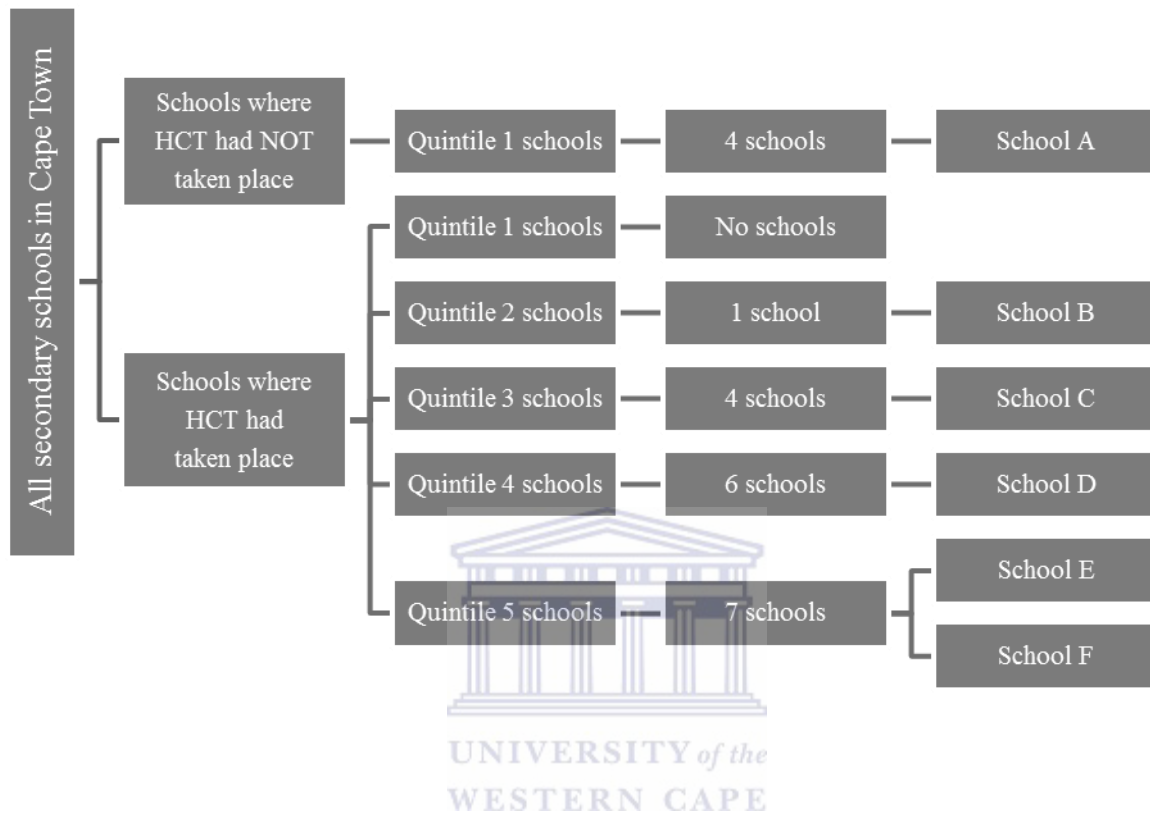
This section describes how the schools were selected to be part of the study, as well as how the participants for the FGDs were chosen.

#### ***Selection of schools***

Figure 4.1 depicts how the schools were selected. Six public secondary schools were purposively selected from a list of schools provided by the NGO where HCT had taken place. As described by Neuman (2006), purposive sampling involves selecting participants with a specific purpose in mind and is based on relevance to the research topic and not on representativeness. In this case, the schools



selected were diverse with regards to the home language of the learners, racial group, and quintile<sup>12</sup> so that I could obtain the views of a wide-range of young people.



**Figure 4.1: Process of selection of schools**

One school was selected from each quintile, except for Quintile 5. Two schools were chosen from Quintile 5 because, even though they were in the same quintile, the socio-economic status and racial backgrounds of the learners at the two schools were very different (Table 4.1). At the time of sampling, there were no secondary schools in Quintile 1 where HCT had taken place; however, one school was selected from Quintile 1, (School A), to gather the perspective of learners who had not previously been exposed to HCT at school.

<sup>12</sup> The Western Cape Education Department (WCED) classifies schools according to relative poverty in five categories called quintiles. The quintile score is based on the national census data of the school catchment area and depends on income, unemployment rate and level of education. Schools from the poorest catchment areas are in quintile one and from the least poor in quintile five.

**Table 4.1: Profile of selected schools**

School	Quintile	HCT had taken place at school	Home language	Racial Groups
A	1	No	Xhosa	Black
B	2	Yes	Xhosa	Black
C	3	Yes	Xhosa	Black
D	4	Yes	English/Afrikaans	Coloured
E	5	Yes	English	Black, Coloured
F	5	Yes	English	White, Black, Coloured, Indian

***Selection of focus group participants***

In each of the six schools, two FGDs were conducted with learners. The LO teacher who was involved in co-ordinating the HCT service at each school was asked to assist with the recruitment of learners, as Bassett, Beagan, Ristovski-Slijepcevic, and Chapman (2008) maintained that learners are more likely to participate if they are approached by someone who they know and trust. The teacher was informed about the study purpose and asked to select learners from Grades 8 and 9 for the first FGD, and learners from Grades 10 and 11 for the second. The teacher was asked to ensure that the chosen learners were confident enough to speak in groups; were able to express themselves well; and were heterogeneous with regards to academic performance, leadership qualities, racial group (where applicable) and sex. All the groups were heterogeneous except for the Grades 10 and 11 groups at School D. None of the male learners arrived for the FGD. A total of 91 learners participated (Table 4.2).

**Table 4.2: Sex and age of FGD participants (n=91)**

School	Gr 8 & 9				Gr 10 & 11			
	Male n (%)	Female n (%)	Total	Age (years) Range Mean	Male n (%)	Female n (%)	Total	Age (years) Range Mean
A	2 (29)	5 (71)	7	14-16 15	4 (44)	5 (56)	9	16-19 17
B	3 (29)	4 (71)	7	14-16 15	4 (50)	4 (50)	8	16-20 18
C	4 (44)	5 (56)	9	13-16 15	3 (50)	3 (50)	6	17-21 18
D	7 (70)	3 (30)	10	14-15 14	0 (0)	5 (100)	5	17-18 17
E	3 (33)	5 (63)	8	13-15 14	1 (17)	5 (83)	6	15-17 16
F	4 (50)	4 (50)	8	13-15 14	4 (50)	4 (50)	8	16-17 16
Total	23 (47)	26 (53)	49	13-16 14.5	16 (38)	26 (62)	42	15-21 17

#### **4.2.4. Research ethics**

Young people are particularly vulnerable when it comes to being research participants, so care was taken to obtain the relevant permission to do the research and the informed consent and assent. In accordance with the National Health Research Ethics Committee guidelines (South African DOH, 2004), learners of 18 years of age and above gave written informed consent to participate in the FGDs (Appendix IV); those under 18 years gave assent, and written informed consent was obtained from their parent/guardian (Appendix V). An explanation of the study was provided to the learners, parents or guardians and the schools, orally to the LO teacher and learners, in a meeting before the FGD took place and in writing to the LO teacher, learners and parents, in the form of a Participant Information Sheet (Appendix VI) in the language of the participants and understandable by a lay person. The English to Afrikaans translation of the consent forms and Participant Information Sheets was done by the researcher, and the English to Xhosa translation was done by a Xhosa-speaking counsellor fluent in English and Xhosa (she also assisted with the facilitation of the FGDs described below).

It was emphasised that the participants' identities would be kept confidential, and that all data would be kept in a locked cupboard to which only the researcher would have access. The participants were promised that any comments made during the FGDs would remain anonymous, and that information would only be divulged if it concerned child abuse or neglect or potential harm to the learners or to others. They were reassured that no sensitive issues would be included in the discussions, but in the unexpected event of the discussion leading to distress, counselling would be arranged through the Western Cape Education Department (WCED) or community social services. They were assured that they could withdraw at any stage without explanation.

#### **4.2.5. Data collection**

In this section, the FGD as a method of data collection is discussed, with specific mention of conducting FGDs with young people. The instrument used to collect the data is presented and how the FGD was conducted is explained. The section concludes with a reflection on the FGDs.

##### ***The FGD as data collection method***

The FGD is one method of collecting qualitative data. Morgan (1996 p. 130) described a FGD as a research technique whereby data is gathered in a focused way on a topic decided on by the researcher "through group interaction". FGDs have the advantage that they do not only explore what participants have to say but also help the researcher to understand the complex behaviour and motivations of participants. It is not just the sum of individual interviews because participants question each other and explain themselves to each other, and this group interaction produces data and insights that would

not be possible if it were not for the group interaction (Morgan, 1996). One of the challenges of FGDs is the need for a skilled facilitator who is able to guide the discussion without interrupting the interaction between the participants (Morgan, 1996).

### ***FGD with young people***

The FGD method was chosen for this study as it can be a useful way of giving young people a voice. It was important to me to obtain young people's views and insights in order to provide an HCT service that is culturally appropriate and acceptable to them. I also hoped that through their participation they would be empowered to make decisions about issues that affect them. Some researchers have posited that young people may find the group discussion less threatening than a one-on-one interview, and they usually have the cognitive, language and social skills to participate in FGDs (Horner, 2000; Peterson-Sweeney, 2005).

The cognitive development of the learners was also considered when planning and conducting the FGDs. The lower grades were done separately from the higher grades as it has been argued that young people find it easier to talk in a group where everyone is of a similar age (Horner, 2000; Peterson-Sweeney, 2005).

Because peer acceptability and group norms are so important to young people, the young FGD participant may withhold an opinion which is different from that of the group (Horner, 2000). Special effort was therefore made to make the group a safe space for discussion to take place. The moderator created an atmosphere of acceptance by setting ground rules (e.g., respecting each other's opinions, there being no right or wrong answer); being sensitive to learners' feelings and group dynamics; and encouraging learners to explain their comments, especially if they differed from the group's.

### ***The instrument used to collect data during FGDs***

Patton (1990) described the researcher as the major instrument of data collection in qualitative research. It is the researcher who observes, analyses, and interprets. As discussed in Section 1.5, my background influences the way I collect and interpret the data.

In order to guide the researcher, a step-by-step outline for the FGD process was developed. (Appendix VII). This FGD guideline provided a framework for each FGD and ensured that similar topics were discussed in each group. The research question "What are the expressed needs of learners with regards to school-based HCT service provision?" framed the questions used to guide the FGD:

*What do you think will make learners want to use this testing service?*



*What do you think will make learners NOT want to use this testing service?*

*What would you like to experience when you go for HCT at school?*

*Do you think the school is a good place to do HCT? Why do you say that?*

The questions were translated into Afrikaans by the researcher and into Xhosa by the same person who translated the consent forms and facilitated the FGD.

### ***Conduction of FGDs***

Horner (2000) suggested conducting the FGDs at the school that the learners attend as it provides a familiar safe space for the learners. The FGDs were held immediately after school in one of the classrooms (venue arranged by the LO teacher) at the school involved, except at school F, where they took place during class time because learners had to attend extramural activities after school. The teachers were not present when the FGDs took place.

**Setting up:** On arrival, the assistant(s) and I set up the room with chairs in a circle, tape recorder on a table/chair in the centre of the circle; a registration table with name tags, registration form, pens and extra paper; and a table with refreshments (chicken burger, fruit juice and oat bar) and educational material about HIV and AIDS and HCT.

**Registration and refreshments:** When the learners arrived, they were asked to register and write their names on tags, which they stuck onto the front of their chests. Consent forms were collected. Refreshments were offered, but learners opted to take them at the end of the FGD.

**Introductions:** The facilitator welcomed the learners, thanked them for being willing to participate, reminded them of the purpose of the FGD, and set ground rules (see Facilitator's Script, Appendix VIII). Learners were asked to introduce themselves, say how old they were, which grade they were in, and what they did during their leisure time. They were encouraged to speak in the language of their choice.

**Role play:** Before the discussion was started, a role play was used to trigger the learners' thinking. This methodology was copied from a community based participatory action research study done with community members in Canada to ascertain their perceptions of their primary health centre (Hills, Mullett & Carroll, 2007). In their study, Hills et al. (2007, p. 128) employed the Freirian approach of using a role play as a trigger to stimulate participants to reflect "on the system from within the system". Community members were asked to participate in a role play simulating a waiting room in a primary health centre and the typical interactions that take place when visiting the centre. Hills et al.

(2007) reported that the role play stimulated critical dialogue and debate amongst the participants of the FGD.

Following the methodology used by Hills et al. (2007), learners were divided into two teams and were asked to create a role play about accessing HCT services and to act out what they thought might happen. Each team was given “role cards” with roles similar to the service providers that provide HCT at schools (i.e., learner, nurse, counsellor, and receptionist) and they then divided the roles amongst themselves. (They were asked to imagine themselves as *that* person in *that* situation.) The teams had ten minutes to prepare, and then had a chance to perform for the other team. Once the teams had watched each other’s role play, the two teams came together for the FGD.

**Focus group discussion:** Each focus group was conducted by a facilitator who focused on the discussion process (guiding the discussion and encouraging equal participation by all learners) and an assistant who took comprehensive notes and documented non-verbal communication, following a specific format (see Appendix IX). I acted as facilitator in all FGDs that took place in English and Afrikaans and was assisted by a trained English/Afrikaans speaking counsellor<sup>13</sup> who also took notes. The FGDs that were conducted in Xhosa were facilitated by two trained Xhosa-speaking females<sup>14</sup> (one facilitated the discussion while the other took notes). I was present at all FGDs.

The facilitators did not rigidly follow the sequence of the questions in the guideline and sometimes rephrased the questions in order to allow the discussion to flow normally. Probing questions were also asked so as to gain an in-depth understanding of the learners’ views. The discussions were audio-taped.

**Wrap-up summary:** Each focus group lasted approximately 60 to 90 minutes. During the last 5 to 10 minutes of the session, the assistant who was taking notes summarised and recapped the themes that had emerged from the FGD. Because I do not speak Xhosa and was not able to follow the Xhosa discussion, at the end of the Xhosa FGDs, the assistant recapped the themes in both Xhosa and English to give me the opportunity to clarify and ask questions. Learners were also asked, based on

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<sup>13</sup> A 43 year old female counsellor, fluent in English and Afrikaans, who worked with another NGO that also provided HCT at schools, and who had experience in conducting FGDs.

<sup>14</sup> A 24 year old female youth-group facilitator, fluent in English and Xhosa, who worked for an NGO doing development work in schools, and a 29 year old female counsellor, fluent in English and Xhosa, who facilitated support groups for HIV-positive youth run by an NGO.

the summary of the discussion done by the assistant, to correct any misunderstandings, to clarify their positions or to add any remaining thoughts they may have had. They were thanked and it was acknowledged that their ideas had been valuable and would be utilised. When leaving, they were offered refreshments and HIV and AIDS educational materials, which they took home with them.

**Debriefing:** Immediately after all the learners had left, the facilitator and assistant debriefed by discussing things that went well, difficulties experienced, and any improvements that could be made. Debriefing notes were made by the researcher while the events were still clear in the minds of the facilitator and assistant. All tapes and notes were labelled with the date, time, and name of the group.

### ***My reflections on the evaluation of the HCT service***

During the first FGD that I facilitated at School D, I did not only gather information about the learners' views on school-based HCT, but I also discovered a great deal about myself. I found myself being 'the health educator' instead of being 'the researcher'. The group of Grades 8 and 9 learners in that first FGD had so many questions about HIV and other sexual matters that I kept getting side-tracked into answering all their questions. On reflection, I had much more fun answering their questions than I did trying to elicit their view on HCT! The tendency for the learners to ask questions was not confined to the first FGD, so for the rest of the groups that I facilitated, I had to be extra careful (with the help of my co-facilitator) to remain focused on the research questions. This did however also highlight for me the great need that young people (especially the Grades 8 and 9 learners) have for spaces to talk about issues around sexuality. At the end of one FGD, the learners in fact thanked us for providing the space for them to talk about these issues.

Besides being side-tracked in the first FGD, the rest of the groups went off well. Throughout the session, all learners were responsive and keen to share their opinions with little reservation. Where learners tended to dominate the discussion, the facilitators handled this well and managed to get all participants to express their opinions.

#### **4.2.6. Data analysis**

A general inductive approach was used to analyse the data, as described by Thomas (2006 p. 238), which involved "detailed readings of the raw data to derive concepts, themes or a model through interpretations made from the raw data". Thomas (2006 p. 240) explained that "the outcome of an inductive analysis is the development of categories into a model or framework that summarises the raw data and conveys key themes". The process of inductive content analysis was followed as described by Thomas (2006):

**Preparation of raw data:** Data was transcribed from the audio-recordings. The Xhosa transcriptions were translated into English, and the English and Afrikaans transcripts were analysed as is. The transcripts were then loaded into Nvivo 8 for data management.

**Close reading of text:** The transcripts were read and reread carefully until I was familiar with the contents.

**Creation of categories (coding):** Statements (segments of text) relating to the research questions were identified. Each segment of text was coded (or labelled) and assigned to a category; for example, a statement made by a learner, “*when you go for a test, they take it as if you already have HIV,*” was assigned to the category which was coded “concern that others will assume that if one tests, one is already positive”. This process continued until all statements relating to the research question were added to the category to which they were relevant.

**Overlapping coding and uncoded texts:** Some segments of text were assigned to more than one category because they were relevant to all of the categories. The segments where I was side-tracked into giving information about HIV and other sexual matters (see Section 4.2.5. **My reflections on the FGDs**) were not assigned to a category at all because they were not relevant to the research questions.

**Continuing revision and refinement of the category system:** The transcripts were then reread to look for any statements that fitted into the categories that had already been generated but may have been missed in the first coding and to check if any further categories could be developed.

Contradictory and confirmatory statements were searched for. Patterns and explanations were sought, for example, whether certain categories could be grouped together under a more general category or whether there were any causal relationships between categories. Categories were grouped together if they had similar meanings, under first-level headings, and then these categories were further grouped under second-level headings. This process of refining and revising of the categories continued until three main themes emerged (see Table 4.3.):

- Where we (the learners) want HCT to be done.
- How we want HCT to be done.
- Who we want to do the counselling

**Table 4.3: Data analysis summary**

SUBCATEGORY	CATEGORY	THEME
School accessible	At school	Where we want HCT to be done
School convenient		
Will not be seen by community members		
Will not be seen by other learners	At clinic	
Service at clinic of better quality		
More private	At home	
Concern that others will assume HIV+	We do not want to be seen going for HCT	How we want HCT to be done
Concern that others will assume sexually active		
Do not want to be seen if upset by positive result	We want HCT to be done in a place that provides privacy	
Do not want others to hear result being given		
Need to know benefits of HCT	We want information about HCT before testing takes place	
Need to know procedure of HCT		
Do not want paper trail	We want confidentiality guaranteed	
Want counsellors to promise confidentiality		
Discomfort with being asked questions about sexual activity	We do not want to be asked too many questions	
Emotional support if positive	We want those who test positive to be supported	
Support with follow up treatment		
Friendly service providers	We want service providers that we can easily communicate with	
Non-judgemental service-providers		
Patient service providers		
Experienced service providers	We want serviced providers that are competent to work with youth	
Specially trained service providers		
Service providers that youth can relate to	We want service providers that are 'young'	
Service providers that can give advice and support		

#### 4.2.7. Strategies to improve quality of research

Guba (1981) described four areas of trustworthiness that improve the quality of qualitative research: credibility, transferability, confirmability and dependability. *Credibility* refers to the “truth” in the findings from the perspective of the participants. *Transferability* refers to the degree to which the findings of the research can be generalised to other contexts or settings. *Confirmability* refers to the degree to which the findings could be confirmed if the study were to be repeated by others. *Dependability* refers to whether the findings of a study could be “consistently repeated” if the study

was done on “the same (or similar) subjects in the same (or similar) context” (Guba, 1981 p. 80). To meet the criteria for trustworthiness described by Guba, a number of strategies were suggested by Shenton (2004). The strategies used in this study are described below.

### ***To improve credibility***

An independent researcher was asked to do *independent coding* of the FGD data. A discussion was subsequently held to compare the codes and subcategories and to identify the similarities and differences to reach a consensus.

*Member checks* (Guba, 1981, p. 80) were also done to improve the accuracy and validity of the coding and interpretation of the FGD. After the consensus discussion with the independent researcher, I met with the groups of learners (the “members”) who had participated in the FGDs at each school, to present a summary of the themes and categories and to “check” with them that they agreed with my analysis. The learners agreed with my interpretation of the findings and did not suggest any alterations.

*Tactics to help ensure honesty* in participants were used, for instance, only involving participants who genuinely wanted to take part; encouraging participants to be honest at the beginning of the FGDs and stressing that there were no “right” answers.

*Debriefing sessions* were held with my supervisors, and my research was presented to my peers, who were able to draw attention to flaws in my research process.

*Triangulation* was applied by using a wide range of data collection methods (FGDs, interviews, observation, and survey) and more than one data source (learners and service providers) was used.

### ***To improve transferability***

In order for the findings of this study to be generalised to other contexts or settings, clear, detailed descriptions of the context in which the study was done have been given. As suggested by Shenton (2004), information about the characteristics of the participants, the number of participants, the data collection method used, and the number and length of the data collections sessions have been given.

### ***To improve confirmability***

As recommended by Shenton (2004), a detailed methodological description is given in order to improve the degree to which the findings could be confirmed if the study were repeated by others. The reasons why certain research methods were chosen above others is explained and the limitations

of the study are acknowledged and described. Also, to ensure as far as possible that the findings are a result of the ideas of the participants and not those of the researcher, I have critically reflected on my own role within the data collection and analysis process and how it may have influenced the findings. See Section 1.5, where I give my background and declare my predispositions.

### ***To improve dependability***

In order for similar results to be obtained if the study were repeated with the same participants, in the same context and using the same methods, an in-depth description of the research process is provided, which includes a description of the research design, the operational detail of data gathering and a reflection on the data collection process, as advised by Shenton (2004).

## **4.3. Findings**

In this section, the findings of the FGDs are presented. The focus is on answering the research question “What are the expressed needs of learners with regards to school-based HCT service provision?” The findings are presented according to the themes that emerged from the data analysis.

### **4.3.1. General findings**

The learners’ expressed needs were similar across schools, sex, age and grade, except where mentioned in the findings. There was also no difference between the responses from the school where no HCT had ever taken place and those schools where it had taken place. The responses from the all-female group were similar to the mixed-sex groups.

### **4.3.2. Category 1: Where we want HCT to be done**

#### ***We want HCT to be done at school***

When asked whether they thought their school was a good place to have testing, most learners stated that they preferred having HCT provided at their school during school hours. They explained that they would not find or make time after school to attend a clinic for testing. They also found it difficult to get to clinics because they are often located far from where they live.

**Female, aged 14:** *It is easy if it’s done here at school, ‘cause I would have never gone for testing if it wasn’t.*

Learners also preferred testing at school rather than at a clinic, as they feared being seen by community members who would tell their parents that they had gone for testing.

**Female, aged 17:**...*the other woman is going to say, "Oh no! Your child was at the clinic! What was she doing there? She was sitting on the other side for people who go to test".*

However, when stating that they would like to be tested at their school, learners invariably added the proviso that it must be done *"in a right way"*.

### ***We would prefer HCT to be done at a clinic or at home***

A few learners felt that they would prefer being tested at a clinic. Reasons included not wanting to be seen by other learners when going for testing, concerns about confidentiality at school and perceiving the quality of service at the clinic as being better. One learner felt that he would prefer being tested at home as it was more private.

### **4.3.3. Category 2: How we want HCT to be done**

#### ***We don't want to be seen going for HCT***

When describing what they meant by *"in a right way,"* learners said that they did not want other learners and teachers to know that they were going for HCT.

**Female, aged 17:** *Young people they don't want this kinda thing [going for HCT] to be seen by others.*

They had serious concerns about what their peers and teachers would think of them if they were to be seen going for testing.

**Female, aged 16:** *As a young person ... something that is extremely important for us, is what people think about us, whether it is at school or at home.*

"What people think" was different depending on the racial groups attending the school. Learners from the FGDs held at Schools D (only Coloured learners), E and F (learners from different racial groups) were concerned that others would assume that they were sexually active if they went for testing. On the other hand, learners from the FGDs held at Schools A, B and C (all three schools have only Black learners) were concerned that if they went for testing others would assume that they were HIV positive.

**Black female, aged 15:** *Black people ... if you do go for a test, it's not because you want to know your status. It's because you are definitely [HIV] positive.*



A 15-year-old male in one of the FGDs at School A (only Black learners) pointed out that male learners did not want female learners to see them go for testing (as it would be assumed that they were positive), and suggested that males be tested on a separate day from the females, so as to encourage more males to be tested.

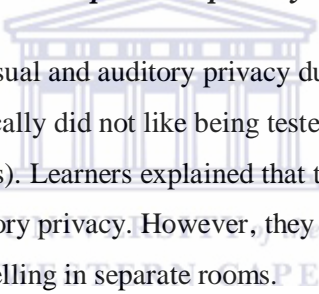
**Black male, aged 15:** *If you queuing there and you see a girl that you like ... you are going to get shy if you are also there to test. You are going to think, “no, no”.*

A **16-year-old female** learner in the same FGD corroborated what he said:

*If maybe [he] goes in there to test, most girls are going to distance themselves from him, thinking that he is already positive ... that is how most girls think.*

To avoid being seen, learners suggested going for testing one at a time rather than class by class in the school hall (some suggested an appointment system).

### ***We want HCT to be done in a place that provides privacy***

The need for a space that provided visual and auditory privacy during the HCT process was consistently mentioned. They specifically did not like being tested in the school hall (the site where HCT took place at each of the schools). Learners explained that tents or cubicles were erected in the hall to try to provide visual and auditory privacy. However, they felt that the privacy provided was not adequate and preferred having counselling in separate rooms. 

**Male, aged 16:** *About the privacy, I do think they need a room, like different rooms for each counsellor ... this cubicle thing is just too open. It's just too public ... The whole grade behind you, like a few meters behind you ... and there you've just heard that you're positive, and the person right behind you.*

According to the learners at Schools B, C, D and E, the NGO did not use tents or cubicles at the previous HCT session at the school, and counselling was done in the school hall at open tables (School F had provided their own screens). Learners from Grades 8 and 9 at School B reported that the results were given verbally while the learners were standing in a queue, so all could hear.

Another reason learners disliked being tested in the hall was because, after getting the results, they had to face the other learners waiting to be tested and were afraid that they would not be able to hide the fact if they had been told that they were HIV positive.

**Female, aged 16:** *When we in the hall first of all, there's only one door. When I get told that I am positive, even if I keep quiet about it, I will have a facial expression that I make. If I am*

*coming out they are going to first look at me in the face, what facial expression I'm going to make, and then they know that if I am crying I am HIV positive, and if I am smiling they know that I am not.*

Some learners proposed that the counselling area should have a separate exit so that after receiving results, learners did not have to face the other learners waiting in the queue.

### ***We want information about HCT before testing takes place***

Learners attributed an 'it won't happen to me' attitude towards HIV as a reason for not going for testing. They felt that many learners thought HIV and AIDS only affected older people. For this reason, they felt it was necessary for learners to be informed about HCT prior to testing taking place at school. They suggested that information be given about the benefits and importance of testing and the procedure of testing.

On the other hand, the fear of testing positive was also mentioned by some learners as a reason for not going for testing. They suggested that information be given, before testing takes place, about what to do if one should test HIV positive as they felt that this would reassure learners and alleviate some of these fears.

### ***We want confidentiality guaranteed***

Learners mentioned confidentiality as an important part of doing the testing "in the right way". They wanted service providers to promise confidentiality "upfront" and felt that confidentiality would be better maintained if only the counsellors knew the HIV results (not nursing and administrative service providers) and if no paper trail of results was kept or left at the school.

### ***We don't want to be asked "too many questions"***

In many of the FGDs, learners said that they felt uncomfortable with being asked questions about sexual activity. They considered these questions to be "private" and wanted their privacy respected.

**Female, aged 17:** *Sometimes they ask too much questions. They go too far into detail and that doesn't make you wanna talk ... Maybe they ask you now, "Are you sexually active?" Now you say, "Yes," then they ask you, "When last did you have sex?" You had sex yesterday last ... you dunno how to tell her, because she's a big person [an adult] and you telling her now.*

### ***We want those who test positive to be supported***

Learners felt it important that those who test positive be followed up and given support by the NGO. They wanted assistance with disclosing to family members and emotional support and encouragement with adherence if needing to take antiretroviral drugs.

**Female, aged 17:** *If they say you are positive ... they should do check-ups to see ... if you are coping.*

### **4.3.4. Category 3: Who we want should do the counselling**

#### ***We want to be counselled by service providers that we feel we can easily communicate with***

Learners said they wanted the counsellors to be people who are easy to talk to and who would make them feel comfortable. They felt it was essential that the counsellors were friendly, non-judgemental and treated young people with respect. They wanted the counsellors to be patient, and expressed the need to have enough time with the counsellor to have things explained properly and to have the opportunity to ask questions.

#### ***We want to be counselled by service providers that are competent to work with young people***

It was important to them that the counsellor was experienced, behaved professionally and had received training to provide a youth friendly health service (YFHS).

**Female, aged 17:** *The counsellor should be taught ... about teenagers of today and how they function.*

#### ***We want HCT to be done by someone who is 'young'***

Some learners preferred the counsellor to be young (they defined 'young' as someone between the ages of 20 and 30). They felt that a younger counsellor would be easier to relate to and would understand them better:

**Female, aged 17:** *Older people don't know what we are going through.*

Some learners preferred an older counsellor (they defined 'older' as someone in their thirties). Those who preferred an older counsellor felt an older person would have more knowledge and experience and, therefore, be better able to give advice. Learners in one FGD favoured a counsellor under the age of 20 years, whereas other learners specified that though they preferred a younger counsellor, they did

not want to be counselled by someone their own age, as they felt that their peers would only have as much knowledge as they did.

## **4.4. Discussion**

The aim of this part of the study was to explore the expressed needs of learners with regards to school-based HCT service provision. The school-based model is one of the models for providing HCT to young people, but whether this is acceptable to learners has not been explored. This study gives learners a voice regarding their needs in terms of school-based HCT service provision.

### **4.4.1. Learners find school-based HCT accessible and convenient**

Learners expressed the need for HCT services that are accessible and acceptable. Results suggest that learners find HCT offered at school to be more accessible and convenient than a health facility-based HCT service. These results are similar to the findings of Henry-Reid et al. (1998), who proposed that school-based HCT services are more accessible and acceptable to young people than other formal health settings.

### **4.4.2. Learners expressed needs are based on fear**

The learners made it clear though that if HCT is to be offered at school, it has to be provided in a manner that takes into account their needs. They had very specific ideas about what they wanted and what they did not want. Most of their expressed needs were based on fear: fear of being seen going for testing, fear of testing positive, fear of their HIV-positive status been known and the stigma associated with it, fear of not being supported if they tested positive, and fear of being judged and not being understood.

### **4.4.3. Learners want HCT to be done in secret**

Fear and embarrassment of being seen going for HCT were the most frequently mentioned concerns. Learners wanted to be able to be tested without their peers or teachers knowing as they feared that it would be assumed that they are sexually active or HIV-positive. This concern about being seen was also raised by young people in other studies (Denison et al., 2006; Horizons, 2001a; Lindberg et al., 2006; MacPhail et al., 2008). In this study, specifically male learners who attended schools where there were only Black learners requested to be tested separately from female learners as they feared the female learners would assume that they were positive and would reject them. This concern about being seen going for testing was also expressed by male clients in Lindberg et al.'s (2006) study with Black male adolescents in the United States.

#### **4.4.4. Learners want privacy when going for HCT**

Learners stressed the importance of visual and auditory privacy during counselling as they feared that others would hear if they were given a positive result or would realise that they had a positive result if they were seen to be upset. This need for privacy was also expressed by adolescents attending clinics that were part of a YFHS project in Zambia (Mmari & Magnani, 2003).

#### **4.4.5. Learners want information about HCT**

Learners felt that many young people do not go for testing as they think that they are invulnerable to acquiring HIV, a perception widely held by young people and described in other South African studies (MacPhail & Campbell, 2001; Pettifor et al., 2005). Therefore, they suggested that information about the high prevalence of HIV infection in young people, and about the benefits of testing, should be included in the publicity for the HCT service. This need for information before testing was also mentioned by the African Youth Alliance (2003) in their assessment report of a YFHS project in Tanzania.

#### **4.4.6. Learners want confidentiality guaranteed**

Learners feared that what they discussed with the counsellor and their HIV status would not be kept confidential. The guarantee of confidentiality was mentioned as an important need by learners and was also expressed by young people in studies done in other African countries investigating young people's needs regarding YFHSs (Erulkar et al., 2005; Mmari & Magnani, 2003).

#### **4.4.7. Learners do not want to be asked too many personal questions**

Learners also felt embarrassed and uncomfortable about being asked too many questions about their sexual activity and felt that counsellors should respect their privacy and keep questions about their sexual activity to a minimum. This finding is similar to that from a report by the Kaiser Family Foundation (1999), in which high-risk teens said they felt questions about their sexual activity during counselling to be too personal.

#### **4.4.8. Learners want to know that they will be supported if they test positive**

Learners expressed a fear of testing positive and not having any support, so it was crucial to them that those who test HIV positive should be followed up. This echoed the findings of MacPhail et al. (2008) in their study with adolescents in two South African townships, in which they highlighted the importance of ongoing counselling in order to deal with a positive diagnosis and to assist with access to treatment.

#### **4.4.9. Learners want service providers that are youth friendly**

Learners feared that they would be judged, disrespected and not understood by HCT service providers. This concern about service-provider attitude has been described by young people to researchers in previous studies (Atuyambe, Mirembe, Johansson, Kirumira & Faxelid, 2005; Erulkar et al., 2005; Horizons, 2001a; MacPhail et al., 2008; Senderowitz, 1999). Learners stated that they wanted service providers to be friendly and non-judgemental and to treat them with respect. They wanted to be counselled and tested by service providers who had experience of working with young people, who were specially trained to work with young people, and who were competent and sensitive to young people's needs.

#### **4.4.10. Learners' expressed needs compared to WHO characteristics of a YFHS**

The expressed needs of learners with regards to school-based HCT, described in this chapter, coincide with some of the characteristics of a YFHS described by the WHO (2002), that is, that the service should have policies that guarantee privacy and confidentiality; that service providers are easy to relate to, non-judgemental, have good interpersonal and communication skills, and are competent to work with young people; and that testing facilities offer privacy (WHO, 2002). To be noted is the fact that learners did not mention youth involvement in service provision and assessment, nor parent and community involvement, as suggested by the WHO (2002). In a survey carried out among Kenyan and Zimbabwean youth, youth involvement was also not seen as a priority for providing a YFHS (Erulkar et al., 2005).

### **4.5. Limitations**

A number of limitations exist in the findings of this part of the study. All the groups, except one, were of mixed sexes, and all the facilitators were female, which may have affected responses by learners. Stewart, Shamdasani and Rook (2007) suggest that the nature of the interaction between focus group members and the quality of data obtained may be influenced by the gender composition of the group. They point out that females tend to be less dominant in mixed sex groups. However, in one group, there were only female learners and their responses were similar to the responses in the mixed-sex groups.

At School D, where both English and Afrikaans are the languages of teaching and learning, the English- and Afrikaans-speaking learners were in the same FGD, and despite the facilitators speaking Afrikaans to the Afrikaans-speaking learners, most of them chose to speak in English. This may have limited the responses from some Afrikaans-speaking learners. Krueger and Casey (2000) recommend conducting face groups in the local language of the participants as "language has the potential for

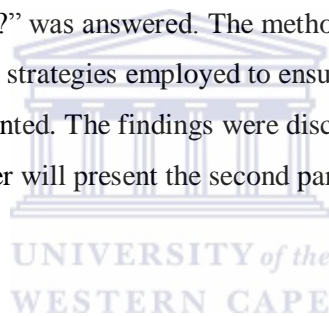
inhibiting communication” (p. 100). All the schools were urban schools, therefore, the findings may be different with learners from rural schools. It is recommended that a similar study be done with learners from rural schools.

#### **4.6. Conclusion**

Learners want HCT to be provided at schools *on condition* that their fears and expressed needs are taken into account. If HCT is to be provided at schools, service providers need to address learners’ concerns regarding privacy and confidentiality; they need to provide information regarding HCT to learners before HCT takes place; and they need to ensure that service providers are experienced and trained to work with young people, and that learners who test positive are followed up and supported.

#### **4.7. Summary**

In this chapter, the research question “What are the expressed needs of learners with regards to school-based HCT service provision?” was answered. The methods of data collection and data analysis were explored in depth. The strategies employed to ensure data quality were described, and the ethical considerations were presented. The findings were discussed and the limitations acknowledged. The following chapter will present the second part of the study – the evaluation of the mobile school-based HCT service.



## 5. CHAPTER FIVE: THE SCHOOL-BASED HCT SERVICE – IS IT YOUTH FRIENDLY?

### 5.1. Introduction

The second part of the study – the evaluation of the mobile school-based study – is presented in this chapter. The research question “Is the mobile school-based HCT service youth friendly?” is answered. The methods used to answer this question are described and then the findings are presented and discussed. The limitations of this part of the study are acknowledged and the chapter ends with the conclusion drawn from the evaluation.

### 5.2. Methodology

#### 5.2.1. Research design

This part of the study is exploratory and descriptive, using qualitative methodology. Three data collection methods were used, which are described in detail later in this chapter:

- Interviews with the service providers
- Observation of the HCT site
- Direct observation of the HCT counselling sessions.

In addition to these three data collection methods, the original assessment tool suggests interviewing clients and reviewing the service provider’s records, policies and procedures. Interviewing clients was decided against, as it was considered to be unethical. Doing on site interviews would mean conducting exit interviews with learners who had just gone through what was thought to be an emotionally-charged counselling process. It was thought that this would be unfair on learners (especially those who had tested positive). Review of the service provider’s records was attempted but they failed to provide their records despite numerous requests. They also did not have any written policies and procedures that could be examined.

#### 5.2.2. Study population

The study population was the mobile school-based HCT service providers.

#### 5.2.3. Sample

**Interviews:** The service provider team consisted of the project manager, two nurses and four counsellors. All members of the team except one counsellor (who declined) took part in the interviews.



**Observation of the HCT site:** The two high schools where the observation of the HCT site took place were selected using convenience sampling. Neuman (2006) described convenience sampling as a non-random method of sampling based on availability of participants. These two schools were the only schools at which the NGO conducted tests during the time that data was collected for this part of the study, and therefore they were included in the sample. All the service providers of the mobile school-based HCT service, that is, the project manager, two nurses, and four counsellors, were observed at the HCT site.

**Direct observation of HCT counselling sessions:** In all, 21 counselling sessions (14 pre-test and seven post-test sessions) were observed at the two schools where the site visits took place. The sessions were not chosen at random but were consecutive observations when the site visit was done. All four counsellors' sessions were observed.

#### 5.2.4. Research ethics

As mentioned in Section 3.4, the service providers of the mobile school-based HCT service had agreed to be part of the study, and the research proposal was discussed with them prior to submission to the Ethics Committee.

Each service provider gave written informed consent to be interviewed, which included permission to observe and audio-record counselling sessions (See Appendix XII). An explanation of the study was provided to them both orally and in writing in the form of a Participant Information Sheet (See Appendix XIII). They were informed that they could withdraw at any stage without explanation.

#### 5.2.5. Data collection

As mentioned above, three methods of data collection were used to explore whether the mobile school-based HCT service was youth friendly. These methods are listed in Table 5.1 and are described in detail below.

**Table 5.1: Data collection methodology**

Data Collection Method	Study participants
Service provider interviews	Project manager, 2 nurses, 3 counsellors
Observation of HCT site and activities	Service providers: project manager, 2 nurses, 4 counsellors
Direct observation of HCT counselling sessions	4 Counsellors, 21 counselling sessions

Data was collected on six non-consecutive days over a six-week period from 18 February 2011 to 31 March 2011. The observation of the HCT site and process at the two secondary schools took place on two different days (24 February and 4 March). The data were not collected sequentially (i.e. first the interviews, then the observations) but occurred at times that were convenient for me and for the service providers. For example, on one day, observation of the HCT site took place, as well as direct observation of the HCT counselling process, and when the learners had all left one of the nurses was interviewed. .

### ***Service provider interviews data collection***

#### **The interview as data collection method**

Kvale (1996) described an interview as a “conversation between two partners about a theme of mutual interest” (p 125), where even though the interviewer decides on the theme and steers the course of the conversation, the interviewee is the expert and the interviewer the learner. The interview is especially useful when the topic is one that the participants might be reluctant to discuss in a group setting or where one does not want the participant’s response to be influenced by the others in the group. For this study, I was concerned that the interviewees (the service providers), despite being reassured that I was not looking for fault, may have been reluctant to divulge any negative things about their service in front of their colleagues, so I chose to do individual interviews rather than a FGD.

Semi-structured interviews were conducted, described by Corbetta (2003) as interviews where there are pre-set topics and questions to be covered (usually with an interview guide) but where the interviewer decides on the sequence and wording of the questions in the course of the interview. This type of interview was chosen as it afforded the flexibility of asking probing questions when relevant but ensuring that all the topics that needed to be covered during the interview were included.

#### **The instrument used to collect data for the interviews**

Questions to guide the interview were taken from the “Tool for assessing the youth friendliness of a school-based HCT service” (Appendix X) which was described in Section 5.2.5 under the heading

#### **The instrument used to collect data for the observation of the HCT site.**

#### **Conduction of the interviews**

All the interviews were conducted at the school where HCT had taken place (once all the learners had left the site) except for the interview with the project manager, which took place at the NGO’s office. Each interview was done on a separate day at a time which was convenient for the service provider.

Once the rest of the team had packed up and left, the interviewee and I found a quiet and private spot to conduct the interview. I started off by thanking him/her for being willing to be interviewed and reminding her/him of the purpose of the study. Written informed consent was obtained and the fact that interviewees would remain anonymous was stressed. The steps of the interview process was explained: that I would be asking them questions; that there were no 'right answers' but that I wanted to learn from them (the experts) about the HCT process; and that the interview was being recorded and that notes would be taken so that nothing important that was said would be missed. The digital audio-recorder (including the backup audio-recorder) was checked by asking the interviewee to introduce themselves, and then playing the recording back.

Four of the service providers spoke both English and Afrikaans fluently, and one service provider (a counsellor) was Xhosa-speaking but also fluent in English and Afrikaans. As I am fluent in English and Afrikaans, the bilingual service providers were given the option of conducting the interview in either English or Afrikaans, and the Xhosa-speaking service provider the option of having an interpreter. All service providers chose to conduct the interview in English and the Xhosa-speaking service provider declined having an interpreter as she felt comfortable conversing in English.

The interview was conducted according to the questions in the assessment tool (Appendix X), not rigidly following the sequence of questions but ensuring that all the topics and questions were covered. Topics covered included information on their training and work experience, HCT service hours, the services they provided, educational activities, youth involvement, the NGO's policies and administrative procedures, and their publicity and recruitment strategy. Where necessary, probing questions were asked and interviewees were requested to clarify if something was not clear. Throughout the interview, the recorders were checked. (After my first interview, I realised that both my recorders had stopped taping in the middle of the interview! Fortunately I had taken detailed notes, which I was able to expand immediately after the interview).

Once everything on the interview guide had been covered, they were asked if there was anything else they thought I needed to know that I had not asked, and whether they had any questions. Each interview lasted approximately 30 to 60 minutes. The interviewees were thanked again for their time and the information they had shared and given a fruit juice and an oat bar as a token of appreciation.

As soon as the interview was done, the recorders were checked again to see that the interview had been recorded. Fortunately, after the first interview, there were no further recording problems. I also made sure that my notes and the recordings were labelled correctly. The digital audio-files were sent to a professional data management company for verbatim transcription.

## *Observation of HCT site data collection*

### **Observation as data collection method**

Marshall and Rossman (1989, p. 79) defined observation as “the systematic description of events, behaviours, and artifacts in the social setting chosen for study”. Kawulich (2005, p. 2) described it as a method by which the researcher is able to provide a “written photograph” to portray the situation under study.

Spradley (1980) noted the various roles that the researcher may take when doing observation, ranging in degree of participation, from *non-participation* (where activities are observed from outside the research setting) to *passive observation* (where activities are observed from within the research setting, but without participation in the activities) to *moderate participation* (where activities are observed from within the research setting, with almost complete participation in the activities) to *complete participation* (where activities are observed from within the research setting, with complete participation in the activities and culture). In this study, I, the researcher, took the role of passive observer, where the participants being studied were aware that they were being observed whilst I was on site and where I did not take part in any of the activities but concentrated on collecting data.

Patton (2002) listed a number of advantages of observation as a research method. According to Patton, observation allows the researcher to have a more holistic understanding of the context in which the research takes place. I hoped that by observing I would have a more complete sense of the context that HCT took place; of how the service providers interact with each other and the learners; of how things are organised; how they set up and do their administration; and how much time is spent on each activity. I wanted to be able to observe events that the service providers may have been unwilling or unable to share during the interviews, checking for distortions or inaccuracies in their descriptions, which Patton (2002) mentions as an advantage of observation. Patton (2002) explained that people working in a setting may not pay attention to things that routinely occur in that setting and, therefore, may omit to mention them in an interview. Also, in an interview, the service providers would be giving their perceptions of a situation (Patton, 2002), and through observation, the researcher can verify what was reported in the interviews.

There are also a number of challenges to observation as a data collection method. According to Mack et al. (2005), documenting the data whilst observing can be difficult. The researcher is not always able to write down everything that he/she observes (especially if there are many things happening at once) and often has to rely on memory and shorthand (Mack et al., 2005). Moreover, observation is inherently a subjective exercise. As Schensul, Schensul and LeCompte (1999, p. 95) explained, “observation is filtered through one’s own interpretive frames” so, often, the data that is collected is

based on the researcher's own interests or theoretical frameworks rather than on what has actually happened. Another criticism of observation is that those who are being observed may deviate from their standard practice because of the presence of the observer (Mack et al., 2005).

### **The instrument used to collect data for the observation of the HCT site**

An observation guide was developed (Appendix X: Tool for assessing the youth friendliness of a school-based HCT service) which was an amendment of an assessment tool, 'Clinic Assessment of Youth Friendly Services: A Tool for Assessing and Improving Reproductive Health Services for Youth' (Senderowitz, Solter, & Hainsworth, 2002), originally developed to be used by project managers to assess clinic-based services where young people are seen at a facility at which adults are also treated and where services other than HCT are available. Because this study was intended for evaluating HCT at schools specifically, the tool was amended to make it more appropriate for a mobile school-based service. Questions that were not pertinent to the school as a testing site were removed (See Appendix XI). The data collection was carried out in accordance with the instructions for use of the tool. Because the amendments to the tool were minimal and the structure was not changed in any way, reliability and validity tests were not done on the amended tool.

### **Conduction of the observation of the HCT site**

The visits to the two school HCT sites took place on Friday, 4 March 2011, from 10h00-12h45 (School E) and Thursday, 24 February 2011, from 10h45-13h30 (School F). On both days, I arrived after the service providers had set up and had already started testing. On arrival at the site, I always greeted the service providers and the LO teacher (if he/she was on site) and then attempted to blend in as one of the team without actually participating in activities. I always wore jeans and a blue t shirt, because this was similar to what the service providers wore, and I hoped the informal dress code would also make me more approachable (and younger looking) to the learners. Because testing took place in a large space (i.e., the school hall) and involved learners moving from one area to another, it was easy to move about the testing site unobtrusively.

A process of focused observation (as opposed to descriptive observation, in which one observes anything and everything) was followed, as described by Angrosino and Mays de Perez (2000), wherein the observation was guided by the questions in the observation guide. Special attention was paid to answers to these questions, but I also remained open to any other observations which I was not expecting to encounter.

At each site, a physical map of the setting was drawn and labelled, and each part of the diagram described. Notes were made of who was present on site, what activities were occurring and which

interactions were taking place. Wherever possible, I tried to answer the questions in the observation guide by observation only, but where necessary, I asked questions without affecting the flow of the HCT process.

### ***Direct observation of HCT counselling sessions data collection***

#### **Direct observation as data collection method**

Observation as a data collection method has been discussed above. I hoped that by observing I would have a more comprehensive understanding of the HCT counselling process (Patton, 2002); of how the counsellor interacts with the learner; what is included in the counselling session; and how much time is spent on counselling.

#### **The instrument used to collect the data**

UNAIDS Tool 4 (UNAIDS, 2000b) is designed to assess the standards of HIV counselling by monitoring the process, content and quality of pre- and post-test HIV counselling sessions. It is part of a series of tools developed to help HIV programmes evaluate their HCT services and were tested in developing and industrialised countries. They were designed to be used in a flexible way and may be adapted to suit the needs of the service being evaluated. Tool 4 is provided in the form of a checklist (Appendix XVI) and consists of three parts: (1) Tool 4.1 for observing counselling *quality* of both pre- and post-test counselling, (2) Tool 4.2 for observing the *content* of pre-testing counselling, and (3) Tool 4.3 for observing the *content* of post-test counselling. Therefore, for each pre-test session, parts (1) and (2) of Tool 4 was used, and for each post-test session, parts (1) and (3) were used. For this study, no amendments were made to the tool.

#### **Conducting the direct observation of the HCT counselling sessions**

The sessions that were observed were not chosen at random but were consecutive observations when I was on site. All four counsellors' sessions were observed, and the number of sessions depended on convenience. The data were collected on two days (24 February and 4 March 2011). When arriving on site, I would approach one of the counsellors to ask if their counselling sessions could be observed on that day. Previously, in a meeting, all the counsellors had been asked if they would allow me to sit in on their sessions, and they had given permission for me to do this. I reminded them why I was observing their sessions, that I was not trying to find fault with them, but that I wanted to learn from them and find ways of improving the HCT service.

Before starting a counselling session with a learner, the counsellor would introduce me, explain that I am a researcher and ask whether the learner minded if I observed the session. My reason for sitting in

was explained to the learner and they were assured that I was evaluating the counsellor and not them, and that whatever was discussed in the session would remain confidential. They were informed that they had the right to refuse being observed and that their session would not be rescheduled or denied if they did not permit me to be present. None of the learners refused to be observed.

During the session, I sat facing the counsellor, with the learner beside me, to reinforce the fact that the counsellor was being observed and not the learner. I tried to be as unobtrusive as possible and did not interrupt the sessions. Whilst observing sessions, I scored the counselling content and quality against a checklist of items in the UNAIDS Tool 4 (See Appendix XVI). If anything of relevance was observed that was not on the checklist, a note of this was made. With each counsellor two to three learners were observed being counselled, before moving on to the next counsellor. Both pre- and post-test counselling sessions were observed.

During observation on the first day, I realised it would be useful to be able to include quotes from the counselling sessions in the findings, but the sessions went too quickly for me to write down, verbatim, what was said. Therefore, on the second day, the sessions were audio-recorded during the observation. The digital audio-files were transcribed verbatim.

### ***My reflections on the evaluation of the HCT service***

In this part of the research, the impression that stood out the most for me was the huge influence the school system had in the quality of the HCT service provided. Although this was not the focus of my research, as mentioned in Section 1.5, the Health Promoting Schools concept underlies my approach to almost everything I do. It was therefore inevitable that my observations would be viewed through a Health Promoting Schools lens.

When entering School F (the previous model C school), I was struck by a plaque in the reception area which displayed their vision:

*We strive to be a world class school rooted in Africa,  
that facilitates a quality all-round education  
in a caring and disciplined environment.*

When doing the evaluation, I discovered how true they are to their vision and how much of a Health Promoting School they are. As recommended by WHO (1998), the school has, with regards to HCT,

- drawn on local and regional support services by inviting the NGO to provide the HCT service at their school;

- provided effective skills-based health education by including HCT in their curriculum, and using the testing week to have discussions in LO about HIV and other sexual health issues;
- implemented school policies and practices that support health by making it policy to test learners annually (The LO teacher explained that “*testing week is just like sports week*”, and that learners ask every year when testing week will take place);
- provided a safe, healthy and supportive environment (both physically and psycho-socially) for HCT to take place in by trying to decrease the stigma related to HCT by normalising the process and encouraging all learners to at least speak to the counsellor, whether they decided to be tested or not. They have also made an effort to ensure privacy for learners when they are tested by providing screens behind which counselling takes place. Learners are also given the opportunity to give feedback on their testing experiences and to suggest changes and improvements; and
- engaged the whole school community in the HCT process by involving all school staff in the planning and co-ordination of the testing, and informing parents when testing is to take place. The LO teacher explained how at first parents were resistant to having HCT at school, but that after consulting with them at meetings, parents have also embraced the initiative.

At the other schools, this systems approach was not used. The HCT service was seen as an add-on to normal curricular activities, with little involvement of learners, school staff and parents. Furthermore, no attempts were made by the schools to provide a safe environment in which to test the learners.

#### **5.2.6. Data analysis**

##### ***Analysis of the service provider interviews***

A directed content analysis approach was used to analyse the data, as described by Hsieh and Shannon, (2005), which involved developing pre-determined coding categories which then directed the analysis of the data. The headings and questions in the “Tool for assessing the youth friendliness of a school-based HCT service” (see Appendix X) and the UNAIDS Tool 4 (see Appendix XVI) were used as coding categories.

The process of directed content analysis, as described by Hsieh and Shannon (2005), was followed:

***Preparation of raw data:*** The audio-recordings of the interviews were transcribed verbatim.

***Creation of categories:*** The questions and headings in the “Tool for assessing the youth friendliness of a school-based HCT service” (see Appendix X) and the UNAIDS Tool 4 were used to create categories.



**Close reading of text:** The transcripts were read and reread carefully until I was familiar with the contents.

**Coding:** Statements (segments of text) that related to the pre-determined categories were highlighted. Each highlighted segment of text was coded (or labelled) and then assigned to one of the categories. For example, (see Table 5.2), in response to the interview question “Do young people request health services other than HIV testing? Which ones?”, a service provider answered, “Once a girl asked me if we do pregnancy tests”. This segment of text was coded under “request for pregnancy test”, then assigned to the pre-determined category, “Health services that young people request other than HCT”. This process continued until all statements relating to the pre-determined categories were identified and assigned to a category. Data that did not fit into any of the pre-determined categories were identified and analysed separately to determine if they represented a new category or a subcategory of an existing code.

**Continuing revision and refinement of category system:** The transcripts were then reread, looking for any statements that fitted into the categories but may have been missed in the first coding. Contradictory and confirmatory statements were searched for. Patterns and explanations were looked for, for example, whether certain codes could be grouped together under a more general code.

**Table 5.2: Example of coding of service provider interviews**

Segment of text (responses)	Codes	Pre-determined category
“Before you go for the counselling you let them understand that we are only for the HIV counsel... testing; no other test is being done. But if there is something that they should know or they want to know about, you do give your input to them. Like they will ask signs of STIs...”	Request for treatment of STIs	Health services requested other than HIV testing
“STIs mostly, treatment for STIs...”	Request for treatment of STIs	
“Once a girl asked me if we do pregnancy tests”	Request for pregnancy test	
“...she had an STI and yes, and then referred to (nurse). (Nurse) must give her a letter”	Request for treatment of STIs	

**Analysis of the observation of the HCT site**

I expanded the notes and diagrams I had made during the observation of the HCT sites into a narrative describing the HCT site environment and process at the two schools.

### ***Analysis of the direct observation of the HCT counselling sessions***

I read through the transcripts of the session that had been recorded and scored the content and quality of the counselling, using the UNAIDS Tool 4 checklist (UNAIDS, 2000b). I then checked that the scores coincided with the scores that I had given on the day of observation, which they did. I used Microsoft Excel 2010 to calculate the frequencies of the scores that I had recorded. I also read through the notes that I had made while I was observing the counselling sessions and used them to add to the description of the counselling sessions.

#### **5.2.7. Strategies to improve the quality of the research**

The strategies that were employed to improve the trustworthiness and thereby the quality of the qualitative research, in general, have been discussed in Section 4.2.7. Strategies to improve the credibility of the research, specific to this chapter, included the following:

- Expansion of my observation notes within 24 hours of doing the fieldwork while all my observations were still clear in my mind
- Audio-recording of the counselling sessions as well as taking notes during the sessions
- Independent coding of the service provider interviews was done by an independent researcher. This was followed by a discussion to compare the codes and subcategories and to identify the similarities and differences to reach a consensus.
- Unofficial visits were made to the HCT site to assess whether service providers changed their behaviour when they thought they were not being observed (which they did not).

### **5.3. Findings**

This section answers the question “Is the mobile school-based HCT service youth friendly?” and includes the findings of the service provider interviews, the observation of the HCT site, and the direct observation of the counselling sessions.

#### **5.3.1. Findings of the service provider interviews**

##### ***Profile of service providers***

In Table 5.3 the sex, age and job title of the service providers is given.

**Table 5.3: Profile of service providers**

<b>Title</b>	<b>Sex</b>	<b>Age</b>
Project Manager	Male	52
Professional Nurse	Female	67
	Female	63
Counsellor	Female	71
	Female	34
	Female	48

The service providers that were interviewed included the project manager, two professional nurses and three counsellors (one of the four counsellors declined to be interviewed). Except for the project manager, all providers were female. The youngest counsellor was 34 years and the oldest counsellor 71 years.

### ***Service providers' work experience and training***

The project manager (and co-founder of the NGO) is a qualified pastor and therefore has had pastoral counselling experience. He also lectured in Management and Leadership at a technikon, and has many years of experience of working with impoverished communities. Both nurses had more than 40 years nursing experience. They had both worked in primary health care clinics for more than 30 years. At the clinics, they had had contact with young people who came for family planning, but this was minimal as they said not many young people attended the clinic. They also acquired experience in HIV and AIDS, HIV testing, and treatment of STIs when working in the clinics. One of the nurses had been working with the NGO for one year, the other for six years. Two of the counsellors had previous community work experience (home-based care and antiretroviral therapy adherence counselling) and had been working for the NGO for six years. The third counsellor had worked in retail before and had become involved in HIV testing as a voluntary worker for the NGO four years earlier. They all had minimal experience of working with young people.

All providers (nurses, counsellors, manager) had done ATTIC<sup>15</sup> training which included general knowledge regarding HIV and AIDS and antiretroviral therapy as well as counselling skills. The counselling was specific to HCT. Except for one of the nurses who had done a course on Teenage Sexuality in the 1980s, none of the providers had received any youth-specific training. The counsellors had also been trained to do rapid finger-prick HIV testing.

### ***Policies and guidelines***

No guidelines or policies exist for providing HCT to learners at the schools in the sample, and the NGO had no written policies or guidelines of their own. The project manager said he follows the legal guidelines for general HIV testing in South Africa (South African DOH, 2010). The counsellors who had been on the ATTIC training follow the ATTIC guidelines for counselling.

### ***Parental consent***

According to South African law, parental consent for HIV testing is not required for learners over the age of 12 (Republic of South Africa, 2006). Nevertheless, the project manager suggests that the school should inform the parents that testing will take place. According to the LO teachers though, only School F sends out letters to parents to inform them of the HCT service. All learners give consent by signing the ACTS form (which has their name on it) during pre-test counselling (see Appendix XV).



### ***Providing learners with information about HCT***

The project manager explained that before HCT takes place at a school, he meets with the principal and the contact teacher. He assumes that the school informs the learners about the testing. However, during the FGDs with the learners, some mentioned that they were not told beforehand that testing would take place.

As discussed above, on the day of testing, the whole class is called down to the testing area. As a group, they are educated by the project manager about the prevalence of HIV, the importance of testing, how the testing process will take place, and that confidentiality is guaranteed.

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<sup>15</sup> The Western Cape AIDS Training, Information and Counselling Centre (ATICC) is the HIV and AIDS training component of the Directorate: HIV and AIDS/STI/TB, District Health Services and Programs, Provincial Department of Health.

**Project manager:** *so that was very important...that you get all the learners first, get them down, explain to them, allay their fears, because they were fearful about this whole thing, you know. They were fearful about HIV testing, so you had to make sure... for example a lot of them had a phobia for needles so you had to explain to them, listen, this is finger pricks, it's not long needles for example, otherwise they wouldn't test...*

*...they felt more eager to come and test after I would explain to them for example that the law guarantees confidentiality and no information must be or should be given personally about them to the school or to the principal or to anybody whatsoever...I think to a large extent that really made them feel at ease and they would come and test*

### ***When HCT takes place***

According to the service providers, testing takes place during school hours, from 09h00 to 15h00. The providers explained that every effort is made to respect curriculum time and not to disrupt school functioning. Times of testing are therefore usually arranged with the LO teacher at each school, and testing generally takes place during the LO period. Testing is not normally scheduled during interval, but learners do sometimes drop in during this time.

No testing is done after school as the providers and LO teachers felt that learners would not stay after school as they are in a hurry to get home, they have after school activities, or they have to take transport (which leaves immediately after school closes). They also did not recommend school holiday and weekend testing as they thought learners would not come in to school specially for testing. One counsellor mentioned that they had tried testing over a weekend, but that they had tested fewer than five learners.

**Counsellor:** *You know what, I think it is the best time because I have worked on weekends where the school had some event, and nobody came. We probably tested one or two children for the whole day...They've got their own things to get to on weekends.*

**Interviewer:** *And after school? Have they ever requested for you to be after school?*

**Counsellor:** *No, they won't come. We stayed after school already for a class that we had to finish that day and one or two children came, and then the rest all ran home.*

### ***Privacy***

The service providers explained that testing takes place in the school hall at most schools. If the school does not have a hall, then an alternative big space, such as the library, is used, or counsellors set up in separate empty classrooms.

The service providers explained that, previously, they had used tents which they set up in the hall, but about 6 months prior to the interviews, the tents had been broken, so instead they placed tables far apart in the hall to try to ensure auditory privacy. At some schools, the school provided screens to create cubicles in an attempt to provide some visual and auditory privacy (as School F had done). Service providers voiced their concerns that this set-up was not ideal, as they felt that both visual and auditory privacy is important to ensure confidentiality.

**Counsellor:** *Without the tents or the cubicles the other children who's waiting on the other side, they can overhear everything that's said.*

For this reason, the service providers tried to provide some sort of privacy for learners receiving their results by setting the post-test counselling table behind a makeshift screen or curtain (as they had done at School E). One counsellor felt that results should be given separately from the other learners as the other learners could often work out from the time it takes to give results whether the result is positive or negative.

The project manager stated that he visits the site before HCT takes place to check that they have a space that is suitable for testing.

**Project manager:** *I would physically look at what space is available...and then only after I'm satisfied that the process or the HIV AIDS counselling and testing can be done in a safe environment then I would say, okay, it's fine*

Despite this, he mentioned an episode at one of the schools (where tents were used in a hall) where complaints were made because learners waiting to be tested had overheard a counselling session taking place in one of the tents.

## ***Confidentiality***

No written procedures exist for protecting the learners' confidentiality; however, the team tries to ensure confidentiality as they have been taught this during their ATTIC training. The professional nurse explained that confidentiality is part of her nursing training and work ethos. The project manager follows the legal guidelines regarding confidentiality in HIV testing.

**Project manager:** *That's very important because I have often refused to test at some of the schools if confidentiality cannot be guaranteed.*

All forms and registers are handled only by the professional nurses and the project manager and are stored in a locked cupboard at their offices. No paper trail is left at the school. There is no registration

process, except at School F, where all learners who come down to the HCT site sign a register, irrespective of whether they are tested or not.

### ***Counselling difficulties***

Counsellors complained about the new ACTS<sup>16</sup> method of counselling, which does not include taking a sexual risk history during pre-test counselling. The ACTS form (See Appendix XIII) does not include the question “Are you sexually active?” One of the counsellors, however, did add this question during pre-test counselling, so that she could address issues regarding safer sex and pregnancy prevention during post-test counselling.

One counsellor expressed her unhappiness with the fact that learners seemed not to be interested in discussing prevention plans, and therefore she often omitted it from the counselling process.

**Counsellor:** *The post-test counselling, I make it shorter because the children just want to know their results ... They will ... stand like this ... I don't want them to stand; they must sit so that even if the client is tested negative, I have to talk about the negative, or the positive lifestyles, you see ... they're just in a hurry to hear their results.*

Counsellors felt that not enough time was allowed for counselling.

**Counsellor1:** *When you are in the clinics ... you see 12 (clients) but in the schools you cannot do 12 ... they (the DOH) want the stats. They run for the stats. And to me it's not about stats; it's about the quality of the job that you are doing.*

**Interviewer:** *So how many learners do you see generally in a day?*

**Counsellor1:** *In a day, you see more than 20. Serious, we see more than 20.*

and

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<sup>16</sup> ACTS (Advise, Consent, Test, Support) is a system aimed at making HCT easier for health-care providers to integrate into the other services they routinely deliver by reducing the conventional UNAIDS 25 minute pre-test counselling session to 5 minutes or less. It is also meant to allow lay counsellors to test more clients per day and frees up their time to provide more intensive counselling to HIV positive clients. ACTS was developed in the United States and has been implemented by the Western Cape DOH since 2009. See Appendix XIV for steps followed during the counselling process.

**Counsellor2:** *You're being rushed the whole time while you're there. You need to make up your stats, you can't still think of whatever. Because sometimes there's other problems that the kids have...they don't just come sit there for HIV, they come sit there to tell you something else, something more personal. And now you get somebody rushing you on that side, so you can't really listen*

### ***Health needs other than HCT***

Counsellors reported that learners sometimes asked for treatment for STIs and pregnancy testing. The nurses then referred them to the local health facility. One counsellor described her experience of accompanying a learner to a clinic for treatment of an STI.

**Counsellor:** *There was the girl with that STI but she was scared to go to the clinic, and she actually showed me. She pulled down her pants and she showed me, and then (the project manager) said it's okay, I can take her to the clinic.*

**Interviewer:** *Why do you think she was scared to go to the clinic, any idea? Did she tell you?*

**Counsellor:** *She said ... that the people in the area might see her ... and she had blisters, hey, but the blisters were, like, far already, so I told her let's go into another area ... and I told [the project manager] I can't let this child go alone because she was only 15, so I went with her and we went to the clinic.*

The NGO's policy on providing condoms was not clear, but it appeared as though they had handed out condoms to learners in the past. However, on the days that the HCT site visit was done, the team did not have condoms. It was unclear whether this was because the project manager did not receive stock or whether he had made the decision not to get them. He had said in the interview that he personally would not hand out condoms (perhaps for religious reasons, but he did not confirm this) but said that the nurses had condoms if the learners asked for them. In the interview, one nurse said that she handed out condoms if learners asked and another counsellor claimed she gave condoms to learners who asked for them and that condoms were left in a bowl on the counselling table for learners to take.

The second nurse, who had only been working with the team for less than a year, said she had asked about condoms because since she had started with the NGO, they had not had condoms. Apparently, no decision was made about her request, and she thought handing out condoms was taboo at some schools. This nurse seemed uncomfortable answering this interview question. The second counsellor said they had stopped handing out condoms when one school complained that learners were using



them as water balloons. The third counsellor felt that handing out condoms would mean she would be giving two messages.

**Counsellor:** *We cannot say abstain, and then provide condoms.*

Apparently the LO teacher at School F provided condoms to learners on request. At the other schools, the LO teachers said that it was school policy to not provide condoms.

### ***Psychosocial needs***

Service providers said that learners often raised psychosocial problems with them when they were counselled for HCT, such as physical and emotional abuse and bullying.

**Project manager:** *HIV testing and counselling goes way beyond HIV testing at the school, because...you find yourself dealing with so many issues of the learner: abuse, rape, incest, physical abuse, emotional abuse in the home environment*

The project manager voiced concerns that the abridged counselling, with the ACTS form, limited opportunities for learners to bring up these issues.

**Project manager:** *They used to ask on the questionnaire [UNAIDS model of HCT] quite a few in-depth questions. For example if you're found to be HIV positive, you know, "What will you do?" "Who will you confide in, and how about your sexual partner?" But those questions are not part of the current questionnaire [ACTS model] that we're using, which means it has really, sort of, minimised the time that you spend with a learner*

### ***Referral and follow-up of learners***

The nurses had a standardised referral letter for referring learners to local health facilities or NGOs. They spoke about a list of referral resources that they had compiled, but not one of the nurses or counsellors had the list with them when I did the interviews (even though interviews were done on site). There is no follow-up of learners who are referred. If the learner gives permission, then the case is discussed with the LO teacher, who then is expected to follow up.

Learners who test positive are counselled by the counsellor and given a referral letter by the nurse to attend the nearest health facility for further tests and treatment. Results are not shared with anyone at the school or outside the school without the learner's permission. All the counsellors found it very

stressful to give a positive result to a young person and expressed concern that they did not know whether the learner actually attended the health facility for follow-up.

One counsellor said that she usually gives her cell number if the learner requests it. The project manager said that they would offer to contact the learner again if the learner so wished in order to provide support, and he confirmed that counsellors had accompanied learners to the clinic on request before. He also said that he would suggest to learners that they should confide in a friend, family member or teacher at school for support. All those interviewed expressed discomfort with not knowing whether the learner had support once the team had left.

**Counsellor:** *it's really difficult when it's at the schools because what we've found, like, from there some of the children couldn't handle it and there wasn't anybody to assist them ... they still get referred to the clinic. We don't get to see them again after that ... But if there was somebody that ... from there that can assist the child immediately then it's fine, then you don't feel so, like ... because what does a referral letter do? We can give the child that referral letter. Is she going to go?"*

### ***Educational materials***

Counsellors reported that they did not make use of any job aids (e.g. flipcharts or posters) as these were not available. They said that they had previously put up an STI poster at the HCT site. The project manager said that some schools found the STI poster too graphic and therefore did not give them permission to put it up. One counsellor described a poster which gave information about how HIV affects the body, which they had displayed in the past.

The service providers reported that they had also previously handed out pamphlets which they fetched from the DOH resource centre, but apparently they had had no stock when the site visit was done. According to the service providers when pamphlets were available, they were in English, Afrikaans and Xhosa and were displayed on a table for learners to take if they wished. The project manager said that the last time he went to fetch stock, he found that the resource centre did not have appropriate materials for schools. What was available focused on gender issues, was not HIV specific, and was aimed at adults. Also, the materials were not in line with what was being taught in the curriculum.

### ***Learner involvement***

According to the service providers, besides being tested, the learners were not involved in the running of the HCT process in any way. There is no formal way for learners to suggest or recommend changes to the mobile HCT service, however at one school (School F), the contact teacher reported that she

asks for feedback from the learners and then writes up a report of the positive and negative experiences of the testing service. According to the project manager, at School F they have peer counsellors who have helped with co-ordination of the testing days, and the service providers felt that it had been helpful. The project manager felt it was a good idea to get learners involved but admitted he had not discussed this with the principals as he had assumed that the learners did not have time to be involved.

One counsellor suggested that learners become involved in poster making, quizzes and games relating to HIV. Another counsellor suggested that those learners who are HIV positive should form a support group where they can discuss issues related to HIV under the guidance of a teacher.



### 5.3.2. Findings of the observation of the HCT site

Two HCT site visits were done. At the first site visit (School E), the project manager, two nurses and four counsellors were present, and at the second site visit (School F), the project manager, one nurse (the other was off sick) and four counsellors were present. At both schools, the Grade 9 classes were being tested on the day of my visit.

#### *General observations*

The mobile school-based HCT service does not put any restriction on use of the service based on race, gender, religion or socio-economic status. By bringing the HCT service to the school (therefore easily accessed geographically), the mobile school-based HCT service gives all school-going young people at the schools involved equal opportunity to make use of the service. However, only learners attending the school are allowed to access the service and therefore out-of-school young people are excluded.

#### *School E HCT site visit*

Site layout and environment at School E: (see Figure 5.1)

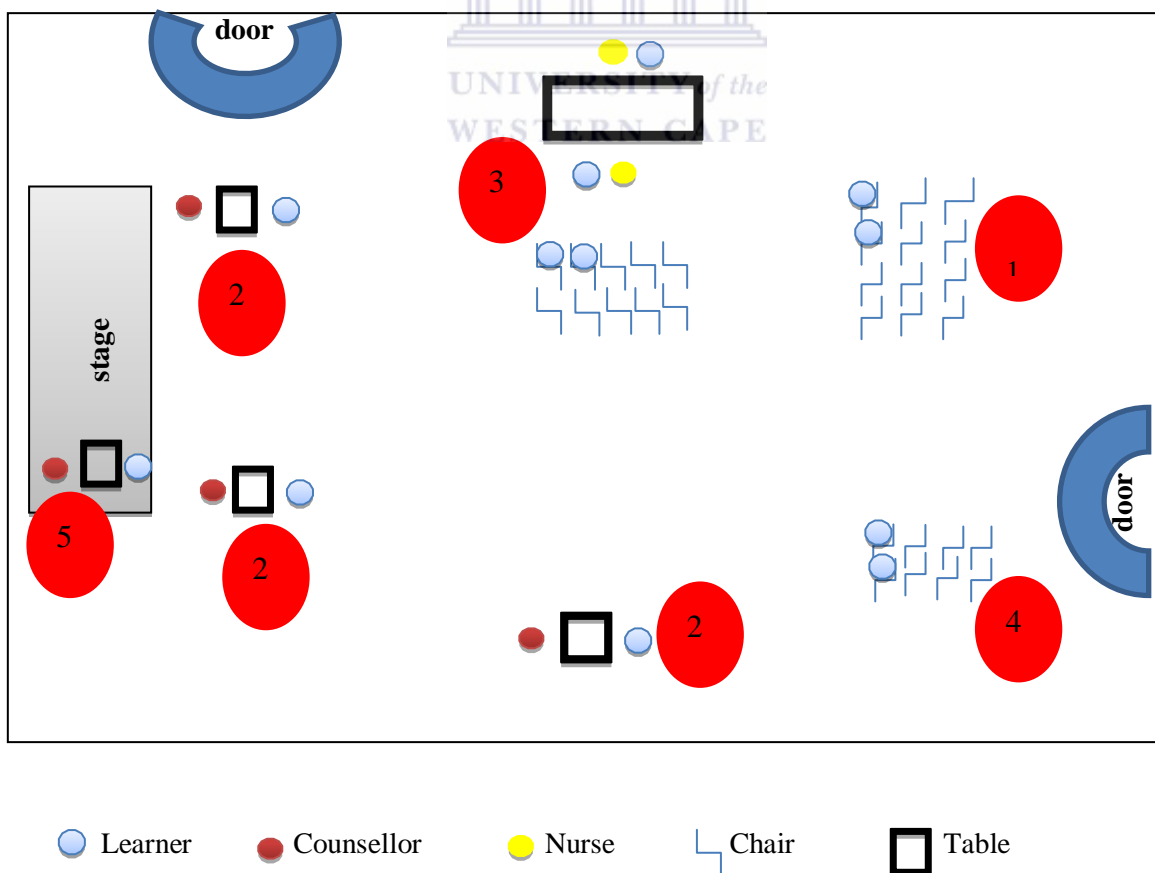


Figure 5.1: School E HCT site layout

At school E, HCT took place in the hall. The hall was clean and light, approximately 20 metres x 25metres. The entrance door was at the back of the hall, and a stage with curtains closed at the front. Posters with examination rules were on the walls, suggesting that examinations take place here. There were no condoms or educational materials (e.g., posters, pamphlets, audio-visuals) on site.

The hall was divided into a counselling area, a nurses' station and three waiting areas (one for pre-test counselling, one for the testing station and one for the post-test counselling). The counselling area was divided into four counselling stations. Three of the stations were set up below the stage at the front of the hall. Each station consisted of a table and two chairs. No screens were present to provide visual privacy. Stations were about 10 metres apart, providing auditory privacy. The fourth station was behind the stage curtain. Results were given and post-test counselling took place at the fourth station.

The nurses' station was on the right, in the middle of the hall, and consisted of a long table with two chairs facing each other on either side of it. Equipment for testing was on the table. The pre-test waiting area was at the entrance to the hall on the right. It consisted of five rows of ten plastic chairs facing the stage and counselling area. The waiting area at the nurses' station consisted of three rows of nine chairs facing the nurses' station. The post-test waiting area was on the left side of the hall and consisted of three rows of nine chairs facing the centre of the hall. Learners were allowed to sit wherever they chose in the waiting areas.

### **Process:**

Learners (males and females simultaneously) came down to the testing site class by class, according to a schedule drawn up by the LO teacher.

1 Learners entered the hall at the back and took a seat at the first group of chairs at the back of the hall. Here the project manager gave them a talk about the prevalence of HIV, the benefits of testing, the testing procedure, and stressed confidentiality. The talk lasted for about 10 minutes, and was repeated each time a new class came to the hall. After the talk those who did not want to be tested then went back to class.

2 Learners who wished to be tested were then called up one by one to go for pre-test counselling. This took about 5 minutes per learner.

3 After counselling, they proceeded to the next set of chairs facing the nurses' station. They were then called up to the nurses' station to have their fingers pricked. Here, no attempt was made at providing visual or auditory privacy. Two learners at a time sat on either side of the table with the nurse who was taking their blood. The nurses explained to the learners what they were going to do but did not ask the learners any questions.

4

Once their blood was taken, the learners then went to the post-testing counselling waiting area, where they waited for about 15-20 minutes for the nurse to take their results to the counsellor who was doing post-test counselling. The nurse would take a few results at a time and not wait for the whole class to be done.

5

They were then called to the counsellor on the stage behind the curtain for their results and post-test counselling. Post-test counselling took 30 seconds to one minute. No learners tested positive while I was on site.

The process from registration to post-test counselling took approximately 40 minutes per learner (the length of one teaching lesson).

The LO teacher was present for a short while to check if there were any problems. The rest of the time, the project manager made sure that learners were well-behaved and directed the flow of learners. The learners seemed relaxed, and the atmosphere was light. Some of the learners were carrying dolls as part of an LO project, in which they were pretending to have babies. The counsellors and nurses appeared rushed. The counsellor doing the post-test counselling declined to have me sit in on her session, as she was feeling upset because she had given a positive result to a learner earlier that day.

### ***School F HCT site visit***

On arrival at school F, the counsellors and the nurse were sitting on benches outside the hall where they had been testing. The hall was being used for a school ceremony. When we gained access to the hall, 15 minutes later, it was interval. The general assistants employed by the school started setting up screens, tables and chairs (belonging to the school) for counselling and testing. While this was happening, the team sat around the nurses' table and had tea provided by the school. Learners had baked eats for their tea during their Consumer Studies class. Apparently, this is a tradition when testing is done at School F.

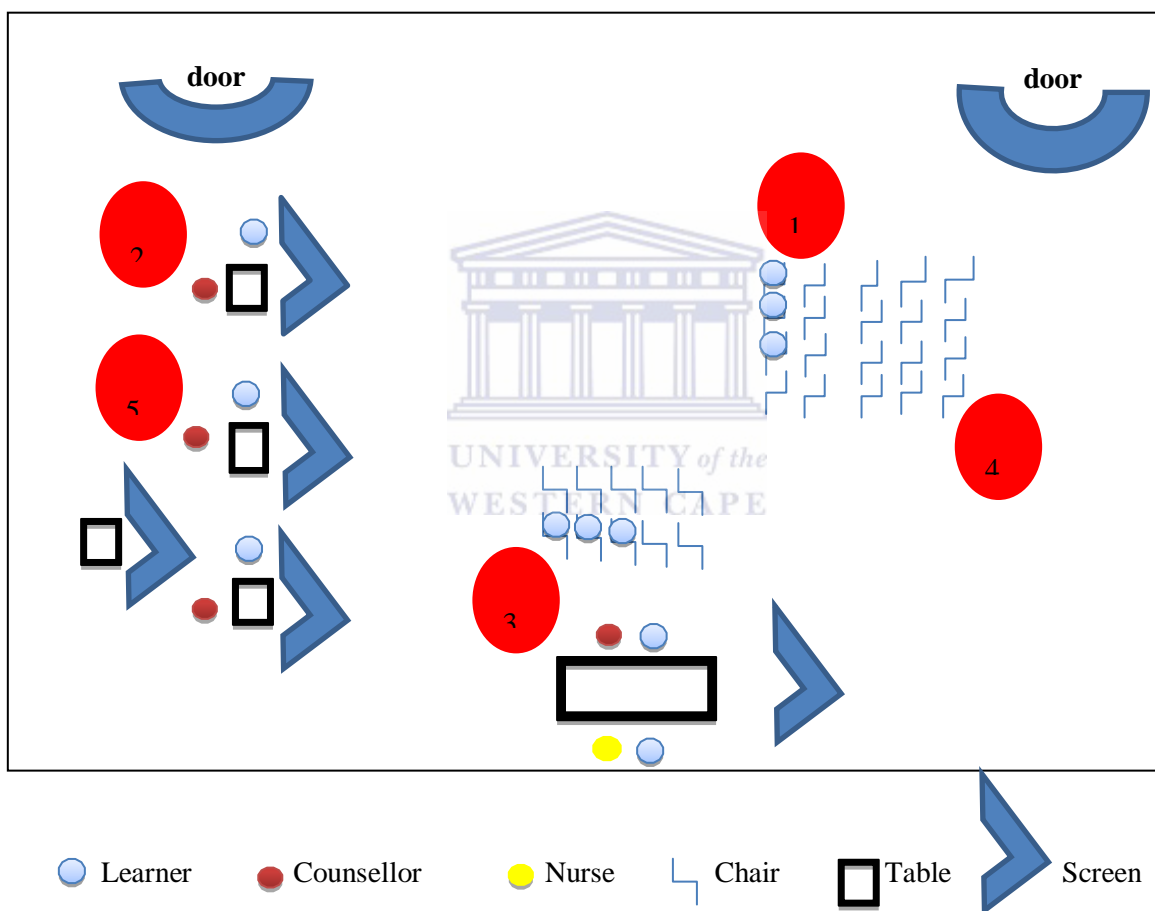
### **Site layout and environment at school F: (see Figure 5.2)**

The nurses' station consisted of a long table with two chairs facing each other on either side of it. Equipment for testing was on the table. The hall was clean and light, approximately 15 metres x 20 metres. Two side doors were open. Gym equipment was stacked against the walls. The hall was divided into a counselling area, a nurses' station and two waiting areas.

The counselling area was divided into four counselling stations – three were being used (one counsellor was helping the nurse with testing as one nurse was absent). Screens were put up to provide privacy whilst counselling was taking place. Stations were far apart enough to avoid hearing

what was being said. Learners waiting to be seen could not see those behind the screens, but learners sitting in stations next to each other could see one another. The two waiting areas consisted of six rows of 10 plastic chairs each. Learners were allowed to sit wherever they wanted in the waiting areas.

The LO teacher was present throughout to ensure that learners behaved and to assist the service providers with the flow of learners. The learners themselves seemed mostly relaxed; a few expressed their anxiety about having their fingers pricked. The atmosphere was light and informal. The counsellors and nurse appeared rushed.



**Figure 5.2: School F HCT site layout**

**Process:**

Learners (males and females simultaneously) came down to the testing site class by class, according to a schedule drawn up by the LO teacher.

- 1 Learners entered the hall at the side door furthest away from the counselling stations. On entering, learners were required to sign a register (irrespective of whether they decided to be

tested or not), which the teacher explained was not to check who was tested, but to check whether the whole class had been notified that they were meant to come to the hall for testing. If she noticed that only a few learners had signed in, she would be alerted to check whether they had all received the message. After signing in, learners took a seat at the first group of chairs facing the counselling stations. Here the project manager gave them a talk, as he had in School E. After the talk, learners who opted not to be tested then went back to class.

2

Learners were called up one by one to go for pre-test counselling. This took about 5 minutes per learner.

3

After counselling, they proceeded to the next set of chairs facing the nurses' testing station. They were then called up to the nurses' station to have their fingers pricked. Here, no attempt was made at providing visual or auditory privacy. The nurses explained what they were doing but did not ask any questions.

4

Once their blood was taken, the learners then went back to the original set of chairs, where they waited for about 15 minutes for the nurse to give their results to one of the counsellors. (not necessarily the same counsellor who had done pre-test counselling). The nurse took a few results at a time and did not wait for the whole class to be tested.

5

Learners were then called up one at a time to get their results and for post-test counselling. Post-test counselling took 30 seconds to one minute. In fact, one counsellor did not even wait for the learners to sit down before she told them their results.

The process from registration to the end of post-test counselling took approximately 40 minutes per learner (the length of one teaching lesson). It took on average 45 to 60 minutes to test one class, so the team was able to test about four classes a day.

### **5.3.3. Findings of the direct observation of the HCT counselling process**

Twenty one counselling sessions were observed: 14 pre-test sessions and seven post-test sessions (not of the same learners observed in the pre-test sessions).

#### ***Quality of counselling***

Table 5.4, below, shows the counselling skills displayed by counsellors during both the pre- and post-test counselling sessions.



**Table 5.4: Number of sessions observed where counsellors adequately demonstrated counselling skills according to the UNAIDS Tool 4 (n=21)**

Function	Skills	No. of sessions n (%)
Interpersonal relationship	Greets clients	21 (100)
	Introduces self	21 (100)
	Engages client in conversation	Difficult to assess
	Listens actively (verbal/non-verbal)	Difficult to assess
	Is supportive and non-judgemental	21 (100)
Gathering information	Uses appropriate balance of open and closed questions	0 (0)
	Uses silence well to allow for self-expression	Difficult to assess
	Seeks clarification about information given	1 (5)
	Avoids premature conclusions	Difficult to assess
	Probes appropriately	9 (43)
Giving information	Summarises main issues discussed	0 (0)
	Gives information in clear and simple terms	16 (76)
	Gives client time to absorb information and to respond	0 (0)
	Has up-to-date knowledge about HIV	Difficult to assess
	Repeats and reinforces important information	0 (0)
	Checks for understanding/ misunderstanding	8 (38)
Handling special circumstances	Summarises main issues	0 (0)
	Accommodates language difficulty	21 (100)
	Talks about sensitive issues plainly and appropriately to the culture	21 (100)
	Prioritises issues to cope with limited time in short contacts	21 (100)
	Uses silences well to deal with difficult emotions	Difficult to assess
	Is innovative in overcoming constraints (e.g. space for privacy)	1 (5)
	Manages client's distress	Difficult to assess
Flexible in involving partner or significant other	1 (5)	

**Interpersonal relationship:** All the counsellors greeted the learner and introduced themselves. They were friendly, respectful and non-judgemental. It was difficult to assess whether they were actively listening, and they did not engage learners in conversation because sessions were short and rushed.

**Gathering information:** The counsellors followed the ACTS form (Appendix XV) when asking questions, so most questions were closed. Again, because sessions seemed rushed, counsellors did not allow silence for self-expression, nor seek clarification about information given, nor probe appropriately. For the same reason, there was minimal discussion (if any), so summarising main issues was not necessary.

**Giving information:** Very little information was given about HIV, so it was not possible to assess whether the counsellors had up-to-date knowledge about the subject. Because the sessions I observed were with Grades 9 learners, the counsellors assumed that the learners had learned about HIV at

school or when they were previously tested: “*You’re quite clued up on HIV education, the same as we did it last year?*” When information was given, however, it was not always given in clear and simple terms. For instance, a word like *contraception* was used (the learner asked for clarification), and the acronym STI and the term *safe sex* was used (the learner did not ask for clarification, but later the counsellor realised that the term was not understood). Learners were also not given time to absorb information and to respond, neither did the counsellors check whether everything was understood.

**Handling special circumstances:** The sessions observed took place at English/Afrikaans medium schools, so counselling was conducted in these languages. All of the learners observed were fluent in the language of counselling. The counsellors seemed comfortable to talk about sensitive issues (e.g. sores on the penis). None of the observed sessions elicited obviously upsetting emotions or distress in the learners, so counsellors’ skill in dealing with these situations could not be assessed. Only one learner was asked whether his partner had been tested. With regards to sexual orientation, the counsellors assumed that learners were heterosexual and posed questions such as “Do you have a boyfriend?” and “Do you use contraception?” to the females.

### ***Content of pre-test counselling***

Table 5.5 shows the content covered by the counsellors during pre-test counselling. During the pre-test counselling session, reasons for attending were discussed. Knowledge about HIV and modes of transmission was not really explored, and information concerning the HIV test was not given (e.g., process of testing, meaning of possible test results, window period), as counsellors assumed that learners had been tested before and therefore were educated at the previous testing (see above). A personal risk profile was carried out by asking learners whether they had had unsafe sex and whether they had had contact with blood. They were also asked questions relating to TB and STI, such as, “Do you have a cough?” and “Do you have a vaginal discharge?” which are included in the ACTS form to assist decisions on whether to screen for these conditions.

Sessions were so short that counsellors were not really able to ascertain whether learners had any misconceptions, which could be corrected, nor was there adequate time for questions and clarifications.

The meaning of an HIV-positive or an HIV-negative result and possible implications, and the learner’s capacity to cope with an HIV-positive result, was not discussed. The learner’s potential needs and available support, should he/she test positive, were also not discussed. A personal risk-reduction plan was not explored. Learners gave consent by signing the ACTS form.

**Table 5.5: Content-based assessment of pre-test counselling (n=14)**

<b>During the session have the following occurred?</b>	<b>No. of sessions in which listed aspects were adequately covered n (%)</b>
Reason for attending discussed	14 (100)
Knowledge about HIV and modes of transmission explored	9 (64)
Misconceptions corrected	0 (0)
Assessment of personal risk profile carried out	9 (64)
Information concerning the HIV test given (e.g. process of testing, window period )	1 (7)
Understanding checked for	14 (100)
Discussion of meaning of HIV-positive and HIV-negative results and possible implications	0 (0)
Capacity to cope with HIV-positive result	0 (0)
Discussion of potential needs and available support	0 (0)
Discussion of a personal risk-reduction plan	0 (0)
Time allowed to think through issues	0 (0)
Informed consent/dissent given freely	14 (100)
Follow-up arrangements discussed	0 (0)
Adequate time for questions and clarifications	0 (0)

### ***Content of post-test counselling***

I observed only post-test counselling sessions in which a negative HIV result was given. No learners tested positive in the time that the sessions were observed. Table 5.6 shows the content covered by the counsellors during pre-test counselling.

The counsellors gave the results by telling the learners that they “*tested HIV negative*”. They did ask the learners whether they understood the results, but did not clarify this by asking them to explain what they had understood. However, in the sessions that were observed, all the learners appeared to understand that a HIV negative result meant that they did not have HIV.

The meaning and implications of the result for the learner was mentioned but not really explored:

**Counsellor:** *And how do you feel about your results?*

**Learner:** *Happy.*

**Counsellor:** *Happy, happy and I'm also happy for you.*

The counsellor encouraged learners to stay negative, but a personal risk-reduction plan was not discussed:

**Counsellor:** *And just keep it negative, né? You know how to keep your status negative, né? By maintaining a good healthy, positive lifestyle. Is that okay with you?*

**Learner:** *Okay.*

**Counsellor:** *You can go now. Enjoy the rest of your day and the weekend.*

**Table 5.6: Content-based assessment of post-test counselling (n = 7)**

During the session have the following occurred?	No. of sessions in which listed aspects were adequately covered n (%)
Results given simply and clearly	7 (100)
Time allowed for the result to sink in	0 (0)
Checking for understanding	7(100)
Discussion of the meaning of the result for the client	7 (100)
Discussion of the personal, family & social implications including who, if any, to tell	0 (0)
Discussion of a personal risk-reduction plan	0 (0)
Dealing with immediate emotional reactions	0 (0)
Checking availability of adequate immediate support	n/a
Discussion of follow-up care and support	n/a
Options and resources identified	n/a
Immediate plans, intentions and actions reviewed	n/a
Follow-up plans discussed and referrals where necessary	n/a

Because all results were negative, discussions regarding immediate support, options and referrals were not needed. Once again, the post-test counselling sessions were very brief. In fact, I observed one learner being given a result before he even sat down because one member of the team was absent and the counsellor was rushing. As he approached the counsellor's table, he was greeted, and before he sat down, he was shown his result on the ACTS form. She continued without inviting him to sit down. She quickly told him that he was HIV negative and told him to “*stay negative*”. The learner was not asked if he had any questions. He seemed relieved that he was negative and did not seem to mind that he was being rushed.

## 5.4. Discussion

The aim of this part of the study was to evaluate whether the mobile school-based HCT service was youth friendly, that is, did it provide a service which was equitable, accessible, acceptable, appropriate and effective for youth? (WHO, 2002)? Once the findings from each of the data collection methods (service provider interviews, observation of the HCT site and activities, and direct observation of the HCT counselling sessions) were analysed, these findings were then integrated by answering the above questions to evaluate the youth friendliness of the service. The findings were then discussed in relation to the above criteria of a youth friendly service.

### 5.4.1. Equitability

The WHO (2006) has described an equitable health service as one which does not vary in quality because of personal characteristics such as gender, race, ethnicity, geographical location, or socioeconomic status. In their document “Making health services adolescent friendly: developing national quality standards for adolescent friendly health services”, WHO (2012) advocated that policies and procedures should be in place that do not restrict the provision of health services based on characteristics such as gender, race and religion and that health-care providers (as well as support staff) should treat all adolescent clients with equal care and respect, regardless of their status.

Whitehead (1991, p. 8) broke down the WHO definition of equitability into three parts: “equal access to available care for equal need; equal utilisation for equal need; equal quality of care for all”. In the first part of her definition (equal access to available care for equal need), she suggested that everyone should have equal opportunity to make use of the available services and that services should be fairly distributed, based on health-care needs, and should be easily accessed geographically. By bringing the HCT service to the school (therefore easily accessed geographically), the mobile school-based HCT service gives all school-going young people at the schools involved equal opportunity to make use of the service. However, this service excludes out-of-school young people, and therefore a different model of providing HCT should be made available to this high-risk group, for example, the community centre model, where health services are provided in conjunction with recreational and educational activities at community multi-purpose centres, or the outreach service model, where services are provided in settings where young people meet such as malls, bars, street corners (these models have been described in Chapter 2).

In the second part of Whitehead’s definition (equal utilisation for equal need), she suggests that barriers to using the HCT service due to social or economic disadvantage should be addressed (Whitehead, 1991). The mobile school-based HCT service does not put any restriction on use of the service based on race, religion or socio-economic status. However barriers to utilisation based on

gender and sexual orientation have not been considered by the service providers. Some Black male learners in the FGDs expressed the need to test separately from their female peers as they thought that if they were seen going for testing, it would be assumed that they are HIV positive. Perhaps having separate testing days or sessions for male and female learners should be considered to increase use of the service by male learners. With regards to sexual orientation, the counsellors assumed that learners were heterosexual and posed questions such as “Do you have a boyfriend?” and “Do you use contraception?” to the females. One wonders if homosexual learners would feel confident and comfortable enough to discuss issues around sex and sexuality if it were obvious that these assumptions had been made. Counsellors need to be made aware that heterosexual sex between a girlfriend and boyfriend is not the only form of sex that young people take part in. They need to be aware of the needs of young people from the LGBTI community, young people who may not identify as LGBTI but may be having sex with someone of the same sex and young people who have transactional sex and intergenerational sex, and they need to be trained to provide counselling and prevention plans relevant to these marginalised groups of young people.

In the third part of Whitehead’s definition (equal quality of care for all), she advocated that service providers should deliver services to all people, irrespective of gender, race, religion or socioeconomic status, with the same effort and commitment, so that everyone receives the same high quality of care (Whitehead, 1991). The environment in which the HCT service is provided is not the same at all schools and is dependent on the resources of the school. For example, school F has the resources to provide cubicles so that testing can take place with some visual and auditory privacy, whereas at school E (where they do not have the resources), testing takes place at tables, without any visual privacy. Also, in one of the FGDs, the learners said that they had been given results whilst standing in a queue. This school happened to be a Quintile 3 school, with only Black learners, and the group that had been treated in this sub-optimal way were Grade 8 learners. One wonders whether the service providers would have done the same with Grade 12 learners, or at School F, a Quintile 5 school, where the LO teacher was always present at the testing site. The service needs to be provided with the same quality standards at all schools.

#### **5.4.2. Accessibility**

Thiede et al. (2007) defined access to a health service as having the opportunity to use the service as well as the information to make decisions about using the service, irrespective of whether a person uses the service or not. Ricketts and Goldsmith (2005) described this framework for accessibility as “access as use”. They described a second framework, “access as fit”, which had been proposed by Penchansky and Thomas (1981). They suggested that access should be measured across five dimensions of “fit” between the client’s needs and the provider’s ability to meet those needs: (1)

*availability*, referring to the extent to which the provider has enough resources (e.g. personnel) to meet the needs of the client; (2) *accessibility*, referring to how easily the client can geographically reach the provider's location; (3) *accommodation*, referring to the extent to which the provider's service is organised in ways that meet the client's needs (e.g. clinic hours and waiting time); (4) *affordability*, referring to the client's ability or willingness to pay for the service; and (5) *acceptability*, referring to the extent to which the client is comfortable with the characteristics (e.g. sex, age, ethnicity) of the provider (and vice versa).

WHO (2002) interpreted these definitions, with regards to a YFHS, as *accessibility*, meaning that policies and procedures should be in place that ensure that health services are either free or affordable to adolescents; that point-of-service delivery should have convenient working hours; that adolescents should be well informed about the range of health services available and how to obtain them; that community members should understand the benefits that adolescents will gain by obtaining the health services they need, and support their provision; and that some health services should be provided to adolescents in the community.

With regards to *availability* of resources (Penchansky & Thomas, 1981), the mobile service does not have enough human resources and equipment. When visiting the HCT site and observing the counselling sessions, I could see that the service providers appeared rushed, and one of the counsellors expressed her unhappiness with having to rush through clients because counsellors are expected to see 20 learners a day. In order to provide a quality service that meets the needs of the learners, there need to be sufficient counsellors so that client-provider interaction is long enough to provide counselling that is of value to the client. The service also does not have the necessary equipment (tents or cubicles) to provide auditory and visual privacy during counselling. Neither do they have educational material (pamphlets and posters), nor extensive publicity so that clients have the information they need to make decisions about using the service, as suggested by Thiede et al. (2008).

With regard to *accommodation* (Penchansky & Thomas, 1981) or the extent to which the provider's service is organised in ways that meet the client's needs, the mobile school-based HCT service provides their service at a time which is convenient for both the learners and the school, and they make every effort to keep disruption to curriculum time to a minimum.

The remaining dimensions of geographic *accessibility* and *affordability* (Penchansky & Thomas, 1981) have been discussed in the previous section under **Equity**, and the dimension of *acceptability* will be discussed in the next section.

### 5.4.3. Acceptability

An acceptable health service is one which takes into account the preferences and wishes of clients and the cultures of their communities (Gilson, 2007; WHO, 2006). WHO (2012) advocated that a YFHS should have policies and procedures in place that guarantee client confidentiality; that the point of service delivery should ensure privacy, that short waiting times and swift referral be ensured; that providers should be non-judgmental, considerate, and easy to relate to; that the point-of-service delivery should be appealing and clean; and that information and education should be provided through a variety of channels. They also recommended that adolescents be actively involved in the provision of these health services to ensure acceptability of the service (WHO, 2012).

When defining acceptability, Gilson (2007) describes three elements of acceptability: the fit between lay and professional health beliefs; the client-provider interaction; and the influence of health-care organisation arrangements on the client's response to services. Each of these will be discussed in relation to the mobile school-based HCT service.

Firstly, with regard to the fit between lay and professional health beliefs (Gilson, 2007), in the FGDs, some learners expressed distrust in the service provided by the NGO. They believed that the quality of care at a formal health facility would be better than that provided by the school-based HCT service.

Secondly, concerning the role the client-provider interaction plays in acceptability of the service (Gilson, 2007), the service providers of the mobile school-based HCT service were friendly and non-judgemental towards the learners. The counselling sessions, however, were too short and rushed to build up any sort of rapport between client and provider, and there was little room for the learner to have a voice (Gilson, 2007). Also, as mentioned above in the section on **Equity**, the service providers stereotyped the learners as being heterosexual with "normal" adolescent relationships of "boyfriend-and-girlfriend", which is unlikely to be acceptable to young people who do not fit this stereotype.

Thirdly, regarding the role that the fit between the structure and organisation of the health service and the client plays in acceptability (Gilson, 2007); a number of factors about the mobile school-based service did not fit the criteria for being acceptable. In the FGDs, the issues of confidentiality and privacy were of major concern to the learners. Although the NGO ensures confidentiality, the arrangement of the HCT site does not provide sufficient auditory and visual privacy. Furthermore, in the FGDs, some learners had expressed a preference for young (which they defined as being between the age of 20 and 30 years) counsellors, whilst others had felt that an older (which they defined as being between the age of 30 and 40 years) counsellor would be preferable.



By these definitions, the service providers (who range from age 34 to 71 years) are not of an acceptable age to the learners. According to Gilson (2007), continuity of care and time spent with the provider are important operational structures that determine a health service's acceptability for clients. As mentioned before, counselling sessions were of short duration and hurried, and learners did not always receive post-test counselling from the same counsellor who did pre-test counselling with them.

WHO (2012) recommended that the environment in which the health service is provided should be clean and appealing to young people. When visiting the HCT sites, the areas were clean, but no attempts were made by the service providers or school to make the environment appealing to young people, for instance, putting up posters, having flowers or plants on the table, playing music or offering incentives such as food (which was suggested in one of the FGDs). WHO (2012) also advised that in order to increase the likelihood that a service is found acceptable to young people, they should be involved in the designing, assessing and providing of the service. According to the project manager, he had not considered including learners in the provision of the service as he thought that they did not have time to be involved. School F, however, had taken the initiative to involve their peer counsellors to assist with the smooth running of the testing day, and they gave learners the opportunity to give feedback about the service, and they acted upon the feedback.

#### **5.4.4. Appropriateness**

At a WHO workshop on the appropriateness of health-care services, the participants suggested that in order for a service to be appropriate, it needs to provide care which is effective, care which is efficient and care which is consistent with the ethical preferences of the individual, community or society (WHO, 2000). In their document "Making health services adolescent friendly: developing national quality standards for adolescent friendly health services", WHO (2012) defined an appropriate service for young people as one which provides the required package of health care that fulfils the needs of all adolescents, either at the point of service or by referral to the necessary facility.

In this case, the "required package of health care" is HCT, which is a service (as discussed in Section 1.1.2) which has been advocated both internationally (UNAIDS, 1997) and locally (South African National AIDS Council, 2007) as an appropriate way of effectively preventing the transmission of HIV and gaining entry to treatment for HIV. Studies suggest that HCT for people who test HIV positive results in positive behaviour change (Weinhardt et al., 1999) and that HCT may provide a critical entry point for care and treatment for those who test positive (Janssen et al., 2001; Mshana et al., 2006; Nsigaye et al., 2009; Perbost et al., 2005; Sabin et al., 2004). Authors of other studies have also intimated that HCT is appropriate and consistent with the preferences of young people and that they want to know their HIV status (UNAIDS, 2001). Moreover, in the FGDs conducted in this study,

most of the learners said that they wanted HCT to be provided at school on condition that it is provided in a youth friendly manner.

#### 5.4.5. Effectiveness

In regard to YFHS, WHO (2012) recommended that in order to offer an effective health service to young people, health-care providers should have the required competencies to work with adolescents and to provide them with the required health services; that evidenced-based protocols and guidelines should be used to provide health services; that health-care providers should be able to dedicate sufficient time to deal effectively with their adolescent clients; and that the point-of-service delivery should have the required equipment, supplies, and basic services necessary to deliver the required health services.

In the literature reviewed, effectiveness is defined as the degree to which the objectives of a service are achieved (Long, 1985), given the correct provision of evidence-based health-care services (Bankauskaite & Dargent, 2007). Therefore, in order to determine whether a service is effective or not, one would need to know what the objectives of the service are. The NGO observed in this study aimed to decrease the spread of HIV (personal communication with NGO project manager, 2010) but had no specific written objectives. Thus, the international and national objectives of HCT (as discussed in the section on **Appropriateness** above), namely, to prevent transmission of HIV by changing the behaviour of those who test HIV positive and to create an entry point to treatment and care for those who test positive, will be used to discuss the effectiveness of the mobile school-based HCT service.

Firstly, in terms of changing the behaviour of those who tested positive, the counselling sessions that were observed in this study scored low, when using the UNAIDS Tool 4, a result similar to the findings of the Horizons study in Kenya (2001a), in which counselling was found not to fit the UNAIDS HCT recommendations for counselling. Also, when observing the counselling sessions of the mobile school-based HCT service, it became apparent that the UNAIDS tool was not practical for assessing the quality and content of counselling in this setting (where the ACTS model is used). The UNAIDS model of testing is aimed at counselling for behaviour change, whereas the ACTS model is aimed at identifying individuals who are HIV positive in as short a time as possible. The counselling sessions provided by the mobile school-based HCT service, which were observed in this study, lacked the element of discussing a specific prevention plan for each client. However, only post-test counselling sessions with HIV-negative clients were observed, so perhaps the counsellors *do* include the prevention plan when learners test positive.

Secondly, the service providers raised concerns that learners who tested positive were referred to a health facility for further care and treatment, but they were not followed up, so they were not sure whether these learners actually received the care that they needed. In fact, in the survey that was done for this study (see Chapter 6), few learners reported receiving ongoing care and treatment after testing positive. This finding is similar to the results of a study done by Denison et al. (2006), in which they found that learning their positive status was not linked with young people being given care and support in Zambia.

The other criteria for an effective health service, as described by the WHO (2012), namely, that service providers should be competent to work with adolescents; that service providers should spend enough time with the client to deal effectively with her/his problem; and that the service should have the equipment and supplies needed to deliver the service are not met by the mobile school-based HCT service. The service providers have minimal experience of working with young people and have not received any training in dealing with young clients. The criteria of *adequate time spent with clients* and *sufficient resources* have been discussed in a previous section.

## 5.5. Limitations

A limitation of this part of the study is that the evaluation was done by a single individual and not a team, which may have resulted in interviewer/observer bias. However, the findings across the three methods of data collection (observation of HCT site, interviews of service providers and direct observation of HCT counselling sessions) corroborated each other and no inconsistencies were noted. Another limitation is the limited amount of time I spent doing the observations.

## 5.6. Conclusions

Providing HCT in the school setting may make HCT more accessible for school-going young people, but needs to be provided in an equitable, acceptable and effective way. Based on the findings of this evaluation, service providers should receive training (and then be monitored and supported) to work with young people, which should include the special needs of marginalised groups. The model of 'mass testing' described in this study is not acceptable for young people and does not fulfil their expressed need for privacy with regard to HCT. Mechanisms need to be developed to ensure that learners are able to test without being seen, and this should apply to all schools, irrespective of the resources available to them. Systems that ensure that learners who test positive are given access to the necessary care and support need to be in place. If the emphasis of school-based HCT is on increasing the number of learners who consent to being tested in order to identify learners who are positive (as opposed to counselling focused on changing risky behaviour), then learners need to be given

another space to discuss issues that would normally be addressed in post-test counselling, such as discussing prevention plans.

Future studies are needed to evaluate the impact of school-based HCT on behaviour change in learners, as well as to explore why learners who test positive do not receive the care that they need. Other school-based HCT services need to be evaluated to identify best practices and to develop a model for providing youth friendly HCT in the school setting.

## **5.7. Summary**

In this chapter, the research question “Is the mobile school-based HCT service youth friendly?” was answered. The method of data collection was described in depth and how the data was analysed was explained. The strategies employed to ensure data quality were described, and the ethical considerations were presented. The findings were discussed in relation to the literature and the limitations acknowledged. The last part of the study – the learner survey – will be presented in the next chapter.



## **6. CHAPTER SIX: HCT: LEARNER UPTAKE AND TESTING EXPERIENCES**

### **6.1. Introduction**

The last part of the study – the learner survey – is presented in this chapter. The following research questions are answered: (1) What are the factors that influence learners' uptake of HCT? (2) What are the testing behaviours and testing experiences of learners who have tested? (3) What care and treatment have learners who tested HIV positive accessed? The method of data collection is described in detail and then the findings are presented and discussed. The chapter closes with a discussion of the limitations of this part of the study.

### **6.2. Research objectives**

The objectives 3-6, which will be met in this chapter, are as follows:

3. To determine the factors that influence uptake of HCT in learners.
4. To describe the testing behaviour of those learners who have been tested.
5. To describe the experiences, during testing, of those tested.
6. To describe the care and treatment that HIV-positive learners have received.

### **6.3. Methodology**

#### **6.3.1. Research design**

This part of the study is the quantitative component of the mixed-methods design used in this research. This was explained in detail in Chapter 3.

#### **6.3.2. Study population**

Four of the six schools that had participated in the FGD part of the study also took part in the survey. Of the two schools that did not, one school (School E) declined as they did not want any further interruption of class time, and the second school (School A) was excluded as they had never had HCT at the school. The study population included Grades 8 to 11 learners, irrespective of whether they had been tested or not.

### 6.3.3. Sample

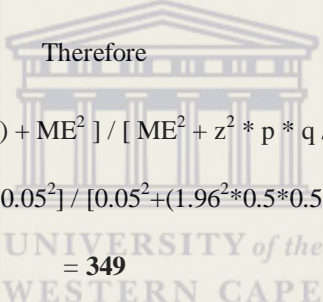
The total sample size was calculated using the following equation (Fowler, Jarvis, & Chevannes, 2002).

$$n = [ ( z^2 * p * q ) + ME^2 ] / [ ME^2 + z^2 * p * q / N ]$$

where

n: is the sample size  
z: is the level of confidence, which is chosen for the purpose of the study to be 95% and z= 1.96  
p: is the proportion of the main variable of the study, taken as 0.5  
q: is 1-p, taken in the study as 0.5  
ME: is the accepted margin of error; here it is 0.05  
N: is population size is 3723 (Total no. of learners in Gr8-11 in the 4 schools)

Therefore

$$n = [ ( z^2 * p * q ) + ME^2 ] / [ ME^2 + z^2 * p * q / N ]$$
$$= [(1.96^2 * 0.5 * 0.5) + 0.05^2] / [0.05^2 + (1.96^2 * 0.5 * 0.5) / 3723]$$
$$= \mathbf{349}$$


The learner sample size from each of the four sampled schools was *proportional* to the number of learners in the school; that is, as the total population size of the four schools was 3723, the sample size (using calculation above) needed to be 349. School F had 974 learners in Grades 8-11, so the sample size from school F had to be 26% (974/3723) of 349, which was equal to 95. On the assumption that 50% of learners would agree to take part in the study, the sample size was doubled, to equal 190 learners.

See Table 6.1 for sample size required for each school.

**Table 6.1: Sample size required from each school**

School	Total no. of learners in Gr 8-11	% of sample size	No. of learners required in sample	X2
School B	764	21	74	148
School C	1074	29	104	208
School D	911	24	89	178
School F	974	26	95	190
	3723	100	362	724

The class was used as the cluster in the survey. The sampling frame was the list of all classes in each sample school (from Grades 8-11). Then, assuming that classes within schools are of approximately equal size, random sampling with equal probability (Fowler et al., 2002) was used to select a sample of classes from across the grades. For example, in School C, the sample size needed was 180 learners. In School C, the average number of learners per class was 45; therefore, four classes, one from each grade (Grades 8 to 11), were randomly sampled, using Stat Trek (2012) (See Table 6.2).

This method of random sampling was not used for School F, as they only allowed some classes to take part in the survey. Consequently, classes that were convenient (causing minimal interruption to curriculum time) were included. The LO teacher therefore selected one class from each grade (Grades 8-11) that was ahead in its LO work to take part.

All learners who returned consent forms in each sampled class were included in the sample.

**Table 6.2: Classes randomly selected for main study**

SCHOOL	Class	8C	9C	10D	11D	11B <sup>a</sup>	Total	
<b>B</b>	No. of learners	51	45	43	22	39	200	
SCHOOL	Class	8B	9C	10A	11A		Total	
<b>C</b>	No. of learners	48	47	48	45		188	
SCHOOL	Class	8E3	9E2	9A2 <sup>b</sup>	10E2	11E3		Total
<b>D</b>	No. of learners	44	32	44	48	40		213
SCHOOL	Class	8AU	9JB	10AU	11SP	11JL	Total	
<b>F</b>	No. of learners	32	31	34	30	28	155	

*a* Two classes were selected from Grade 11 because of the small Grade 11 class sizes.

*b* The second Grade 9 class was randomly selected because the total number of learners, selected after one class had been selected from each grade, was less than the required sample size. A second Grade 9 class was chosen as the first class selected from this grade had the fewest number of learners (32).

#### **6.3.4. Research ethics**

Learners of 18 years of age and above were asked to sign an informed consent (see Appendix IV) in which they confirmed that their participation in the study was voluntary. Those under 18 years gave written assent, and written consent (see Appendix V) was obtained from their parent or guardian as well. An explanation of the study was provided to the learners, parents/guardians and the LO teacher and principal at the schools – orally (to all except the parents/guardians) and written (to all) in the form of a Participant Information Sheet (see Appendix XVII) in the language of the participants and understandable by a lay person. Participants were informed that their identities would remain confidential and that they might withdraw at any stage without prejudice.

#### **6.3.5. Instrument**

The socio-demographic and testing and counselling modules of the Client Instrument of WHO's generic tools for operational research (Obermeyer et al., 2009) were amended to suit the school-based HCT setting and youth (See Appendix XVIII). Questions and responses related to marriage and work were removed, as well as questions about returning for test results (the NGO going to these schools uses rapid HIV tests so results are available 15 minutes after blood is taken and are given on the same day).

The questionnaire consisted of four parts: (1) socio-demographic data such as gender, age, grade, family situation and socio-economic status and test status, (2) questions for learners who had been tested, exploring their testing experience and motivations for consenting to testing, (3) questions for learners who have tested positive, exploring their experiences under testing and management since diagnosis, and (4) questions for learners who had not been tested (non-testers), exploring their reasons for not testing.

#### ***Translation of the instrument***

The questionnaires were translated into Afrikaans and Xhosa.

##### **English to Xhosa translation**

The English to Xhosa translation was done by a researcher who was recommended by a colleague who had previously employed him to translate a questionnaire from English to Xhosa. It was then translated back into English by an independent translator. After the back-translator finished her translation, she reviewed the initial translation, discussed the problematic items with the translator, and they reached a consensus on the back-translated questionnaire.



After the back-translation, I compared each item of the back-translated English version and the source version of the questionnaire to “detect any errors that might make differences in the meaning people would infer” (Brislin, 1970, p. 197). I then discussed discrepancies with the initial translator and the necessary modifications were made. For example, the question “Before your blood/mouth sample was taken for testing, did a health-care worker or counsellor explain that the test does not always detect a very recent HIV infection (this is sometimes called a window period)?” was back-translated from the Xhosa translation to read “Before your blood/saliva from your mouth was taken, did the counsellor explain to you that the test does not show true results when a person has just acquired HIV (this is called the window period).” This sentence did not accurately reflect the meaning of the original sentence, so this was discussed with the initial translator, who reworded the sentence to obtain equivalence in meaning to the source version. In another instance, the Xhosa to English back-translation had the word “testing station” instead of “facility” (as in “health facility”). When querying this, the initial translator explained that there is no word for “facility” in Xhosa, and therefore he had translated it into “place where one is tested”, and the back-translator had in turn translated this into “testing station”. We decided to keep the Xhosa phrase for “place where one is tested” as the equivalent for “facility”. Some items were simply retranslated from the original source version because the translators had made errors in translation.

Finally, I asked the Xhosa focus group facilitator, who had experience conducting support groups with HIV-positive young people, to check the translation. She made a few spelling and grammatical changes, which did not change the meaning of the statements, and suggested that the term “*Gawulayo*” (which means, “the One who chops down” in Xhosa) be replaced with *i-HIV* as this was the term used by young people for HIV.

### **English to Afrikaans translation**

The English to Afrikaans translation was done by a translator who had translated a similar questionnaire previously, once again recommended by a colleague. I then checked the translated version for discrepancies in meaning (Afrikaans is my second language) and corrected them where necessary. A third person (who is an Afrikaans first-language speaker) was then asked to check the translation for grammatical and spelling errors and to correct any discrepancies in meaning. This person was one of the fieldworkers who was familiar with the study and who had done back-translations of a similar questionnaire previously.

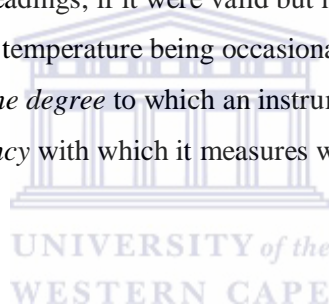
## ***Layout***

A graphic designer was asked to do the layout and to include diagrams to make the questionnaire more fun and youth friendly.

## ***Reliability and validity of the instrument***

In order to have confidence in the results of a survey, one needs to know that the questionnaire used in the study is both valid and reliable (Del Greco, Walop, & McCarthy, 1987). Because I amended the WHO questionnaire to make it more youth friendly, the validity and reliability of the instrument needed to be determined.

Del Greco et al. (1987) used the thermometer as an illustration of what is meant by *validity* and *reliability*. A thermometer is meant to give the correct temperature in order for it to be valid, and must repeatedly give the same reading to be reliable. “If the thermometer were reliable but not valid it would give consistently inaccurate readings; if it were valid but not reliable it would indicate different temperatures at each use, the correct temperature being occasionally indicated” (Del Greco et al., 1987, p. 699). Validity is therefore *the degree* to which an instrument measures what it is supposed to measure, and reliability *the consistency* with which it measures what it is supposed to measure (Del Greco et al., 1987).



### **Determining reliability**

A test-retest study was done to determine reliability of the questionnaire. Cohen (1960, p. 18) described the test-retest reliability as “a measurement of agreement or concordance between the two administrations beyond that which would be expected by chance”, that is, the likelihood that the questionnaire will produce the same data if it is administered to the same group of people on two separate occasions. According to Knapp and Mueller (2010), a limitation of this method is that if the interval between administrations is too short, the results may be confounded because the subject responds from memory, and if the interval is too long, then changes in the respondents or in the factors they are being questioned about may occur during the interval between measurements. They explained that there is no correct time interval between the two administrations and that the amount of time depends on the situation. Knapp and Mueller suggested that researchers should defend their reason for choosing a specific time interval. In this case, the time between the test and retest was one week, as this was considered long enough to avoid confounding due to memory and short enough for changes in the respondents, related to HCT, to be minimal.

I used an online random number generator (Stat Trek, 2012) to randomly select one class per grade (Grades 8 to 11) at each of the four schools to take part in the test-retest study. All learners in the selected classes who agreed to participate were included in the study. Classes that had been already selected for the main study were excluded.

Six fieldworkers with experience of doing research with young people were trained to administer the questionnaire at each of the four schools. The fieldworkers were divided into two teams of three (a team leader and two team members). One team, fluent in Xhosa, collected data at the two schools at which Xhosa was the home language of the learners, while the other team, fluent in English and Afrikaans, worked at the schools where English and Afrikaans were the home languages of the learners. The fieldworkers followed a standard operating procedure (see Appendix XIX) developed by the researcher. The questionnaire was administered to each selected class twice in two weeks, one week apart. A total of 269 learners took part in the test-retest study.

Cohen's Kappa,  $k$  (Cohen, 1960) was used to measure similarities in outcomes between the test and retest, where *zero* indicates no better agreement than could be expected by chance alone, and *one* refers to perfect agreement. The Altman (1991) grading scale for  $k$  was used (Landis & Koch, 1977):  $k < 0.2$  indicates poor agreement;  $k = 0.21-0.40$  indicates a fair agreement;  $k = 0.41-0.60$  indicates a moderate agreement;  $k = 0.61-0.80$  indicates a good agreement; and  $k$  between 0.81 and 1.00 indicates a very good agreement.

The overall kappa scores of the test-retest study ranged from 0.24 to 1.0. The question about whether learners had been tested or not, had a very good agreement ( $k=0.83$ ). Questions about reasons for being testing and experiences of testing had mainly moderate agreement (69.2% of questions had scores between 0.41 and 0.60), whilst questions answered by learners who said they were HIV positive or that they had not been tested had only fair agreement (100% of questions in these sections had scores between 0.24 and 0.37).

Cronbach's alpha is a measure of internal consistency, i.e. how closely related a set of items are as a group (Cronbach, 1951). Cronbach's alpha statistic was not calculated as the questionnaire did not have a set of questions that related to an underlying construct.

### **Determining the validity of the instrument**

Del Greco et al. (1987) identified four types of validity that are important in questionnaire development: content validity, where the questionnaire adequately covers the subject being studied; face validity, where the questionnaire layout is well-constructed; criterion validity, where the

questionnaire measures what it is supposed to measure; and construct validity, where the questionnaire conforms to existing ideas concerning the subject being studied.

Because this questionnaire was an amendment of an internationally used questionnaire, and the amendments were minor, it was not necessary to check content, criterion and construct validity. I did however check face validity by getting feedback from learners who had completed the test-retest questionnaire. At the end of each retest data collection session, the class was asked verbally for comments and suggestions to improve the questionnaire. They were asked to describe what they liked and did not like about the questionnaire, what they thought of the layout, the answer options and the content and clarity of the questions

Learners said that they liked the layout and graphics of the questionnaire, because it made answering the questions fun and easier to understand.

*It wasn't just plain and boring. It explained what it's [the questions] all about.*

They complained that the questionnaire was too long and had too many repetitive questions (the questions about one's first and most recent HIV test were the same). The Xhosa- and Afrikaans-speaking learners felt some of the questions would be easier to understand if they had been in English, because in their spoken language, they often used English terms when they were speaking in their home language. Some learners also did not understand that they were meant to skip questions that did not apply to them, and so answered all the questions.

### **Improving the validity and reliability of the instrument**

One of the reasons for the moderate reliability was the large number of non-responses to the questions due to the physical layout of the questionnaire. The questionnaire was designed with "skip" instructions (e.g., if the answer is 'yes', go to B6) with sections that were to be completed only by learners who had been tested, sections for learners who had not chosen to be tested, and sections for learners who had tested positive. This skip pattern resulted in many errors of omission (i.e., when the learner was instructed to answer the next question, but instead skipped it (Gendall & Ramsay, 2001)), and errors of commission (i.e., when the learner was instructed to skip past the next question, but instead answered it (Gendall & Ramsay, 2001)).

To try to improve the responses to questions, skip instructions were removed, as it has been shown that this produces the lowest error rates (Gendall & Ramsay, 2001). The questionnaire was modified so that all learners had to answer all questions. Where they would normally be instructed to skip past a question, they were given the option of 'not applicable' responses. For example, to the question "Where were you tested?" a learner who had not been tested and who would have skipped the

question, instead could choose option (1) from the responses: (1) I have not tested for HIV, (2) at a clinic, (3) at school, (4) at home, or (5) other. The questionnaire was also shortened by removing the questions about the learner's first HIV test, and only including questions on their most recent test.

Based on the feedback from the learners and fieldworkers, further amendments to the layout were made to the questionnaire. The English translation of the Xhosa questions and responses were included in the same questionnaire, as had been done with the English/Afrikaans questionnaire. As recommended by Dillman (2007), I used different shading for the different languages and put questions and responses into boxes to make the response task easier.

### **6.3.6. Pilot study**

A pilot study was combined with the reliability study, so while the test-retest was taking place, I also measured how long it would take to complete the questionnaire and checked for any other problems in the data collection procedure.

Problems in data collection during the pilot study included (1) some learners handed in their consent forms on the day of data collection, which delayed the starting time; (2) fieldworkers did not explain the skip instructions in the questionnaire so learners thought they had to complete all questions or completed the wrong questions; and (3) fieldworkers handed out juice and oat cookies to learners as soon as they had completed the questionnaire, so learners who were still busy rushed to finish or did not complete the questionnaire. Therefore, during the main study, the team leader ensured that all consent forms had been returned before the day of data collection; the skip instructions were removed so that all learners had to answer all the questions, as indicated in Section 6.3.5 (the fieldworkers stressed this when they handed out the questionnaires); and the refreshments were only handed out once all learners had handed in their questionnaires.

### **6.3.7. Data collection**

Data collection of the main study was done by the same fieldworkers who had done the pilot study.

#### ***Preparation for data collection***

I contacted and visited each school to explain the study to the principal and the LO teacher, and to obtain their consent to take part in the study. Once they had consented, the team leader of the fieldworker teams visited each school to

- (a) set up dates, times and venue for the main study
- (b) collect class lists of the sampled classes

(c) set up times to hand out consent forms and explain the study to the learners

(d) set up times to have all consent forms collected.

A week before the main study was to take place, the team leader met with the learners, class by class, to

(a) explain the study to them (see Appendix XX - What to tell learners)

(b) hand out consent forms and information letters for parents/guardians

(c) inform them about the data collection process.

Two days before data collection, the team leader confirmed the planning for the day of data collection (dates, times, venue) with the LO teacher. The day before data collection, the team leader purchased the refreshments (juice and oat bar) for the learners, and collected numbered questionnaires from me. Each learner had been given an identification number, using the class lists obtained from the school, and this number was written on her/his questionnaire.

### ***Day of data collection***

Before heading to the school, the team leader made sure that the copies of the questionnaires, the class lists, the support services pamphlet (see Appendix XXI), the data collection forms (see Appendix XXII), the necessary stationery and the refreshments for learners were in boxes, ready to be taken to the school. The team made sure they arrived on time at the venue, as previously agreed upon. On arrival at the school, the team leader was taken by the LO teacher to the venue to identify the learners who had returned consent forms, and to check who was absent, who had declined, who had forgotten the consent form, and so on, which she marked on the class list. At some of the schools, the learners who had returned consent forms were separated from those who had not, but remained in the same class to complete the survey. Those who were not taking part in the survey were given work to do by the LO teacher to keep them busy. At other schools, those who had returned consent forms were taken to another venue to complete the survey.

The consent forms were then collected and the questionnaire handed out. Before learners started, the team leader reminded them about the objectives of the questionnaire and the confidentiality (see Appendix XX – What to tell learners). She also explained to them how to fill in the questionnaire, and asked them to wait in the venue until all learners had completed the questionnaire.

Whilst learners were completing the questionnaire, the fieldworkers were available to answer any questions. They also ensured that learners were not disturbing each other or discussing the questionnaire. During this time, the team leader completed the data collection form.

After completing the questionnaire, learners were asked to place the completed questionnaires in the drop-in box placed in front of the room. They were then asked to wait quietly while others completed the questionnaire. Once all learners had put their questionnaires in the drop-in box, they were given the refreshments and a support services pamphlet. The team leader thanked them for their participation, and dismissed them to their teacher, or to break, or to home (depending on the time of data collection). The team leader stayed behind for a while in case learners wanted to talk with her. The box with the completed questionnaires and the data collection report was then delivered to me.

### **6.3.8. Data analysis**

Data were captured on a spreadsheet, using Microsoft Office Excel, and imported into SPSS 20 and RStudio 0.96.316 for data analysis. Descriptive statistics were used to describe the sample. Frequencies and percentages were calculated for categorical data, while means, standard deviations (SD) and ranges were determined for continuous variables. Specifically, the fraction of learners that had ever been tested for HIV, the HIV prevalence in previously tested learners, and the relative frequencies of reasons for having tested or not having tested were calculated.

Next, simple logistic regression models were fitted to the data, to identify covariates of the reasons for having tested, the reasons why it was hard to test and the reasons for not having tested (i.e. the factors influencing the uptake of HCT were the dependent variables). Candidate covariates (independent variables) under investigation included age, grade, sex, race and school. Lastly, simple and multiple logistic regression models were applied to investigate associations between uptake of HIV testing, the above-mentioned candidate covariates, as well as indicators of socio-economic background. Socio-economic background was operationalised using the following indicators: the main building material of the walls of the learner's home, the frequency of experiencing problems with obtaining food, having a tap inside the home, and having a toilet inside the home.

### **6.3.9. Strategies to improve the quality of the research**

The strategies employed to ensure reliability and validity of the data collection instrument were described in Section 6.3.5 above. The steps taken during the development, translation and administration of the questionnaire in order to address issues of validity and reliability were also discussed in Section 6.3.5.

## 6.4. Findings

A total of 560 learners took part in the survey. Table 6.3 shows the response rate and number of study participants.

**Table 6.3: Response rate and number of study participants per school**

School	No. of consent forms handed out	No. of learners who took part in survey	Response rate	No. of learners included in the data analysis
B	195	150	76.9	140 (26.5%)
C	189	181	95.8	167 (31.6%)
D	203	107	52.7	103 (19.5%)
F	155	122	78.7	119 (22.5%)

The low response in school D may have been due to a number of reasons as suggested by Korkeila et al. (2001): learners may have felt that taking part in the survey would offer them no personal benefit; they may have had no interest in the topic; they may have lacked confidence in being able to do the survey; they may have forgotten to get their parents to sign the consent forms or they may have been concerned that their parents would assume that they were taking part in the survey because they had been tested and therefore were sexually active. Another reason for the poor response rate may have been the method of recruiting them. Fan and Yan (2010) stresses the importance of how respondents are invited to take part in the survey; the information given at initial contact and the value of providing reminders of the upcoming survey. In this study the initial contact with learners was made by the team leader (which was the same at each school) and reminders to return consent forms were done by the LO teacher. It may be that in School D the LO teacher did not remind the learners (at all or often enough) to return consent forms.

Despite amendments made to the questionnaire to reduce response errors and omissions, 31 questionnaires had to be discarded because responses were inconsistent: some questions were answered as if the learner had been tested, others as if he/she had not been tested. Of the 529 learners remaining, 140 (26.5%) came from School B, 167 (31.6%) from School C, 103 (19.5%) from School D, and 119 (22.5%) from School F.

Because a cluster design was used in this study, the design effect i.e. the loss of statistical efficiency because a cluster sample and not a random sample was used, needs to be taken into account (Killip, Mahfoud & Pearce, 2004). The learners in the same cluster (in this case the class) may have similarities that can reduce the variability of responses compared to those expected from a simple random sample. The intra-cluster correlation ( $\rho$ ) is a measure of how strongly the responses in the same cluster resemble each other (Killip et al., 2004). In this study  $\rho$  is 0.0038 (where if  $\rho = 1$ , all



responses within a cluster are identical, and if  $\rho = 0$ , there is no correlation of responses within a cluster). This was calculated using the following equation (Killip et al., 2004):

$$\rho = \text{DEFF}-1/(m-1)$$

Where DEFF is the design effect of 1.5 i.e. 529/349 (the sample size that was needed if a random sample was used); and m is the average cluster sample size of 132.

#### 6.4.1. Demographics

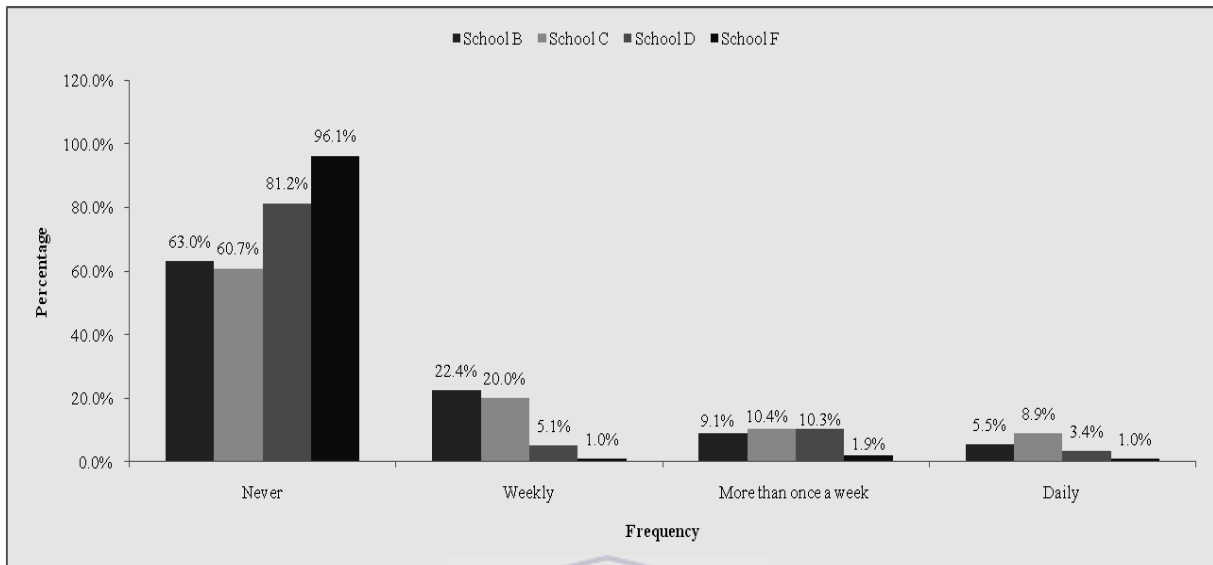
Table 6.4 presents the demographics of the study participants. Learners' ages ranged from 13 to 21 years, with a mean age of 16.2 and an SD of 1.6. More than half (59.9%) of the learners were female. There were approximately equal proportions of learners from each grade (Grades 8-11). Nearly two thirds (57.5%) of the learners identified as Black and 64.3% of learners identified as Christian.

**Table 6.4: Demographics of survey participants (n=529)**

	n	%
Age:		
13	17	3.2
14	71	13.4
15	87	16.4
16	131	24.8
17	115	21.7
18	64	12.1
19	28	5.3
20	11	2.1
21	5	0.9
Sex:		
Female	317	59.9
Male	212	40.1
Grade:		
8	122	23.1
9	123	23.3
10	140	26.5
11	144	27.2
Racial group:		
Black	304	57.5
White	29	5.5
Indian	6	1.1
Coloured	177	33.5
Other	4	0.8
Missing data	9	1.7
Religion:		
Christian	340	64.3
Muslim	77	14.6
Hindu	3	0.6
African traditional	82	15.5
Not religious	16	3.0
Missing data	11	2.1

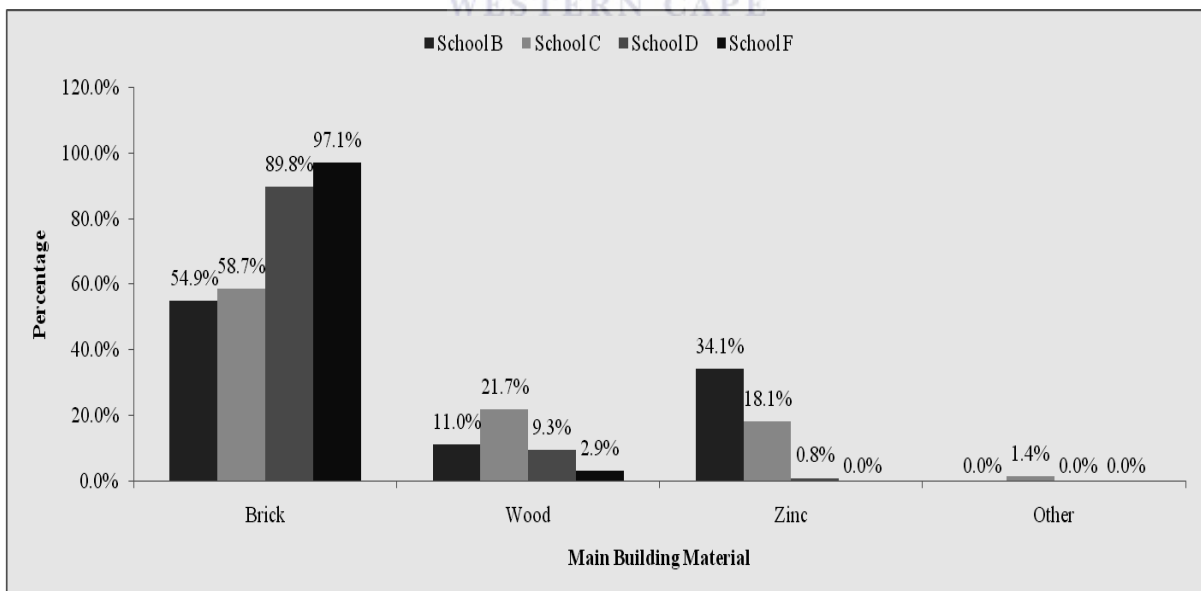
### 6.4.2. Socio-economic background of study participants

Figures 6.1- 6.11 illustrate the differences in the socio-economic backgrounds from which the learners come.



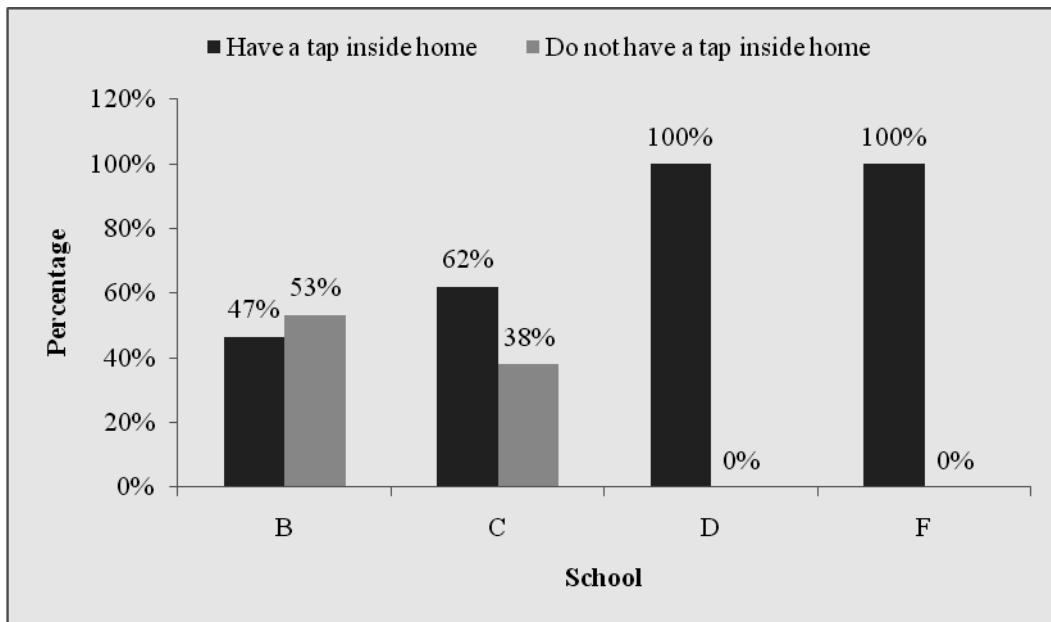
**Figure 6.1: How often learners have had problems obtaining the food they needed in the last month**

More learners who attend Quintile 2 and 3 schools (Schools B and C) have problems obtaining the food they need.



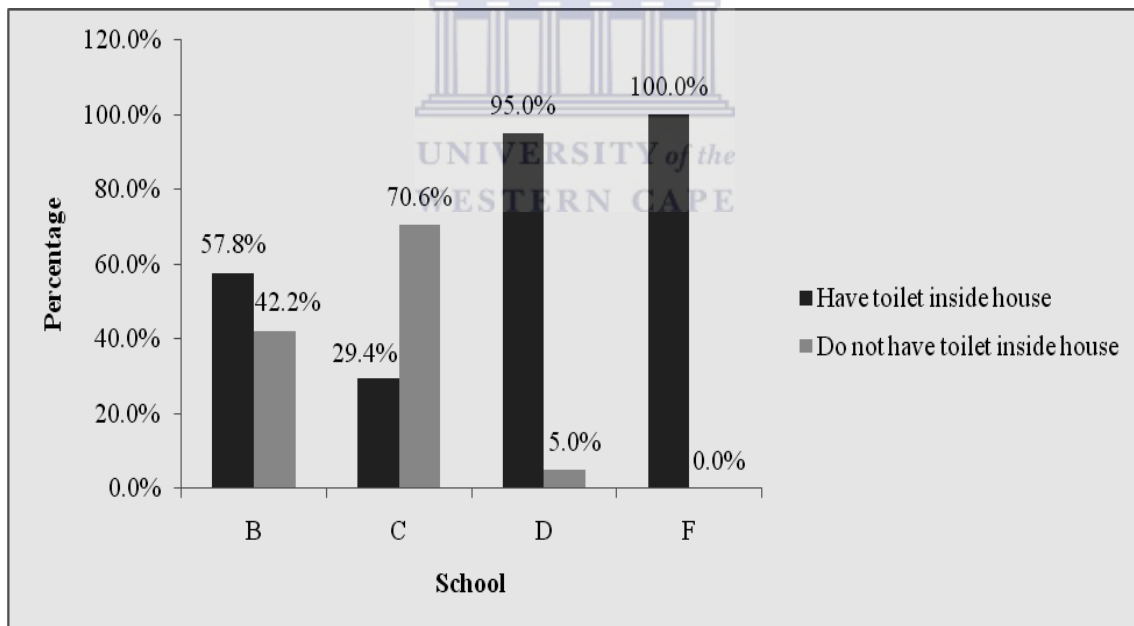
**Figure 6.2 Main building materials of walls of learners' homes**

More learners that attend Quintile 2 and 3 schools live in shacks (made from zinc and wood).



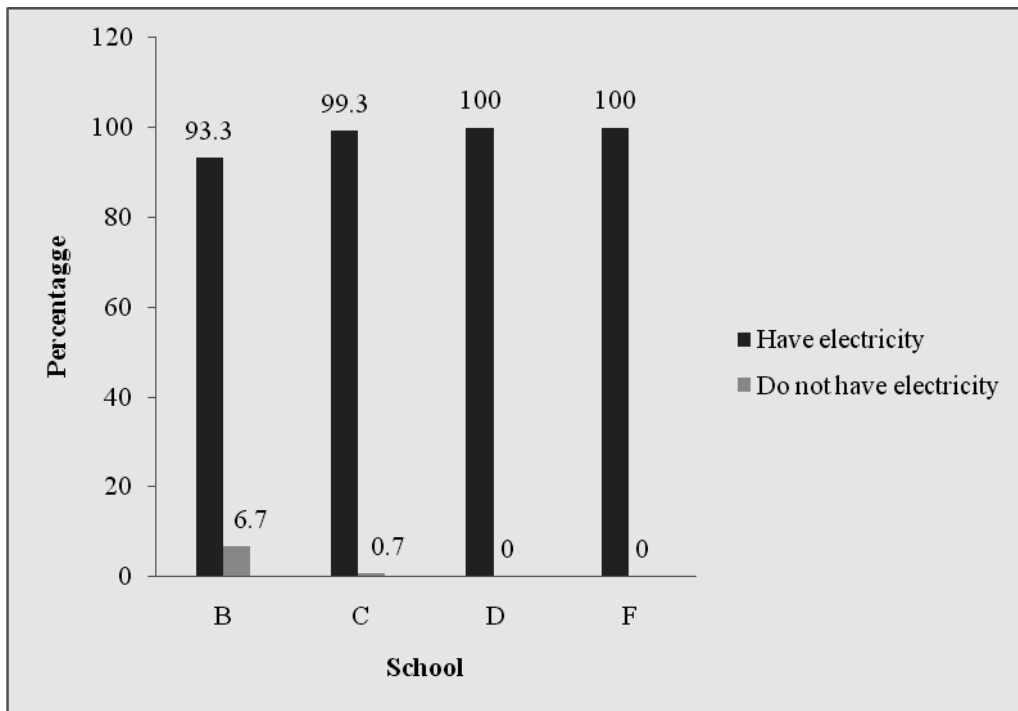
**Figure 6.3: Percentage of learners who have a tap inside their home**

Learners who do not have a tap inside their home, attend either a Quintile 2 or 3 school.



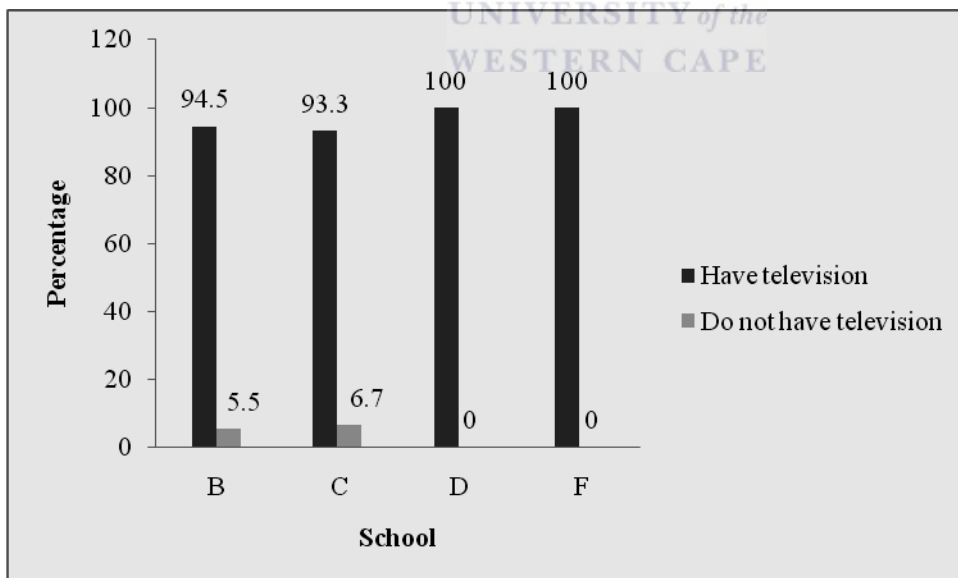
**Figure 6.4: Percentage of learners that have a toilet inside their home**

More learners who do not have a toilet inside their home attend either a Quintile 2 or 3 school.



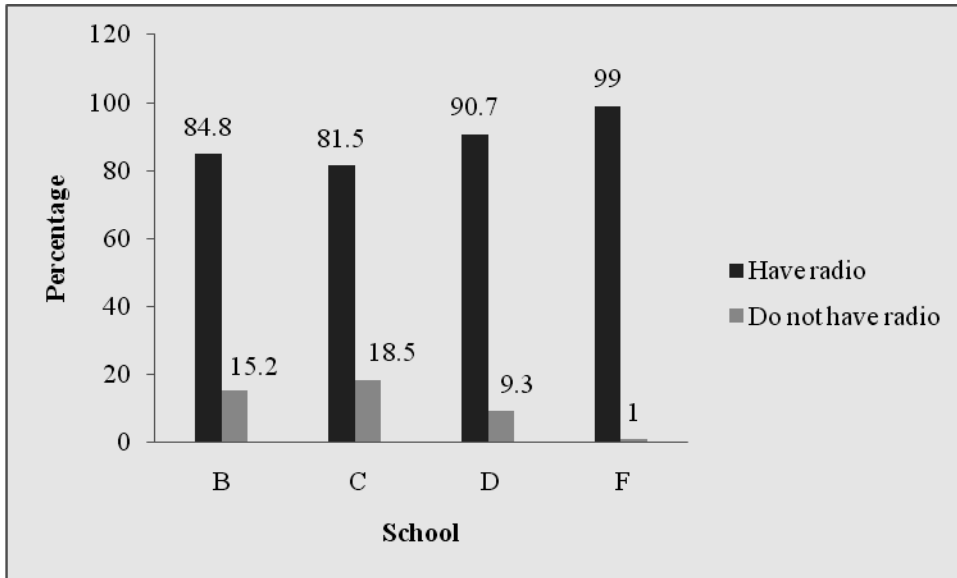
**Figure 6.5: Percentage of learners that have electricity inside their home**

The majority of learners have electricity, but learners who do not have electricity all attend either a Quintile 2 or 3 school.



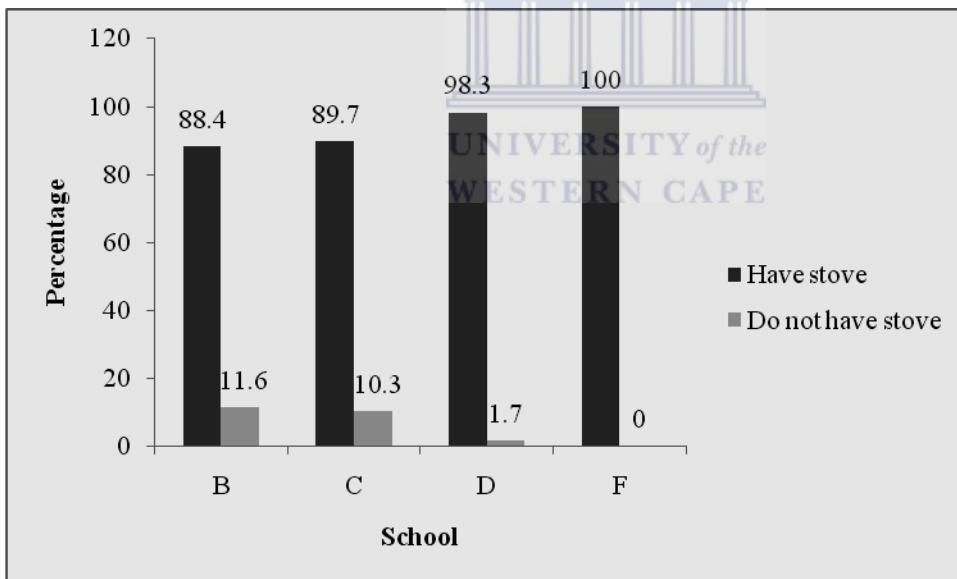
**Figure 6.6: Percentage of learners that have a television at home**

The majority of learners have a television at home, but learners who do not have a television all attend either a Quintile 2 or 3 school.



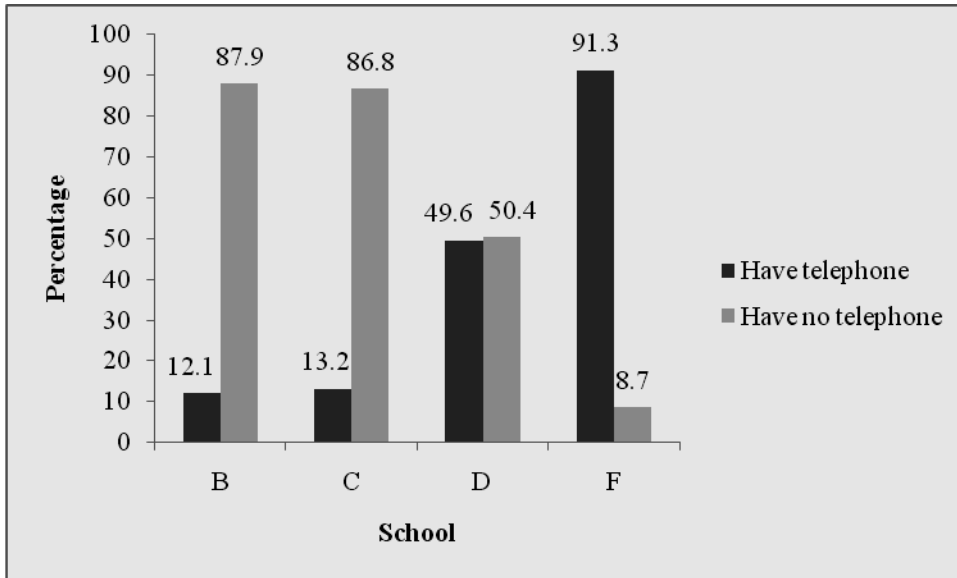
**Figure 6.7: Percentage of learners that have a radio at home**

The majority of learners have a radio at home, but having a radio at home is more common in learners who attend a Quintile 2 or 3 school.



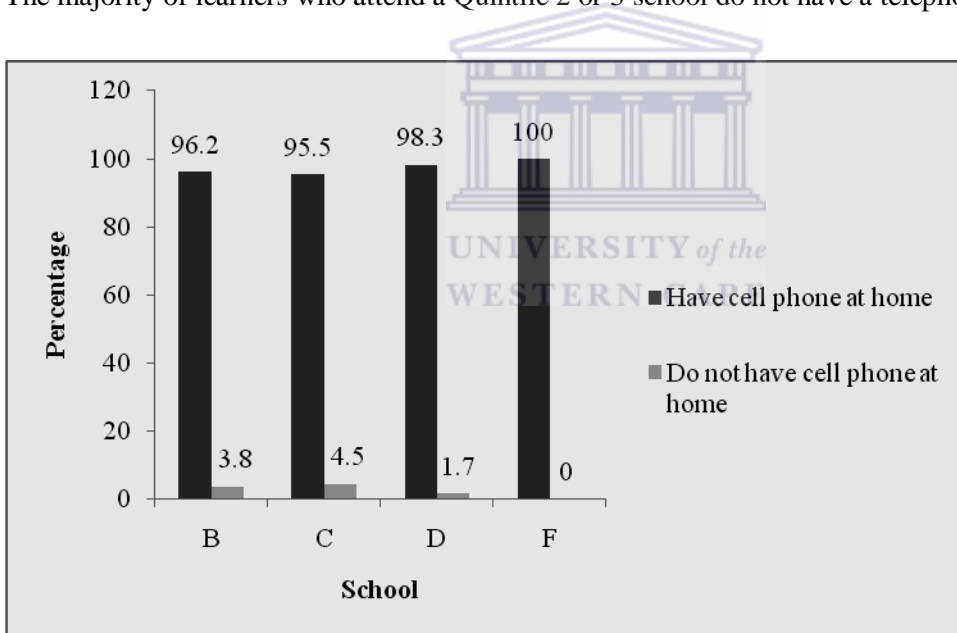
**Figure 6.8: Percentage of learners that have a stove at home**

The majority of learners have a stove at home, but not having a stove is more common in learners who attend a Quintile 2 or 3 school.



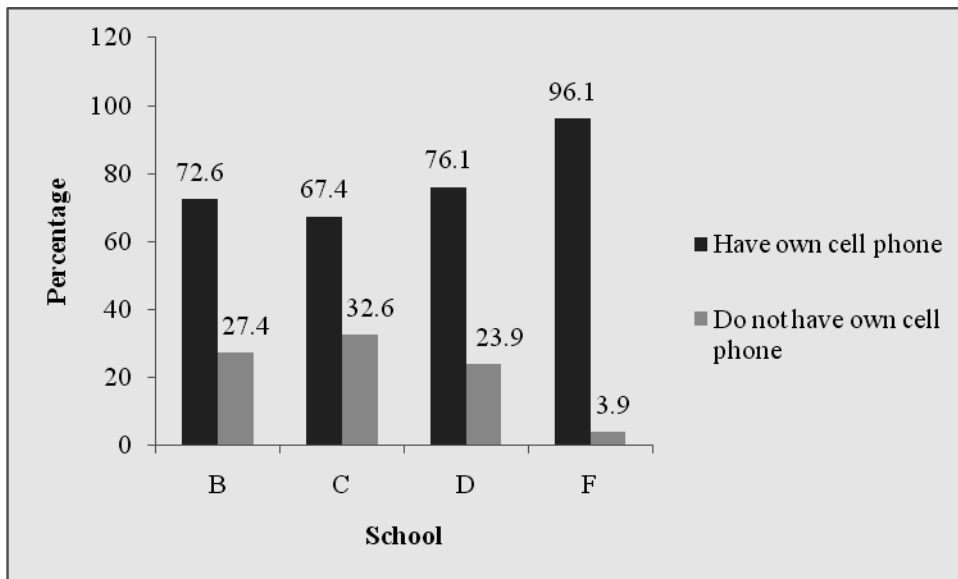
**Figure 6.9: Percentage of learners that have a telephone at home**

The majority of learners who attend a Quintile 2 or 3 school do not have a telephone at home.



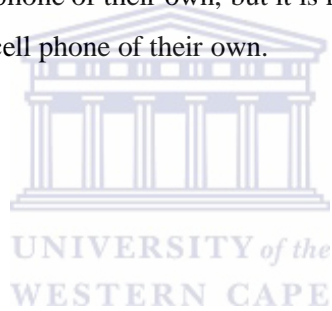
**Figure 6.10: Percentage of learners that have a cell phone at home**

The majority of learners have a cell phone at home, but not having a cell phone at home is more common in learners attending a Quintile 2 or 3 school.



**Figure 6.11: Percentage of learners that have a cell phone of their own**

The majority of learners have a cell phone of their own, but it is more common for learners from a Quintile 2 or 3 school not to have a cell phone of their own.



### 6.4.3. Learners who tested

*Objective: To determine the uptake of HCT in learners.*

A total of 376 (71%) learners reported having had an HIV test (testers). The proportion of testers per demographic variable is presented in Table 6.5.

**Table 6.5: Socio-demographics of learners who tested (n=376)**

	n	%
Age:		
13	8	47.1
14	38	53.5
15	60	69.0
16	88	67.2
17	100	87.0
18	49	76.6
19	21	75.0
20	9	81.8
21	3	60.0
Sex:		
Female	242	76.3
Male	134	63.2
Grade:		
8	59	48.4
9	90	73.2
10	112	80.0
11	115	79.9
Racial group:		
Black	178	58.6
White	25	86.2
Indian	3	50.0
Coloured	162	91.5
Other	2	58.6
School:		
B	90	53.9
C	90	64.3
D	108	90.8
F	88	85.4
Religion:		
Christian	239	70.3
Muslim	68	88.3
Hindu	2	66.7
African traditional	47	57.3
Not religious	12	75.0

The ages of learners who had been tested ranged from 13 to 21 years, with a mean age of 16.4 and an SD of 1.57. The total percentage of females in the sample who had been tested was 76.3%, compared to 63.2% of males. Learners who identified as Coloured had the highest percentage (91.5%) of HCT uptake compared to the other racial groups. School B had the lowest percentage (53.9%) of learners in the sample who reported having been tested. Muslim learners had the highest percentage (88.3%) of learners in the sample who had been tested.



***Objective: To investigate which socio-demographic variables, are predictors of HCT uptake in learners.***

Simple and multiple logistic regression models were applied to investigate associations between uptake of HIV testing and the candidate covariates (age, grade, sex, race and school), as well as indicators of socio-economic background. Table 6.4 shows the odds ratios (OR)/adjusted odds ratios (AOR) and 95% confidence intervals (CI) obtained after regression models were applied for HIV testing. ORs were calculated rather than chi-square, as the latter answers the question whether the uptake of HIV testing was different across variables (chi-square does not give an indication of how big the difference is, or between which variables the difference is), whereas the OR answers the question whether the odds of uptake of HIV is higher or lower across variables (OR gives an indication between which variables and by how much). Confidence intervals (CIs) were given rather than *p* values, as CIs give more information than *p* values: they give an indication of the precision with which the statistic (e.g. OR) was calculated and allow comparison of the statistic under the null hypothesis with the observed statistic and its surrounding CI.

After simple logistic regression, the results indicated that the odds of having had an HIV test is higher in older learners (OR 1.29, CI 1.14 - 1.46) i.e. with each year that a learner is older than the baseline (0 years), the odds of having had an HIV test increases by 29% on average, over the entire age spectrum. The odds of a female learner having had an HIV test is 1.88 times higher than a male learner. The odds of a learner who identifies as Coloured having had an HIV test is 7.64 times higher than a learner who identifies as Black, and 2.36 times higher for a learner who identifies as Indian, White or other. The odds of a learner from School C, F and D having had an HIV test is 1.54, 5.02 and 8.40 times higher than in School B. The odds of a Muslim learner having had an HIV test is 3.19 times higher than a Christian learner, whereas the odds of Hindu and African traditional learners having had an HIV test is 0.85 and 0.57 times lower than a Christian learner. The odds of learners from lower socio-economic backgrounds having had an HIV test are lower than those from higher socio-economic backgrounds.

Because of a suspicion that certain variables were strongly correlated with race (school, religion, socio-economic background), the question was asked: If one were to adjust for race, is it still true that learners in School B, Christians, and learners from lower socio-economic backgrounds are less likely to agree to be tested? In order to answer this question, a multiple regression model was built, to determine which of the variables remained independently associated with HIV testing. After adjusting for race, the variables school, religion and socio-economic status indicators were no longer associated with HIV testing. Only age, sex and race were independently associated with HIV testing (See Table 6.6).

**Table 6.6: Simple and multiple regression models for HIV testing.**

	Simple logistic regression		Multiple logistic regression	
	OR	95% CI	AOR	95% CI
Age <sup>a</sup>	1.29	1.14 - 1.46	1.53	1.33 - 1.77
Grade <sup>b</sup>	1.64	1.38 - 1.97		
Sex				
Male	1.00	/	1.00	/
Female	1.88	1.28 - 2.75	2.32	1.50 - 3.62
Race				
Black	1.00	/	1.00	/
Coloured	7.64	4.42 - 14.11	12.70	7.03 - 24.48
Other	2.36	1.12 - 5.43	3.12	1.43 - 7.46
School				
School B	1.00	/		
School C	1.54	0.97 - 2.45		
School D	8.40	4.37 - 17.59		
School F	5.02	2.75 - 9.68		
Religion				
Christian	1.00	/		
Muslim	3.19	1.61 - 7.09		
Hindu	0.85	0.08 - 18.31		
African traditional	0.57	0.35 - 0.94		
Not religious	1.27	0.43 - 4.62		
Main building material of walls of learner's home				
Brick	1.00	/		
Wood	0.57	0.32 - 1.01		
Zinc	0.47	0.29 - 0.78		
Other	NA	NA		
Frequency of experiencing problems with getting food				
Never	1.00	/		
Weekly	0.59	0.35 - 1.01		
More than once a week	1.13	0.56 - 2.41		
Daily	1.29	0.53 - 3.61		
Having a tap inside the home				
Yes	1.00	/		
No	0.39	0.26 - 0.59		
Having a toilet inside the home				
Yes	1.00	/		
No	0.39	0.26 - 0.57		

*a* and *b*: ORs were calculated with age and grade as continuous variables

**Objective: To describe the testing behaviours of those who took the test**

Table 6.7 presents people with whom the learners discussed HCT before using the service.

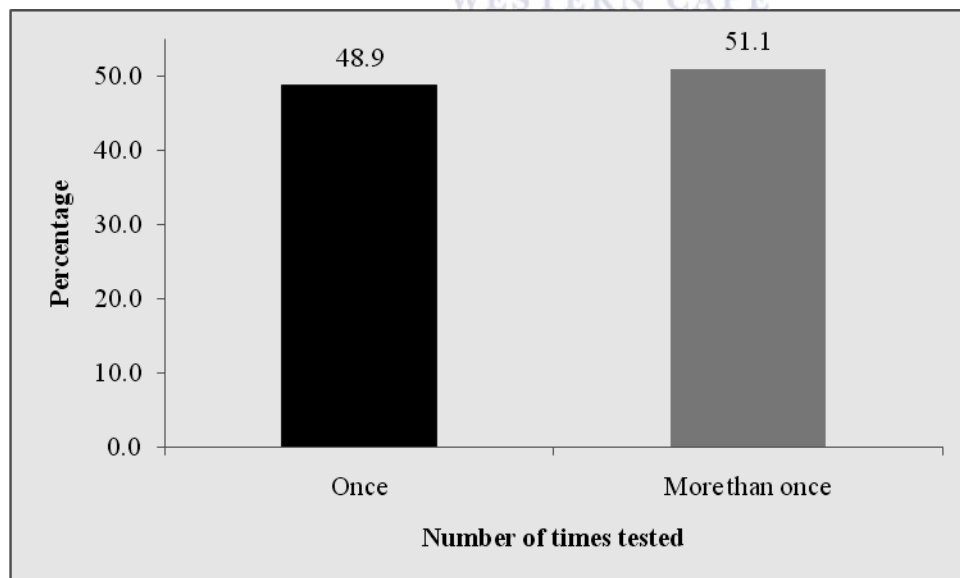
**Table 6.7: Who learners discussed HCT with before they had an HIV test (n=209)**

Who learners discussed HCT with (n=209)	n	% <sup>a</sup>
Parent	112	53.6
Friend	104	49.8
Girlfriend/boyfriend.	41	19.6
Teacher	11	5.3

a Total percentage is greater than 100% because learners could choose more than one person with whom they discussed HCT

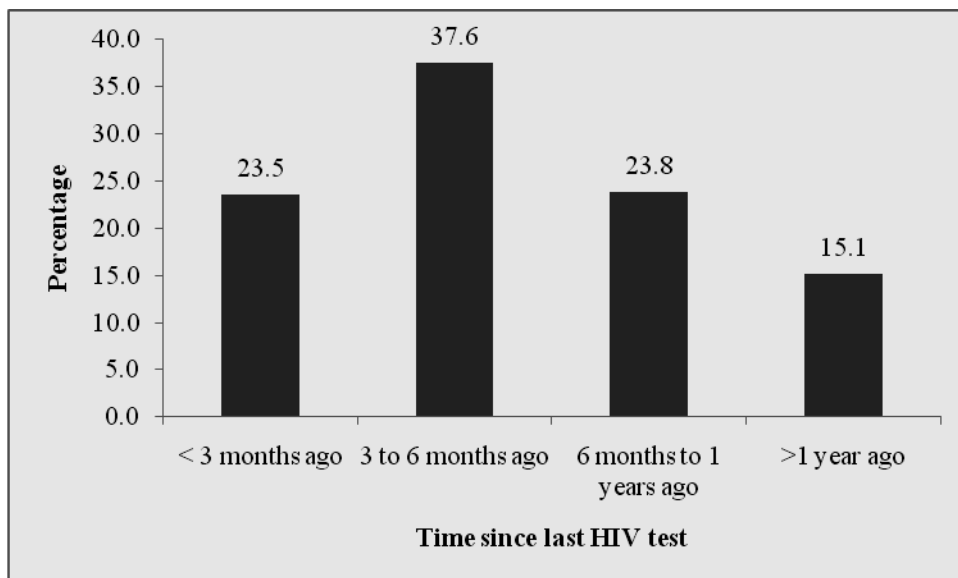
More than half (56.9%) of the sample of learners discussed HCT with someone before they had an HIV test. Most learners discussed getting tested with a parent (53.6%) and/or with a friend (49.8%). Only 19.6% of learners discussed being tested with a partner and 5% with a teacher. Five learners did not answer this question. More than half (59.8%) of learners did not ask their parent/guardian’s permission to be tested.

The behaviour, during testing, of those being tested is depicted in Figures 6.12- 6.15



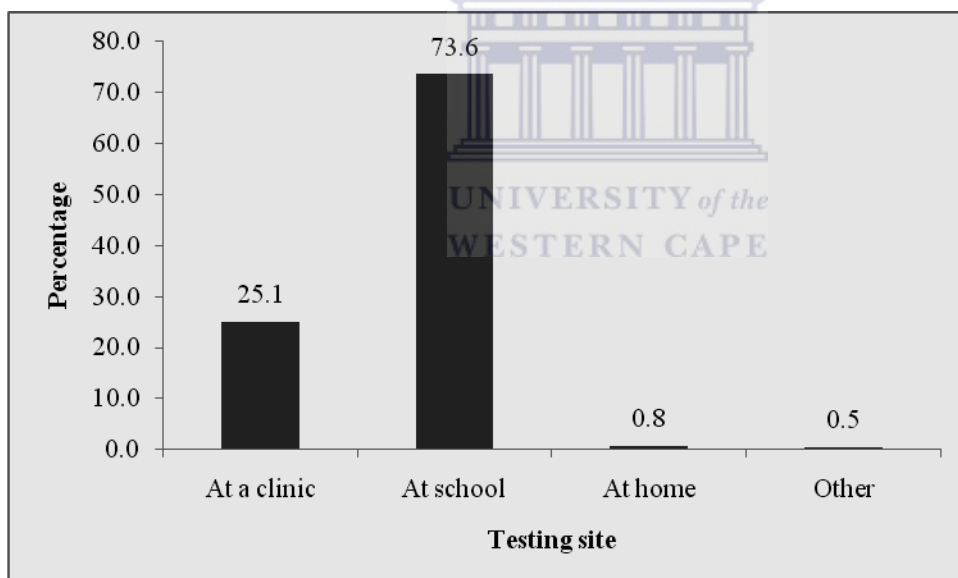
**Figure 6.12: Number of times learners tested**

Half of the learners who had been tested had done so more than once.



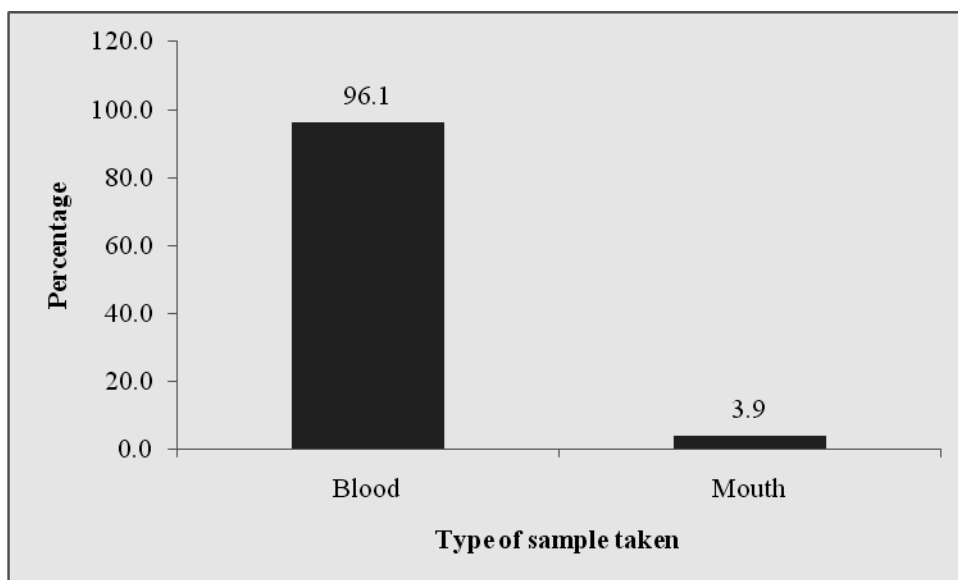
**Figure 6.13: When learners had most recent HIV test**

The majority (84.9%) of learners had tested within the past year.



**Figure 6.14: Where learners had tested**

Nearly three quarters (73.6%) of the learners had been tested at school.



**Figure 6.15: How sample was taken for HIV test**

Most (96.1%) learners had had a blood sample taken for HIV testing.

*Objective: To determine the factors that influence uptake of HCT in learners*

The reasons learners gave for testing are presented in Table 6.8.

**Table 6.8: Reasons reported by learners for having had an HIV test (n=376)**

Reason for testing	N	% <sup>a</sup>
... because I wanted to know my status.	348	92.6
... because I was planning for the future.	201	53.5
... because a healthworker said it was a routine part of care.	167	44.4
... because I was worried about my girlfriend/boyfriend's past sexual behaviour	70	18.6
... because I was worried about my past sexual behaviour.	60	16
... because I take/took care of people with HIV or AIDS.	60	16

- a Total percentage is greater than 100% because learners could choose more than one reason  
 Mean =2.5, SD = 0.4, range 1-7  
 28.7% gave 1 reason, 48.6% gave 2-3 reasons, 22.7% gave 4-7 reasons

The majority (92.6%) of learners said that they had decided to be tested because they wanted to know their status. Only 59 learners (15.7%) gave this as the only reason they were tested. After wanting to know their status, planning for the future was the most frequently cited reason for being tested. However, only three learners (0.8%) gave planning for their future as the only reason for testing. Being offered an HIV test as a routine part of care was the third most common reason for choosing testing given by learners; however, again only two learners (0.5%) gave this as their only reason for choosing to be tested. In the majority of cases, these top three reasons were accompanied by a reason which indicated risk exposure to or symptoms of possible HIV infection.

***Objective: To investigate whether a relationship exists between reason for being tested and age, grade, sex, race, or school.***

Table 6.9 shows the results after application of simple logistic regression models to the data, to identify covariates of the reasons for having taken the test. Only 10 learners did not give “wanting to know status” as a reason for being tested. Because of this small number, it was not statistically meaningful to compare those who gave this reason to those who did not.

Concern about partners’ past sexual behaviour as a reason for undergoing testing was not significantly differently distributed across grades, nor across genders. Although significantly differently distributed across ages, the age distribution was very similar between those who gave this as a reason and those who did not. Being concerned about a partner’s past sexual behaviour was, however, a significantly more common reason in learners who identified as Black than in the other racial groups, and across schools (as shown before, there is a strong correlation between school and race).

Concern about their own past sexual behaviour as a reason for undergoing testing was significantly more common in learners who identified as Black. Gender was borderline significantly associated, with concern about own sexual behaviour more frequently given as a reason for males than for females

Caring for someone with HIV was only given as a reason for being tested by learners who identified as Black (33%) and Coloured (9%), and was a significantly more common reason in learners who identified as Black. Older learners were more likely to give caring for someone with HIV as a reason for going for testing.

Having symptoms which made them suspect HIV infection was a significantly more common reason in learners who identified as Black. The average grade was slightly lower in learners who gave having

symptoms as a reason for testing (the difference was of borderline significance). There was no significant difference between males and females, nor was there a significant age trend.

Having an HIV test as part of routine health care was a significantly more common reason for testing in learners who identified as Black. There was no significant difference between males and females and ages. The average grades were almost identical in both groups.

Planning for the future was a significantly more common reason for testing in learners who identified as Black. There was no significant difference between males and females and the average grades were almost identical in both groups. Learners who cited planning for the future as a reason for testing were slightly older.

***Objective: To investigate whether a relationship exists between reason for being tested and age, grade, sex, race, or school.***

Table 6.7 shows the results after application of simple logistic regression models to the data, to identify covariates of the reasons for having taken the test. Only 10 learners did not give “wanting to know status” as a reason for being tested. Because of this small number, it was not statistically meaningful to compare those who gave this reason to those who did not.

*Concern about partners' past sexual behaviour* as a reason for undergoing testing was not significantly differently distributed across grades, nor across genders. Although significantly differently distributed across ages, the age distribution was very similar between those who gave this as a reason and those who did not. *Being concerned about a partner's past sexual behaviour* was, however, a significantly more common reason in learners who identified as Black than in the other racial groups, and across schools (as shown before, there is a strong correlation between school and race). The odds of a learner who identifies as Coloured or Other giving *concern about a partner's past sexual behaviour* as a reason for testing is respectively 0.30 (CI 0.16 - 0.53) and 0.08 (CI 0.004 - 0.40) lower than a learner who identifies as Black.

*Concern about their own past sexual behaviour* as a reason for undergoing testing was significantly more common in learners who identified as Black. The odds of a learner who identifies as Coloured or Other giving *concern about their own past sexual behaviour* as a reason for testing is respectively 0.47(CI 0.25 - 0.87) and 0.76 (CI 0.24 - 2.02) lower than a learner who identifies as Black. Gender was borderline significantly associated, with *concern about own sexual behaviour* more frequently given as a reason for males than for females. The odds of a female learner giving *concern about their own past sexual behaviour* as a reason for testing is 0.61(CI 0.34 - 1.07) lower than a male learner.

*Caring for someone with HIV* was only given as a reason for being tested by learners who identified as Black (33%) and Coloured (9%), and was a significantly more common reason in learners who identified as Black. Older learners were more likely to give *caring for someone with HIV* as a reason for going for testing. The odds of giving *caring for someone with HIV* as a reason for going for testing is higher in older learners (OR 1.49, CI 1.23 - 1.83) i.e. with each year that a learner is older than the baseline (0 years), the odds of giving this reason increases by 49%.

*Having symptoms which made them suspect HIV infection* was a significantly more common reason given for testing in learners who identify as Black. The odds of a learner who identifies as Coloured giving *having symptoms which made them suspect HIV infection* as a reason for testing is 0.36 (CI 0.13 - 0.85) lower than a learner who identifies as Black. The average grade was slightly lower in learners who gave *having symptoms* as a reason for testing. The difference was of borderline significance (OR 0.70, CI 0.48 - 1.02). There was no significant difference between males and females, nor was there a significant age trend.

*Having an HIV test as part of routine health care* was a significantly more common reason for testing in learners who identify as Black. The odds of a learner who identifies as Other giving *having an HIV test as part of routine health care* as a reason for testing is 0.26 (CI 0.10 - 0.62) lower than a learner who identifies as Black. There was no significant difference between males and females and ages. The average grades were almost identical in both groups.

*Planning for the future* was a significantly more common reason for testing in learners who identified as Black. The odds of a learner who identifies as Coloured or Other giving this as a reason for testing is respectively 0.16 (CI 0.09 - 0.29) and 0.04 (CI 0.01 - 0.11) lower than a learner who identifies as Black. The odds of giving *planning for the future* as a reason for going for testing is higher in older learners (OR 1.25, CI 1.06 - 1.47) i.e. with each year that a learner is older than the baseline (0 years), the odds of giving this reason increases by 25%. There was no significant difference between males and females and the average grades were almost identical in both groups.



**Table 6.9: Covariates of the reasons for participants having tested for HIV (n=376)**

	I was worried about my girlfriend/boyfriend's past sexual behaviour		I was worried about my past sexual behaviour		I take/took care of people with HIV or AIDS		I had symptoms that made me or a health worker think I might have HIV		A health worker said it was a routine part of care		I was planning for the future	
	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Age	1.28	1.07 - 1.53	1.23	1.02 - 1.49	1.49	1.23 - 1.83	1.20	0.93 - 1.56	1.11	0.96 - 1.29	1.25	1.06 - 1.47
Grade	0.95	0.74 - 1.23	0.86	0.66 - 1.11	1.11	0.85 - 1.46	0.70	0.48 - 1.02	0.99	0.80 - 1.23	0.88	0.70 - 1.10
Sex												
Male	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/
Female	0.82	0.48 - 1.41	0.61	0.34 - 1.07	0.83	0.47 - 1.49	1.44	0.62 - 3.61	0.99	0.63 - 1.56	1.08	0.66 - 1.77
Race												
Black	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/
Coloured	0.30	0.16 - 0.53	0.47	0.25 - 0.87	0.21	0.10 - 0.40	0.36	0.13 - 0.85	0.63	0.39 - 1.01	0.16	0.09 - 0.29
Other	0.08	0.004 - 0.40	0.76	0.24 - 2.02	NA <sup>a</sup>	NA	0.27	0.01 - 1.42	0.26	0.10 - 0.62	0.04	0.01 - 0.11
School												
School B	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/
School C	0.81	0.41 - 1.62	0.65	0.30 - 1.39	0.68	0.34 - 1.37	0.98	0.36 - 2.68	0.96	0.49 - 1.90	0.52	0.17 - 1.45
School D	0.37	0.18 - 0.75	0.48	0.23 - 1.02	0.19	0.08 - 0.41	0.44	0.14 - 1.27	0.83	0.44 - 1.55	0.13	0.05 - 0.31
School F	0.10	0.03 - 0.28	0.35	0.14 - 0.82	0.04	0.01 - 0.16	0.19	0.03 - 0.78	0.35	0.17 - 0.67	0.05	0.02 - 0.13

a. The ORs and the confidence intervals could not be computed because of violation of the conditions required for valid logistic regression: too small number of observations in the substrata.

**Objective: To investigate whether there is a relationship between reasons why it was hard to test and age, grade, sex, race, or school.**

Of those learners who reported having been tested, less than a quarter (22.7%) said it was difficult for them to take the test. Table 6.10 presents the reasons learners gave for why it was difficult for them to test.

**Table 6.10: Reasons reported by learners for why it was difficult to have an HIV test (n = 86)**

Why it was hard to test	n	% <sup>a</sup>
I was afraid that I would test positive	61	70.9
I don't like needles, and was scared of having my finger pricked	42	48.8
I was afraid that my results would not be kept confidential/secret	41	47.7
The counsellor or nurse asked too many private questions e.g. about my sexual activity.	33	38.4
It was difficult to talk to the counsellor because he/she was the opposite sex to me.	27	31.4
I was afraid that if other people saw me go for a test they would think that I am HIV+.	23	26.7
I was afraid that if other people saw me go for a test they would think that I am sexually active	21	24.4

a Total percentage is greater than 100% because learners could choose more than one reason  
 Mean =2.7, SD = 1.6, range 1-7  
 31.4% gave 1 reason, 37.7% gave 2-3 reasons, 30.9% gave 4-7 reasons

The majority of those who were had been tested and who said it was hard to test, reported that they were afraid that they would test HIV positive. Fear of having their fingers pricked and concerns about their results not being kept confidential were also highly ranked as reasons why it was difficult to have an HIV test.

Table 6.11 shows the results after application of simple logistic regression models to the data, to identify covariates of the reasons why it was hard to test. Learners who identified as Other have a lower odds (OR 0.10, CI 0.005 - 0.65) of giving "*I was afraid that my results would not be kept confidential/secret*" as a reason for finding it hard to test than learners who identify as Black. The odds of giving "*the counsellor or nurse asked too many private questions, like about my sexual activity*" as a reason for finding it hard to be tested is higher in learners from lower grades (OR 0.59, CI 0.35 - 0.96).

**Table 6.11: Covariates of the reasons why it was hard for testers to test (n = 86)**

	I was afraid that I would test positive		I was afraid that my results would not be kept confidential/secret		I was afraid that if other people saw me go for the test they would think that I am HIV positive		I was afraid that if other people saw me go for the test they would think that I am sexually active		I don't like needles, and was scared of having my finger pricked		It was difficult to talk to the counsellor because he/she was the opposite sex to me		The counsellor or nurse asked too many private questions e.g. about my sexual activity	
	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Age	1.09	0.77 - 1.56	0.99	0.73 - 1.34	0.80	0.56 - 1.12	0.77	0.53 - 1.10	1.01	0.74 - 1.39	0.90	0.65 - 1.24	0.73	0.51 - 1.03
Grade	1.01	0.60 - 1.68	0.73	0.46 - 1.14	0.77	0.47 - 1.25	0.69	0.41 - 1.14	0.85	0.53 - 1.35	0.80	0.50 - 1.29	0.59	0.35 - 0.96
Sex														
Male	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/
Female	1.11	0.37 - 3.20	1.12	0.43 - 2.95	0.99	0.36 - 2.87	1.94	0.65 - 6.66	1.56	0.60 - 4.06	0.82	0.31 - 2.24	0.43	0.15 - 1.15
Race														
Black	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/
Coloured	0.71	0.24 - 2.09	0.62	0.23 - 1.63	1.31	0.46 - 3.74	1.26	0.43 - 3.73	1.67	0.63 - 4.52	0.93	0.34 - 2.52	1.05	0.39 - 2.85
Other	2.03	0.30 - 40.59	0.10	0.005 - 0.65	0.83	0.11 - 4.37	0.93	0.12 - 4.93	1.33	0.26 - 7.64	1.06	0.19 - 5.07	0.68	0.12 - 3.20
School														
School B	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/
School C	2.39	0.48 - 17.83	1.38	0.34 - 6.21	0.96	0.17 - 4.54	0.28	0.01 - 1.93	0.71	0.16 - 2.97	1.08	0.23 - 4.64	1.42	0.34 - 6.19
School D	0.68	0.18 - 2.58	0.61	0.17 - 2.07	1.29	0.34 - 4.83	1.13	0.30 - 4.08	2.20	0.61 - 8.68	0.94	0.26 - 3.35	1.52	0.43 - 5.58
School F	1.66	0.43 - 7.24	0.56	0.17 - 1.80	1.29	0.36 - 4.61	0.90	0.25 - 3.17	0.93	0.28 - 3.03	1.16	0.35 - 3.88	0.64	0.18 - 2.14

*Objective: To describe testers' testing experiences.*

### **Learners experience of pre-test counselling**

Table 6.12 displays the content covered during pre-test counselling as recalled by learners.

**Table 6.12: Content of pre-test counselling as recalled by learners (n=376)**

<b>Before I had my HIV test a health care worker/counsellor...</b>	<b>N</b>	<b>%</b>
explained to me the benefits of having the test	300	83.1
explained that I had a choice to agree to the test or refuse the test	291	81.3
told me that my results would not be shared with anyone except for the staff who care for me	293	81.4
explained how HIV is transmitted	299	84
explained how the test works	294	84
explained the meaning of a positive test result	276	78.9
explained the meaning of a negative test result	285	82.1
explained that the test does not always detect a very recent HIV infection (window period)	200	57.1
gave me advice on preventing the spread of HIV	281	79.4
gave me time to ask questions	288	84

According to learners, the pre-test counselling they received covered most of the UNAIDS' counselling content recommendations; however, only 57.1% of learners reported that the window period had been explained to them, and only 79.4% reported that they had been given advice on preventing the spread of HIV.

### **Learners' experience of post-test counselling**

The majority (95.9%) of learners had received the results of their most recent HIV test. Table 6.13 displays the content that was covered during post-test counselling as recalled by the learners.

**Table 6.13: Content of post-test counselling as recalled by learners (n = 376)**

<b>After giving me my results, the healthworker...</b>	<b>N</b>	<b>%</b>
explained the meaning of the test result	305	83.6
suggested that I discuss my status with someone	112	31.4
suggested that my girlfriend/boyfriend be tested for HIV	194	54.6
discussed how to prevent the transmission of HIV	260	73.4

Most learners (83.6%) reported that the meaning of their test result had been explained to them during post-test counselling. Few learners (31.4%) reported that it had been suggested that they discuss their

status with someone else, and only 54.6% reported that it had been suggested that their girlfriend/boyfriend be tested for HIV. Nearly three quarters reported that prevention of HIV transmission had been discussed during post-test counselling.

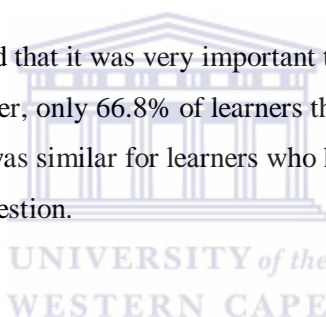
Table 6.14 displays learners' experience of post-test counselling.

**Table 6.14: Learners' experience of post-test counselling**

<b>When meeting with the healthworker to get my test results...</b>	<b>n</b>	<b>%</b>
...the information I was given was enough	305	84
...I was given the opportunity to ask questions	300	82.9
...on the whole, I found the meeting helpful	299	84.7

Most learners felt that they had been given enough information (84%), that they were given the opportunity to ask questions (82.9%), and that on the whole, the post-test counselling was helpful (84.7%).

The majority of learners (81.8%) said that it was very important to them that the health workers kept their HIV result confidential. However, only 66.8% of learners thought that the health workers had kept their results confidential. This was similar for learners who had tested at a clinic or at school. Eight learners did not answer this question.



#### **6.4.4. Learners who did not test**

A total of 153 learners reported never having had an HIV test. The socio-demographics of these learners are presented in Table 6.15.

The ages of non-testers ranged from 13 to 21 years, with a mean age of 15.8 and an SD of 1.72. The total percentage of females in the sample who did not test was 23.7% compared to 36.8% of males. The greatest percentage (52.9%) of learners per grade who did not test was in Grade 8. Learners who identified as Coloured had the lowest percentage (8.5%) of non-testers compared to the other racial groups. Compared to other schools, School B had the highest percentage (46.1%) of learners in the sample who did not test.

Just over a third (36.6%) of learners who had never had an HIV test reported that they had thought of having an HIV test. However, 34.6% of those who had never tested did not answer this question, so one cannot come to any conclusions from the responses to this question

**Table 6.15: Socio-demographics of non-testers (n = 153)**

	n	%
Age:		
13	9	52.9
14	33	46.5
15	27	31.0
16	43	32.8
17	15	13.0
18	15	23.4
19	7	25.0
20	2	18.2
21	2	40.0
Sex:		
Male	78	36.8
Female	75	23.7
Grade:		
8	63	51.6
9	33	26.8
10	28	20.0
11	29	20.1
Racial group:		
Black	126	41.4
White	4	13.8
Indian	3	50.0
Coloured	15	8.5
Other	2	50.0
School:		
B	77	46.1
C	50	35.7
D	11	9.2
F	15	14.6

**Objective: To determine the reasons why non-testers did not test.**

The reasons for not testing reported by non-testers are displayed in Table 6.16.

The most common reasons learners cited for never having had an HIV test were that they did not think that they were HIV positive (51.6%), they had never had sex before (45.8%) and they did not like needles (37.3%).

Less than half (48.4%) of non-testers knew someone personally who had had an HIV test. Two thirds (68.0%) of non-testers thought that being tested could be helpful, and only 17% thought that it could cause problems for someone who does have the test. In all, about 60% of non-testers knew places that offer HIV testing and just over a quarter had been offered a test.

**Table 6.16: Reasons reported by non-testers for why they have never had an HIV test (n= 153)**

Reasons for never having had an HIV test	n	% <sup>a</sup>	Missing
I don't think I am HIV positive	79	51.6	31
I have never had sex before	70	45.8	38
I don't like needles	57	37.3	33
I don't think my girlfriend/boyfriend is HIV positive	49	32.0	33
I had to ask my parent/guardian's permission	41	26.8	33
I am afraid I will test positive	39	25.5	32
I am afraid the counsellor/nurse will ask too many questions	37	24.2	35
I am afraid my results won't be kept confidential	35	22.9	33
I am afraid that other people will think I am sexually active	29	19.0	33
I am afraid that other people will think I am positive	27	17.6	32
I am afraid the counsellor/nurse will make me feel bad because I am sexually active	24	15.7	34

*a* Total percentage is greater than 100% because learners could choose more than one reason  
 Mean =2.5, SD = 0.4, range 1-7  
 28.7% gave 1 reason, 48.6% gave 2-3 reasons, and 22.7% gave 4-7 reasons

***Objective: To investigate whether there is a relationship between reasons for not testing and age, grade, sex, race, school.***

Table 6.17 shows the results after application of simple logistic regression models to the data, to identify covariates of the reasons why non-testers did not test. The odds of an older learner giving "I am afraid that I will test positive" as a reason for not testing are higher than for a younger learner (OR1.32, CI 1.05 - 1.67). The odds of a female learner giving "I have never had sex before" (OR 2.63, CI 1.19 - 5.99), "I don't think I am HIV positive" (OR 3.06, CI 1.37 - 7.15) and "I don't like needles, and I'm scared of having my finger pricked" (OR 3.01, CI 1.41 - 6.62) as reasons for not testing are higher than for males. The odds of learners from the higher grades giving "I am afraid the counsellor or nurse will ask too many private questions" as a reason for not testing are higher than for learners from the lower grades (OR 1.45; CI 1.05 - 2.03).

**Table 6.17: Covariates of the reasons why non-testers did not test (n = 153 )(part 1)**

	I have never had sex before		I don't think I am HIV positive		I don't think my boyfriend/girlfriend is HIV positive		I am afraid that I will test positive		I am afraid that my results will not be kept confidential		I am afraid that other people will think that I am HIV positive	
	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Age	0.96	0.77 - 1.21	1.01	0.80 - 1.27	1.19	0.96 - 1.49	1.32	1.05 - 1.67	1.09	0.87 - 1.37	1.19	0.94 - 1.53
Grade	1.01	0.74 - 1.39	1.03	0.74 - 1.44	1.10	0.81 - 1.51	1.34	0.97 - 1.87	0.94	0.67 - 1.32	1.05	0.73 - 1.50
Sex												
Male	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/
Female	2.63	1.19 - 5.99	3.06	1.37 - 7.15	0.99	0.47 - 2.08	0.61	0.27 - 1.32	1.40	0.62 - 3.16	0.64	0.26 - 1.53
Race												
Black	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/
Coloured	0.61	0.16 - 2.33	0.55	0.15 - 2.02	1.61	0.45 - 5.93	0.65	0.14 - 2.42	2.52	0.71 - 9.42	1.05	0.22 - 3.96
Other	NA <sup>a</sup>	NA	2.73	0.44 - 52.71	0.34	0.02 - 2.37	0.35	0.02 - 2.27	NA	NA	NA	NA
School												
School B	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/
School C	0.66	0.28 - 1.54	0.67	0.28 - 1.59	0.99	0.43 - 2.25	0.61	0.24 - 1.44	0.88	0.35 - 2.16	1.13	0.43 - 2.90
School D	0.36	0.07 - 1.83	0.24	0.05 - 1.09	1.28	0.28 - 5.90	0.20	0.01 - 1.21	1.20	0.23 - 5.46	0.98	0.13 - 4.83
School F	2.19	0.49 - 15.38	4.40	0.76 - 83.75	0.55	0.11 - 2.19	0.52	0.10 - 1.99	10.75	0.15 - 2.95	0.29	0.02 - 1.74

a. The ORs and the confidence intervals could not be computed because of violation of the conditions required for valid logistic regression: too small number of observations in the substrata.



**Table 6.17: Covariates of the reasons why non-testers did not test (n = 153) (part 2)**

	I am afraid that other people will think that I am sexually active		I don't like needles, and I'm scared of having my finger pricked		I am afraid that the counsellor or nurse will criticise me because I am sexually active		I am afraid the counsellor or nurse will ask too many private questions		I had to ask my parent/guardian's permission to test	
	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Age	1.16	0.91 - 1.48	1.18	0.95 - 1.47	1.21	0.95 - 1.56	1.20	0.96 - 1.51	0.91	0.73 - 1.14
Grade	1.25	0.88 - 1.78	1.33	0.98 - 1.84	1.22	0.84 - 1.78	1.45	1.05 - 2.03	0.80	0.57 - 1.10
Sex										
Male	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/
Female	0.85	0.36 - 2.00	3.01	1.41 - 6.62	1.24	0.50 - 3.09	1.55	0.70 - 3.49	1.04	0.48 - 2.24
Race										
Black	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/
Coloured	0.52	0.08 - 2.18	0.98	0.26 - 3.74	0.73	0.11 - 3.12	1.59	0.43 - 5.68	1.04	0.26 - 3.70
Other	NA	NA	1.30	0.27 - 6.93	NA	NA	NA	NA	0.91	0.12 - 4.92
School										
School B	1.00	/	1.00	/	1.00	/	1.00	/	1.00	/
School C	1.39	0.55 - 3.49	0.66	0.28 - 1.52	1.12	0.41 - 2.97	1.55	0.65 - 3.76	0.74	0.30 - 1.75
School D	0.89	0.12 - 4.37	0.65	0.12 - 3.21	1.08	0.15 - 5.36	0.73	0.10 - 3.54	0.89	0.17 - 3.98
School F	NA	NA	1.73	0.49 - 7.11	NA	NA	0.82	0.16 - 3.23	0.55	0.11 - 2.15

#### 6.4.5. Learners who tested positive

Of those learners who reported having an HIV test, 353 learners claimed to know their status: 15 reported being HIV positive, 338 reported being HIV negative, and 12 reported not being sure of their HIV status. Subsequently, eight of the 15 learners who reported being HIV positive, answered the questions “Were you expecting to test positive?” and “When you first learned that you were HIV positive, were you given any further tests?” as if they were HIV negative or unsure of their HIV status. These two questions were therefore discarded for all 15 learners.

The socio-demographics of learners who reported testing HIV positive is represented in Table 6.18.

**Table 6.18: Socio-demographics of HIV-positive learners (n=15)**

	n	%
Age:		
13	0	0.0
14	2	5.3
15	5	8.3
16	3	3.4
17	2	2.0
18	2	4.1
19	1	4.8
20	0	0.0
21	0	0.0
Sex:		
Female	12	5.0
Male	3	2.2
Grade:		
8	3	5.1
9	8	8.9
10	3	2.7
11	1	0.9
Racial group:		
Black	9	5.1
White	0	0.0
Indian	0	0.0
Coloured	6	3.7
School:		
B	7	5.1
C	2	8.9
D	5	2.7
F	1	0.9

HIV-positive learners’ ages ranged from 14 to 19 years, with a mean age of 16 and an SD of 1.51. There were no significant differences between the ages in HIV status. Of the females in the sample, 5% tested positive, compared to 2.2% of males. The percentage of Grade 9 learners (8.9%) who tested positive was the highest amongst the grades. Only learners who identified as Black (5.1%) and Coloured (3.7%) reported testing HIV positive. Schools B and C had a higher percentage of learners who reported testing positive. Because a very small number of learners reported that they were HIV positive, it was hard to draw strong statistical inferences about predictors of HIV status.

**Objective: To determine the factors that motivated learners who tested HIV positive to test.**

Table 6.19 shows the reasons learners who tested HIV positive gave for testing. The majority (86.7%) of HIV-positive learners said that they had been tested because they wanted to know their status. Few (13.3%) were concerned about their boyfriend or girlfriend's past sexual behaviour, or about their own past sexual behaviour (13.3%).

**Table 6.19: Reasons HIV-positive learners chose to be tested (n=15)**

Reason for testing	N	% <sup>a</sup>
... because I wanted to know my status.	13	86.7
... because I was planning for the future.	8	53.3
... because a healthworker said it was a routine part of care.	7	46.7
... because I was worried about my girlfriend/boyfriend's past sexual behaviour	2	13.3
... because I was worried about my past sexual behaviour.	2	13.3
... because I take/took care of people with HIV or AIDS.	3	20
... because I had symptoms that made me or a healthworker think I might have HIV.	4	26.7

a Total percentage is greater than 100% because learners could choose more than one reason  
 Mean =2.5, SD = 0.4, range 1-7  
 28.7% gave 1 reason, 48.6% gave 2-3 reasons, 22.7% gave 4-7 reasons

**Objective: To describe the care and treatment that HIV-positive learners have received.**

HIV-positive learners' access to care and support is displayed in Table 6.20.

**Table 6.20: HIV-positive learners' access to care and support (n=15)**

After receiving your HIV positive test results...	Yes	No	Missing
...did a healthworker refer you for medical care?	3 (20%)	7	5
...have you been for medical care?	3 (20%)	9	3
...did a healthworker talk about getting help from a support group for people living with HIV or AIDS?	2 (13.3)	10	3
...did a healthworker refer you to a support group?	1 (6.7%)	13	1
...have you been to a support group?	3 (20%)	11	1
...did a healthworker talk to you about how to share your status with people around you?	8 (53.3%)	6	1
...have you shared your status with people around you?	5 (33.3%)	9	1
...has a healthworker told you that you need care or medication?	5 (33.3%)	5	5
...have you been able to obtain the medication?	3 (20%)	7	5

After receiving their positive result, few learners reported that a health worker had referred them for medical care (20%) and talked about (13.3%) or referred (6.7%) them to a support group. Just over half of learners (53.3%) reported that the health worker had spoken to them about disclosing their status. Only 20% reported that they had

been for medical care, been to a support group, or been able to obtain medication. A third of learners reported that they had disclosed their status.

## **6.5. Discussion**

The aim of this part of the study was to explore learners' experience of HCT and the factors that influence their uptake of HCT. Little has been written about young people's experience of testing at school, and the motivators and barriers to uptake of HCT in the school setting. In my literature review, I could only find one international peer-reviewed article (Henry-Reid et al., 1998) and one national article (Pfaff & de Beer, 2011) about HCT in the school setting. In this study learners were questioned about their HCT experiences in general and not specifically school-based HCT. However, because the majority of learners in this study tested at school, this research has shed light on young people's school-based testing experiences and practices.

### **6.5.1. Uptake of HCT**

The uptake of HCT in this study is high (73.1%, the majority having tested at school), compared to uptake reported in other South African studies: 43.9% of 18- to 23-year-olds in Soweto, South Africa (Venkatesh et al., 2011); 15% of 15- to 19-year-olds in a peri-urban Black community in Cape Town (April et al., 2009), and 32.7% of males and 17.7% of females between the age of 15 and 24 years in a national survey (MacPhail et al., 2009). These studies did not report where young people were tested, but it is likely that they were tested at a health facility and not at school. This study would suggest that providing HCT at school increases uptake amongst young people.

### **6.5.2. Predictors of HCT uptake in learners**

In this study age, sex and race were found to be predictors of HCT uptake in learners. Older learners, female learners and learners who did not identify as Black were more likely to have had an HIV test. In a South African national household survey, it was found that females between the age of 15 and 24 years were more likely to have had an HIV test, presumably because they had been offered a test when going for prenatal care (MacPhail et al., 2009). One cannot easily make this presumption in this learner survey, as female learners were not asked about history of pregnancy.

MacPhail et al. (2009) also found that HIV testing was significantly associated with young people (15-24 years of age) who did not identify as Black. They speculated that this may be due to the fact that young people who do not identify as Black have better access to testing facilities or that they are more likely to have been tested for insurance purposes. In this survey, however, all learners, irrespective of racial group, had equal access to the school-based HCT service, and none of the learners cited *testing for insurance purposes*. It is more likely that the barrier to uptake of HCT is associated with HIV-related stigma in the school community, as suggested by

Jürgensen et al. (2012). In their qualitative study done in Zambia exploring HIV testing decisions, they found that individuals were reluctant to take a test despite having access to antiretroviral therapy. They attributed this reluctance to be tested to the fear of stigma related to HCT, as well as the powerful memories of suffering and death associated with HIV that individuals have been witness to in areas of high HIV prevalence. They suggested that “the burden of knowing” one’s status may strongly outweigh the benefits of HCT (i.e. early treatment). Similarly, in this study, in the FGDs that took place at schools where all the learners identified as Black, the learners were concerned that it would be assumed that they were being tested because they were HIV positive. Also, male learners who identified as Black were concerned that female learners would see them going for testing and would assume that they were HIV positive. This was not a concern in schools where the learners did not all identify as Black, and may explain why male learners and learners who identified as Black were less likely to have had an HIV test.

### **6.5.3. Motivators for uptake of HCT**

The majority of learners (across all race groups, all schools, and in both males and females) reported “*wanting to know their status*” as one of the reasons they chose to be tested. In other studies, young people have mentioned the importance of “*knowing one’s status*”, but despite this reported belief, few had had an HIV test, citing fear of knowing one’s positive status as a barrier to testing (MacPhail et al., 2008; Meiberg et al., 2008). “*Planning for the future*” and “*being offered an HIV test as a routine part of care*” were also frequently cited by learners in this study as reasons for being tested.

Being tested because of risk exposure through sexual activity has been cited in other studies as the reason young people go for HCT (Denison et al., 2006; Horizons, 2001; McCauley et al., 2004). In this study, less than 20% of learners reported testing because of concerns about their own (16%) or their partner’s (18.6%) previous sexual behaviour. This may mean that less than 20% of this population of learners is sexually active, or that more are sexually active but practice safe sex (i.e. consistently use condoms) and therefore do not think that they are at risk, or that learners who are sexually active are not aware of their risk or are in denial of their risk. In FGDs held with South African students, Meiberg et al. (2008) reported that participants engaged in denial, stating that they feared a positive test result because of their risky sexual behaviour, but preferred being unaware of their HIV status than being confronted with a life threatening and stigmatising affliction.

Concern about risk exposure, because of their own or their partners’ past sexual behaviour, was a significantly more common reason for being tested in learners who identified as Black than in the other racial groups. This concurs with the findings of Pettifor et al. (2004) in a national South African survey, which showed that a greater percentage (71%) of youth aged 15-24 years and who identified as Black reported ever having sex, compared to youth who identified as Coloured (58%), White (43%) and Indian (43%). Although the difference in giving this as a reason for being tested between male and female learners in this survey was only of borderline significance,

concern about own sexual behaviour was more frequently a reason for males than for females. This concurs with the findings of the South African National HIV Prevalence, Incidence, Behaviour and Communication Survey (Shisana et al., 2009) in which the prevalence of risky sexual behaviour, such as having multiple sexual partners and early sexual debut, was significantly higher in males.

Caring for someone with HIV was only given as a reason for testing by learners who identified as Black (33%) and Coloured (9%). This mirrors the prevalence of HIV in South Africa: 13.6% in people who identify as Black, 1.7% in those who identify as Coloured, 0.3% in those who identify as White and 0.3% in those who identify as Indian (Shisana et al., 2009). It also highlights the caregiving role that many young people have had to adopt because of family members living with HIV (Cluver et al., 2012), and supports the statement of Jürgensen et al. (2012) that many individuals have been witness to HIV-related suffering and death.

What is heartening is that few learners reported being tested because they had symptoms of HIV, which concurs with the Horizons study (2001) in Kenya and Uganda, where most learners were tested while they were still healthy. Having symptoms which made them suspect HIV as a reason for testing and being offered an HIV test as part of routine health care were significantly more common reasons in learners who identified as Black. This may be because health workers are more likely to suggest an HIV test in a Black patient (because of the high prevalence of HIV in this racial group).

#### **6.5.4. Barriers to uptake of HCT**

Less than a quarter of learners who had been tested said it was difficult for them to decide to be tested. Of those who said it was difficult, the fear of testing positive and of having their finger pricked and concerns about their results not being kept confidential were the main reasons given for testing being difficult. The fear of testing positive has been cited in other studies (Delva et al., 2008; Horizons, 2001; Matovu & Makumbi, 2007; Meiberg et al., 2008; MacPhail et al., 2008), as well as the dislike of having a finger pricked (McCauley, 2004; Tuysuzoglu et al., 2011). Older learners were more likely to give fear of testing positive as the reason why they did not consent to testing. This may be because older learners were more likely to have been sexually active and therefore been exposed to HIV.

Only 66% of those who had been tested thought that service providers would maintain confidentiality. Learners who identified as Black were more likely to give this as a reason. This is similar to findings by MacPhail et al. (2008) in their study in two South African townships, in which adolescents reported they were concerned about lack of confidentiality in testing services. Learners from lower grades were more likely to give “discomfort with being asked too many personal questions” as a reason for finding it hard to be tested.

Learners who had not been tested, reported not testing because they did not feel vulnerable to HIV, either because they had never had sex before (45.8%) or because they thought their partner was not HIV positive (32%). Female

learners were more likely to have not been tested because they had never had sex before, which concurs with the findings of Shisana et al. (2009) in which South African males reported an earlier sexual debut than females. The feeling of not being vulnerable to HIV infection was also a commonly cited reason for not undergoing testing in other studies (Horizons, 2001; Mc Cauley, 2004; Peralta et al., 2007). Nearly 40% of non-testers said that they did not agree to being tested because they were afraid of needles. This reason was more likely to be given by female learners. As mentioned before, this fear of needles has been cited by young people in other studies as a barrier to testing (McCauley, 2004; Tuysuzoglu et al., 2011). Not knowing how to access HCT was not a commonly cited reason for not testing. Similarly, in the Horizons study (2001), non-testers were aware of existing HCT services.

Less than 30% of non-testers said that they did not agree to being tested because they thought that HCT could have negative consequences, for example, that they would test positive, that others would assume that they were sexually active or already HIV positive, and that health workers would treat them badly or not keep their results confidential. Similarly, only 4% of Kenyan youth in the Horizons study (2001) who had not been tested reported a fear of testing positive as the reason they had not agreed to be tested. This is in contrast to the findings of my FGDs and studies done by others that found that these negative consequences are major barriers to testing in young people (Denison et al., 2006; McCauley et al., 2004; Meiberg et al., 2008; Sherr et al., 2007). This discrepancy between hypothetical and actual acceptability of HCT was highlighted by a study done in Malawi, where uptake of HCT was high when offered conveniently door-to-door and provided confidentiality in people's homes (Angotti et al., 2009) despite low uptake generally in the country. Angotti pointed out that many studies rely on hypothetical responses to explain low HCT uptake; the explanation often being that people fear testing positive. She proposed that rather than pose hypothetical questions about barriers to HCT, perhaps the only valid way to assess acceptability of HCT is by actually offering it, and also that attention to factors such as convenience and confidentiality may, in fact, alleviate the fear of HCT (Angotti et al., 2009). Similarly, in my research, the learners in the FGDs were being asked hypothetical questions, whereas their responses to the survey were based on their actual experience of being offered HCT at school. This also highlights McLaughlin and Wyszewianski's (2002) point about the interdependency of Penchansky and Thomas's five dimensions. Making HCT available at health facilities does not necessarily improve access for individuals. However, if the other dimensions of geographical accessibility (in this case HCT was provided in a geographically convenient setting – the school) and acceptability are addressed, access is more likely to improve.

#### **6.5.5. Who learners discuss HCT with**

Just over a half of learners had discussed going for testing with a parent and/or friend, and only 20% had discussed it with a partner. In a study with youth in Kenya and Uganda, young people reported talking to their friends about testing, getting information about testing sites from their friends, and accompanying friends when going for testing (Horizons, 2001). Similarly, in Zambia, young people's family and friends influenced their decisions about HCT, and if accompanied when going for testing, would most often be accompanied by a friend

for logistical and emotional support (Denison et al., 2006). Also, young people who had discussed HCT with a family member or friend were more likely to go for an HIV test (Denison et al., 2006). It is therefore important, when promoting HCT, to include messages that encourage communication with family and peers (Denison et al., 2006).

#### **6.5.6. Content and quality of pre-and post-test counselling**

According to learners' recall, pre- test counselling had covered most of the content recommended by UNAIDS, except for explaining the window period. However, fewer learners who had been tested at school reported that a positive prevention plan had been discussed during the post-test counselling. This corroborated my findings from the observation of the HCT counselling sessions (see Chapter 5) and is similar to the findings of the Horizon study (2001) that showed that post-test counselling was either absent or insufficient when Kenyan youth went for HCT. Most learners, however, in this survey, felt that they had been given enough information and had found the counselling helpful. Similarly, in the Horizons study (2001), even though the quality of counselling varied, young people saw the counselling as a valuable part of the HCT process.

Initially, when UNAIDS recommended that countries include HCT in their HIV and AIDS strategies (UNAIDS, 1997), it was about both prevention and care. In the way HCT is being provided in developing countries at present, the emphasis seems to have changed from prevention to care, with less attention being placed on high quality counselling that can motivate people to adopt safe behaviour. The reality is that developing countries do not have the resources to provide HCT with high quality counselling if they are trying to test as many people in the population as possible. Therefore, as in the Western Cape, South Africa, where the new ACTS model of testing has replaced the UNAIDS model, many developing countries are not providing counselling that is conducive to behaviour change. Although the ACTS model includes a discussion of a prevention plan, in this study, service providers were often observed to have omitted to incorporate this into the counselling session.

#### **6.5.7. HIV-positive learners' experiences**

In this study, 4% of learners reported being HIV positive, which is similar to the Western Cape prevalence of 3% for those aged 15-24 years (Shisana et al., 2009). The demographics of the learners who tested positive in this study mirrors those of the national demographics, that is, a high prevalence in Black females from low socio-economic backgrounds (Shisana et al., 2009). Of the 15 learners who reported testing HIV positive, only a third had gone to the clinic to be tested and only 13% said that they decided to be tested because they were concerned about their past sexual behaviour. This concurs with the findings of a national survey in which 62% of HIV-positive 15 to 24-year-olds considered themselves to be at low or no risk of HIV infection (Pettifor et al., 2004).

What is worrisome is that even though these learners knew their status, only 20% had gained access to care and support. Similarly, in Zambia, learning about their HIV-positive status was not linked to youth accessing care and



support services (Denison et al., 2006), and in Uganda and Kenya, the majority of youth were not referred for follow up after testing (Horizons, 2001). In my evaluation of the HCT service, I discovered that learners who test positive are given a referral letter and sent to the local health facility for further treatment. One of the reasons that the HCT service is brought to schools is because formal health services do not cater for young people's needs (see Section 2.4. Youth Friendly Health Services), and yet they are referred to these 'unfriendly' places for ongoing care. It makes sense then that many of the learners who test positive do not make use of these services.

## 6.6. Limitations

This study aimed to explore the learners' perspective on school-based HCT, and therefore the findings are based on learner self-reporting. However self-report has validity constraints which need to be considered when interpreting the results. According to Crockett et al. (1987), inaccuracies in self-reports are usually due to errors in recall or to social desirability effects. Errors in recall may occur when participants are expected to recall information about themselves (Crockett et al., 1987). Learners were asked to recall events, thoughts and feelings that had occurred when they had last had an HIV test. The possibility of recall error due to time lapse was therefore possible. Social desirability effects may also have influenced learners' self-reporting. According to Crockett et al. (1987), participants may try to present themselves (consciously or unconsciously) in what they consider to be a socially desirable way, and therefore may adapt their responses to questions to make their behaviour seem less abnormal

Participation bias may also have affected the results of the study. Catania (1990) points out that participants may be infected or affected by HIV and decide to participate for help-seeking reasons, or they may decide not to participate because they feel threatened by the topic of HIV.

Fenton (2001) also described another type of participation bias, item response bias, in which participants refuse to answer particularly sensitive questions. This may explain the non-responses and inconsistent responses in the questionnaire, especially those by learners who tested HIV positive. Although learners were not asked to put their names on the questionnaire, Catania (1990) pointed out that participants' perceptions of privacy may vary according to the extent that they believe the researcher can identify them, and therefore influence their responses.

The method of data collection in this part of the study may also have affected the validity. Fenton (2001) suggested that pen and paper methods may make understanding and responding to questions difficult for those with poor literacy. This may be one of the reasons for the inconsistencies in the responses in this study. Jaspán et al. (2007), in their study with South African adolescents, also found that data regarding sensitive subjects (for example HIV in this study) were more complete when collected by using personal digital assistants rather than from self-administered paper questions.

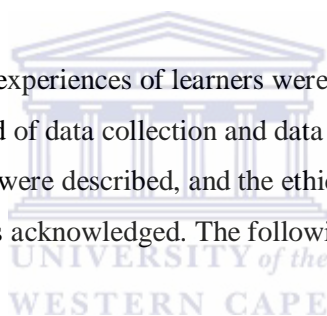
## **6.7. Conclusions**

The results of this study suggest that school-based HCT increases uptake by learners. The findings of the survey indicate that females, learners that do not identify as Black, and older learners are more likely to have had an HIV test. The factors that influence uptake of HCT appear to be complex, with learners reporting many different reasons for being tested or not being tested. The role of pre-and post-test counselling in behaviour change in school-based HCT is also questioned. Furthermore, the results highlight the fact that HIV-positive young people are not being linked up with treatment and care.

Longitudinal research needs to be done to determine the effectiveness of the counselling on behaviour change in the school-based HCT setting. Studies need to be done that look at why HIV-positive young people do not access care and support and that look at the effectiveness of referral systems for young people. Strategies need to be developed in consultation with HIV-positive young people to improve their access to care and support.

## **6.8. Summary**

In this chapter, the testing behaviours and experiences of learners were explored, as well as the factors that influence their uptake of HCT. The method of data collection and data analysis were explained in depth. The strategies employed to ensure data quality were described, and the ethical considerations were presented. The findings were discussed and the limitations acknowledged. The following chapter will be an integrated discussion of the findings of Chapters 4-6.



## **7. CHAPTER SEVEN: DISCUSSION**

In the previous three chapters, the findings of the FGDs, the evaluation of the mobile school-based HCT service and the learner survey were presented and discussed. In this chapter, the findings of these chapters are discussed in an integrated way, bringing together the qualitative and quantitative components of this research.

School-based HCT has been implemented by NGOs in Cape Town, in an attempt to increase the uptake of HCT by young people. Little has been written on research about this model of HCT provision, and there is no evidence to guide its implementation. The purpose of this study was to obtain learners' views on providing HCT in the school setting and to explore the factors that influence HCT uptake in learners, in order to make recommendations for implementing school-based HCT.

### **7.1. School-based HCT: is it what learners want?**

The findings of this study suggest that school-based HCT increases uptake by learners. Compared to other studies, in which less than 40% of young people reported being tested (April et al., 2009; MacPhail et al., 2009; Venkatesh et al., 2011), in this study, 71% of learners who have access to school-based HCT testing reported having had a test, and of those who had been tested, 73.1% had been tested at school.

In the FGDs, learners said that school-based HCT was geographically more easily accessible and convenient, compared to health-facility-based HCT. This finding is similar to that of Henry-Reid et al. (1998) who suggested that school-based HCT services are more accessible and acceptable to young people than other formal health settings. However, learners stressed that if HCT is to be provided at school, it needs to be provided “in the right way”. Many of the needs expressed by the learners were based on fear: fear of being seen going for testing, fear of testing positive, fear of their HIV-positive status becoming known and the stigma associated with it, fear of not being supported if testing positive, and fear of being judged and not being understood. Therefore, according to the learners, providing school-based HCT “in the right way” meant that the HCT service needed to address these fears.

### **7.2. Fear of being seen going for testing**

Learners expressed the need to be able to be tested without others knowing that they are being tested and for privacy to be maintained. Black male learners in the FGDs were especially unhappy with being seen going for testing by their female peers. This need for secrecy (Denison et al., 2006; Horizons, 2001; Lindberg et al., 2006; MacPhail et al., 2008) and privacy (Mmari & Magnani, 2003) was also raised by young people in other studies. The fear underlying this need for secrecy and privacy is rooted in the stigma related to HIV testing. In the FGDs, learners who identified as Black stated that in the Black community, it is assumed that if one goes for an HIV test, one is

probably HIV positive. Similarly, FGD and interview participants in a study by Jürgensen et al. (2012) said that it was assumed that one is HIV positive if one is seen going for testing.

The model of 'mass testing' used by the mobile school-based HCT service does not fulfil this expressed need for privacy and secrecy. Not only are learners seen queuing for testing, but they are also seen during the counselling and testing process, as the mobile school-based service does not have the equipment to provide auditory and visual privacy. This may explain the findings of the regression modelling done in this study showing that female learners and non-Black learners were more likely to have had an HIV test, as the fear of being seen going for testing may have been a barrier to uptake of HCT for male learners and learners who identify as Black.

Surprisingly, in the learner survey, however, less than 20% of non-testers said that they did not agree to be tested because they were concerned that others would assume that they were HIV positive. There may be a number of reasons for this discrepancy between the findings of the FGDs and the survey. Learners who were concerned about being seen going for testing may also have been concerned that others would assume that they are HIV positive if they were to take part in the survey. They may have opted not to participate in the survey, and therefore their views are not reflected in the findings. Also, the concern about being seen going for testing was raised in the FGDs and was therefore not quantified and may have reflected the views of a minority. Angotti et al. (2009) proposed that this discrepancy between responses to hypothetical questions (as was done in the FGDs) and actual acceptability of HCT (as suggested by the high uptake of HCT reported in the learner survey) may be due to the fact that even though individuals fear HCT, when it is provided conveniently (e.g. in the school setting), individuals may overcome their fears and decide to be tested.

### **7.3. Fear of HIV-positive status being known**

The importance of confidentiality was raised by the learners in the FGDs and in the survey, the majority (81.8%) of testers said that it was very important to them that the health workers kept their HIV result confidential.

Although the NGO guaranteed confidentiality and made every effort to maintain it, only two-thirds of learners in this survey thought that their results were kept confidential. This is similar to findings by MacPhail et al. (2008) in their study in two South African townships, where young people were concerned about lack of confidentiality in testing services.

Both learners in the FGDs and service providers in the interviews raised concerns about maintaining confidentiality in the manner in which results were given to learners. Learners felt that it would be obvious to other learners at the testing site if they had tested positive as their distress would be seen on their faces when they exited the testing site. Service providers felt that learners could deduce who tested positive because the post-test counselling sessions were longer for those who tested positive.

#### **7.4. Fear of being judged or not being understood**

Young people, interviewed in previous studies, have raised concerns about the negative attitudes of service providers (Atuyambe et al., 2005; Erulkar et al., 2005; Horizons, 2001a; MacPhail et al., 2008; Senderowitz, 1999). Likewise, in this study, learners said that they wanted service providers who had good interpersonal skills, were easy to talk to and would not judge them for being sexually active. It was also important to them that service providers were between the ages of 20 and 30 years, so that they were young enough to relate to the experiences of young people, but old enough to be able to give advice and be supportive. Learners also expressed the need for service providers to be competent to work with young people.

When observed, the service providers were friendly and non-judgemental; however, they were all older than the ideal age that learners had expressed they would like the service providers to be. They were also not trained in providing a YFHS and had very little experience in working with young people.

The ACTS model of counselling provided by the service providers was found to be suboptimal by UNAIDS (2000b) standards during direct observation of counselling sessions, and because of the brevity of the sessions, was unlikely to be effective in bringing about changes in risky sexual behaviour. Moreover, the counselling provided did not take into consideration the special needs of marginalised groups such as young MSM, and young people involved in transactional sex and intergenerational sex. Despite this finding, the learners reported in the survey that they were happy with the content and quality of the counselling that was provided. This was a similar finding to that of the Horizons study (2001a), in which, even though the quality of counselling varied, young people saw the counselling as a valued part of the HCT process

#### **7.5. Fear of testing positive**

Fear of testing positive was often cited by testees in the learner survey as a reason why it was difficult to be tested (31.4% of testees cited this reason), and 26.1% of non-testers mentioned this as a reason they did not undergo testing. In other studies, many young people reported fear of testing positive as a barrier to testing (Delva et al., 2008; MacPhail et al., 2008; Matovu & Makumbi, 2007). In the FGDs, the fear of testing positive was also mentioned by some learners as a reason for not agreeing to being tested. They suggested that information be given about what to do if one should test HIV positive before testing takes place, as they felt that this would reassure learners and alleviate some of these fears. Learners also stated that it was important that if they tested positive, that they would be supported in accessing care and treatment, which echoed the needs of young people in an earlier study done in South Africa, where young people highlighted the importance of ongoing counselling in order to deal with a positive diagnosis and to assist with access to treatment (MacPhail et al., 2008).

However, in the learner survey, only 20% of learners who tested positive reported gaining access to care and treatment. Similarly, in Zambia, learning about their HIV-positive status was not linked to young people receiving

care and support services (Denison et al., 2006), and in Uganda and Kenya, the majority of young people were not referred for follow up after testing (Horizons, 2001a). The service providers in the interviews in this study had also expressed their unhappiness with the fact that HIV-positive learners were referred to health facilities without any form of follow up to ensure that they were linked with the support that they needed.

## **7.6. Learners' perception of being at low risk**

Less than 20% of learners in the survey cited concerns about their own or their partner's previous sexual behaviour as the reason for choosing to be tested. In contrast, in other studies, risk exposure through sexual activity has been cited as the most common reason young people go for HCT (Denison et al., 2006; McCauley et al., 2004).

Non-testers said they did not get tested because they did not think they were HIV positive (52.3% of non-testers gave this reason). Some non-testers did not go for tests because they had never had sex before (46.4%), or because they thought their partner was not HIV positive (40.8%). Of the 15 learners who reported testing HIV positive, only 13% said that they been tested because they were concerned about their past sexual behaviour, which concurs with the findings of a national survey where 62% of HIV-positive 15 to 24-year-olds considered themselves at low or no risk of HIV infection (Pettifor et al., 2004). Similarly, in a study in the United States (Peralta et al., 2007), adolescents who had never been tested considered themselves not to be at risk even though they had reported risky sexual behaviour. This lack of risk perception is an important finding in understanding the factors that influence HCT uptake in young people and is confirmed in this study.

In this study, few learners reported having been tested because they had symptoms of HIV, which is similar to the findings of the study done in Kenya and Uganda, where most learners were tested while they were still healthy (Horizons, 2001a). However, in other studies, young people reported that they thought testing was only for individuals with symptoms (Jürgensen et al., 2012; MacPhail et al., 2008; Peralta et al., 2007).

## **7.7. Conclusions**

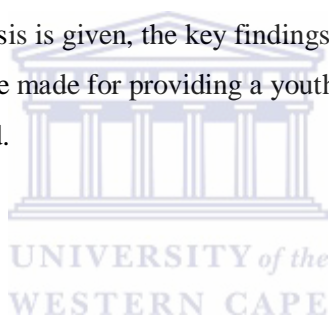
The integrated findings suggest that school-based HCT increases uptake in learners. Even though several of the learners' expressed needs are not addressed by the school-based HCT service, and despite their fears surrounding testing, many learners have nevertheless been tested. This may be explained by the strengths-based perspective which postulates that in the midst of complexity and challenges, individuals ultimately make choices "based on their own best sense of what will meet their need" (Weick, Rapp, Sullivan & Kisthardt, 1989, p. 353). Weick et al. describe this sense as an "inner wisdom" which is fuelled by the individual's innate strengths and capabilities, their personal history, and by supportive relationships and structures in their external environment.

The findings from the FGDs, the learner survey and the literature, with regards to the factors that motivate learners to be tested or hinder them in being tested, do not concur. This highlights the complexity behind the factors that influence uptake of HCT in learners. As postulated by Angotti et al. (2009), the responses individuals give to hypothetical questions do not always match their real-life experiences. Of note is the perception of low risk that learners have regarding their vulnerability to HIV infection, which emphasises the need for ongoing education regarding risk factors for HIV infection. Finally, it is of concern that only a small percentage of learners who test HIV positive receive treatment. Not only is the school-based HCT service ineffective if these learners are not linked with the care and support that they require, but it is also unethical.

## **7.8. Summary**

In this chapter, the findings of Chapters 4-6 were integrated and discussed. The expressed fears and needs of learners with regards to school-based HCT were discussed in relation to other studies in the literature. The extent to which the mobile school-based HCT service addresses the needs of the learners was also deliberated.

In the final chapter, an overview of the thesis is given, the key findings are presented, and the significance of the study is put forward. Recommendations are made for providing a youth friendly, school-based HCT service, and suggestions for further research are offered.



## 8. CHAPTER EIGHT: OVERVIEW, RECOMMENDATIONS AND CONCLUSIONS

The final chapter consists of an overview of the study, a presentation of the key findings and the recommendations arising from the findings, suggestions for further research, and finally, a conclusion.

### 8.1. Overview

The aim of this study was to make recommendations for providing youth friendly, school-based HCT. The characteristics of a YFHS, as proposed by WHO (2002), formed the theoretical framework for the research. In order to achieve the aim, the objectives were as follow:

1. To explore the expressed needs of learners with regards to school-based HCT service provision.
2. To explore whether the mobile school-based HCT service is youth friendly.
3. To determine the factors that influence uptake of HCT in learners.
4. To describe the testing behaviour of those learners who have been tested.
5. To describe the experiences, during testing, of those tested.
6. To describe the care and treatment that HIV-positive learners have received.

The research aim and objectives translated into the following questions, which framed and focused the research process:

1. What are the expressed needs of learners with regards to school-based HCT service provision?
2. Is the mobile school-based HCT service youth friendly?
3. What are the factors that influence learners' uptake of HCT?
4. What are the testing behaviours (i.e. number of times tested, time since last test, where tested) of learners who have tested?
5. What are the testing experiences of learners who have tested?
6. What care and treatment have learners who tested HIV positive accessed?

The research paradigm framing this study is one of pragmatism. A mixed-method design, with both quantitative and qualitative components, is used. The qualitative component consisted of FGDs with learners (to explore their needs for school-based HCT provision), observation of the HCT site layout and environment, interviews with service providers and direct observation of HCT counselling sessions (to determine the youth-friendliness of the mobile school-based HCT service). Content analysis was used to analyse the data of the qualitative component. The qualitative component of the study was followed by a quantitative component, which consisted of a learner



survey (to explore their HCT experiences and behaviours, and the factors that influence their uptake of HCT). Both descriptive and inferential statistics were used to analyse the data. Finally, the findings of both the qualitative and quantitative components of the study were used to make recommendations for providing a youth friendly, school-based HCT service.

## 8.2. Key findings

Key findings that emerged from this study concern the needs of learners regarding school-based HCT, the youth friendliness of a mobile school-based HCT service, and the learner's HCT experiences and behaviours.

Learners found school-based HCT convenient and easily accessible and wanted HCT to be provided at school, on condition that it met their expressed needs. They expressed the need to be tested without others seeing them go for testing, for confidentiality to be guaranteed, and for privacy to be maintained. Learners wanted information about the benefits and procedure of HCT before testing took place. They needed assurance that those who tested positive would be provided with the necessary care and support. They wanted service providers to be friendly, non-judgemental, easy to communicate with, and competent to work with young people.

The mobile school-based HCT service met some of the needs of the learners and fulfilled some of the criteria for being a YFHS. The service was equitable in that all learners, irrespective of race, sex, age or socio-economic status, were free to use the service, but not equitable in that it was not sensitive to the needs of males and marginalised young people, and that it was not provided with the same amount of privacy at all schools. The service was accessible to learners in terms of location and cost. The service was acceptable in that confidentiality was guaranteed and the service providers were friendly and non-judgemental, but was not acceptable in that there was limited auditory and visual privacy, service providers were not trained to provide a youth friendly service, information about HCT was not provided prior to the testing day, and no educational materials were available. The service was appropriate in that HCT is internationally and nationally recommended as an intervention for decreasing the transmission of HIV, based on evidence and expert opinion, and studies have suggested that young people want to know their HIV status. The service was effective in that it identified learners who are HIV positive, but not effective enough because these learners were not provided with the means to receive care.

In the results of the survey, the uptake of HCT was found to be high (71%), most of the learners having tested at school. The factors which influenced the uptake of HCT were complex. The majority of learners who were tested reported wanting to "*know their status*", "*planning for the future*" or "*testing as part of routine health care*". However, very few learners gave these top three reasons as the only reasons they agreed to be tested. Many also cited risk exposure through sexual activity, caring for an HIV-positive person, and having symptoms suspicious of HIV as reasons. Most learners were tested while they were healthy, with only 7% of learners being tested because they had symptoms which suggested they had HIV. Those who had been tested said it was difficult to make the

decision to be tested because they were afraid they would test positive, they disliked having their fingers pricked, and they were concerned that their results would not be kept confidential. Non-testers said they did not undergo testing because they did not think they were vulnerable to HIV, either because they had never had sex or they did not think their partner had HIV. A few said they did not undergo testing because they were afraid of the negative consequences of testing, for example, the associated stigma. Learners who tested positive said that they had decided to be tested because they wanted to “*know their status*,” and a few were concerned about their risk exposure (only 13.3%). Learners were satisfied with the content and quality of counselling, despite it being found to be suboptimal by UNAIDS standards. Only 4% of learners reported being HIV positive. The majority were Black females from low socio-economic backgrounds. Two thirds had tested at school and a third had disclosed their status to someone else. Only 20% of those reported to be HIV positive had received care and support after diagnosis.

### **8.3. Significance of this study**

This study adds to the body of emancipatory research by giving young people a voice in the discussion regarding the provision of HCT in schools and will contribute to the current debate around the ethics and feasibility of providing school-based HCT. This unique insider perspective is critical to understanding young people’s worlds and enables them to be part of the decision-making process in a part of their lives which particularly concerns them. The findings also contribute to research on the sociology of childhood by shedding light on young people’s HCT experiences and behaviours within a social context, and how their testing behaviours are affected by the social structures within which they live.

This study also contributes to the body of knowledge concerning youth and adolescent health. Very few studies that document school-based HCT programmes are available, so this research adds to the literature regarding HCT in the school-setting. This study also sheds light on the factors that influence the uptake of HCT by young people in developing countries and contributes to the limited body of literature on youth friendly approaches to HCT provision.

This research provides the South African National Departments of Health and Basic Education with an evidence-based approach to implementing HIV testing in schools, which is part of the National HIV and AIDS and STI Strategic Plan for 2012-2016. These recommendations can also be used by NGOs (both locally and internationally) who are providing HCT services at schools to make their service more youth friendly.

### **8.4. Recommendations for providing a youth friendly school-based HCT service**

The aim of this study was to make recommendations for providing a youth friendly school-based HCT service. In this section, these recommendations will be put forward, based on my literature review and the findings of my

study. Because of the multifaceted nature of HCT, these recommendations are intended for all stakeholders involved in designing, implementing and evaluating such a service for young people, including researchers, implementers, civil society and government departments. These recommendations are not meant to be exhaustive, nor fully comprehensive, but emerge from the findings of my research.

#### **8.4.1. The purpose of school-based HCT**

Initially the purpose of HCT was to both prevent HIV and to provide a gateway for access to care (UNAIDS, 1997). However, in developing countries where HIV prevalence is high, there has been a shift in the emphasis from prevention to care because the aim is to test as many people in the population as possible and because there are limited resources to provide the high quality counselling which is more likely to result in positive behaviour change. Similarly, in the Western Cape, the DOH has replaced the UNAIDS model with the ACTS model of HCT in order to increase the number of people who are tested and, subsequently, to identify more people who are HIV positive. Therefore, the recommendations that will be made will be based on the premise that the objective of school-based HCT is to identify HIV-positive learners so that they can be offered care and support. Because most learners will test negative and therefore still be in the position to protect themselves and others, alternative ways of helping learners to develop individual plans for protecting themselves against acquiring HIV need to be put in place. These alternative ways of assisting young people to develop plans for protecting themselves will not be discussed in this thesis, but it is recommended that further research be done to determine the best methods of doing this.

#### **8.4.2. Providing HCT as part of a comprehensive health service**

The primary concern that learners expressed was the fear of the negative consequences of being seen going for testing. By providing HCT as part of a comprehensive school-based health service (which includes STI and TB screening, nutrition services, mental health services and social services), learners are able to visit a service provider without anyone else knowing their reason for the visit. Also, providing HCT as part of a package of health services has the potential to normalise it.

#### **8.4.3. Ensuring the service is provided in a setting with visual and auditory privacy**

Mass testing of learners violates their right to privacy. HCT as part of a comprehensive health service should be provided with visual and auditory privacy. At a minimum, tents can be used, spaced far enough apart to provide auditory privacy. Ideally, the service should be provided in a room with a door that can close. Learners should also not be subjected to having to face queues of waiting peers when they exit the service, and therefore it is recommended that they be seen by an appointment system or that not more than two to three learners at a time are allowed out of the classroom to make use of the health service. This would also cause less disruption of class time.

#### **8.4.4. Employing service providers who are youth friendly**

Service providers who enjoy working with young people, who are young or ‘young at heart’, who are friendly and non-judgemental, and who have good interpersonal and communication skills should be employed. These are qualities that cannot be learned, so people who are employed to provide a youth friendly service should have these traits inherent in their personalities.

#### **8.4.5. Training and supporting service providers to provide an acceptable and effective service**

Service providers need to be given the knowledge and skills to work with young people and to provide a service which is acceptable to them, that is, a YFHS. Service providers also need to be given the skills to provide an effective service. They need to be trained in counselling, how to deal with issues specific to young people (including issues pertaining to marginalised young people), how to correctly execute the procedure of testing, and how to link learners up with the care and support that they need.

Because service providers have to deal with emotionally charged issues (such as sex, relationships, death and dying) on a daily basis, it is suggested that they be provided with ongoing supportive supervision and frequent information updates and in-service training in order to reduce stress and improve their effectiveness, (Grinstead, 2000).

#### **8.4.6. Providing learners with information about the service**

Not feeling vulnerable to HIV and concerns about the testing procedure are some of the reasons young people do not go for testing; therefore, active publicity and recruitment of learners to use the service needs to take place. Learners need to be provided with information regarding why it is important to be tested and how testing is done. It is important to emphasise that confidentiality is guaranteed and that those who test positive will be referred for care. The AIDS Information Centre in Uganda attracted young people to their service by distributing promotional pamphlets and brochures, placing an article in a local youth magazine, having a discussion on a local radio station about the importance and benefits of testing, and explaining the procedure that the young people would encounter when visiting the centre for testing (McCauley et al., 2004). In Manguzi, South Africa, the Tholulwazi Uzivikele HCT programme offered HCT in schools and used drama to raise awareness and to encourage testing amongst the learners (Pfaff & de Beer, 2011).

#### **8.4.7. Providing non-invasive procedures of testing for HIV**

Fear of needles has been cited, in this study (see Chapter 6) and in other studies (McCauley, 2004; Tuysuzoglu et al., 2011), as a reason young people do not go for testing. Young people have also reported that they would be more likely to undergo testing if the testing procedure was non-invasive (Peralta et al., 2007; Tuysuzoglu et al.,

2011). Therefore, where resources permit, young people should have the option of a non-invasive testing procedure, that is, testing using a mouth swab rather than having a finger pricked.

#### **8.4.8. Considering marginalised young people**

Recent studies suggest that South Africa may be experiencing a parallel homosexual and heterosexual epidemic, with 9,8% of 15 to 19-year-old MSM and 49% of 20 to 24-year-old MSM being HIV positive, compared to 3.3% and 6% in the same age groups in the general population (Metcalf & Rispel, 2009). Therefore, a school-based HCT service also needs to cater for young MSM. Service providers need to be aware that some learners may belong to marginalised high-risk groups (such as the LGBTI community and young people involved in transactional sex and intergenerational sex) and need to tailor their counselling appropriately.

#### **8.4.9. Setting up referral networks for care and support**

Only 20% of learners who tested positive reported accessing care and support (see Chapter 6). At a WHO global consultation (WHO, 2003), participants expressed their concerns about the ethics of providing testing for young people if treatment, care and support elements were not also in place. School-based HCT should not be provided if referral networks for care and support are not set up first. Clinics in Uganda that serve young people have put together a handbook of referral services for young people that is distributed to counsellors who work with young people (McCauley, 2004). Formal health services need to be made youth friendly, and young people need to be referred to specific individuals within other services who have training and experience in working with young people (McCauley, 2004).

#### **8.4.10. Involving young people**

One of the characteristics of a YFHS is that young people should be actively involved in the assessment and provision of the service (WHO, 2002). Involving young people in the design of the service and getting their continuous feedback will not only help to provide a service that is more likely to meet their needs but will also enhance their ownership of the service. Young people have been involved in providing a YFHS in some countries in many ways, including design, implementation and evaluation of the service (Senderowitz, 1998). In a Tanzanian refugee camp project, the organisers used peer educators to inform community members about the service, involved the young people in planning and implementing activities and established school health clubs (Likwelile, cited in McCauley, 2004).

In some studies, young people have indicated a preference for obtaining reproductive health information from their peers (Senderowitz, 1998); however, in the FGDs in this study (see Chapter 4), learners said that they did not want to be counselled by someone their own age as they felt that their peers would only have as much knowledge as they did. Senderowitz (1998) did, however, warn that the acceptance of peer counsellors may vary according to

the culture and norms of the target population and suggested that decisions about using peers for counselling and education regarding reproductive health services be made with this in mind.

#### **8.4.11. Involving parents, community structures and peers**

It is generally assumed that in order to increase young people's use of health services, it is crucial to work with parents and community structures to promote and develop support and acceptance for the services. Parents and other adults in the community are often unreceptive to reproductive health services for young people, and therefore it is important to raise community awareness of and support for such services (WHO, 2003). A study done in Zambia indicated that community acceptance of reproductive health services for young people may play a positive role in young people's use of the service (Mmari & Magnani, 2003). The fact that about a half of the learners who were tested in the learner survey had discussed going for testing with a parent and/or friend (see Chapter 6), and that other studies have elicited similar findings (Denison et al., 2006; Horizons, 2001a), highlights the important role of parents and peers in young people's testing decisions.

A project in Tanzanian refugee camps has successfully worked with the community to gain acceptance for young people who wish to test for HIV or use other reproductive health services. They bridged the gaps between adults in the community and the young people through involvement in debates, symposia, Parents Day celebrations, training and awareness workshops and by having the adults in the community review all material before it was presented to the young people. This resulted in the number of young people seeking HCT doubling and the community requesting additional centres (Likwelile, cited in McCauley, 2004).

By involving parents, community structures and peers, the hope is that HCT among young people will be normalised among family and community networks.

#### **8.4.12. Addressing stigma**

Fear of stigma and discrimination has been cited as a barrier to testing in this study (see Chapter 6) and other studies (Denison et al., 2006; Horizons, 2001a; Kirumira et al. in McCauley, 2004; Matovu et al., 2005; McCauley et al., 2004; Meiberg et al., 2008; Sherr et al., 2007; Yahaya et al., 2010). Therefore, stigma needs to be addressed on both an individual and community level if a school-based HCT service is to be successful.

In a Horizons publication which reviewed interventions that have attempted to reduce the stigma of HIV and AIDS (Horizons, 2001b), it was suggested that intervention strategies should include information, counselling, coping skills acquisition, and contact with people living with HIV (PLHIV). Information about HIV and AIDS (which included facts about the condition, modes of transmission and modes of risk reduction) in the reviewed interventions were given in the form of advertisements, leaflets, information packs and presentations. Some interventions combined information-based approaches with counselling of PLHIV to assist them to disclose their

status and to cope with the condition. Attitudes towards PLHIV among primary school children improved after a school-based programme in Tanzania, which used information-based approaches as well as small group discussions with learners and involvement of learners in poster making, role play, songs and poems about HIV risk factors (Klepp, Ndeki, Leshabari, Hannan & Lyimo, 1997). In Uganda, a community project decreased stigma and discrimination towards PLHIV using information-based approaches as well as demystifying and dispelling misinformation about HIV and AIDS through testimonies by PLHIV (Mwandha et al., cited in Horizons, 2001b).

#### **8.4.13. Monitoring and evaluating the service**

Monitoring and evaluation is a critical part of providing a youth friendly school-based HCT service. It is necessary to identify and correct potential problems on an ongoing basis. Both the service delivery (how well the service is provided) as well as the effectiveness of the service (the impact of the service) need to be monitored and evaluated (Family Health International, 2003). A monitoring and evaluation plan needs to be designed and implemented with process and effectiveness indicators (see Table 8.1 for suggestions for indicators).



**Table 8.1: Suggested indicators for monitoring and evaluation of school-based HCT service [amended from Family Health International's VCT Toolkit (2003)]**

**Process indicators: service delivery/programme output**

- Proportion of learners in the school community who know about the HCT service;
- Number of learners counselled and tested at the HCT site (per month, per year);
- Proportion of learners testing HIV positive who have been for appropriate care and support;
- Proportion of learners counselled and tested who state that they intend to inform their partners;
- Proportion of learners counselled and tested who have informed their partners

**Effectiveness indicators: intermediate programme outcomes**

- Changes in HIV/STI-related risk behaviours among HCT clients and their partners;
- Changes in behaviour among learners stating that they know their serostatus (collected through behavioural surveillance surveys, for example);
- Changes in STI trends in sub-populations (e.g. young MSM) reached by the HCT service;
- Reduced stigmatisation of, and discrimination against, learners affected by HIV and AIDS;
- Increased community support for HIV positive learners.

**Effectiveness indicators: expected programme impact (long-term effects)**

- Changes in trends in HIV incidence/prevalence in the population or sub-populations served by the HCT service;
- Sustained changes in societal norms in the community reached by the HCT service

## **8.5. Suggestions for further research**

The following are suggestions for further research:

- HCT service providers' experiences of school-based HCT
- Impact of school-based HCT on sexual risk behaviour in learners
- Impact of school-based HCT on stigma and discrimination in the school community
- Reasons why HIV-positive learners do not access care and support
- Strategies to improve HIV-positive learners' access to care and support



## 8.6. Conclusions

This research focused on the model of providing school-based HCT in a youth friendly manner. One example of this model was evaluated to explore whether it met the expressed needs of learners. The factors that influence the uptake of school-based HCT, as well as learners' behaviours and experiences during HCT testing, were also explored.

Providing HCT at schools, using the youth friendly approach suggested in this thesis, would assist young people to access HCT. Multisectoral collaboration and community involvement is essential to provide school-based HCT in an acceptable and effective way and to provide supportive networks for young people to go through the HCT process.



## REFERENCES

- Aday, L., Begley, C.E., Lairson, D.R., Slater, C.H., Richard, A.J., & Montoya, I.D. (1999). A framework for assessing the effectiveness, efficiency, and equity of behavioural healthcare. *American Journal of Managed Care*, 5(1 SP), SP25-44.
- African Youth Alliance/Pathfinder. (2003). *Youth-friendly sexual and reproductive health services: An assessment of facilities*. Retrieved from [http://www2.pathfinder.org/site/DocServer/Youth\\_Friendly\\_Services\\_Summary\\_Assessment\\_Report\\_Tanzania.pdf](http://www2.pathfinder.org/site/DocServer/Youth_Friendly_Services_Summary_Assessment_Report_Tanzania.pdf)
- Altman, D. (1991). *Practical statistics for medical research*. London: Chapman & Hall.
- Andersen, R.M. (1995). Revisiting the behavioural model and access to medical care: Does it matter? *Journal of Health and Social Behaviour*, 36, 1-10.
- Angotti, N., Bula, A., Gaydosh, L., Kimchi, E.Z., Thornton, R.L., & Yeatman, S.E. (2009). Increasing the acceptability of HIV counselling and testing with three C's: Convenience, confidentiality and credibility. *Social Science & Medicine*, 68(12), 2263-70.
- Angrosino, M.V., & Mays de Perez, K.A. (2000). Rethinking observation: From method to context. In N. K. Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 673-702). Thousand Oaks, CA: Sage.
- April, M.D. (2010). Rethinking HIV exceptionalism: The ethics of opt-out HIV testing in sub-Saharan Africa. *Bulletin of the World Health Organization*, 88, 703-708. doi: 10.2471/BLT.09.073049
- April, D.A., Walensky, R.P., Chang, Y., Pitt, J., Freedberg, K.A., Losina, E., Paltiel, D., & Wood, R. (2009). Trends in HIV testing rates and outcomes in a South African township, 2001-2006: Implications for expanded screening policies. *Journal of Acquired Immune Deficiency Syndrome*, 51(3), 310-316.
- Arah, O.A., Klazinga, N.S., Delnoij, D.M.J., Ten Asbroek, A.H.A., & Custers, T. (2003). Conceptual frameworks for health systems performance: A quest for effectiveness, quality, and improvement. *International Journal for Quality in Health Care*, 15(5), 377-398.
- Arah, O.A., Westert, G.P., Hurst, J., & Klazinga, N.S. (2006). A conceptual framework for the OECD health care quality indicators project. *International Journal for Quality in Health Care*, 18(Suppl. 1), 5-13.

- Arthur, G., Nduba, V., Forsythe, S., Mutemi, R. & Gilks, C. (2007). Behaviour change in clients of health centre-based voluntary HIV counselling and testing services in Kenya. *Sexually Transmitted Infections*, 83, 541-546.
- Atuyambe, L., Mirembe, F., Johansson, A., Kirumira, E.K., & Faxelid, E. (2005). Experience of pregnant adolescents: Voices from Wakiso District, Uganda. *African Health Sciences*, 5(4), 304-309.
- Bankauskaite, V. & Dargent, G. (2007). Health systems performance indicators: Methodological issues. *Presupuesto y Gasto Público*, 49, 125-137. Retrieved from [http://www.ief.es/documentos/recursos/publicaciones/revistas/presu\\_gasto\\_publico/49\\_health.pdf](http://www.ief.es/documentos/recursos/publicaciones/revistas/presu_gasto_publico/49_health.pdf)
- Bassett, I.V., & Walensky, R.P. (2010). Integrating HIV screening into routine health care in resource-limited settings. *Clinical Infectious Diseases*, 50(Suppl. 3), S77-84. doi:10.1086/651477
- Bassett, R., Beagan, B.L., Ristovski-Slijepcevic, S., & Chapman, G.E. (2008). Tough teens: The methodological challenges of interviewing teenagers as research participants. *Journal of Adolescent Research*, 23, 119. doi:10.1177/074355840731073.
- Bearinger, L.H., Sieving, R.E., Ferguson, J., & Sharma, V. (2007). Global perspective on the sexual and reproductive health of adolescents: Patterns, prevention, and potential. *The Lancet*, 369(9568), 1220-31.
- Bell, D.M. (1997). Occupational risk of human immunodeficiency virus infection in healthcare workers: An overview. *American Journal of Medicine*, 102(5B), 9-15.
- Bhuiya, I., Rob, U., Chowdhury, A. H., Rahman, L., Haque, N., Adamchak, S., ... & Khan, M. E. (2004). *Improving adolescent reproductive health in Bangladesh*. Population Council, Frontiers in Reproductive Health. Retrieved from [http://www.popcouncil.org/pdfs/frontiers/FR\\_FinalReports/Bang\\_Youth.pdf](http://www.popcouncil.org/pdfs/frontiers/FR_FinalReports/Bang_Youth.pdf)
- Booth, M.L., Bernard, D., Quine, S., Kang, M.S., Usherwood, T., Alperstein, G., & Bennett, D.L. (2004). Access to health care among Australian adolescents. Young people's perspectives and their sociodemographic distribution. *Journal of Adolescent Health*, 34(1), 97-103.
- Boswell, D., & Baggaley, R. (2002). Voluntary counselling and testing and young people: A summary overview. Retrieved from <http://www.fhi360.org/en/HIVAIDS/pub/guide/vcttoolkityouth.htm>
- Braveman, P.A., & Gruskin, S. (2003). Defining equity in health. *Journal of Epidemiology and Community Health*, 57(4), 254-8.

- Brindis, C. D., Llewelyn, L., Marie, K., Blum, M., Biggs, A., & Maternowska, C. (2003). Meeting the reproductive health care needs of adolescents: California's family planning access, care, and treatment program. *Journal of Adolescent Health, 32*(6), 79-90.
- Brindis, C. D., Geierstanger, S. P., Wilcox, N., McCarter, V., & Hubbard, A. (2005). Evaluation of a peer provider reproductive health service model for adolescents. *Perspectives on sexual and reproductive health, 37*(2), 85-91.
- Brislin, R.W. (1970). Back-translation for cross-cultural research. *Journal of Cross-cultural Psychology, 1*(3), 185-216.
- Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.
- Brook, R.H., Chassin, M.R., Fink, A., Solomon, D.H., Kosecoff, J., & Park, R.E. (1986). A method for the detailed assessment of the appropriateness of medical technologies. *International Journal of Technology Assessment in Health Care, 2*, 53-63.
- Bryman, A. (2006). Integrating quantitative and qualitative research: How is it done? *Qualitative Research, 6*, 97. doi: 10.1177/1468794106058877.
- Catania, J. A., Gibson, D. R., Chitwood, D. D., & Coates, T. J. (1990). Methodological problems in AIDS behavioural research: Influences on measurement error and participation bias in studies of sexual behaviour. *Psychological Bulletin, 108*(3), 339-362.
- Christianson, M., Berglin, B., & Johansson, E.E. (2010). 'It should be an ordinary thing' -- a qualitative study about young people's experiences of taking the HIV-test and receiving the test result. *Scandinavian Journal of Caring Sciences, 24*(4), 678-83. doi: 10.1111/j.1471-6712.2009.00762.x.
- City of Cape Town. (2003). City of Cape Town - Census 2001: Census Suburb Index. [Compiled by Strategic Development Information and GIS from 2001 Census data supplied by Statistics South Africa]. Retrieved from <http://www.capetown.gov.za/en/stats/2001census/Documents/Suburb%20Index.htm>
- Cluver, L., Orkin, M., Boyes, M., Gardner, F., & Nikelo, J. (2012). AIDS-orphanhood and caregiver HIV/AIDS sickness status: Effects on psychological symptoms in South African youth. *Journal of Pediatric Psychology, 37*(8), 857-867. doi:10.1093/jpepsy/jss004
- Cohen, J. (1960). A coefficient for agreement for nominal scales. *Educational and Psychological Measurement, 20*, 37-46.
- Corbetta, P. (2003). *Social research theory, methods and techniques*. London: Sage.

- Cremin, I., Nyamukapa, C.A., Sherr, L., Hallett, T.B., Chawira, G., Cauchemez, S., ... Gregson, S. (2009). Patterns of self-reported behaviour change following voluntary counselling and testing in a longitudinal study from Manicaland, Zimbabwe. *AIDS and Behaviour*, 14(3), 708-715.
- Creswell, J. (2003). *Research design: Qualitative, quantitative, and mixed method approaches*. London: Sage.
- Crockett, L.J., Schulenberg, J.E., & Petersen, A.C. (1987). Congruence between objective and self-report data in a sample of young adolescents. *Journal of Adolescent Research*, 2(4), 383-392.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297-334. Deane, F.P., Wilson, C.J., & Ciarrochi, J. (2002). *Mental health help seeking in young people: A report for the National Health and Medical Research Council of Australia* (Grant YS060). Retrieved from <http://www.uow.edu.au/content/groups/public/@web/@health/@iimh/documents/doc/uow025420.pdf>
- De Cock, K.M., Crowley, S.P., Lo, Y.R., Granich, R.M., & Williams, B.G. (2009). Preventing HIV transmission with antiretrovirals. *Bulletin of the World Health Organization*, 87(7), 488-A.
- Dehne, K.L., & Riedner, G. (2005). *Sexually transmitted infections among adolescents: The need for adequate health services*. Retrieved from <http://whqlibdoc.who.int/publications/2005/9241562889.pdf>
- Del Greco, L., Walop, W., & McCarthy, R.H. (1987). Questionnaire development: 2. Validity and reliability. *Canadian Medical Association Journal*, 136(7), 699-700.
- Delport, C. S. L., & Fouché, C. B. (2005). The place of theory and literature review in the qualitative approach to research. In A. S. De Vos, H. Strydom, C. B. Fouche, & C. S. L. Delport (Eds.), *Research at grassroots: For the social sciences and human service professions* (3rd ed., pp. 261-266). Pretoria: Van Schaik.
- Delva, W., Wuillaume, F., Vansteelandt, S., Claeys, P., Verstraelen, H., Vanden Broeck, D., & Temmerman, M. (2008). HIV testing and sexually transmitted infection care among sexually active youth in the Balkans. *AIDS Patient Care and STDS*, 22, 817-821.
- Denison, J.A., Nalakwanji, L., Dunnett-Dagg, W., McCauley, A., & Sweat, M.D. (2006). *Social relationships and adolescents - HIV counseling and testing decisions in Zambia*. Horizons Research summary. Retrieved from [www.popcouncil.org/pdfs/horizons/zambvctyth.pdf](http://www.popcouncil.org/pdfs/horizons/zambvctyth.pdf)
- Denison, J. A., O'Reilly, K. R., Schmid, G. P., Kennedy, C. E. & Sweat, M. D. (2008). HIV voluntary counseling and testing and behavioural risk reduction in developing countries: A meta-analysis, 1990-2005. *AIDS and Behaviour*, 12, 363-373.

- Denzin, N.K. & Lincoln, Y.S. (Eds.). (2005). *The Sage handbook of qualitative research* (3rd ed.). Thousand Oaks, CA: Sage.
- Dickson-Tetteh, K., Pettifor, A., & Moleko, W. (2001). The National Adolescent Friendly Clinic Initiative. *Reproductive Health Matters*, 9(17), 160-169.
- Dillman, D.A. (2007). *Mail and Internet Surveys. The Tailored Design Method* (2nd ed.). New York, NY: John Wiley & Sons.
- Dodd, P.J., Garnett, G.P., & Hallett, T.B. (2010). Examining the promise of HIV elimination by 'test and treat' in hyperendemic settings. *AIDS*, 24, 729-735.
- Donegan, E., Stuart, M., Niland, J.C., Sacks, H.S., Azen, S.P., Dietrich, S.L., Faucett, C., ... Operskalski, E.A. (1990). Infection with Human-Immunodeficiency-Virus Type-1 (Hiv-1) among recipients of antibody-positive blood donations. *Annals of Internal Medicine*, 113(10), 733-739.
- Doyle, A. M., Ross, D. A., Maganja, K., Baisley, K., Masesa, C., Andreasen, A., ... & Hayes, R. J. (2010). Long-term biological and behavioural impact of an adolescent sexual health intervention in Tanzania: follow-up survey of the community-based MEMA kwa Vijana Trial. *PLoS Medicine*, 7(6), e1000287.
- Erulkar, A.S, Beksinska, M., & Cebekhulu, Q. (2001). *An Assessment of Youth Centres in South Africa*. Retrieved from [http://www.popcouncil.org/pdfs/frontiers/FR\\_FinalReports/SouthAfrica\\_Youth\\_Centers.pdf](http://www.popcouncil.org/pdfs/frontiers/FR_FinalReports/SouthAfrica_Youth_Centers.pdf)
- Erulkar, A.S., Onoka, C.L., & Phiri, A. (2005). What is youth friendly? Adolescents' preferences for reproductive health services in Kenya and Zimbabwe. *African Journal of Reproductive Health*, 9(5), 51-58.
- Evans, D.B., Tan-Torres Edejer, T., Lauer, J., Frenk, J., & Murray, C.J.L. (2001). Measuring quality: From the system to the provider. *International Journal for Quality in Health Care*, 13(6), 439-446.
- Family Health International. (2003). *Voluntary counselling and testing for HIV: A strategic framework. VCT toolkit*. Retrieved from [http://www.fhi360.org/NR/rdonlyres/e3wvnsfi7dh2wi5utwueyw2p75xrkuafbb62zqlixtkncvoetip2r2zq6ca\\_cuediy2ciurs4uowj6g/VCTToolkitStrategy.pdf](http://www.fhi360.org/NR/rdonlyres/e3wvnsfi7dh2wi5utwueyw2p75xrkuafbb62zqlixtkncvoetip2r2zq6ca_cuediy2ciurs4uowj6g/VCTToolkitStrategy.pdf)
- Fan, W., & Yan, Z. (2010). Factors affecting response rates of the web survey: A systematic review. *Computers in Human Behaviour*, 26(2), 132-139. Fenton, K.A., Johnson, A.M., McManus, S., & Erens, B. (2001). Measuring sexual behaviour: Methodological challenges in survey research. *Sexually Transmitted Infections*, 77(2), 84-92. doi:10.1136/sti.77.2.84

- Forgrieve, B. (2012, July). *Shout-It-Now: A New Paradigm in Community-based HIV Counseling and Testing (HCT) How Teamwork, Technology, Celebrities & Community Partnerships are Successfully Engaging South African Adults and Youth in 21st Century HCT and Prevention Services*. Poster exhibition, THPE128, presented at the XIX International AIDS Conference, Washington D.C. Retrieved from <http://pag.aids2012.org/EPosterHandler.axd?aid=8033>
- Fowler, J., Jarvis, P., & Chevannes, M. (2002). *Practical statistics for nursing and health care*. West Sussex: John Wiley & Sons.
- Garnett, G.P., & Baggaley, R.F. (2009). Treating our way out of the HIV pandemic: Could we, would we, should we? *The Lancet*, 373(9657), 9-11.
- Gendall, P., & Ramsay, R. (2001). An Experiment with Skip Instructions. *Marketing Bulletin*, 12, Research Note 1. Retrieved from [http://marketing-bulletin.massey.ac.nz/V12/MB\\_V12\\_N1\\_Gendall.pdf](http://marketing-bulletin.massey.ac.nz/V12/MB_V12_N1_Gendall.pdf)
- Gilson, L. (2007). Acceptability, trust and equity. In D. McIntyre & G. Mooney (Eds.), *The economics of health equity*. Cambridge: Cambridge University Press.
- Gleeson, C., Robinson, M., & Neal, R. (2002). A review of teenager's perceived needs and access to primary health care: Implications for health services. *Primary Health Care Research & Development*, 3(3): 184-93.
- Glynn, J.R., Kayuni, N., Floyd, S., Banda, E., Francis-Chizororo, M., Tanton, C.,... French N. (2010). Age at menarche, schooling, and sexual debut in northern Malawi. *PLoS One*, 5(12), e15334.
- Greenberg, J., Magder, L., & Aral, S. (1992). Age at first coitus. A marker for risky sexual behaviour in women. *Sexually Transmitted Diseases*, 19(6), 331e4.
- Granich, R.M., Gilks, C.F., Dye, C., De Cock, K.M., & Williams, B.G. (2009). Universal voluntary HIV testing with immediate antiretroviral therapy as a strategy for elimination of HIV transmission: A mathematical model. *The Lancet*, 373(9657), 48-57.doi: 10.1016/S0140-6736(08)61697-9
- Guba, E.G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Technology Research and Development*, 29(2), 75-91.
- Gulliford, M.C. (2003). Equity and access to health care. In M.C. Gulliford & M. Morgan (Ed.), *Access to Health Care* (pp 36-60). London: Routledge.

- Haldre, K., Part, K., & Ketting, E. (2012). Youth sexual health improvement in Estonia, 1990-2009: The role of sexuality education and youth-friendly services. *The European Journal of Contraception and Reproductive Health Care*, 17(5), 351-362.
- Hargreaves, J.R., Morison, L.A., Kim, J.C., Bonell, C.P., & Porter, J.D.H., Watts, C.,...Pronyk, P.M. (2008). The association between school attendance, HIV infection and sexual behaviour among young people in rural South Africa. *Journal of Epidemiology and Community Health*, 62, 113-119.  
doi:10.1136/jech.2006.053827
- Harris, B., Goudge, J., Ataguba, J.E., McIntyre, D., Nxumalo, N., Jikwana, S., & Chersich, M. (2011). Inequities in access to health care in South Africa. *Journal of Public Health Policy*, 32(Suppl. 1), S102-S123.  
doi:10.1057/jphp.2011.35
- Henry-Reid, L.M., Rodriguez, F., Bell, M.A., Martinez, J., & Peera, A. (1998). Youth counselled for HIV testing at school - and hospital-based clinics. *Journal of the National Medical Association*, 90(5), 287-92.
- Hicks, N.R. (1994). Some observations on attempts to measure appropriateness of care. *British Medical Journal*, 309(6956), 730-733.
- Hills, M., Mullett, J., & Carroll, S. (2007). Community-based participatory action research: Transforming multidisciplinary practice in primary health care. *Revista Panamericana de Salud Pública*, 21(2/3), 125-35.
- Horizons. (2001a). *HIV voluntary counseling and testing among youth – results from an exploratory study in Nairobi, Kenya, and Kampala and Masaka, Uganda*. Washington DC: Population Council.
- Horizons. (2001b). *Interventions to Reduce HIV AND AIDS Stigma: What Have We Learned?* Washington DC: Population Council.
- Horner, S.D. (2000). Focus on research methods. Using focus group methods with middle school children. *Research in Nursing and Health*, 23(6), 510-517.
- Horowitz, J.A., Vessey, J.A., Carlson, K.L., Bradley, J.F., Montoya, C., & McCullough, B. (2003). Conducting school-based focus groups: Lessons learned from the CATS Project. *Journal of Paediatric Nursing*, 18(5), 3321-3331.doi:10.1053/S0882-5963(03)00104-0.
- Hsieh, H. & Shannon, S.E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288.
- Hunter, M. (2002). The materiality of everyday sex: Thinking beyond prostitution. *African Studies*, 61, 99-119.



- Hymes, K., Greene, J., & Marcus, A. (1981). Kaposi's sarcoma in homosexual men: A report of eight cases. *The Lancet*, 2(8247), 598-600.
- International Network for the Rational Use of Drugs (INRUD), Social Scientists Working Group (1996). *How to use applied qualitative methods to design drug use interventions*. Retrieved from [http://www.inrud.org/documents/upload/How\\_to\\_Use\\_Applied\\_Qualitative\\_Methods.pdf](http://www.inrud.org/documents/upload/How_to_Use_Applied_Qualitative_Methods.pdf)
- International Planned Parenthood Federation (IPPF). (2007). *A guide for developing policies on the sexual and reproductive health & rights of young people in Europe*. Retrieved from <http://www.ysafe.net/safe/page14/assets/policyguide.pdf>
- Jacobs, B., Ir, P., Bigdeli, M., Annear, P., & Van Damme, W. (2012). Addressing access barriers to health services: An analytical framework for selecting appropriate interventions in low-income Asian countries. *Health Policy and Planning*, 27(4), 288-300. doi:10.1093/heapol/czr038
- Janssen, R.S., Holtgrave, D.R., Valdiserri, R.O., Shepherd, M., Gayle, H.D., & De Cock, K.M. (2001). The serostatus approach to fighting the HIV epidemic: Prevention strategies for infected individuals. *American Journal of Public Health*, 91(7), 1019-1024.
- Jaspan, H.B., Flisher, A.J., Myer, L., Mathews, C., Seebregts, C., Berwick, J.R., Wood, R. & Bekker L.G. (2007). Brief report: Methods for collecting sexual behaviour information from South African adolescents—a comparison of paper versus personal digital assistant questionnaires. *Journal of Adolescence*, 30(2), 353-359.
- Jones, A. (2004) Involving children and young people as researchers. In V. Lewis, M. Kellett, S. Fraser, S. Ding, & C. Robinson (Eds.), *Doing research with children and young people* (pp.113-130). London: Sage.
- Jürgensen, M., Tuba, M., Fylkesnes, K., & Blystad, A. (2012). The burden of knowing: Balancing benefits and barriers in HIV testing decisions. A qualitative study from Zambia. *BMC Health Services Research*, 12, 2.
- Kabiru, C.W., Luke, N., Izugbara, C.O., Zulu, E.M. (2010). The correlates of HIV testing and impacts on sexual behaviour: Evidence from a life history study of young people in Kisumu, Kenya. *BMC Public Health*, 10, 412. doi:10.1186/1471-2458-10-412.
- Kaiser Family Foundation. (1999). *Hearing their voices: A qualitative research study on HIV testing and higher-risk teens*. Retrieved from <http://www.kff.org/youthhivstds/loader.cfm?url=/commonspot/security/getfile.cfm&PageID=13226>

- Kang, M., Bernard, D., Usherwood, T., Quine, S., Alperstein, G., Kerr-Roubicek, H., ... Bennett, D. (2005). *Better practice in youth health: Final report on research study access to health care among young people in New South Wales: phase 2*. Sydney: New South Wales Centre for the Advancement of Adolescent Health, Children's Hospital at Westmead, and Department of General Practice, University of Sydney at Westmead Hospital.
- Kaplan, E.H., & Heimer, R (1992). A model-based estimate of HIV infectivity via needle sharing. *Journal of Acquired Immune Deficiency Syndrome*, 5(11), 1116-1118.
- Katz, I., & Low-Beer, D. (2008). Why has HIV stabilized in South Africa, yet not declined further? Age and sexual behaviour patterns among youth. *Sexually Transmitted Diseases*, 35(10), 837-842.
- Kawulich, B.B. (2005, May). Participant observation as a data collection method [81 paragraphs]. *Forum: Qualitative Social Research/Sozialforschung* , 6(2), Art. 43. Retrieved from <http://www.qualitative-research.net/index.php/fqs/article/view/466/996>
- Killip, S., Mahfoud, Z., & Pearce, K. (2004). What is an intraclass correlation coefficient? Crucial concepts for primary care researchers. *The Annals of Family Medicine*, 2(3), 204-208.
- King, G., Keohane, R.O., & Verba, S. (1994). The science in social science. In King, G., Keohane, R.O., & Verba, S (Eds.), *Designing social inquiry: Scientific inference in qualitative research* (pp. 4-33). New Jersey: Princeton University Press. Retrieved from <http://press.princeton.edu/chapters/p5458.pdf>
- Klepp, K.I., Ndeki, S.S., Leshabari, M.T., Hannan, P.J., & Lyimo, B.A. (1997). AIDS education in Tanzania: Promoting risk reduction among primary school children. *American Journal of Public Health*, 87(12), 1931-1936.
- Knapp, T.R., & Mueller, R.O. (2010). Reliability and validity of instruments. In G.R. Hancock & R.O. Mueller (Eds.), *The reviewer's guide to quantitative methods in the social sciences* (pp. 337-341). New York: Routledge.
- Knowles, J.C., Leighton, C., & Stinson, W. (1997). *Measuring results of health sector reform for system performance: A handbook of indicators*. (Special Initiatives Report No. 1). Retrieved from <http://www.phrplus.org/Pubs/Sir1.pdf>
- Korkeila, K., Suominen, S., Ahvenainen, J., Ojanlatva, A., Rautava, P., Helenius, H., & Koskenvuo, M. (2001). Non-response and related factors in a nation-wide health survey. *European Journal of Epidemiology*, 17(11), 991-999.

- Krueger, R.A., & Casey, M.A. (2000). *Focus groups: a practical guide for applied research* (3rd ed.). Thousand Oaks, CA: Sage.
- Kumar, S., Mmari, K., & Barnes, W. (2009). Programming considerations for youth friendly HIV care and treatment services. In R.G. Marlink & S.T. Teitelman ST (Eds.), *From the ground up: Building comprehensive HIV/AIDS care programs in resource-limited settings*. Retrieved from <http://ftguonline.org/ftgu-232/index.php/ftgu/article/view/2022/4040>
- Kvale, S. (1996). *Interviews: An introduction to qualitative research interviewing*. London: Sage
- Landis, J.R., & Koch, G.G. (1977). The measurement of observer agreement for categorical data. *Biomedicine*, 33(1), 159-174.
- Lavis, J.M. & Anderson, G.M. (1996). Appropriateness in health care delivery: Definitions, measurement, and policy implications. *Canadian Medical Association Journal*, 154(3), 321-328.
- Leclerc-Madlala, S. (2008) Age-disparate and intergenerational sex in southern Africa: the dynamics of hypervulnerability. *AIDS*, 22(Suppl. 4), S17-S25.
- Leon, N.H., Colvin, C.J., Lewin, S., Mathews, C., & Jennings, K. (2010). Provider-initiated testing and counselling for HIV -- from debate to implementation. *South African Medical Journal*, 100(4), 220-1.
- Lindberg, C., Lewis-Spruill, C., & Crownover, R. (2006). Barriers to sexual and reproductive health care: Urban male adolescents speak out. *Issues in Comprehensive Pediatric Nursing*, 29(2), 73-88.
- Long, A.F. (1985). Effectiveness: Definitions and approaches. In A.F. Long & S. Harrison (Eds.), *Health services performance: Effectiveness and efficiency*. Beckenham, UK: Kent Croom Helm.
- Lou, C. H., Wang, B., Shen, Y., & Gao, E. S. (2004). Effects of a community-based sex education and reproductive health service program on contraceptive use of unmarried youths in Shanghai. *Journal of Adolescent Health*, 34(5), 433-440.
- Mack, N., Woodsong, C., Macqueen, K. M., Guest, G. & Namey, E. (2005). *Qualitative research methods: A data collector's field guide*. Retrieved from <http://www.fhi360.org/NR/rdonlyres/emgox4xpcoyrysqspgy5ww6mq7v4e44etd6toiejyxlhbmK5sdnef7fqlr3q6hlwa2ttj5524xbn/datacollectorguideenrh.pdf>
- MacPhail, C. & Campbell, C. (2001). I think condoms are good but, aai, I hate those things: Condom use among adolescents and young people in a Southern African township. *Social Science and Medicine*, 52(11), 1613-1627.

- MacPhail, C., Pettifor, A.E, Coates, T., & Rees, H. (2008). 'You must do the test to know your status': Attitudes to voluntary counselling and testing for HIV among South African youth and their parents. *Health Education and Behaviour*, 35(1), 87-104.
- MacPhail, C., Pettifor, A.E, Moyo, W., & Rees, H. (2009). Factors associated with HIV testing among sexually active South African youth aged 15-24 years. *AIDS Care*, 21(4), 456-467.
- Maman, S., Mbwambo, J., Hogan, N.M., Kilonzo, G.P., & Sweat, M. (2001). Women's barriers to HIV-1 testing and disclosure: Challenges for HIV-1 voluntary counseling and testing. *AIDS Care*, 13(5), 595-603.
- Marshall, C. & Rossman, G.B. (1989). *Designing qualitative research*. Newbury Park, CA: Sage.
- Mason-Jones, A.J., Crisp, C., Mathews, C., & Dhansay, A. (2012). *School-based health clinics for adolescent sexual, reproductive and mental health*. (Policy Brief). Retrieved from the Medical Research Council website: <http://www.mrc.ac.za/policybriefs/Schoolbased.pdf>
- Mathews C, Guttmacher SJ, Flisher AJ, Mtshizana YY, Nelson T, McCarthy J, Daries V. (2009) The quality of HIV testing services for adolescents in Cape Town, South Africa: do adolescent-friendly services make a difference? *Journal of Adolescent Health*; 44(2): 188-190.
- Matovu, J.K.B., Gray, R.H., Makumbi, F.E, Wawer, M.J., Serwadda, D., Kigozi G, Sewankambo, N.K., & Nalugoda, F. (2005). Voluntary HIV counseling and testing acceptance, sexual risk behaviour and HIV incidence in Rakai, Uganda. *AIDS*, 19(5), 503-511.
- Matovu, J.K.B., & Makumbi, F.E. (2007). Expanding access to voluntary HIV counselling and testing in sub-Saharan Africa: Alternative approaches for improving uptake, 2001-2007. *Tropical Medicine & International Health*, 12(11), 1315-1322.
- McCauley, A.P. (2004). Equitable access to HIV counseling and testing for youth in developing countries: A review of current practice, Horizons Report. Washington, DC: Population Council.
- McCauley, A.P., Kirumira, E., Bufumbo, L., Kakande, N., Hittimana, L., Lukenge, D., Juma, M., & Geibel, S. (2004). *Attracting Youth to voluntary counseling and testing services in Uganda*, Horizons Research Summary. Washington, DC: Population Council. Retrieved from <http://www.popcouncil.org/pdfs/horizons/vctythugndsum.pdf>
- McLaughlin, C.G., & Wyszewianski, L. (2002). Access to care: Remembering old lessons. *Health Services Research*, 37(6), 1441-3.

- Médecins Sans Frontières. (2010). *Providing HIV/TB care at the primary health care level*. Khayelitsha Annual Activity Report: 2008-2009. Cape Town: Author.
- Meiberg, A., Bos, R., Onya, H., & Schaalma, H. (2008). Fear of stigmatization as barrier to voluntary HIV counseling and testing in South Africa. *East African Journal of Public Health*, 5(2), 49-53.
- Melzer-Lange, M.D. (1998). Violence and associated high-risk health behaviour in adolescents. Substance abuse, sexually transmitted diseases, and pregnancy of adolescents. *Pediatric Clinics of North America*, 45(2), 307-17.
- Metcalf, C. & Rispel, L. (2009). Exposing a hidden HIV epidemic among men who have sex with men. *HSRC Review*, 7(2), 4-5.
- Mmari, K.N. & Magnani, R.J. (2003). Does making clinic-based reproductive health services more youth friendly increase service use by adolescents? Evidence from Lusaka, Zambia. *Journal of Adolescent Health*, 33(4):259-270
- Mooney, G.H. (1983). Equity in health care: Confronting the confusion. *Effective Health Care*, 1(4), 179-85.
- Morgan, D.L. (1996). Focus groups. *Annual Review of Sociology*, 22, 129-152.
- Motala, S. & Pampallis, J. (2005). *Governance and finance in the South African schooling system: The first decade of democracy*. Retrieved from [http://www.cepd.org.za/files/pictures/CEPD\\_Governance&Finance\\_booklet.pdf](http://www.cepd.org.za/files/pictures/CEPD_Governance&Finance_booklet.pdf)
- Motsoaledi, A. (2010, March 25). *Outline of the National HIV Counselling and Testing Campaign*. Retrieved from <http://www.info.gov.za/speeches/2010/10032611051001.htm>
- Moyo, W., Levandowski, B.A., MacPhail, C., Rees, H., & Pettifor, A.E. (2008). Consistent condom use in South African youth's most recent sexual relationships. *AIDS and Behavior*, 12(3), 431-440. doi:10.1007/s10461-007-9343-3
- Mshana, G.H., Wamoyi, J., Busza, J., Zaba, B., Changalucha, J., Kaluvya, S., & Urassa, M. (2006). Barriers to accessing antiretroviral therapy in Kisesa, Tanzania: A qualitative study of early rural referrals to the national program. *AIDS Patient Care STDS*, 20(9), 649-57.
- Neukom, J., & Ashford, L. (2003). *Changing youth behaviour through social marketing: Program experiences and research findings from Cameroon, Madagascar, and Rwanda*. Washington, DC: Population Reference Bureau and Population Services International.

- Neuman, W.L. (2006). *Social research methods: Qualitative and quantitative approaches* (6th ed.). Boston: Pearson/Allyn and Bacon.
- Newton, N. (2000). *Applying best practices to youth reproductive health*. Washington, DC: John Snow, SEATS Project.
- Nsigaye, R., Wringe, A., Roura, M., Kalluvya, S., Urassa, M., Busza, J., & Zaba, B. (2009). From HIV diagnosis to treatment: Evaluation of a referral system to promote and monitor access to antiretroviral therapy in rural Tanzania. *Journal of the International Aids Society*, 12, 31.
- Obermeyer, C.M., Bott, S., Carrieri, P., Parsons, M., Pulerwitz, J., Rutenberg, N., & Sarna, A. (2009). *HIV testing, treatment and prevention: Generic tools for operational research* (Client instrument). Retrieved from [http://www.who.int/hiv/pub/operational/or\\_generic\\_client.pdf](http://www.who.int/hiv/pub/operational/or_generic_client.pdf)
- Operario, D., Underhill, K., Chuong, C., & Cluver, L. (2011). HIV infection and sexual risk behaviour among youth who have experienced orphanhood: Systematic review and meta-analysis. *Journal of the International AIDS Society*, 14, 25.
- Parker, W., Makhubele, M.B., Ntlabati, P., & Connolly, C. (2007). *Concurrent sexual partnerships amongst young adults in South Africa: Challenges for HIV prevention communication*. Johannesburg: CADRE.
- Pathfinder. (2005). *Provision of youth friendly services to reach young people: Story of Uganda Youth Development Link (UYDEL)*. Retrieved from [http://www2.pathfinder.org/site/DocServer/UYDEL\\_BOOK\\_FINAL\\_Nov2005.pdf?docID=5181](http://www2.pathfinder.org/site/DocServer/UYDEL_BOOK_FINAL_Nov2005.pdf?docID=5181)
- Patton, M.Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park: Sage.
- Patton, M. Q. (2002). *Qualitative research and evaluation method*. (3rd ed.). London: Sage.
- Peck, R., Fitzgerald, D.W., Liautaud, B., Deschamps, M.M., Verdier, R.I., Beaulieu, M.E., GrandPierre, R., Joseph, P., Severe, P., Noel, F., Wright, P., Johnson, W.D., & Pape, J.W. (2003). The feasibility, demand, and effect of integrating primary care services with HIV voluntary counseling and testing. Evaluation of a 15-year experience in Haiti, 1985-2000. *Journal of Acquired Immune Deficiency Syndromes*, 33(4), 470-75.
- Penchansky, R., & Thomas, J.W. (1981). The concept of access: Definition and relationship to consumer satisfaction. *Medical Care*, 19, 127-140.
- Peralta, L., Deeds, B.G., Hipszer, S., & Ghalib, K. (2007). Barriers and facilitators to adolescent HIV testing. *AIDS Patient Care STDS*, 21(6), 400-408.

- Perbost, I., Malafronte, B., Pradier, C., Santo, L.D., Dunais, B., Counillon, E.,...Dellamonica, P. (2005). In the era of highly active antiretroviral therapy, why are HIV-infected patients still admitted to hospital for an inaugural opportunistic infection? *HIV Medicine*, 6(4), 232–239.
- Peterson-Sweeney, K. (2005). The use of focus groups in paediatric and adolescent research. *Journal of Paediatric Health Care*, 19(2), 104-110. doi:10.1016/j.pedhc.2004.08.006
- Pettifor, A.E., Rees, H., Kleinschmidt, I., Steffenson, A., MacPhail, C., Hlongwa-Madikizela, L., ... Padian, N.S. (2005). Young people's sexual health in South Africa: HIV prevalence and sexual behaviours from a nationally representative household survey. *AIDS*, 19(14), 1525-1534.
- Pettifor, A.E., Van der Straten, A., Dunbar, M.S., Shiboski, S.C., & Padian, N.S. (2004). Early age of first sex: A risk factor for HIV infection among women in Zimbabwe. *AIDS*, 18(10), 1435-1442.
- Pfaff, C. & de Beer, J. (2011). Expanding access to HIV counselling and testing at schools – the Manguzi experience. *The Southern African Journal of HIV Medicine*, 12(1), 16-18.
- Plüddemann, A., Flisher, A.J., Mathews, C., Carney, T. & Lombard, C. (2008). Adolescent methamphetamine use and sexual risk behaviour in secondary school learners in Cape Town, South Africa. *Drug and Alcohol Review*, 27, 687-692.
- Polit, D. & Hungler, B. (1997). *Essentials of nursing research: Methods, appraisal, and utilisation* (4th ed.). Philadelphia, PA: J.B. Lippincott.
- Prochaska, J. O., Redding, C. A., & Evers, K. E. (1997). The transtheoretical model and stages of change. In K. Glanz, F. M. Lewis, & B. K. Rimer (Eds.), *Health behaviour and health education: Theory, research, and practice* (2nd ed., pp. 60-84). San Francisco: Jossey-Bass.
- Prout, A., & James, A. (1997). A new paradigm for the sociology of childhood: Provenance, promise and problems. In A. Prout, & A. James (Eds.), *Constructing and reconstructing childhood: Contemporary issues in the sociological study of childhood* (pp.7-32). London: Falmer Press.
- Raine, T., Marcell, A. V., Rocca, C. H., & Harper, C. C. (2003). The other half of the equation: Serving young men in a young women's reproductive health clinic. *Perspectives on Sexual and Reproductive Health*, 35(5), 208-214.
- Reddy, S.P., James, S., Sewpaul, R., Koopman, F., Funani, N.I., Sifunda, S.,...Omaridien, R.G. (2010). *Umntente Uhlaba Usamila – The South African Youth Risk Behaviour Survey 2008*. Retrieved from the Medical Research Council website: [http://www.mrc.ac.za/healthpromotion/yrbs\\_2008\\_final\\_report.pdf](http://www.mrc.ac.za/healthpromotion/yrbs_2008_final_report.pdf)

- Republic of South Africa. (2006). Children's Act, No. 38 2005. *Government Gazette*. Vol. 492 No. 28944. Retrieved from [www.info.gov.za/view/DownloadFileAction?id=67892](http://www.info.gov.za/view/DownloadFileAction?id=67892)
- Ricketts, T.C., & Goldsmith, L. (2005). Access in health services research: The battle of the frameworks. *Nursing Outlook*, 53(6), 274-80.
- Rosaline, B. (2008). The scope and contribution of qualitative research. In *Introducing Qualitative Research*. London: Sage. doi:10.4135/9780857029034
- Royce, R.A., Seña, A., Cates, W. Jr., & Cohen, M.S. (1997). Sexual transmission of HIV. *New England Journal of Medicine*, 336, 1072-1078.
- Sabin, C.A., Smith, S.J., Gumley, H., Murphy, G., Lampe, F.C., Phillips, A.N., ... Johnson, M.A. (2004). Late presenters in the era of HAART: Uptake of and responses to antiretroviral therapy. *AIDS*, 18, 2145-2151.
- Sanci, L. A., Coffey, C. M. M., Veit, F. C. M., Carr-Gregg, M., Patton, G. C., Day, N., ... & Ker, J. (2000). Evaluation of the effectiveness of an educational intervention for general practitioners in adolescent health care: randomised controlled trial. *British Medical Journal*, 320(7229), 224-230.
- Schensul, S.L., Schensul, J. J., & LeCompte, M.D. (1999). *Essential ethnographic methods: Observations, interviews, and questionnaires: Ethnographer's Toolkit 2*. Walnut Creek, CA: Alta Mira Press.
- Senderowitz, J. (1998). *Involving youth in reproductive health projects* (Research, Program and Policy Series). Washington, D.C.: FOCUS on Young Adults.
- Senderowitz, J. (1999). *Making reproductive health services youth friendly. Focus on young adults*. Retrieved from <http://www.fhi360.org/NR/rdonlyres/ek115zcl7fcs3zci43i7vxbaokgvumttd6fkg53h5nqurwcr7lh4vww4i3zfpqgelfwnyjbz3opjd/makingRHservicesyouthfriendly.pdf>
- Senderowitz, J., Solter, C., & Hainsworth, G. (2002). *Clinic assessment of youth-friendly services: A tool for assessing and improving reproductive health services for youth*. Retrieved from <http://www2.pathfinder.org/site/DocServer/mergedYFStool.pdf?docID=521>
- Shafer, M. A. B., Tebb, K. P., Pantell, R. H., Wibbelsman, C. J., Neuhaus, J. M., Tipton, A. C., ... & Bergman, D. A. (2002). Effect of a clinical practice improvement intervention on Chlamydial screening among adolescent girls. *JAMA: the Journal of the American Medical Association*, 288(22), 2846-2852. Retrieved from <http://jama.jamanetwork.com/article.aspx?articleid=195598>



- Sharpe, V.A. & Faden, A.I. (1996). Appropriateness in patient care: A new conceptual framework. *The Milbank Quarterly*, 74(1), 115-138.
- Shenton, A. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2), 63–75.
- Sherr, L., Lopman, B., Kakowa, M., Dube, S., Chawira, G., Nyamukapa, C., ... Gregson, S. (2007). Voluntary counselling and testing: Uptake, impact on sexual behaviour, and HIV incidence in a rural Zimbabwean cohort. *AIDS*, 21(7), 851-860.
- Shisana, O., Rehle, T., Simbayi, L.C., Parker, W., Zuma, K., Bhana, A., ...Shean, Y. (2005). *South African national HIV prevalence, HIV incidence, behaviour and communication survey, 2005*. Cape Town: HSRC Press.
- Shisana, O., Rehle, T., Simbayi, L.C., Zuma, K., Jooste, S., Pillay-van-Wyk, V., ...the SABSSM III Implementation Team. (2009). *South African national HIV prevalence, incidence, behaviour and communication survey 2008: A turning tide among teenagers?* Cape Town: HSRC Press.
- South African Department of Basic Education. (2010). *Draft Integrated Strategy on HIV and AIDS (2012-2016) Full Report*. Retrieved from <http://www.education.gov.za/LinkClick.aspx?fileticket=u6KgP4PKpOw%3d&tabid=614&mid=1713>
- South African Department of Basic Education. (2011a). *School HIV Counselling and Testing (HCT) Campaign*. Retrieved from <http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=16251&tid=28211>
- South African Department of Basic Education. (2011b). *National curriculum statement. Curriculum and assessment policy statement. Grades 10-12 Life orientation*. Pretoria: Government Printers.
- South African Department of Health. (2004). *Ethics in health research: Principles, structures and processes*. Pretoria: Government Printers.
- South African Department of Health. (2010). *National HIV Counselling and Testing (HCT) Policy Guidelines*. Pretoria: Government Printers.
- South African National AIDS Council. (2007). *HIV & AIDS and STI Strategic Plan for South Africa, 2007–2011*. Retrieved from [http://www.info.gov.za/otherdocs/2007/aidsplan2007/khomanani\\_HIV\\_plan.pdf](http://www.info.gov.za/otherdocs/2007/aidsplan2007/khomanani_HIV_plan.pdf)
- South African National AIDS Council. (2011). *National Strategic Plan on HIV, STIs and TB: 2012-2016*. Retrieved from <http://www.doh.gov.za/docs/stratdocs/2012/NSPfull.pdf>

- Spradley, J. P. (1980). *Participant observation*. New York, NY: Holt, Rinehart and Winston.
- Statistics South Africa. (2011). *Mid-year population estimates 2011*. Retrieved from <http://www.statssa.gov.za/publications/P0302/P03022011.pdf>
- Stat Trek. (2012). Random number generator. Retrieved from <http://stattrek.com/statistics/random-number-generator.aspx>
- Stewart, D.W., Shamdasani, P.N., & Rook, D.W. (2007). *Focus groups: theory and practice* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage.
- Tebb, K. P., Pantell, R. H., Wibbelsman, C. J., Neuhaus, J. M., Tipton, A. C., Pecson, S. C., ... & Shafer, M. A. B. (2005). Screening sexually active adolescents for Chlamydia trachomatis: what about the boys?. *Journal of Information*, 95(10).
- Thiede, M., Akweongo, P., & McIntyre, D. (2007). Exploring the dimensions of access. In D. McIntyre & G. Mooney (Eds.), *The economics of health equity*. Cambridge, UK: Cambridge University Press.
- Thomas, D.R. (2006). A general inductive approach to analysing qualitative evaluation data. *American Journal of Evaluation*, 27(2), 237-246.
- Topp, S.M., Chipukuma, J.M., Chiko, M.M., Wamulume, C.S., Bolton-Moorea, C. & Reid, S.E. (2011). Opt-out provider-initiated HIV testing and counselling in primary care outpatient clinics in Zambia. *Bulletin of the World Health Organization*, 89, 328-335A. doi:10.2471/BLT.10.084442
- Tuysuzoglu, S., Corliss, H.L., Fitzgerald, S.M., Abascal, B.R., & Samples, C.L. (2011). Acceptability and feasibility of rapid HIV testing in an adolescent clinic setting: Youth testing attitudes, knowledge, and behaviours. *Journal of Adolescent Health*, 49(6), 609-614.
- Tylee, A., Haller, D.M., Graham, T., Churchill, R., & Sanci, L.A. (2007). Youth friendly primary-care services: How are we doing and what more needs to be done? *The Lancet*, 369(9572), 1565-1573. doi:10.1016/S0140-6736(07)60371-7
- UNAIDS. (1997). *Policy on HIV counselling and testing*. Retrieved from [http://data.unaids.org/Publications/IRC-pub03/counsepol\\_en.pdf](http://data.unaids.org/Publications/IRC-pub03/counsepol_en.pdf)
- UNAIDS. (2000a). *Voluntary counselling and testing*. Retrieved from [http://www.unaids.org/en/media/unaids/contentassets/dataimport/publications/irc-pub01/jc379-vct\\_en.pdf](http://www.unaids.org/en/media/unaids/contentassets/dataimport/publications/irc-pub01/jc379-vct_en.pdf)

- UNAIDS. (2000b). *Tools for evaluating HIV voluntary counselling and testing*. Retrieved from [http://data.unaids.org/publications/IRC-pub02/jc685-toolseval\\_en.pdf](http://data.unaids.org/publications/IRC-pub02/jc685-toolseval_en.pdf)
- UNAIDS. (2001). *The impact of voluntary counselling and testing: A global review of the benefits and challenges*. Retrieved from [http://data.unaids.org/Publications/IRC-pub02/jc580-vct\\_en.pdf](http://data.unaids.org/Publications/IRC-pub02/jc580-vct_en.pdf)
- UNAIDS. (2010). *AIDS epidemic update*. Retrieved from [http://www.unaids.org/documents/20101123\\_GlobalReport\\_Chap2\\_em.pdf](http://www.unaids.org/documents/20101123_GlobalReport_Chap2_em.pdf)
- UNAIDS. (2011a). *Terminology guidelines*. Retrieved from [http://www.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2011/JC2118\\_terminology-guidelines\\_en.pdf](http://www.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2011/JC2118_terminology-guidelines_en.pdf)
- UNAIDS. (2011b). *World AIDS Day Report*. Retrieved from [http://www.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2011/JC2216\\_WorldAIDSday\\_report\\_2011\\_en.pdf](http://www.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2011/JC2216_WorldAIDSday_report_2011_en.pdf)
- UNAIDS. (2012). *Together we will end AIDS*. Geneva, Hel: Author. Retrieved from [http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2012/20120718\\_togetherwewillendaids\\_en.pdf](http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2012/20120718_togetherwewillendaids_en.pdf)
- UNAIDS & WHO. (2004). *Policy statement on HIV testing*. Retrieved from [http://www.who.int/rpc/research\\_ethics/hivtestingpolicy\\_en\\_pdf](http://www.who.int/rpc/research_ethics/hivtestingpolicy_en_pdf)
- United Nations General Assembly. (1979). *Convention on the elimination of all forms of discrimination against Women (CEDAW)*. Retrieved from <http://www.un.org/womenwatch/daw/cedaw/text/econvention.htm>
- United Nations General Assembly. (1994). *International Conference on Population and Development Programme of Action*. Retrieved from <http://www.un.org/popin/icpd/conference/offeng/poa.html>
- United Nations General Assembly. (2001). *Special session on HIV and AIDS*. Retrieved from <http://www.un.org/ga/aids/conference.html>
- United Nations High Commissioner for Refugees. (2010). *Establishment of multi-purpose youth friendly centres for young refugees in Nepal. Field brief*. Retrieved from [http://www.aidsandemergencies.org/cms/documents/UNHCR\\_FIELDBRIEF\\_NEPAL.pdf](http://www.aidsandemergencies.org/cms/documents/UNHCR_FIELDBRIEF_NEPAL.pdf)
- UNICEF. (2012). *Progress for children: A report card on adolescents* (Number 10, April 2012). Retrieved from [http://www.unicef.org/publications/files/Progress\\_for\\_Children\\_-\\_No.\\_10\\_EN\\_04232012.pdf](http://www.unicef.org/publications/files/Progress_for_Children_-_No._10_EN_04232012.pdf)

- UNICEF, UNAIDS, UNESCO, UNFPA, ILO, WHO & World Bank. (2011). *Opportunity in crisis: Preventing HIV from early adolescence to young adulthood*. Retrieved from [http://www.unicef.org/publications/files/Opportunity\\_in\\_Crisis-Report\\_EN\\_052711.pdf](http://www.unicef.org/publications/files/Opportunity_in_Crisis-Report_EN_052711.pdf)
- Van Dyk, A.C., & van Dyk, P.J. (2003). 'To know or not to know': service-related barriers to voluntary HIV counseling and testing (VCT) in South Africa. *Curationis*, 26(1), 4-10.
- Venkatesh, K.K., Madiba, P., De Bruyn, G., Lurie, M.N., Coates, T.J., & Gray, G.E. (2011). Who gets tested for HIV in a South African urban township? Implications for test and treat and gender-based prevention interventions. *Journal of Acquired Immune Deficiency Syndrome*, 56 (2), 151-165.
- Wagner, B.G., Kahn, J.S., & Blower, S. (2010). Should we try to eliminate HIV epidemics by using a 'Test and Treat' strategy? *AIDS*, 24 (5), 775-776.
- Wagner, B.G., & Blower, S. (2012). Universal Access to HIV treatment versus Universal 'Test and Treat': Transmission, drug resistance & treatment costs. *PLoS ONE*, 7(9), e41212. doi:10.1371/journal.pone.0041212
- Walker, Z., Townsend, J., Oakley, L., Donovan, C., Smith, H., Hurst, Z., ... & Marshall, S. (2002). Health promotion for adolescents in primary care: randomised controlled trial. *British Medical Journal*, 325(7363), 524.
- Wallrauch, C., Heller, T., Lessells, R., Kekana, M., Bärnighausen, T., & Newell, M. (2010). High uptake of HIV testing for tuberculosis patients in an integrated primary health care HIV/TB programme in rural KwaZulu-Natal. *South African Medical Journal*, 100(3), 146-147.
- Wand, H., & Ramjee, G. (2012). *The relationship between age of coital debut and HIV seroprevalence among women in Durban, South Africa: A cohort study*. *BMJ Open*, 2, e000285. doi:10.1136/bmjopen-2011-000285
- Weick, A., Rapp, C., Sullivan, W. P., & Kisthardt, W. (1989). A strengths perspective for social work practice. *Social Work*, 34(4), 350-354.
- Weinhardt, L. S., Carey, M. P., Johnson, B. T., & Bickham, N. L. (1999). Effects of HIV counseling and testing on sexual risk behaviour: Meta-analysis of published research, 1985-1997. *American Journal of Public Health*, 89(9), 1397-1405.
- Wells, H. (2006). *Levels of empowerment among lesbian, gay, bisexual and transgender [LGBT] people in KwaZulu-Natal, South Africa*. Arcadia, South Africa: OUT LGBT Wellbeing.

- Wells, H., & Polders, L. (2004). *Levels of empowerment among lesbian, gay, bisexual and transgender [LGBT] people in Gauteng, South Africa*. Arcadia, South Africa: OUT LGBT Well-being.
- Whitehead, M. (1991). *The concepts and principles of equity and health, WHO, EURO report*. Retrieved from <http://190.210.115.167/curso/cursoesp/Textos%20Completo/the%20concepts%20and%20principles%20of%20equity%20and%20health.pdf>
- WHO. (1986). *Young people's health -- a challenge for society*. Report of a WHO study group on young people and "Health for All by the Year 2000". (World Health Organization Technical Report Series 731), Retrieved from [http://whqlibdoc.who.int/trs/WHO\\_TRS\\_731.pdf](http://whqlibdoc.who.int/trs/WHO_TRS_731.pdf)
- WHO. (1998). WHO's global school health initiative: Health-Promoting Schools. Geneva, Hel: WHO. Retrieved from [http://www.who.int/school\\_youth\\_health/media/en/92.pdf](http://www.who.int/school_youth_health/media/en/92.pdf)
- WHO. (2000). *Appropriateness in health care services* (Report on a WHO workshop). Retrieved from [http://www.euro.who.int/\\_data/assets/pdf\\_file/0011/119936/E70446.pdf](http://www.euro.who.int/_data/assets/pdf_file/0011/119936/E70446.pdf)
- WHO. (2002). *Adolescent friendly health services: an agenda for change*. Retrieved from [http://whqlibdoc.who.int/hq/2003/WHO\\_FCH\\_CAH\\_02.14.pdf](http://whqlibdoc.who.int/hq/2003/WHO_FCH_CAH_02.14.pdf)
- WHO. (2003). *Global consultation on the health services response to the prevention and care of HIV and AIDS among young people: Achieving the global goals: Access to services* (Technical Report of a WHO consultation, Montreux, Switzerland, 17-21 March 2003). Retrieved from <http://whqlibdoc.who.int/publications/2004/9241591323.pdf>
- WHO. (2006). *Quality of care – a process for making strategic choices in health systems*. Retrieved from [http://www.who.int/management/quality/assurance/QualityCare\\_B.Def.pdf](http://www.who.int/management/quality/assurance/QualityCare_B.Def.pdf)
- WHO. (2007). *WHO case definitions of HIV for surveillance and revised clinical staging and immunological classification of HIV-related disease in adults and children*. Retrieved from <http://www.who.int/hiv/pub/guidelines/HIVstaging150307.pdf>
- WHO. (2012). *Making health services adolescent friendly: developing national quality standards for adolescent friendly health services*. Retrieved from [http://apps.who.int/iris/bitstream/10665/75217/1/9789241503594\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/75217/1/9789241503594_eng.pdf)
- WHO & UNAIDS. (2007). *Guidance on provider-initiated HIV testing and counselling in health facilities*. Geneva, Hel: WHO. Retrieved from [http://www.who.int/hiv/pub/guidelines/9789241595568\\_en.pdf](http://www.who.int/hiv/pub/guidelines/9789241595568_en.pdf)

- Wolfe, K. (2005). *Youth friendly pharmacies and partnerships: The CMS-CELSAM experience*. Retrieved from [http://pdf.usaid.gov/pdf\\_docs/PNADF915.pdf](http://pdf.usaid.gov/pdf_docs/PNADF915.pdf)
- Wood, K., & Jewkes, R. (2006). Blood blockages and scolding nurses: Barriers to adolescent contraceptive use in South Africa. *Reproductive Health Matters*, 14(27), 109-118.
- Worobey, M., Gemmel, M., Teuwen, D.E., Haselkorn, T., Kunstman, K., Bunce, M.,... Wolinsky, S.M. (2008). Direct Evidence of Extensive Diversity of HIV-1 in Kinshasa by 1960. *Nature*, 455(7213), 661-664.
- Worobey, M., Telfer, P., Souquière, S., Hunter, M., Coleman, C.A., Metzger, M.J.,... Marx P.A. (2010). Island biogeography reveals the deep history of SIV. *Science*, 329(5998), 1487. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/20847261>
- Yahaya, L. A., Jimoh, A.A.G., & Balogun, O.R. (2010). Factors hindering acceptance of HIV and AIDS voluntary counseling and testing (VCT) among youth in Kwara State, Nigeria. *African Journal of Reproductive Health*, 14(3), 159.



## Appendix I: WHO framework for development of youth friendly health services (WHO, 2012)

<b>EQUITABLE: Services are provided to all people who require them.</b>	
<b>Characteristic</b>	<b>Definition</b>
Policies and procedures do not restrict the provision of services.	There are no policies or procedures that restrict the provision of health services to adolescents on the basis of age, sex, social status, cultural background, ethnic origin, disability, or any other area of difference.
Health-care providers and support staff treat all adolescent clients with equal care and respect, regardless of status.	Health-care providers and support staff administer the same level of care and consideration to all adolescents, regardless of age, sex, social status, cultural background, ethnic origin, disability, or any other difference.
<b>ACCESSIBLE: Ready access to services is provided.</b>	
<b>Characteristic</b>	<b>Definition</b>
Policies and procedures ensure that health services are either free or affordable to adolescents.	All adolescents are able to receive health services free of charge or are able to afford any charges that might be in place.
The point of service delivery has convenient working hours.	Health services are available to all adolescents during times of the day that are convenient to them.
Adolescents are well informed about the range of reproductive health services available and how to obtain them.	Adolescents are aware of what health services are being provided, where they are provided, and how to obtain them.
Community members engage in respectful and participative discussion with health-care providers, creating a shared understanding of adolescent health and development and increased support for reproductive health service provision.	Community members (including parents) are well informed about how the provision of health services could help their adolescents. They support the provision of these services as well as their utilisation by adolescents.
The provision of health services by selected community members, outreach workers, and peer-to-peer educators is implemented in a way that effectively reaches adolescents.	Efforts are made to provide health services in close proximity to where adolescents are located. Depending on the situation, outreach workers, selected community members (e.g., sports coaches), and adolescents themselves may be involved in these efforts.
<b>ACCEPTABLE: Care meets the expectations of the people who use the services.</b>	
<b>Characteristic</b>	<b>Definition</b>
Policies and procedures guarantee client confidentiality.	<p>Policies and procedures maintain adolescent confidentiality at all times (except where staff are obligated by law to report incidents—such as sexual assaults, road traffic accidents, or gunshot wounds—to the relevant authorities). Policies and procedures address the following:</p> <ul style="list-style-type: none"> <li>• Registration—information on the identity of the adolescent and the presenting issue or complaint is gathered in confidence</li> <li>• Consultation—confidentiality is maintained throughout the visit at the point of delivery (i.e., before, during, and after a consultation)</li> <li>• Record keeping—case records are kept in a secure place, accessible only to authorised personnel</li> </ul>

	<ul style="list-style-type: none"> <li>• Disclosure of information—staff do not disclose any information given to or received from an adolescent to a third party (e.g., family members, school teachers, or employers) without their consent</li> </ul>
The point of service delivery ensures privacy.	The point of service delivery is located in a place that ensures the privacy of adolescent users. Its layout is designed to ensure privacy throughout an adolescent’s visit. This includes the point of entry, the reception area, the waiting area, the examination area, and the patient-record storage area.
Health-care providers are non-judgmental, considerate, and easy to relate to.	Health-care providers do not criticize their adolescent patients even if they do not approve of their words or actions. They are considerate to their patients and reach out to them in a friendly manner.
The point of service delivery ensures that consultations occur within a short waiting time, with or without an appointment, and that referrals (where necessary) are provided swiftly.	Adolescents are able to consult with health-care providers at short notice, regardless of whether they have a formal appointment. If their medical condition requires that they be referred elsewhere, the referral appointment should also take place within a short time frame.
The point of service delivery has an appealing and clean environment.	The point of service delivery is welcoming, attractive, and clean.
The point of service delivery provides information and education through a variety of channels.	Informational materials that are relevant to the health of adolescents are available in different formats (e.g., posters and booklets). They are presented in a familiar language, are easy to understand, and are eye-catching.
Adolescents are actively involved in the assessment and provision of health services.	Adolescents are given the opportunity to share their experiences in obtaining health services and to express their needs and preferences. They are involved in certain appropriate aspects of health service provision (e.g. peer education).
<b>APPROPRIATE: Required care is provided, and unnecessary and harmful care is avoided.</b>	
<b>Characteristic</b>	<b>Definition</b>
The required package of health care is provided to reflect and fulfil the individual needs of all adolescents, either at the point of service delivery or through referral linkages.	The health needs and problems of all adolescents are addressed by the health services provided at the point of delivery, or through referral linkages. The services provided meet the special needs of marginalized groups as well as the general population.
<b>EFFECTIVE: Care produces positive change in the health status or quality of life of the client.</b>	
<b>Characteristic</b>	<b>Definition</b>
Health-care providers have the required competencies to work with adolescents.	Health-care providers have the required knowledge and skills to work with adolescents and to provide them with the required health services.
Health-care providers use evidence-based protocols and guidelines.	Health service provision is based on protocols and guidelines that are technically sound and of proven usefulness. Ideally, they should be adapted to the requirements of the local situation and approved by the relevant authorities.
Health-care providers are able to dedicate sufficient time to deal effectively with their adolescent clients.	Health-care providers allow for sufficient time to deal with their adolescent clients.
The point of service delivery has the required equipment, supplies, and basic services necessary to deliver the essential care package.	Each point of service has the necessary equipment, supplies (including medicines), and basic services (e.g., water and sanitation) needed to deliver the health services for which it is required.



## Appendix II: Permission to do research (UWC, Senate Research Committee)

**OFFICE OF THE DEAN  
DEPARTMENT OF RESEARCH  
DEVELOPMENT**

Private Bag X17, Bellville 7530  
South Africa  
Telegraph: UNIBELL  
Telephone: +27 21 959-2948/2949  
Fax: +27 21 959-3170  
Website: www.uwc.ac.za


21 September 2010


**To Whom It May Concern**

I hereby certify that the Senate Research Committee of the University of the Western Cape has approved the methodology and the ethics of the following research project by:  
Dr E Lawrence (School of public Health)

Research Project: U Evaluation of the youth-friendliness of a mobile school-based HIV Voluntary Counselling and W Testing Programme

Registration no: 10/3/27

  
Peter Ester  
Manager: Research Development Office  
University of the Western Cape

  
**UNIVERSITY of the  
WESTERN CAPE**  
A place of quality, a place to grow, from hope to action through knowledge

## Appendix III: Permission to do research (WCED)

Navrae  
Enquiries  
IMibuzo  
Telefoon  
Telephone  
IFoni  
Faks  
Fax  
IFeksi

Verwysing  
Reference  
ISalathiso

Dr Estelle Lawrence  
P2 Princess Beach  
Princess Street  
HOUT BAY  
7806



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Wes-Kaap Onderwysdepartement

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Western Cape Education Department

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ISebe leMfundo leNtshona Koloni

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Dear Dr E. Lawrence

**RESEARCH PROPOSAL: EVALUATION OF THE YOUTH-FRIENDLINESS OF A MOBILE SCHOOL-BASED HIV VOLUNTARY COUNSELLING AND TESTING PROGRAMME.**

Your application to conduct the above-mentioned research in schools in the Western Cape has been approved subject to the following conditions:

1. Principals, educators and learners are under no obligation to assist you in your investigation.
2. Principals, educators, learners and schools should not be identifiable in any way from the results of the investigation.
3. You make all the arrangements concerning your investigation.
4. The programmes of Educators are not to be interrupted.
5. The Study is to be conducted from **25<sup>th</sup> August 2010 to 30<sup>th</sup> September 2012.**
6. No research can be conducted during the fourth term as schools are preparing and finalizing syllabi for examinations (October to December).
7. Should you wish to extend the period of your survey, please contact Dr R. Cornelissen at the contact numbers above quoting the reference number.
8. A photocopy of this letter is submitted to the principal where the intended research is to be conducted.
9. Your research will be limited to the list of schools as submitted to the Western Cape Education Department.
10. A brief summary of the content, findings and recommendations is provided to the Director: Research Services.
11. The Department receives a copy of the completed report/dissertation/thesis addressed to:

**The Director: Research Services  
Western Cape Education Department  
Private Bag X9114  
CAPE TOWN  
8000**

We wish you success in your research.

Kind regards.

Signed: Ronald S. Cornelissen  
for: **HEAD: EDUCATION**

**DATE: 25<sup>th</sup> August 2010**

## Appendix IV: Consent form for learners older than 18 years

### TITLE OF RESEARCH: EVALUATION OF THE YOUTH-FRIENDLINESS OF A MOBILE SCHOOL-BASED HIV VOLUNTARY COUNSELLING AND TESTING PROGRAMME

I have read the information sheet regarding the above research, and it has been described to me in language that I understand. I freely and voluntarily agree to participate in the research. My questions about the research have been answered. I understand that my identity will not be disclosed and that I may withdraw from the research without giving a reason at any time and this will not negatively affect me in any way.

First name of research participant.....

Surname of research participant.....

Date of birth of research participant.....

Grade .....

School.....

Signature of research participant.....

Witness.....

Date.....

Should you have any questions regarding this research or wish to report any problems you have experienced related to the study, please contact the research supervisor:

Supervisor's Name: Prof Trish Struthers

University of the Western Cape

Private Bag X17, Belville 7535

Telephone: (021)959-2542

Fax: (021)959-1217

Email: [pstruthers@uwc.ac.za](mailto:pstruthers@uwc.ac.za)

**TOESTEMMINGSVORM (leerders 18 jaar en ouer)****TITEL VAN NAVORSING: EVALUERING VAN DIE JEUG-VRENDELIKHEID VAN 'N  
MOBIELE SKOOL-GEBASEERDE MIV VRYWILLIGE BERADING- EN TOETSINGSPROGRAM**

Ek het die inligtingstuk oor die bogenoemde navorsing gelees, en dit is vir my beskryf in taal wat ek verstaan. Ek stem vrylik en vrywillig in om deel te neem aan die navorsing. My vrae oor die navorsing is beantwoord. Ek verstaan dat my identiteit nie bekend gemaak sal word nie, en dat ek enige tyd van die navorsing kan onttrek sonder om 'n rede te gee, en dit sal nie 'n negatiewe invloed op my hê nie.

**Eerste naam van die navorsing deelnemer** .....

**Van van die navorsing deelnemer**.....

**Graad van die navorsing deelnemer**.....

**Handtekening van die navorsing deelnemer** .....

**Getuie**.....

**Datum**.....

Indien jy enige vrae het met betrekking tot hierdie navorsing, of as jy enige probleme wil aanmeld wat jy ervaar het met betrekking tot die studie, kontak asseblief die navorsingstoeshouer:

Prof Trish Struthers

Universiteit van die Wes-Kaap

Privaatsak X17, Bellville 7535

Telefoon: (021) 959-2542

Faks: (021) 959-1217

E-pos: [pstruthers@uwc.ac.za](mailto:pstruthers@uwc.ac.za)

**IPHEPHA LEMVUME (abafundi 18 iminyaka ubudala nangaphezulu)****ISIHLOKO SOPHANDO: UVAVANYO LOKWAKWELEKA KWENQUBO YENDAWO  
YOKUVAVANYELA UGAWULAYO EZIZELA KWABANTU ABATSHA, KWANENDLELA  
UVAVANYO KWAKUNYE NEENCEBISO EZAMKELEKE NGALO**

Ndilufundile uxwebhu lwenkcukacha mayelana noluphando, kwaye icaciswe ngolwimi endiluqondayo. Ndizikhethele ngokukhululekileyo ukuthabatha inxaxheba koluphando. Imibuzo endinayo ngoluphando iphenduliwe. Ndiyaqonda ukuba iinkcukacha zam aziyikuchazwa, kwaye ndingarhoxa kuphando ngaphandle kwesizathu nangaliphi na ixesha kwaye oku akundichaphazela nangayiphi na indlela.

**Igama lomntu othatha inxaxheba kuphando:.....**

**Ifani yomntu othatha inxaxheba kuphando:.....**

**Umhla wokuzalwa womntu othatha inxaxheba kuphando:.....**

**Ibanga:.....**

**Isikolo.....**

**I-signature yomntu othatha inxaxheba kuphando:.....**

**Ingqina.....**

**Umhla.....**

Ukubangaba unemibuzo malunga noluphando okanye unqwenela ukubika ingxaki othe wanayo malunga nophando, nceda unxulumane nomphathi wophando:

Igama lomphathi: Prof Trish Struthers

University of the Western Cape

Private Bag X17, Belville 7535

Telephone: (021)959-2542

Fax: (021)959-1217

Email: [pstruthers@uwc.ac.za](mailto:pstruthers@uwc.ac.za)

**Appendix V: Consent form for learners younger than 18 years**

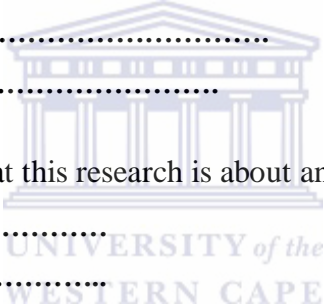
**TITLE OF RESEARCH: EVALUATION OF THE YOUTH-FRIENDLINESS OF A MOBILE SCHOOL-BASED HIV VOLUNTARY COUNSELLING AND TESTING PROGRAMME**

I have read the information sheet regarding the above research, and it has been described to me in language that I understand. I freely and voluntarily agree to allow my son/daughter to participate in the research. My questions about the research have been answered. I understand that my son/daughter’s identity will not be disclosed and that he/she may withdraw from the research without giving a reason at any time and this will not negatively affect him/her in any way.

**First name of parent/guardian.....**

**Surname of parent/guardian.....**

**Signature of parent/guardian.....**



This is to confirm that I understand what this research is about and agree to participate

**Child’s first name .....**

**Child’s surname:.....**

**Grade:.....**

**School.....**

**Child’s signature .....**

**Date.....**

Should you have any questions regarding this research or wish to report any problems you have experienced related to the study, please contact the research supervisor:

Supervisor’s Name: Prof Trish Struthers  
University of the Western Cape  
Private Bag X17, Belville 7535  
Telephone: (021)959-2542  
Fax: (021)959-1217  
Email: [pstruthers@uwc.ac.za](mailto:pstruthers@uwc.ac.za)

**TOESTEMMINGSVORM****(Ouers van leerders, instemming vir leerders onder die ouderdom van 18)****TITEL VAN NAVORSING: EVALUERING VAN DIE JEUG-VRENDELIKHEID VAN 'N  
MOBIELE SKOOL-GEBASEERDE MIV VRYWILLIGE BERADING- EN TOETSINGSPROGRAM**

Ek het die inligtingstuk oor die bogenoemde navorsing ge lees, en dit is vir my beskryf in taal wat ek verstaan. Ek stem in vrylik en vrywillig in vir my seun/dogter om aan die navorsing deel te neem. Ek verstaan dat my seun/dogter se identiteit nie bekend gemaak sal word nie, en dat hy/sy uit enige tyd van die navorsing kan onttrek sonder om rede te gee, en dit sal nie 'n negatiewe invloed op hom/haar hê nie.

Eerste naam van ouer/voog.....

Van van ouer/voog.....

Handtekening van ouer/voog.....



Dit is om te bevestig dat ek verstaan waaroor hierdie navorsing gaan en instem om deel te neem.

Kind se eerste naam .....

Kind se van .....

Kind se handtekening .....

Getuie.....

Datum.....

Indien jy enige vrae het met betrekking tot hierdie navorsing, of as jy enige probleme wil aanmeld wat jy ervaar het met betrekking tot die studie, kontak asseblief die navorsingstoeshouer:

Prof Trish Struthers  
 Universiteit van die Wes-Kaap  
 Privaatsak X17, Bellville 7535  
 Telefoon: (021) 959-2542  
 Faks: (021) 959-1217  
 E-pos: [pstruthers@uwc.ac.za](mailto:pstruthers@uwc.ac.za)

**IPHEPHA LEMVUME****(imvume yabazali babafundi apangaphantsi kweminyaka eyi 18 ubudala)****ISIHLOKO SOPHANDO: UVAVANYO LOKWAKWELEKA KWENQUBO YENDAWO  
YOKUVAVANYELA UGAWULAYO EZIZELA KWABANTU ABATSHA, KWANENDLELA  
UVAVANYO KWAKUNYE NEENCEBISO EZAMKELEKE NGALO**

Ndilufundile uxwebhu lwenkcukacha mayelana noluphando, kwaye icaciswe ngolwimi endilufundayo. Ndizikhethela ngokukhululekileyo ukuvumela unyana/intombi yam ukuba ithabathe inxaxheba koluphando. Imibuzo endinawo ngoluphando iphenduliwe. Ndiyaqonda ukuba iinkcukacha zakhe aziyikuchazwa, kwaye angarhoxa kuphando ngaphandle kwesizathu nangaliphi na ixesha kwaye oku akuyikumchaphazela nangayiphi na indlela.

**Igama lomzali/i-gaurdian.....****Ifani yomzali/i-gaurdian.....****I-signature yomzali/i-gaurdian.....**

Oku kukungqinisa ukuba ndiyaqonda ukuba oluphando lungantoni kwaye ndiyavuma ukuthatha inxaxheba.



UNIVERSITY of the  
WESTERN CAPE

**Igama lomntwana:.....****Ifani yomntwana:.....****Ibanga:.....****Isikolo:.....****I-signature yomntwana:.....****Umhla.....**

Ukubangaba unemibuzo malunga noluphando okanye unqwenela ukubika ingxaki othe wanayo malunga nophando, nceda unxulumane nomphathi wophando:

Igama lomphathi: Prof Trish Struthers

University of the Western Cape

Private Bag X17, Belville 7535

Telephone: (021)959-2542

Fax: (021)959-1217

Email: [pstruthers@uwc.ac.za](mailto:pstruthers@uwc.ac.za)



## **Appendix VI: Participant information sheet (focus group discussions)**

**TITLE OF RESEARCH:** EVALUATION OF THE YOUTH-FRIENDLINESS OF A MOBILE SCHOOL-BASED HIV VOLUNTARY COUNSELLING AND TESTING PROGRAMME

### **What is this study about?**

This is a research project being conducted by Dr Estelle Lawrence at the University of the Western Cape. The purpose of this research project is to look at the things that have an influence on whether young people go for HIV testing or not.

### **What will I be asked to do if I agree to participate?**

You will be one of 8 learners (of similar ages) taking part in a focus group which will take place at your school out of school hours. Your participation in the focus group will last about 2 hours. You will be asked to role play a scenario with other participants, which will be followed by a group discussion. The role play will be videotaped so that I can capture the comments and ideas in a written document for analysis. The role play and the discussion will give me information about how you would like HIV testing to be provided to young people.

### **Would my participation in this study be kept confidential?**

Every effort will be taken to protect your identity as a participant in this study. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. Your name will not appear on any written documents. After the role play tape has been written up, the tape will be destroyed. Members of staff at your school will not be allowed to watch the recording or read the written document.

In accordance with legal requirements and/or professional standards, we will disclose to the appropriate individuals and/or authorities information that comes to our attention concerning child abuse or neglect or potential harm to you or others.

### **What are the risks of this research?**

There are no known risks associated with participating in this research project.

### **What are the benefits of this research?**

The benefits to you include the improvement of the VCT programme. This research is not designed to help you personally, but the results may help the investigator learn more about how young people would like HIV testing to

be provided. I hope that your experiences will help to improve the VCT programme, and so in the future, other young people might benefit from this study.

**Do I have to be in this research and may I stop participating at any time?**

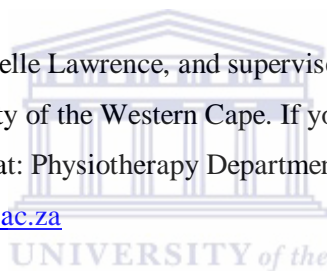
Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalised or lose any benefits to which you otherwise qualify. You may still make use of the VCT services at the school, even if you do not choose to participate in the research study.

**Is any assistance available if I am negatively affected by participating in this study?**

Counselling can be organised if you find you are negatively affected by participating in this study.

**What if I have questions?**

This research is being conducted by Dr Estelle Lawrence, and supervised by Associate Professor Trish Struthers, Physiotherapy Department, at the University of the Western Cape. If you have any questions about the research study itself, please contact Trish Struthers at: Physiotherapy Department, UWC, Private Bag X17, Bellville 7535, Telephone: 021 9592542, [pstruthers@uwc.ac.za](mailto:pstruthers@uwc.ac.za)



Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Head of Department: Prof Uta Lehman

Dean of the Faculty of Community and Health Sciences: Prof Ratie Mpofu

University of the Western Cape

Private Bag X17

Bellville 7535

This research has been approved by the University of the Western Cape's Senate Research Committee and Ethics Committee.

## INLIGTINGSVORM

**TITEL VAN NAVORSING:** Evaluering van die jeug-vriendelikheid van 'n mobiele skool MIV vrywillige berading en toetsingprogram

### **Waaroor gaan hierdie studie?**

Dit is 'n navorsingsprojek uitgevoer deur Dr Estelle Lawrence van die Universiteit van die Wes-Kaap. Die doel van hierdie navorsingsprojek is om te kyk na die faktore wat beïnvloed of jongmense vir MIV-toetsing gaan of nie.

### **Wat sal ek gevra word om te doen as ek besluit om deel te neem?**

Jy sal een van 8 leerders (van dieselfde ouderdom) wees wat sal deel neem aan 'n fokusgroep wat sal plaasvind by jou skool na skoolure. Jou deelname aan die fokusgroep sal ongeveer 2 ure duur. Jy sal versoek word om 'n rolspel met ander deelnemers te doen, wat dan deur 'n groepsbespreking gevolg sal word. Die rolspel sal op videoband opgeneem word sodat ek die kommentaar en idees in 'n geskrewe dokument vir ontleding kan opsom. Die rolspel en die bespreking sal vir my inligting gee oor hoe jy wil hê MIV-toetsing verskaf moet word aan jongmense.

### **Sal my deelname tydens die studie vertroulik wees?**

Alle pogings sal aangewend word om jou identiteit te beskerm as 'n deelnemer aan hierdie studie. Sou ek 'n artikel of rapport oor die studie skryf, sal jou identiteit beskerm word. Jou naam sal nie op enige skriftelike dokumente voor kom nie. Na die rolspel opgeskryf is, sal die band vernietig word. Lede van die personeel by jou skool sal nie toegelaat word om die opname te kyk of die skriftelike dokument te lees nie.

Volgens wetgevingsvereistes en/of professionele standaarde sal ons enige inligting van kindermishandeling of –verwaarlosing of potensiele skade teen jou of ander, wat onder ons aandag gebring word, oorgedra word aan die toepaslike individue en/of owerhede.

### **Is daar enige risiko's verbonde aan hierdie studie?**

Sover my kennis strek, is daar geen risiko's aan hierdie studie verbonde nie.

### **Wat is die voordele van hierdie navorsing?**

Die voordele vir jou sluit in die verbetering van die MIV-toetsingprogram. Hierdie navorsing is nie bedoel om jou persoonlik te help nie, maar die uitslae kan die onderzoeker help om meer te leer oor hoe jongmense wil hê MIV-toetsing vorsien moet word. Ek hoop dat jou ervarings sal help om die MIV-toetsingprogram te verbeter, en so in die toekoms, ander jongmense kan baat vind by hierdie studie.

### **Is dit verpligtend om deel neem en kan ek my enige tyd onttrek?**

Jou deelname aan die studie is vrywillig. Jy kan kies om glad nie deel te neem nie. Indien jy tydens jou deelname aan die studie besluit om te onttrek, mag jy dit doen. Jou keuse om nie meer deel te neem aan die studie of om tydens jou deelname te onttrek, sal jou geensins benadeel of negatief beïnvloed nie. Jy mag nog steeds deelneem aan die MIV-toetsingprogram by jou skool, al verkies jy om nie deel te neem aan hierdie studie nie.

### **Is daar enige ondersteuning beskikbaar indien ek negatief beïnvloed word deur hierdie studie?**

Indien jy wel negatief beïnvloed word sal ons 'n gekwalifiseerde sielkundige aanstel om jou by te staan of jou na die relevante person(e) verwys.

### **Indien ek enige vrae het?**

Hierdie navorsingsprojek word uitgevoer deur Dr Estelle Lawrence, en is onder leiding van Professor Trish Struthers (Fisioterapie Afdeling by UWK).

**Indien u enige navrae aangaande hierdie studie het asook u regte as 'n deelnemer, kontak asseblief:**

Prof. Trish Struthers ([pstruthers@uwc.ac.za](mailto:pstruthers@uwc.ac.za))  
Fisioterapie Afdeling, UWK  
Privaatsak X17  
Bellville 7535  
021 959 2542

Of alternatief kontak:  
Prof. Ratie Mpofu (Dean)  
Fakulteit Gemeenskap & Gesondheids Wetenskappe, UWK  
Privaatsak X17  
Bellville 7535  
021 959 2631

## INKCUKACHA MALUNGA NOPHANDO

**UPHANDO: OLU LUPHONONONGO LOKUFIKELELEKA KWENKONZO EZIYINKXASO KULUTSHA EZIKOLWENI XA KUSENZIWA UVAVANYO LWENGQUBO ZE – HIV EZIKOLWENI.**

### **Lumalunga nantoni Uphando?**

Oluphando lwenziwa ngu Dr Estelle Lawrence eUniversity yaseNtshona Koloni. Luphando olujonga izinto ezithi zibeligalelo ekuthatheni isigqibo kubantu abatsha xa kufuneka beyekuvavanyela i-HIV.

### **Yintoni endizakuyibuzwa ukuba ndiyenze xa ndivumile ukuba yinxalenye yophando?**

Uyakubangomnye wabafundi abasibhozo (abaneminyaka engqameneyo neyakho) abayakuthi bathathe inxaxheba koluphando oluyakube luqhutyelwa apha esikolweni sakho, emveni kokuba isikolo siphumile. Inxaxheba yakho koluphando iyakuthatha iyure ezimbini. Uyakucelwa ukuba uthathe inxaxheba kumdlalo weqonga nabanye abafundi bayakuthi bathathe inxaxheba koluphando, oku kuyakulandelwa zingxongxo zeqela. Umdlalo uzakusasazwa kusetyenziswa (i-video tape) ukwenza indlela lula yokufumana konke okuyakuthi kuxoxwe, konke oku kuyakuqulathwa kwisishwankathelo ngophando. Umdlalo weqonga nengxoxo eziyakuthi zilandele iyakubayindlela lula eyakuthi inike inkcukacha ngendlela abafundi abanqwenela uvavanyo lwe-HIV lwenziwe okanye lunikezwe ngayo kubantu abatsha.

### **Ingaba inxaxheba yam koluphando iyakuba yimfihlo?**

Siyakukwenza konke esinako ukukhusela wena negama lakho njengomnye wabafundi abuyakuthatha inxaxheba kuphando. Ukuba sithe sabhala nayiphi na ingcazelo ngophando, igama lakho siyakulikhusela lingapapashwa. Xa sigqibile ukubhala ingxoxo zomdlalo weqonga, ubuxhakaxhaka obusetyenzisiweyo ukusasaza (i-video tape) buyakutshatyalaliswa. Abasenzi (Ootitshala) esikolweni abazukunikwa mvume yokubukela okanye ukufunda oku kuqulathwe ngophando.

Ukongeza koku, ngokwemfuno zomthetho waseMzantsi Afrika siyakuthi sinike ingxelo/ingcazelo malunga nomntu/umfundi okanye inkcukacha ngendawo ezibubungozi okanye ubungozi ojengene nabo, malunga nokuhlukunyezwa okanye ukungakhathalelwa kwabantwana.

### **Ingaba ikho na imingcipheko malunga noluphando?**

Hayi akukho mingcipheko ekuchaphazelayo ngokuthatha inxaxheba koluphando okanye ngophando.

### **Ndizakuzuzwa ntoni koluphando?**

Inzuzo kuwo idibanisa ukuphuculwa kwe ndawo zengcebiso nezokuvavanya(HCT). Uphando olu alwenzelwanga ukuphuhlisa wena njengomntu kuphela, kodwa iziphumo zinganceda umphandi afunde lubanzi ngezizathu zokuba abantu abatsha bavavanyelwe ugawulayo, okanye kutheni bengavavanyi. Ndiyathemba ukuba amava akho azakuphuhlisa inqubo ye(HCT), lonto ibangele abanye abantu abatsha abasazayo bazuze'nto ngoluphando.

### **Kunyanzelekile ukuba ndibekoluphando kwaye ndingakwazi ukuyeka ukuthatha inxaxheba nangaliphina ixesha?**

Ukuthatha kwakho inxaxheba koluphando buxhomekeke kuwe. Ungakhetha ukungathathi inxaxheba. Ukuba ukhetha ukuthatha inxaxheba ungayeka nangaliphina ixesha. Ukuba ukhetha ukungathathi inxaxheba koluphando okanye wenze izigqibo zokuyeka nangaliphina ixesha, awusoze wohlwaywe okanye uphulukane nezinto ekufuneka uzifumene. Ungakwazi ukuqhubeka usebenzisa indawo zokuvavanya esikolweni, nokuba ukhetha ukungathathi inxaxheba koluphando.

### **Lukhona na uncedo ukuba inkxaxheba yam koluphando indiphatha kakubi?**

Kungakhona ii-ngcebiso (counselling) enokulungiselelwa xa uphatheka kakubi kuphando.

### **Ukuba ndinemibuzo?**

Oluphando luqhutywa ngu Dr Estelle Lawrence, kwaye luhlolwa ngu Associate Professor Trish Struthers, Physiotherapy Department, e-University of the Western Cape. Ukuba unemibuzo ngophando lona ngqo, tsalela uTrish Struthers at: Physiotherapy Department, UWC, Private Bag X17, Bellville 7535, Telephone: 021 9592542, [pstruthers@uwc.ac.za](mailto:pstruthers@uwc.ac.za)

Ukuba unemibuzo mayelana noluphando kunye namalungelo akho njengomntu othatha inkxaxheba, okanye unqwenela ukubika ingxaki othe wayifumana malunga nophando, nceda tsalela:

Head of Department: Prof Uta Lehman  
Dean of the Faculty of Community and Health Sciences: Prof Ratie Mpofo  
University of the Western Cape, Private Bag X17, Bellville 7535

Uluphando luvunywe yi-Dyunivesiti yase Ntshona Koloni ye-Senate yophando ne-Komiti Yemigaqo yokuziphatha (Ethics Committee).

## Appendix VII: Focus Group Guideline

**AIM OF FGD:** to explore what learners think a youth friendly HCT service should consist of.

**STEP 1:** Prepare for the individual FGDs

**1.1.** Organise the times, venues and people involved for all the groups scheduled:

School	Grade	Total no. of learners	Person responsible for learner recruitment	Facilitator & assistant	Venue	Date	Time

**1.2.** Pack in all equipment:

	✓
Refreshments	
Registration form	
Consent forms	
Digital audio-recorders (x3)	
Batteries	
Facilitators guide	
Recording forms	
Role cards	
Pens	
Paper	



**STEP 2:** Conduct the FGD

1. Set up
2. Registration, consent & refreshments
3. Introductions, aim of FGD and ground rules
4. Role play

5. Discussion

*What do you think will make learners want to use this testing service?*

*What do you think will make learners NOT want to use this testing service?*

*What would you like to experience when you go for HCT at school?*

*Do you think the school is a good place to do HCT? Why do you say that?*

6. Wrap-up summary

7. Debriefing





## **Appendix VIII: Facilitator's script**

### **WELCOME**

Thanks for agreeing to be part of the focus group. We appreciate your willingness to participate.

### **INTRODUCTIONS**

Facilitator; assistant

### **PURPOSE OF FOCUS GROUPS**

The reason we are having this focus group is to find out what young people think a youth friendly HIV Counselling and Testing service should consist of. We need your input and want you to share your honest and open thoughts with us.

### **GROUND RULES**

#### **1. WE WANT YOU TO DO THE TALKING.**

We would like everyone to participate.

I may call on you if I haven't heard from you in a while.



#### **2. THERE ARE NO RIGHT OR WRONG ANSWERS**

Every person's experiences and opinions are important.

Speak up whether you agree or disagree.

We want to hear a wide range of opinions.

#### **3. WHAT IS SAID IN THIS ROOM STAYS HERE**

We want everyone to feel comfortable sharing when sensitive issues come up.

#### **4. WE WILL BE TAPE RECORDING THE GROUP**

We want to capture everything you have to say.

We don't identify anyone by name in our report. You will remain anonymous.

## Appendix IX: Format of observer's notes

1. **Group:** (Identification of participating group)
2. **Date:** (of group)
3. **Time:** (group began and ended)
4. **Meeting Place:** (location and brief description (i.e., big, convenient) and how this could affect the discussion)
5. **Participants:** (including number and personal characteristics and other kinds of relevant information)
6. **Group Dynamics:** (general description, level of participation, dormant participants, interest level, boredom, anxiety, etc.)
7. **Interruptions:** (occurring during the session)
8. **Impressions and Observations**
9. **Seating Diagram** of the group.
10. **Running Notes** on discussion of various topics.



Source: INRUD (1996)

## Appendix X: Tool for Assessing the Youth Friendliness of A School-Based HCT Service

### 1. GENERAL BACKGROUND INFORMATION

This section is designed to provide general information about the HCT site, such as its size and location, as well as details of the assessment process.

Date of Visit: \_\_\_\_\_

Name of School: \_\_\_\_\_

Address: \_\_\_\_\_

Location:     Rural                       Urban                       Peri-urban



HIV Testing Service Provider: \_\_\_\_\_

#### Staff Interviewed:

---

---

#### Person(s) Conducting Assessment (Name and Affiliation):

---

---

## II. ASSESSMENT OF YOUTH-FRIENDLINESS

Ask the questions below to the manager or service provider and observe operations, where possible. Write brief answers in the “Answer” column. Add additional findings or recommendations in the “Comments/Recommendations” column.

**R = Review service provider’s records**    **E = Examine site layout and environment**    **IS = Interview service provider managers and staff**

**IC = Interview clients**    **O = Observe provider-client interaction**    **P = Review service provider’s policies and procedures**

	Method	Answer	Comments/Recommendations
<b>1. Location</b>			
Where at the school is the service provided?	E		
<b>2. HCT Service Hours</b>			
What time is the service provided?	IS, IC		
What times are convenient for learners to seek services	IS, IC		
<b>3. Site Environment</b>			
Does the site provide a comfortable setting for learners?	E, IC		
Is there a counselling area that provides both visual and auditory privacy?	E, IC		
<b>4. Staff Preparedness</b>			
Are providers trained to serve adolescent clients?	IS		
Did all staff members (e.g., receptionist) receive at least an orientation about adolescent clients? What type of orientation was this and how long was it?	IS		

Do providers show respect for the adolescent client during counselling and consultations?	IS, O, IC		
Are there job aids available to help service providers in their daily work (i.e., flipchart, posters that remind them of key messages, client's rights, etc.)?	IS, O		
<b>5. Services Provided</b>			
Is counselling on sexuality, safer sex, pregnancy prevention, and STI and HIV prevention provided (including dual protection)?	IS, IC, P		
Are condoms provided to both males & females?	IS, IC, O, P		
Are condoms sufficient to meet the need?	IS, IC		
Do young people request Reproductive Health services other than HIV testing? Which ones?	IS, IC		
Are referrals made for services not provided at the HCT site (e.g., sexual abuse)? Please give examples.	R, IS, IC, P		
Is there a formal referral system, including tracking and follow-up, in place?	IS, IC, P		
<b>6. Educational Activities</b>			
Are educational materials available on-site (audio-visual, computers, printed material)? Which ones?	IS, IC, E		
Are there educational posters displayed?	IS, IC, E		
Are there posters or brochures that describe the clients' rights?	IS, IC, E		



Are there print materials available for clients to take? Describe materials and comment.	IS, IC, E		
In what languages are educational materials available?	IS, IC, E		
Are there ways clients can access information or counselling off-site (telephone hotline, website, materials sent by mail)? Please describe.	IS, IC, E		
<b>7. Youth Involvement</b>			
What ways can learners suggest/recommend changes to make services more comfortable and responsive?	IS, IC, E, P		
Are learners currently involved in decision making about how the service is provided? How?	IS, IC, P		
How could learners be more effectively involved in decision making about the HCT service?	IS, IC		
What other roles can learners play in operations or guidance?	IS, IC		
<b>8. Supportive Policies</b>			
Do clear written guidelines for serving learners exist? Please describe.	IS, P		
Do written procedures exist for protecting client confidentiality? Please describe.	IS, P		
Are records stored so that confidentiality is assured?	IS, E, P		
Is parental consent required? Which type and under what circumstances?	IS, IC, P		



Is there a minimum age requirement for learners to receive HIV testing? If yes, why?	IS, IC, P		
Do policies or procedures exist that pose barriers to youth friendly HCT services?	IS, IC, P		
<b>9. Administrative Procedures</b>			
Is the registration process private so that other waiting clients cannot overhear the conversation?	IS, IC, E, P		
Is there an appointment system? If so, can learners be seen without an appointment?	IS, IC, P		
How long would a learner wait, on average, to see a provider?	IS, IC		
What is the average time allowed for client/provider interaction?	IS, IC, O, P		
<b>10. Publicity/Recruitment</b>			
Does publicity about the HCT service stress confidentiality?	IS, IC, E		
Are there outreach activities to improve uptake of the service? If so, what type of activity and who does it?	IS, IC, O		
<b>11. Fees</b>			
How much are learners charged?	IS, IC, P		
Are these fees affordable by the learners attending the school?	IS, IC		



**Diagram/description of site layout:**





## **Appendix XI: Amendments made to “Clinic assessment of youth friendly services tool”**

The terms “client” and “youth” were changed to “learner” throughout the document.

Section II: “Range of services provided” and “Schedule of available services” (sections removed)

Section IV:

1. Location: Question added: Where at the school is the service provided?  
Questions removed: How far is the facility from public transportation? How far is the facility from places where adolescents spend free time? How far is the facility from schools in the area?
2. Facility hours: The heading “Facility hours” was changed to “HCT service hours”  
“What time is the clinic scheduled to open?” was changed to “What time is the service provided?”  
Questions removed: What time is the clinic scheduled to close? Does the facility have separate hours for adolescents? Is there a sign listing services and clinic working hours?
3. Facility environment: The word “facility” was changed to “site”  
Questions removed: Does the facility have a separate space to provide services for adolescent clients? Does the facility have a separate waiting room for adolescent clients? Is there an examination room that provides visual and auditory privacy?
5. Services provided: Questions removed: What contraceptive methods are offered?  
Is there sufficient equipment for the provision of reproductive health services for young people?
6. Peer education/counselling programme (section removed)
9. Support policies: Questions removed: Are there any contraceptive methods that adolescents cannot receive? Are adolescent clients served without regard to their marital status? Are pelvic exams routinely required?
10. Administrative procedures: Question removed: If appointments are required, can they be expedited for adolescent clients?

**Appendix XII: Consent form (service providers)**

**TITLE OF RESEARCH:** EVALUATION OF THE YOUTH-FRIENDLINESS OF A MOBILE SCHOOL-BASED HIV VOLUNTARY COUNSELLING AND TESTING PROGRAMME

I have read the information sheet regarding the above research, and it has been described to me in language that I understand. I freely and voluntarily agree to participate in the research. I agree to have my counselling session audiotaped. My questions about the research have been answered. I understand that my identity will not be disclosed and that I may withdraw from the research without giving a reason at any time and this will not negatively affect me in any way.

**Name of research participant**.....

**Signature of research participant**.....

**Witness**.....

**Date**.....



Should you have any questions regarding this research or wish to report any problems you have experienced related to the study, please contact the research supervisor:

Patricia Struthers PhD  
Assoc. Professor  
School of Public Health  
University of the Western Cape  
Private Bag X17  
Bellville 7535  
South Africa  
Ph work 27.21.9592542/3935  
Fax work 27.21.9591217  
email [pstruthers@uwc.ac.za](mailto:pstruthers@uwc.ac.za)

## **Appendix XIII: Participant information sheet (service provider interviews)**

### **TITLE OF RESEARCH: EVALUATION OF THE YOUTH-FRIENDLINESS OF A MOBILE SCHOOL-BASED HIV VOLUNTARY COUNSELLING AND TESTING PROGRAMME**

#### **What is this study about?**

This is a research project being conducted by Dr Estelle Lawrence at the University of the Western Cape. The purpose of this research project is to find out the best way to do HIV testing of learners at schools.

#### **What will I be asked to do if I agree to participate?**

You will be asked to participate in one interview. You will be asked several questions about your work doing HIV testing in schools. With your permission, I will tape record the interviews so I don't have to make so many notes. You will not be asked to state your name on the recording.

#### **Would my participation in this study be kept confidential?**

Every effort will be taken to protect your identity as a participant in this study. If I write a report or article about this research project, your identity will be protected to the maximum extent possible. Your name will not appear on any written documents.

In accordance with legal requirements and/or professional standards, we will disclose to the appropriate individuals and/or authorities information that comes to our attention concerning child abuse or neglect or potential harm to you or others.

#### **What are the risks of this research?**

There are no known risks associated with participating in this research project.

#### **What are the benefits of this research?**

This research is not designed to help you personally, but the results may help the investigator learn more about what the best way is to provide HIV testing for learners at schools. I hope that your experiences will help to improve the HIV testing programme, and so in the future, young people might benefit from this study.

**Do I have to be in this research and may I stop participating at any time?**

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalised or lose any benefits to which you otherwise qualify.

**What if I have questions?**

This research is being conducted by Dr Estelle Lawrence, and supervised by Associate Professor Trish Struthers at the University of the Western Cape. If you have any questions about the research study itself, please contact Trish Struthers at: School of Public Health, UWC, Private Bag X17, Bellville 7535. Telephone: 021 9592542/3935, pstruthers@uwc.ac.za

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Head of Department: Prof Uta Lehman, University of the Western Cape, Private Bag X17, Bellville 7535



## Appendix XIV: The ACTS model

(<http://www.actshivtest.org.za/ACTS%20A3.pdf>)

# HIV TESTING IS FOR EVERYONE

<div style="background-color: white; color: #e61e00; border-radius: 50%; width: 40px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> <div style="font-size: 24px; font-weight: bold; margin-bottom: 5px;">A</div> <div style="font-size: 8px; font-weight: bold;">ADVISE</div> </div>	<ul style="list-style-type: none"> <li>• <b>Advise all clients to have an HIV test today</b> <ul style="list-style-type: none"> <li>• If they decline, respond to concerns and motivate with benefits of testing</li> <li>• If HIV negative, client can learn how to stay negative</li> <li>• If HIV positive, client can get the care needed to stay healthy</li> </ul> </li> <li>• <b>If HIV positive, ensure that client is in care</b>  <b>Ask client about questions/concerns and if ready to get an HIV test</b> </li> </ul>						
<div style="background-color: white; color: #e61e00; border-radius: 50%; width: 40px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> <div style="font-size: 24px; font-weight: bold; margin-bottom: 5px;">C</div> <div style="font-size: 8px; font-weight: bold;">CONSENT</div> </div>	<ul style="list-style-type: none"> <li>• <b>Explain consent:</b> they can only be tested for HIV if they give permission by signing the consent form</li> <li>• <b>Explain confidentiality:</b> no one outside of the health team will be told about their HIV test or status without their permission  <b>Have client sign the consent form</b> </li> </ul>						
<div style="background-color: white; color: #e61e00; border-radius: 50%; width: 40px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> <div style="font-size: 24px; font-weight: bold; margin-bottom: 5px;">T</div> <div style="font-size: 8px; font-weight: bold;">TEST</div> </div>	<ul style="list-style-type: none"> <li>• <b>Explain testing procedure:</b> <ul style="list-style-type: none"> <li>• Finger prick to test a drop of blood for HIV</li> <li>• Results of test ready in approximately 15 minutes</li> </ul> </li> <li>• <b>If first test is positive, explain need for confirmatory test</b>  <b>Perform rapid test or take client to nurse for finger prick</b> </li> </ul>						
<div style="background-color: white; color: #e61e00; border-radius: 50%; width: 40px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> <div style="font-size: 24px; font-weight: bold; margin-bottom: 5px;">S</div> <div style="font-size: 8px; font-weight: bold;">SUPPORT</div> </div>	<p style="text-align: center; color: #e61e00; font-weight: bold;">Give test result ► Allow time to react ► Respond to concerns &amp; support:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; border-bottom: 1px solid #e61e00; color: #e61e00; font-weight: bold;">Client HIV negative</th> <th style="width: 50%; border-bottom: 1px solid #e61e00; color: #e61e00; font-weight: bold;">Client HIV positive</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;"> <ul style="list-style-type: none"> <li>• You tested HIV negative today</li> <li>• <b>What will you do to stay negative?</b>  <b>Discuss prevention options:</b> <ul style="list-style-type: none"> <li>• Abstain: don't have sexual intercourse</li> <li>• Be faithful to one or reduce number of partners</li> <li>• Condomise correctly EVERY TIME you have sex</li> <li>• Encourage partner testing &amp; condomising</li> </ul> </li> <li>• <b>Get tested again every year or sooner if you have: STI, new partner, unsafe sex, fall pregnant or if you become sick</b>   <b>Ask client if they have any questions</b> </li> </ul> </td> <td style="padding: 5px;"> <ul style="list-style-type: none"> <li>• You tested HIV positive today, which means you have HIV infection</li> <li>• <b>Coping</b> <ul style="list-style-type: none"> <li>• Ask about &amp; respond to client's concerns</li> <li>• Reassure client: knowing status can save their life</li> </ul> </li> <li>• <b>Living Positively</b> <ul style="list-style-type: none"> <li>• Explain importance of knowing CD4 &amp; HIV Stage</li> <li>• Stress importance of returning for CD4 results to find out if they need ARV's</li> </ul> </li> <li>• <b>Protect Your Health &amp; Your Partner</b> <ul style="list-style-type: none"> <li>• Avoid re-infection by HIV or new STIs</li> <li>• Use condoms EVERY TIME you have sex</li> <li>• Encourage partner testing &amp; condomising</li> </ul> </li> </ul> </td> </tr> <tr> <td colspan="2" style="padding: 5px;"> <ul style="list-style-type: none"> <li>• Obtain blood for CD4 test and do HIV staging</li> <li>• Assess if client needs further counselling</li> <li>• Verify 2+ contacts for recall</li> </ul> </td> </tr> </tbody> </table>	Client HIV negative	Client HIV positive	<ul style="list-style-type: none"> <li>• You tested HIV negative today</li> <li>• <b>What will you do to stay negative?</b>  <b>Discuss prevention options:</b> <ul style="list-style-type: none"> <li>• Abstain: don't have sexual intercourse</li> <li>• Be faithful to one or reduce number of partners</li> <li>• Condomise correctly EVERY TIME you have sex</li> <li>• Encourage partner testing &amp; condomising</li> </ul> </li> <li>• <b>Get tested again every year or sooner if you have: STI, new partner, unsafe sex, fall pregnant or if you become sick</b>   <b>Ask client if they have any questions</b> </li> </ul>	<ul style="list-style-type: none"> <li>• You tested HIV positive today, which means you have HIV infection</li> <li>• <b>Coping</b> <ul style="list-style-type: none"> <li>• Ask about &amp; respond to client's concerns</li> <li>• Reassure client: knowing status can save their life</li> </ul> </li> <li>• <b>Living Positively</b> <ul style="list-style-type: none"> <li>• Explain importance of knowing CD4 &amp; HIV Stage</li> <li>• Stress importance of returning for CD4 results to find out if they need ARV's</li> </ul> </li> <li>• <b>Protect Your Health &amp; Your Partner</b> <ul style="list-style-type: none"> <li>• Avoid re-infection by HIV or new STIs</li> <li>• Use condoms EVERY TIME you have sex</li> <li>• Encourage partner testing &amp; condomising</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Obtain blood for CD4 test and do HIV staging</li> <li>• Assess if client needs further counselling</li> <li>• Verify 2+ contacts for recall</li> </ul>	
Client HIV negative	Client HIV positive						
<ul style="list-style-type: none"> <li>• You tested HIV negative today</li> <li>• <b>What will you do to stay negative?</b>  <b>Discuss prevention options:</b> <ul style="list-style-type: none"> <li>• Abstain: don't have sexual intercourse</li> <li>• Be faithful to one or reduce number of partners</li> <li>• Condomise correctly EVERY TIME you have sex</li> <li>• Encourage partner testing &amp; condomising</li> </ul> </li> <li>• <b>Get tested again every year or sooner if you have: STI, new partner, unsafe sex, fall pregnant or if you become sick</b>   <b>Ask client if they have any questions</b> </li> </ul>	<ul style="list-style-type: none"> <li>• You tested HIV positive today, which means you have HIV infection</li> <li>• <b>Coping</b> <ul style="list-style-type: none"> <li>• Ask about &amp; respond to client's concerns</li> <li>• Reassure client: knowing status can save their life</li> </ul> </li> <li>• <b>Living Positively</b> <ul style="list-style-type: none"> <li>• Explain importance of knowing CD4 &amp; HIV Stage</li> <li>• Stress importance of returning for CD4 results to find out if they need ARV's</li> </ul> </li> <li>• <b>Protect Your Health &amp; Your Partner</b> <ul style="list-style-type: none"> <li>• Avoid re-infection by HIV or new STIs</li> <li>• Use condoms EVERY TIME you have sex</li> <li>• Encourage partner testing &amp; condomising</li> </ul> </li> </ul>						
<ul style="list-style-type: none"> <li>• Obtain blood for CD4 test and do HIV staging</li> <li>• Assess if client needs further counselling</li> <li>• Verify 2+ contacts for recall</li> </ul>							

NURSES CAN FOLLOW THESE 4 STEPS DURING EVERY CLINICAL VISIT

1

Determine reason for client's visit.

► 2

Start ACTS. If client consents, begin the testing process.

► 3

Provide service per reason for visit.

► 4

Give HIV result & support per above.

ACTSHIVtestLog.za

ACTS

ADVISE  
 CONSENT  
 TEST  
 SUPPORT

## Appendix XV: ACTS Form

HIV CONSENT & TESTING RECORD FOR ADULTS & CHILDREN						
Place Patient Sticker Here						
Name of Client:						
Folder Number:						
Age:					Male	Female
Reason for Accessing Service						
Self Referred	Current TB client	TB Suspect	New STI client	MTCT	MTCT Follow-up	
Other (specify):						
ADVISE CLIENT TO HAVE AN HIV TEST					Date:	
Accept HIV Test	Yes	No	First Ever HIV Test	Repeat HIV Test (last test less than 1 yr ago)	Repeat HIV Test (last test more than 1 yr ago)	
If refuse, specify reason:						
CONSENT TO HIV TESTING [Consent of guardian / parent is required if <12yrs]						
I hereby consent to having an HIV test. Ndiyavuma okokuba igazi lam lingahlolelwa isifo sengculazi (HIV/AIDS) Ek verleen hiermee toestemming vir 'n MIV toets.						
Name/Igama/Naam				Client	Parent	Guardian
Signature/Usayine/Handtekening:				Date/Umhla/Datum:		
Name of Provider:				Signature		
TEST CLIENT					Date:	
Rapid Test Performed by:				Test:	Batch No:	
Screening test	Neg	Pos	Confirmatory Test	Neg	Pos	Batch No:
Elisa Test	Neg	Pos	Date to return for Elisa result:			
SUPPORT [Post Test]						
	Indeterminate		Negative		Positive	
Importance of returning for Elisa test result						
Encourage Partner Testing / Disclosure						
Risk Reduction Plan						
Number of Condoms issued						
Importance of Cd4 count result & HIV Care						
Date of Clinical & F/up Counselling visit						
Date of support group						

ICN 999970T9490475  
NOV 2009

FOR COUNSELLOR USE AT HIV TESTING											
PMTCT Education				Family Planning [FP] Screen [Men & Women]							
Transmission to baby		ARVs to baby		Using FP method	Yes	No	Method:	Next FP appt:			
Feeding options		Bactrim to baby		Referred for FP		Yes	No	N/A	Using condoms:	Yes	No
ARVs to mother		Testing to baby		Pap smear Ever	Yes	No	Name of PN referred to:				
<b>TB Screen</b>				<b>STI Symptom Screen</b>							
Cough for more than 2 weeks	Yes	No	<b>WOMEN</b>				<b>MEN</b>				
Weight loss more than 1.5kg in last month	Yes	No	Discharge from vagina		Yes	No	Discharge from penis		Yes	No	
Fever	Yes	No	Sores on vagina		Yes	No	Sores on penis		Yes	No	
Drenching night sweats	Yes	No	Lower abdominal pain		Yes	No	Burning on passing urine		Yes	No	
TB contact in house	Yes	No	Name of PN referred to:								
Name of PN referred to:		Name of Counsellor:									
FOR COUNSELLOR USE AT FOLLOW-UP SESSIONS											
	F/up Session 1			F/up Session 2			F/up Session 3				
<b>Discussion</b>	Date:			Date:			Date:				
Risk Reduction Plan											
Partner Testing/Disclosure											
Positive Living [Nutrition, Lifestyle, Exercise, Ongoing Care, CD4]											
<b>Screening</b>	Yes	No	Yes	No	Yes	No	Yes	No			
<b>TB Screen</b>											
Cough for more than 2 weeks											
Weight loss more than 1.5kg in last month											
Fever											
Drenching night sweats											
TB contact in house											
<b>STI Symptom Screen</b>											
<b>WOMEN</b>											
Discharge from vagina											
Sores on vagina											
Lower abdominal pain											
<b>MEN</b>											
Discharge from penis											
Sores on penis											
Burning on passing urine											
<b>Family Planning [FP] Screen</b>											
Using Condoms											
Pap smear Ever											
FP Method [Women & Men's partner]											
Next FP Date											
Name of PN referred to:											
<b>Management</b>											
No. of Condoms issued											
Date of f/up counselling											
Date of support group											
Name of Counsellor:											

## Appendix XVI: UNAIDS Tool 4 for assessing VCT counselling content and quality

### Tool 4.1

Function	Skills	Score (1-3, 3=best)	Comments
<b>Interpersonal relationship</b>	Greets clients		
	Introduces self		
	Engages client in conversation		
	Listens actively (verbal/non-verbal)		
	Is supportive and non-judgemental		
<b>Gathering information</b>	Uses appropriate balance open and closed questions		
	Uses silence well to allow for self-expression		
	Seeks clarification about information given		
	Avoids premature conclusions		
	Probes appropriately		
	Summarises main issues discussed		
<b>Giving information</b>	Gives information in clear and simple terms		
	Gives client time to absorb information and to respond		
	Has up-to-date knowledge about HIV		
	Repeats and reinforces important information		
	Checks for understanding/misunderstanding		
	Summarises main issues		
<b>Handling special circumstances</b>	Accommodates language difficulty		
	Talks about sensitive issues plainly and appropriately to the culture		
	Prioritises issues to cope with limited time in short contacts		
	Uses silences well to deal with difficult emotions		
	Is innovative in overcoming constraints (e.g. space for privacy)		
	Manages client's distress		
	Flexible in involving partner or significant other		



## Tool 4.2

### For evaluation of pre-test counselling

During the session have the following occurred?	Y	N
Reason for attending discussed		
Knowledge about HIV and modes of transmission explored		
Misconceptions corrected		
Assessment of personal risk profile carried out		
Information concerning the HIV test given (e.g. process of testing, meaning of possible test results, window period)		
Understanding checked for		
Discussion of meaning of HIV-positive and HIV-negative results and possible implications		
Capacity to cope with HIV-positive result		
Discussion of potential needs and available support		
Discussion of a personal risk-reduction plan		
Time allowed to think through issues		
Informed consent/dissent given freely		
Follow-up arrangements discussed		
Adequate time for questions and clarifications		

### TOOL 4.3

## For evaluation of post-test counselling

<b>During the session have the following occurred?</b>	<b>Y</b>	<b>N</b>
Results given simply and clearly		
Time allowed for the result to sink in		
Checking for understanding		
Discussion of the meaning of the result for the client		
Discussion of the personal, family & social implications including who, if any, to tell		
Discussion of a personal risk-reduction plan		
Dealing with immediate emotional reactions		
Checking availability of adequate immediate support		
Discussion of follow-up care and support		
Options and resources identified		
Immediate plans, intentions and actions reviewed		
Follow-up plans discussed and referrals where necessary		



## **Appendix XVII: Participant information sheet (survey)**

### **TITLE OF RESEARCH: EVALUATION OF THE YOUTH-FRIENDLINESS OF A MOBILE SCHOOL-BASED HIV COUNSELLING AND TESTING PROGRAMME**

#### **What is this study about?**

This is a research project being conducted by Dr Estelle Lawrence at the University of the Western Cape. The purpose of this research project is to look at the things that have an influence on whether young people go for HIV testing or not.

#### **What will I be asked to do if I agree to participate?**

You will be asked to answer a questionnaire which will take you about 45-60 minutes to complete. The questions will give me information about your reasons for having an HIV test at your school (if you have tested), or your reasons for not having a test at school (if you did not test).

#### **Would my participation in this study be kept confidential?**

We will do our best to keep your personal information confidential. To help protect your confidentiality, the questionnaire that you answer will not have your name on it and will be kept in a secure locked cabinet. There will be nothing on the questionnaire that can identify you. Members of staff at your school will not be allowed to read the completed questionnaires. If we write a report or article about this research project, your identity will be protected to the maximum extent possible.

In accordance with legal requirements and/or professional standards, we will disclose to the appropriate individuals and/or authorities information that comes to our attention concerning child abuse or neglect or potential harm to you or others.

#### **What are the risks of this research?**

There are no known risks associated with participating in this research project.

### **What are the benefits of this research?**

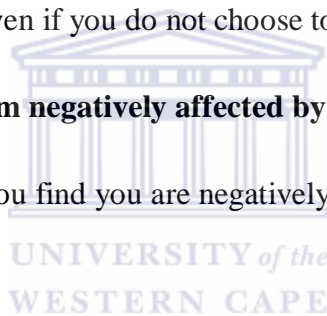
The benefits to you include the improvement of the HIV Counselling and Testing (HCT) programme. This research is not designed to help you personally, but the results may help the investigator learn more about the things that influence why young people go for HIV testing or not. I hope that your experiences will help to improve the HCT programme, and so in the future, other young people might benefit from this study.

### **Do I have to be in this research and may I stop participating at any time?**

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalised or lose any benefits to which you otherwise qualify. You may still make use of the VCT services at the school, even if you do not choose to participate in the research study.

### **Is any assistance available if I am negatively affected by participating in this study?**

Counselling can be organised if you find you are negatively affected by participating in this study.



### **What if I have questions?**

This research is being conducted by Dr Estelle Lawrence, and supervised by Associate Professor Trish Struthers, Physiotherapy Department, at the University of the Western Cape.

If you have any questions about the research study itself, please contact Trish Struthers at:

Physiotherapy Department, UWC, Private Bag X17, Bellville 7535, Telephone: 021

9592542, [pstruthers@uwc.ac.za](mailto:pstruthers@uwc.ac.za)

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Head of Department: Prof Uta Lehman

Dean of the Faculty of Community and Health Sciences: Prof Ratie Mpofu

University of the Western Cape

Private Bag X17

Bellville 7535

This research has been approved by the University of the Western Cape's Senate Research Committee and Ethics Committee.

**INLIGTINGSBLAD (Opname)****TITEL VAN NAVORSING: EVALUERING VAN DIE JEUG-VRIENDELIKHEID VAN 'N MOBIELE SKOOL-GEBASEERDE MIV VRYWILLIGE BERADINGS- EN TOETSINGSPROGRAM****Waaroor gaan die studie?**

Dit is 'n navorsingsprojek uitgevoer deur Dr Estelle Lawrence by die Universiteit van die Wes-Kaap. Die doel van hierdie navorsingsprojek is om te kyk na die faktore wat 'n invloed het op jong mense vir MIV-toetsing gaan of nie.

**Wat sal ek gevra word om te doen as ek instem om deel te neem?**

Jy sal gevra word om 'n vraelys te beantwoord wat ongeveer 45-60 minute sal duur om te voltooi. Die vrae sal vir my inligting gee oor die redes hoekom jy vir 'n MIV-toets by jou skool gegaan het (as jy getoets het), of die redes hoekom jy nie vir 'n toets by jou skool gegaan het nie (as jy nie getoets het nie).

**Sal my deelname aan hierdie studie vertroulik gehou word?**

Ons sal ons bes doen om jou persoonlike inligting vertroulik te hou. Om jou privaatheid te beskerm, sal die vraelys wat jy beantwoord nie jou naam op hê nie, en dit sal in 'n veilige toesluitkabinet gehou word. Daar sal niks wees op die vraelys wat jou kan identifiseer nie. Lede van die personeel by jou skool sal nie toegelaat word om die voltooide vraelyste te lees nie. As ons 'n verslag of artikel oor die navorsingsprojek skryf, sal jou identiteit tot die maksimum mate moontlik beskerm word.

In ooreenstemming met wetlike vereistes en/of professionele standaarde, sal ons inligting wat onder ons aandag kom met betrekking tot kindermishandeling of verwaarlosing, of potensiële skade aan jou of ander mense, bekend maak aan die toepaslike individue en/of owerhede.

**Wat is die risiko's van hierdie navorsing?**

Daar is geen bekende risiko's wat verband hou met die deelname aan hierdie navorsingsprojek nie.

### **Wat is die voordele van hierdie navorsing?**

Die voordele vir jou sluit in die verbetering van die MIV-berading- en toetsingsprogram. Hierdie navorsing is nie ontwerp om jou persoonlik te help nie, maar die uitslae kan help om die ondersoeker meer te leer oor die dinge wat 'n invloed het op waarom jong mense vir MIV-toetsing gaan of nie. Ek hoop dat jou ervarings sal help om die MIV-toetsingprogram te verbeter, en so kan ander jong mense in die toekoms baat vind by hierdie studie.

### **Is dit verpligtend om deel neem en kan ek my enige tyd onttrek?**

Jou deelname aan hierdie navorsing is heeltemal vrywillig. Jy kan kies om nie deel te neem nie. As jy besluit om deel te neem aan hierdie navorsing, kan jy ter eniger tyd onttrek. As jy besluit om nie aan hierdie studie deel te neem nie of as jy onttrek sal jy nie gepenaliseer word nie of enige voordele waarvoor jy andersins kwalifiseer verloor nie. Jy mag nog steeds deelneem aan die MIV-toetsingsprogram by jou skool, al verkies jy om nie deel te neem aan hierdie studie nie.

### **Is daar enige bystand wat beskikbaar is as ek negatief beïnvloed word deur hierdie studie?**

Berading kan gereël word as jy dink jy is negatief beïnvloed deur jou deelname aan hierdie studie.

### **Wat as ek vrae het?**

Hierdie navorsing word gedoen deur Dr Estelle Lawrence, en onder toesig van die Medeprofessor Trish Struthers. As jy enige vrae oor die navorsingstudie self het, kan jy Trish Struthers kontak by: Departement van Fisioterapie, UWK, Privaatsak X17, Bellville 7535, Telefoon: 021 9592542, [pstruthers@uwc.ac.za](mailto:pstruthers@uwc.ac.za)

Indien jy enige vr

ae oor hierdie studie en jou regte as 'n navorsings-deelnemer het, of as jy enige probleme wat jy ervaar het met betrekking tot die studie wil aanmeld, kontak asseblief vir:

Hoof van die Departement: Prof Uta Lehman

Dekaan van die Fakulteit van Gemeenskap en Gesondheidswetenskappe: Prof Ratie Mpofu  
Universiteit van die Wes-Kaap, Privaatsak X17, Bellville 7535

Hierdie navorsing is deur die Universiteit van die Wes-Kaap se Senaat Navorsingskomitee en Etniek komitee goedgekeur.

## IPHEPHA LEENKCUKACHA (Survey)

### ISIHLOKO SOPHANDO: EVALUATION OF THE YOUTH-FRIENDLINESS OF A MOBILE SCHOOL-BASED HIV COUNSELLING AND TESTING PROGRAMME

#### Lungantoni oluphando?

Oluphando luqhutywa ngu Dr Estelle Lawrence we-Dyunivesiti yase Ntshona Koloni.

Oluphando luhlola izinto ezithi zibenefuthe ekubeni ulutsha luye okanye lungayi ukuyokuvavanyelwa intsholongwane kagawulayo (HIV test).

#### Ndakubuzwa ntoni ukuba ndivumile ukuthatha inxaxheba koluphando?

Uzakucelwa ukuba uphendule uxwebhu lwemibuzo oluyakuthatha imizuzu emiyi-45 ukuya kwiyure ukugqiba. Lemibuzo izakundinika iinkcukacha ngezizathu ezibangela ukuba wenze i-HIV test esikolweni sakho (ukuba uyenzile), okanye unobangela wokuba ungayenzi i-HIV test (ukuba awuyenzanga).

#### Inxaxheba yam koluphando izakugcinwa iyimfihlo na?

Sizakwenza konke okusemandleni ukugcina iinkcukacha zakho ziyimfihlo. Ukunceda oku, uxwebhu lwemibuzo ozakuyiphendula ayinagama lakho kwaye iyakugcinwa kwindawo etshixwayo. Akuba kho nto koloxwebhu echaza wena. Abaphathi nootitshala esikolweni sakho abanalungelo lokufunda amaxwebhu emibuzo egqityiweyo. Ukuba kukho iphepha elipapashwayo ngoluphando, iinkcukacha zakho ziyakukhuselwa kangangoko.

Njengokuba kunxulumene nomthetho, sinokukwazi ukuchaza iinkcukacha ezifaneleyo kumthetho okanye kwabasemthethweni malunga nomntwana ohlukunyezwayo okanye ongenasihoyo.

#### Yintoni imingcipheko yoluphando?

Ayikho imingcipheko edityaniswa nokuthatha inxaxheba koluphando

#### Ndizakuzuzwa ntoni koluphando?

Inzuzo kuwo idibanisa ukuphuculwa kwe ndawo zengcebiso nezokuvavanya(HCT). Uphando olu alwenzelwanga ukuphuhlisa wena njengomntu kuphela, kodwa iziphumo zinganceda umphandi afunde lubanzi ngezizathu zokuba abantu abatsha bavavanyelwe ugawulayo, okanye kutheni bengavavanyi. Ndiyathemba ukuba amava akho azakuphuhlisa inqubo ye(HCT), lonto ibangele abanye abantu abatsha abasazayo bazuze'nto ngoluphando.

### **Kunyanzelekile ukuba ndibekoluphando kwaye ndingakwazi ukuyeka ukuthatha inxaxheba nangaliphina ixesha?**

Ukuthatha kwakho inxaxheba koluphando buxhomekeke kuwe. Ungakhetha ukungathathi inxaxheba. Ukuba ukhetha ukuthatha inxaxheba ungayeka nangaliphina ixesha. Ukuba ukhetha ukungathathi inxaxheba koluphando okanye wenze izigqibo zokuyeka nangaliphina ixesha, awusoze wohlwaywe okanye uphulukane nezinto ekufuneka uzifumene. Ungakwazi ukuqhubeka usebenzisa indawo zokuvavanya esikolweni, nokuba ukhethe ukungathathi inxaxheba koluphando.

### **Lukhona na uncedo ukuba inkxaxheba yam koluphando indiphatha kakubi?**

Kungakhona ii-ngcebiso (counselling) enokulungiselelwa xa uphatheka kakubi kuphando.

### **Ukuba ndinemibuzo?**

Oluphando luqhutywa ngu Dr Estelle Lawrence, kwaye luhlolwa ngu Associate Professor Trish Struthers, Physiotherapy Department, e-University of the Western Cape. Ukuba unemibuzo ngophando lona ngqo, tsalela uTrish Struthers at: Physiotherapy Department, UWC, Private Bag X17, Bellville 7535, Telephone: 021 9592542, [pstruthers@uwc.ac.za](mailto:pstruthers@uwc.ac.za)

Ukuba unemibuzo mayelana noluphando kunye namalungelo akho njengomntu othatha inkxaxheba, okanye unqwenela ukubika ingxaki othe wayifumana malunga nophando, nceda tsalela:

Head of Department: Prof Uta Lehman

Dean of the Faculty of Community and Health Sciences: Prof Ratie Mpofu

University of the Western Cape, Private Bag X17, Bellville 7535

Uluphando luvunywe yi-Dyunivesiti yase Ntshona Koloni ye-Senate yophando ne-Komiti Yemigaqo yokuziphatha (Ethics Committee)



## Appendix XVIII: Survey questionnaire

### **HIV** Counselling & Testing Questionnaire

*Thanks for agreeing to complete this questionnaire. Please answer the questions honestly. There is no 'right' or 'wrong' answer. We are interested in knowing what you experience and what you think. Please take your time and answer carefully.*

*In questions where there are boxes, please tick ✓ the box next to the answer you want to give. If you have any questions or if you are unsure about a question please raise your hand and ask one of the project staff for help.*

### **MIV** Berading & Toetsing Vraelys

*Dankie dat jy ingestem het om die vraelys te voltooi. Beantwoord asseblief die vrae eerlik. Daar is nie 'n 'regte' of 'verkeerde' antwoord nie. Ons stel belang om te weet wat jy dink en wat jou ervaring is. Neem asseblief jou tyd en beantwoord die vrae noukeurig.*

*By vrae waar daar blokkies is, maak asseblief 'n regmerkje ✓ langs die antwoord wat jy wil gee. As jy enige vrae het, of as jy onseker is oor 'n vraag, lig asseblief jou hand en vra een van die projekpersoneel om jou te help.*

School name: .....

Naam van skool: .....

Questionnaire identity: .....

Vraelys identiteit: .....



# FIRST WE'D LIKE TO KNOW ABOUT YOU

## EERS WIL ONS GRAAG OOR JOU WEET

1	Are you male or female? <i>Is jy manlik of vroulik?</i>	Male	Female
		<i>Manlik</i>	<i>Vroulik</i>

2	What is your date of birth? <i>Wat is jou geboortedatum?</i>	Year
		<i>Jaar</i>

3	What grade are you in? <i>In watter graad is jy?</i>	8	9	10	11

4	What population group do you identify most with? <i>Met watter bevolkingsgroep identifiseer jy die meeste?</i>	Black
		<i>Swart</i>
		White
		<i>Wit</i>
		Indian
		<i>Indiër</i>
		Coloured
		<i>Kleurling</i>
Other, please write your answer in the box		
<i>Ander, skryf asseblief jou antwoord in die blokkie</i>		

5	What is your religion? <i>Wat is jou godsdiens?</i>	Christian
		<i>Christelik</i>
		Muslim
		<i>Moslem</i>
		Hindu
		<i>Hindu</i>
		Jewish
		<i>Joods</i>
		African traditional
		<i>Tradisionele Afrika</i>
Not religious		
<i>Nie godsdiensdig nie</i>		
Other, please write your answer in the box		
<i>Ander, skryf asseblief jou antwoord in die blokkie</i>		



6	<b>During the past month, how often have you had problems getting the food you need?</b>  <i>Gedurende die afgelope maand, hoe dikwels het jy probleme gehad om die kos te kry wat jy nodig het?</i>		Never
			Nooit
			Every week
			Elke week
			More than once a week
			Meer as een keer per week
			Almost every day
			Amper elke dag



7	<b>With whom do you live?</b>  <i>Saam met wie woon jy?</i>		I live alone
			Ek woon alleen
			With family
			Met familie
			With friends
			Met vriende
			Other, please write your answer in the box
			Ander, skryf asseblief jou antwoord in die blokkie

8	<b>What is the main building material of the walls of the home you live in?</b>  <i>Wat is die belangrikste boumateriaal van die mure van die huis waarin jy woon?</i>		Brick
			Baksteen
			Wood
			Houd
			Zinc
			Sink
			Other, please write your answer in the box
			Ander, skryf asseblief jou antwoord in die blokkie

Does your home have any of the following? <i>Het jou huis enige van die volgende?</i>		Yes	No
		Ja	Nee
9	Drinking water from a tap inside your home		
	Drinkwater uit 'n kraan in jou huis		
10	A toilet inside the house		
	'n Toilet binne die huis		
11	Electricity		
	Elektrisiteit		
12	A television		
	'n Televisie		
13	A radio		
	'n Radio		
14	An electric or gas kitchen stove		
	'n Elektriese of gas kombuisstoom		
15	A telephone (not including cell phone)		
	'n Telefoon (nie selfoon nie)		
16	A cellphone		
	'n Selfoon		



Do you have a cell phone of your own? <i>Het jy jou eie selfoon?</i>		Yes	No
		Ja	Nee
17			





## QUESTIONS ABOUT HIV TESTING AND COUNSELLING

### VRAE OOR MIV-TOETSING EN-BERADING


If you have never tested for HIV, please read the questions as well and answer them appropriately.  
As jy nog nooit 'n MIV toets gehad het nie, lees ook asseblief die vrae en antwoord dit toepaslik

18	Have you ever been tested for HIV? <i>Is jy al ooit getoets vir MIV?</i>	Yes	No
		Ja	Nee

19	How many times have you been tested for HIV? <i>Hoeveel keer was jy getoets vir MIV?</i>	I have never tested for HIV
		Ek is nog nooit vir MIV getoets nie
		Once
		Een keer
		More than once
		Meer as een keer

20	How long ago did you have your most recent HIV test? <i>Hoe lank terug het jy jou mees onlangse MIV-toets gehad?</i>	I have never tested for HIV
		Ek is nog nooit vir MIV getoets nie
		Less than 3 months ago
		Minder as 3 maande gelede
		3 to 6 months ago
		3 tot 6 maande gelede
		6 months to 1 year ago
		6 maande tot 1 jaar gelede
		More than a year ago
		Meer as 1 jaar gelede



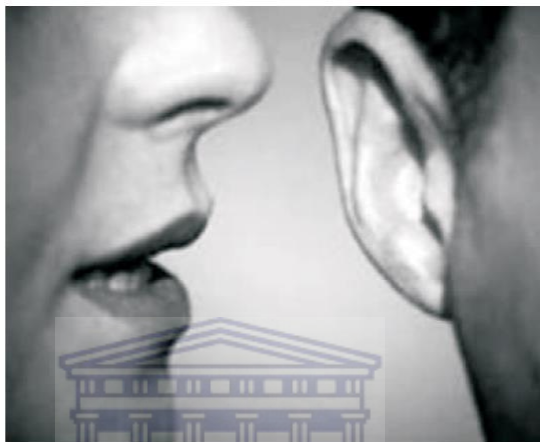
21	<b>Where were you tested?</b> <i>Waar was jy getoets?</i> 	I have never tested for HIV Ek is nog nooit vir MIV getoets nie		
		At a clinic By 'n kliniek		
		At school By die skool		
		At home By die huis		
		Other, please write your answer in the box Ander, skryf asseblief jou antwoord in die blokkie		
22	<b>Was the test done with blood or with a sample taken from your mouth?</b> <i>Was die toets met bloed gedoen of met 'n monster wat uit jou mond geneem is?</i>	I have never tested for HIV Ek is nog nooit vir MIV getoets nie	Blood Bloed	Mouth Mond
23	<b>What was the reason for you having a test? (mark all that applies)</b> <i>Wat was die rede vir jou toetsing? (merk alles wat van toepassing is)</i>	I have never tested for HIV Ek is nog nooit vir MIV getoets nie	Yes Ja	No Nee
24	I was worried about my girlfriend/boyfriend's past sexual behaviour Ek was bekommerd oor my vriendin / kêrel se vorige seksuele gedrag			
25	I was worried about my past sexual behaviour Ek was bekommerd oor my vorige seksuele gedrag			
26	I take/took care of people with HIV or AIDS Ek versorg / het mense met MIV of vigs versorg			
27	I had symptoms that made me or a healthworker think I might have HIV Ek het simptome gehad wat my of 'n gesondheidswerker laat dink dat ek miskien MIV het			
28	A health worker said it was a routine part of care 'n Gesondheidswerker het gesê dit was 'n roetine-deel van die versorging			
29	I was planning for the future Ek het vir die toekoms beplan			
30	Other, please write your answer in the box Ander, skryf asseblief jou antwoord in die blokkie			

31	<b>When you had your most recent test, was it hard for you to be tested?</b>	I have never tested for HIV	Yes	No
	<i>Toe jy jou mees onlangse toets gehad het, was dit swaar vir jou?</i>	Ek is nog nooit vir MIV getoets nie	Ja	Nee



<b>If it was hard for you to be tested, why was it hard? (mark all that applies)</b>		I have never tested for HIV	It was not hard	Yes	No
<i>As dit swaar was vir jou om getoets te word, hoekom was dit swaar? (merk alles wat van toepassing is)</i>		Ek is nog nooit vir MIV getoets nie	Dit was nie swaar nie	Ja	Nee
32	I was afraid that I would test positive Ek was bang dat ek positief sou toets				
33	I was afraid that my results would not be kept confidential/secret Ek was bang dat my uitslae nie vertroulik gehou sou word nie				
34	I was afraid that if other people saw me go for the test they would think that I am HIV positive Ek was bang dat as ander mense sien dat ek vir die toets gaan, hulle sou dink dat ek MIV-positief is				
35	I was afraid that if other people saw me go for the test they would think that I am sexually active Ek was bang dat as ander mense sien dat ek vir die toets gaan, hulle sou dink dat ek seksueel aktief is				
36	I don't like needles, and was scared of having my finger pricked Ek hou nie van naalde nie, en was bang om my vinger te laat prik				
37	It was difficult to talk to the counsellor because he/she was the opposite sex to me Dit was moeilik om met die berader te praat omdat hy / sy die teenoorgestelde geslag was				
38	The counsellor or nurse asked too many private questions e.g. about my sexual activity Die berader of verpleegster het te veel persoonlike vrae gevra bv. oor my seksuele gedrag				
39	Other, please write your answer in the box Ander, skryf asseblief jou antwoord in die blokkie				

40	<b>Did you discuss getting tested with anyone before you had your HIV test?</b> <i>Het jy jou toetsing met iemand bespreek voor jy jou MIV-toets gehad?</i>	I have never tested for HIV	Yes	No
		Ek is nog nooit vir MIV getoets nie	Ja	Nee



41	<b>With whom did you discuss getting tested before you had your HIV test?</b> <i>Met wie het jy die toets bespreek voor jy jou MIV-toets gehad het?</i>	I have never tested for HIV
		Ek is nog nooit vir MIV getoets nie
		I did not discuss getting tested with anyone
		Ek het nie my toetsing met iemand bespreek nie
		Girlfriend/boyfriend
		Vriendin / kêrel
		Parent
		Ouer
		Friend
		Vriend
Other, please write your answer in the box		
Ander, skryf asseblief jou antwoord in die blokkie		

42	<b>Did you have to ask your parent or guardian's permission to be tested?</b> <i>Moes jy jou ouers of voog se toestemming gekry het om getoets te word?</i>	I have never tested for HIV	Yes	No
		Ek is nog nooit vir MIV getoets nie	Ja	Nee



8.





NOW WE WOULD LIKE TO KNOW WHAT YOU EXPERIENCED JUST BEFORE YOU WERE TESTED

NOU WIL ONS WEET WAT JY ERVAAR HET NET VOOR JY GETOETS IS

Before you had your HIV test, did a health care worker or counsellor.....		I have never tested for HIV	Yes	No
Voor jy getoets is vir MIV, het 'n gesondheidswerker of berader...		Ek is nog nooit vir MIV getoets nie	Ja	Nee
43	explain to you the benefits of having the test? die voordele van die toets aan jou verduidelik?			
44	explain that you had a choice to agree to the test or refuse the test? verduidelik dat jy'n keuse het om in te stem tot die toets of om te weier om die toets te doen?			
45	tell you that your results would not be shared with anyone except for the staff who care for you? jou vertel dat jou uitslae nie gedeel sal word met iemand nie, behalwe met die personeel wat vir jou sorg?			
46	explain how HIV is transmitted? verduidelik hoe MIV oorgedra word?			
47	explain how the test works? verduidelik hoe die toets werk?			
48	explain the meaning of a positive test result? die betekenis van 'n positiewe toetsuitslag verduidelik?			
49	explain the meaning of a negative test result? die betekenis van 'n negatiewe toetsuitslag verduidelik?			
50	explain that the test does not always detect a very recent HIV infection (this is sometimes called a window period)? verduidelik dat die toets nie altyd 'n baie onlangse MIV-infeksie optel nie (dit word soms 'n venster tydperk genoem)?			
51	give you advice on preventing the spread of HIV? jou advies gegee oor die voorkoming van die verspreiding van MIV?			
52	give you time to ask questions? jou tyd gegee om vrae te vra?			



?

NOW WE WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT WHAT INFORMATION OR COUNSELLING YOU RECEIVED FROM THE HEALTHWORKERS WHO GAVE YOU YOUR TEST RESULTS.

NOU WIL ONS VIR JOU 'N PAAR VRAE VRA OOR WATTER INLIGTING OF BERADING JY ONTVANG HET VAN DIE GESONDHEIDSWERKERS WIE JOU TOETSUITSLAE VIR JOU GEGEE HET.

53	Did you receive your results from your most recent HIV test? <i>Het jy jou uitslae ontvang van jou mees onlangse MIV toets?</i>	I have never tested for HIV	Yes	No
		Ek is nog nooit vir MIV getoets nie	Ja	Nee

After giving you your test results, did a healthworker... <i>Na hulle jou toetsuitslae gegee het, het 'n gesondheidswerker...</i>		I have never tested for HIV	Yes	No
		Ek is nog nooit vir MIV getoets nie	Ja	Nee
54	explain the meaning of the test result? <i>die betekenis van die toetsuitslae verduidelik?</i>			
55	suggest that you discuss your status with someone? <i>voorgestel dat jy jou status met iemand bespreek?</i>			
56	suggest that your girlfriend/boyfriend be tested for HIV? <i>voorgestel dat jou kêrel / vriendin vir MIV getoets word?</i>			
57	discuss how to prevent the transmission of HIV? <i>bespreek hoe om die oordrag van MIV te voorkom?</i>			



About your meeting with the healthworker after you got your test results: <i>Oor jou ontmoeting met die gesondheidswerker nadat jy jou toetsuitslae ontvang het:</i>		I have never tested for HIV	Yes	No
		Ek is nog nooit vir MIV getoets nie	Ja	Nee
58	was the information you were given enough? <i>was die inligting wat jy ontvang het genoeg?</i>			
59	were you given the opportunity to ask questions? <i>het jy die geleentheid gekry om vrae te vra?</i>			
60	on the whole, did you find the meeting helpful? <i>oor die geheel, het die ontmoeting gehelp?</i>			

SOMETIMES HEALTHWORKERS DO EVERYTHING THEY CAN TO KEEP PATIENTS' HIV TEST RESULTS CONFIDENTIAL (SECRET) SO THAT OTHER PEOPLE DO NOT KNOW ABOUT THEM. OTHER HEALTH WORKERS SOMETIMES SAY OR DO THINGS THAT REVEAL PATIENTS' HIV STATUS TO OTHER PEOPLE WITHOUT THEIR PERMISSION. PEOPLE HAVE DIFFERENT FEELINGS ABOUT HOW IMPORTANT IT IS FOR HEALTH WORKERS TO KEEP HIV TEST RESULTS CONFIDENTIAL.

SOMS DOEN GESONDHEIDSWERKERS ALLES WAT HULLE KAN OM PASIËNTE SE MIV-TOETSUITSLAE VERTROUOLIK (GEHEIM) TE HOU, SODAT ANDER MENSE NIE DAARVAN WEET NIE. ANDER GESONDHEIDSWERKERS SÊ OF DOEN SOMS DINGE WAT PASIËNTE SE MIV-STATUS OPENBAAR MAAK AAN ANDER MENSE SONDER OM HUL TOESTEMMING TE KRY. MENSE HET VERSKILLENDE GEVOELENS OOR HOE BELANGRIK DIT IS VIR GESONDHEIDSWERKERS OM MIV-TOETSUITSLAE VERTROUOLIK TE HOU.

	How important is it to you that these health workers keep your HIV results confidential and do not reveal them to anyone else without your permission?	I have never tested for HIV Ek is nog nooit vir MIV getoets nie	Very important Baie belangrik	Somewhat important Ietwat belangrik	Not important Nie belangrik nie	I don't know Ek weet nie
61	<i>Hoe belangrik is dit vir jou dat hierdie gesondheidswerkers jou MIV uitslae vertroulik hou en nie aan iemand anders vertel sonder jou toestemming nie?</i>					

**CONFIDENTIAL**

	Do you think that these healthworkers have kept your test results confidential?	I have never tested for HIV Ek is nog nooit vir MIV getoets nie	Yes Ja	No Nee	Not sure Nie seker nie	I don't know Ek weet nie
62	<i>Dink jy dat hierdie gesondheidswerkers jou toetsuitslae vertroulik gehou het?</i>					


?

THE FOLLOWING QUESTIONS ARE MORE PERSONAL. WE WILL BEGIN BY ASKING YOU SOME QUESTIONS ABOUT YOUR HIV STATUS AND ALSO WHAT HAPPENED WHEN YOU LEARNED YOUR HIV STATUS.

REMEMBER THAT THE SURVEY IS CONFIDENTIAL, AND YOUR NAME DOES NOT APPEAR ON THE FORM. AS WE SAID AT THE BEGINNING, YOU ARE FREE TO DECIDE WHETHER OR NOT YOU WANT TO ANSWER ANY QUESTION, AND YOU ARE FREE TO SKIP ANY QUESTIONS THAT YOU WOULD RATHER NOT ANSWER.

DIE VOLGENDE VRAE IS MEER PERSOONLIK. ONS SAL BEGIN OM JOU 'N PAAR VRAE TE VRA OOR JOU MIV-STATUS EN OOK WAT GEBEUR HET TOE JY GELEER HET VAN JOU HIV-STATUS.

ONTHOU DAT DIE OPNAME VERTROULIK IS, EN DAT JOU NAAM NIE OP DIE VORM VERSKYN NIE. SOOS ONS AAN DIE BEGIN GESÊ HET, JY IS VRY OM TE BESLUIT OF JY ENIGE VRAE WIL BEANTWOORD OF NIE, EN JY IS VRY OM ENIGE VRAE DAT JY LIEWER NIE WIL ANTWOORD NIE, OOR TE SLAAN.

63	What is your HIV status?	I have never tested for HIV	HIV positive	HIV negative	I'm not sure
	Wat is jou MIV status?	Ek is nog nooit vir MIV getoets nie	MIV positief	MIV negatief	Nie seker nie
					

64	When you first learned that you were <b>HIV-positive</b> , were you expecting this test result?	I have never tested for HIV	I am HIV negative	I'm not sure of my HIV status	Yes	No
	Toe jy die eerste keer geleer het dat jy <b>MIV-positief</b> is, het jy die toetsuitslae verwag?	Ek is nog nooit vir MIV getoets nie	Ek is MIV negatief	Ek is nie seker van my MIV status nie	Ja	Nee

65	When you first learned that you were <b>HIV-positive</b> , were you given any further medical or blood tests to see if you might need treatment or other support?	I have never tested for HIV	I am HIV negative	I'm not sure of my HIV status	Yes	No
	Toe jy die eerste keer geleer het dat jy <b>MIV-positief</b> is, is enige verdere mediese of bloed toetse aan jou gedoen om te sien of jy dalk behandeling of ander ondersteuning nodig het?	Ek is nog nooit vir MIV getoets nie	Ek is MIV negatief	Ek is nie seker van my MIV status nie	Ja	Nee

After receiving your <b>HIV positive</b> test results...		I have never tested for HIV	I am HIV negative	I'm not sure of my HIV status	Yes	No
<i>Na ontvangs van jou <b>MIV positief</b> toetsuitslae...</i>		Ek is nog nooit vir MIV getoets nie	Ek is MIV negatief	Ek is nie seker van my MIV status nie	Ja	Nee
66	did any health worker refer you for medical care? het 'n gesondheidswerker jou verwys vir mediese sorg?					
67	have you been for medical care? het jy al vir mediese versorging gegaan?					
68	did any health worker talk about getting help from a support group for people living with HIV or AIDS? het 'n gesondheidswerker met jou gepraat oor waar jy hulp kan kry van 'n ondersteuningsgroep vir mense wat met MIV of vigs leef?					
69	did any healthworker refer you to a support group for people living with HIV or AIDS? het 'n gesondheidswerker jou verwys na 'n ondersteuningsgroep vir mense wat met MIV of vigs leef?					
70	have you been to a support group for people living with HIV or AIDS? het jy al by 'n ondersteuningsgroep vir mense wat met MIV of vigs leef aangesluit?					
71	did any healthworkers talk to you about how to share your status with people around you? het enige gesondheidswerkers met jou gepraat oor hoe om jou MIV-status te deel met mense rondom jou?					
72	have you shared your status with people around you? het jy jou MIV-status gedeel met mense rondom jou?					
73	has a healthworker told you that you needed any sort of care or medication in order to manage your HIV and stay healthy? het 'n gesondheidswerker gesê dat jy enige soort van sorg of medikasie nodig het om jou MIV te beheer en gesond te bly?					
74	have you been able to obtain the medication? was jy in staat om die medikasie te verkry?					



**THE QUESTIONS THAT FOLLOW ARE FOR THOSE WHO HAVE NEVER HAD AN HIV TEST. IF YOU HAVE HAD A TEST BEFORE, PLEASE READ THE QUESTIONS AS WELL AND ANSWER THEM APPROPRIATELY.**

**DIE VRAE WAT VOLG IS VIR DIEGENE WIE NOG NOOIT 'N MIV TOETS GEHAD HET NIE. AS JY AL 'N TOETS GEHAD HET, LEES OOK ASSEBLIEF DIE VRAE EN BEANTWOORD DIT TOEPASLIK.**

75	<p>If you've <u>never had an HIV test before</u>, have you ever thought about having an HIV test?</p> <p><i>As jy <u>nog nooit 'n MIV toets gehad het nie</u>, het jy ooit daaraan gedink om 'n MIV toets te ondergaan?</i></p>	I have had an HIV test	Yes	No
		Ek het al 'n MIV toets gehad	Ja	Nee

<p>If you've <u>never had an HIV test before</u>, why have you not had one? (mark all that apply)</p> <p><i>As jy <u>nog nooit 'n MIV toets gehad het nie</u>, hoekom het jy nie een gehad nie? (merk alles wat van toepassing is)</i></p>		I have had an HIV test	Yes	No
		Ek het al 'n MIV toets gehad	Ja	Nee
76	Because I have never had sex before <i>Want ek het nog nie seks gehad nie</i>			
77	Because I don't think I am HIV positive <i>Want ek dink nie ek is MIV-positief nie</i>			
78	Because I don't think my boyfriend/girlfriend is HIV positive <i>Want ek dink nie my kêrel/vriendin is MIV-positief nie</i>			
79	Because I am afraid that I will test positive <i>Want ek is bang dat ek positief sal toets</i>			
80	Because I am afraid that my results will not be kept confidential/secret <i>Want ek is bang dat my uitslae nie vertroulik gehou sal word nie</i>			
81	Because I am afraid that if other people see me go for the test they will think that I am HIV positive <i>Want ek is bang dat as ander mense sien dat ek vir die toets gaan, hulle sal dink dat ek MIV-positief is</i>			
82	Because I am afraid that if other people see me go for the test they will think that I am sexually active <i>Want ek is bang dat as ander mense sien dat ek vir die toets gaan, hulle sal dink dat ek seksueel aktief is</i>			
83	Because I don't like needles, and I'm scared of having my finger pricked <i>Want ek hou nie van naalde nie, en ek is bang om my vinger te laat prik</i>			
84	Because I am afraid that the counsellor or nurse will criticise me (or make me feel bad) because I am sexually active <i>Want ek is bang die berader of verpleegster sal my kritiseer (my laat sleg voel), want ek is seksueel aktief</i>			
85	Because I am afraid the counsellor or nurse will ask too many private questions e.g. about my sexual activity <i>Want ek is bang die berader of verpleegster sal my te veel persoonlike vrae vra bv. oor my seksuele gedrag</i>			
86	Because I had to ask my parent/guardian's permission to test <i>Want ek moes my ouer/voog se toestemming vra om te toets</i>			
87	Other, please write your answer in the box <i>Ander, skryf asseblief jou antwoord in die blokkie</i>			

88	<p>If you've <u>never had an HIV test</u> before, do you know anyone personally who has had an HIV test?</p> <p><i>As jy <u>noq nooit 'n MIV toets gehad het nie</u>, ken jy enige iemand persoonlik wat 'n MIV-toets gehad het?</i></p>	I have had an HIV test	Yes	No
		Ek het al 'n MIV toets gehad	Ja	Nee

89	<p>If you've <u>never had an HIV test</u> before, do you think that getting tested could be helpful for someone who does have the test?</p> <p><i>As jy <u>noq nooit 'n MIV toets gehad het nie</u>, dink jy om getoets te word nuttig kan wees vir iemand wat getoets is?</i></p>	I have had an HIV test	Yes	No
		Ek het al 'n MIV toets gehad	Ja	Nee



90	<p>If you've <u>never had an HIV test</u> before, do you think that getting tested could cause problems for someone who does have the test?</p> <p><i>As jy <u>noq nooit 'n MIV toets gehad het nie</u>, dink jy om getoets te word probleme kan veroorsaak vir iemand wat getoets is?</i></p>	I have had an HIV test	Yes	No
		Ek het al 'n MIV toets gehad	Ja	Nee

91	<p>If you've <u>never had an HIV test</u> before, do you know any places that offer HIV testing?</p> <p><i>As jy <u>noq nooit 'n MIV toets gehad het nie</u>, weet jy van enige plek wat MIV-toetsing aanbied?</i></p>	I have had an HIV test	Yes	No
		Ek het al 'n MIV toets gehad	Ja	Nee

92	<p>If you've <u>never had an HIV test</u> before, have you ever been offered an HIV test?</p> <p><i>As jy <u>noq nooit 'n MIV toets gehad het nie</u>, was jy al ooit 'n MIV-toets aangebied?</i></p>	I have had an HIV test	Yes	No
		Ek het al 'n MIV toets gehad	Ja	Nee

## END OF QUESTIONNAIRE

## EINDE VAN VRAELYS

This concludes the survey. We would like to thank you very much for helping us. We appreciate the time that you have taken to answer these questions. We realise that some of these questions may have been difficult to answer, but it is only by hearing from young women and men about their first hand experiences that we can understand how to provide HIV Counselling and Testing to young people.

*Dit eindig die opname. Ons wil graag baie dankie sê dat jy ons gehelp het. Ons waardeer die tyd wat jy geneem het om hierdie vrae te beantwoord. Ons beseft dat sommige van hierdie vrae moeilik was om te beantwoord, maar dit is slegs deur te hoor van jong mans en vroue oor hul eerstehandse ervarings dat ons kan verstaan hoe om MIV-berading en toetsing aan jong mense aan te bied.*



At the end of this session, in case you or anyone else you know needs assistance, you will be given a list of places that provide support groups, counselling and other services for people living with HIV.

*Indien jy of enige iemand wat jy ken, hulp nodig het, sal ons aan die einde van hierdie sessie vir jou 'n lys gegee van plekke wat ondersteuningsgroepe, berading en ander dienste aanbied vir mense wat met MIV leef.*



## Appendix XIX: Standard operating procedure for data collection (survey)

<b>Prior to data collection</b>
<ul style="list-style-type: none"> <li>Each school is contacted and visited by EL to explain the project to the principal and the contact teacher.</li> </ul>
<ul style="list-style-type: none"> <li>The Team Leader visits the 5 main study schools to (a) set up dates, times and venue for the main study (b) collect class lists of the sampled classes (c) set up times to hand out consent forms and explain study to the learners (d) set up times to have all consent forms collected</li> </ul>
<ul style="list-style-type: none"> <li>Team leader copies consent forms.</li> </ul>
<ul style="list-style-type: none"> <li>Team leader speaks to all learners, class by class, to (a) explain the study to them, (see ‘What to tell learners’) (b) hand out consent forms and information letters for parents and (c) inform them about the data collection process.</li> </ul>
<ul style="list-style-type: none"> <li>Team leader buys refreshments for learners.</li> </ul>
<ul style="list-style-type: none"> <li>EL delivers numbered questionnaires to Team Leaders.</li> </ul>
<ul style="list-style-type: none"> <li><u>Two days before data collection</u>, together with the contact teacher, the planning for data collection is checked and confirmed (dates, times, venue)</li> </ul>
<ul style="list-style-type: none"> <li><u>The day before data collection (at least)</u>, consent forms from parent(s)/guardian(s) have been collected from the school, by the Team leaders.</li> </ul>
<ul style="list-style-type: none"> <li><u>The day before data collection</u>, the class lists have been updated accordingly (list refusals and acceptances), and the Team leader reminds the school of the planned data collection.</li> </ul>
<b>Day of the completion of questionnaires</b>
Before heading to the school
<ul style="list-style-type: none"> <li>The TL makes sure that the copies of the questionnaires, the refreshments for learners, the class lists, the support services pamphlet, and the data collection forms are in boxes, ready to be taken to the school.</li> </ul>
<ul style="list-style-type: none"> <li>The TL makes sure he/she arrives <u>on time</u> at the venue as previously agreed upon.</li> </ul>

At the school
<ul style="list-style-type: none"> <li>• The TL meets the contact teacher to go to the class.</li> </ul>
<ul style="list-style-type: none"> <li>• The TL reminds the contact teacher that no teacher is allowed in the rooms where learners fill out the questionnaire.</li> </ul>
<ul style="list-style-type: none"> <li>• The TL (a) identifies the learners who have returned consent forms and separates them from the rest of the class. (b) checks who is absent, who has declined, who has forgotten consent form, etc and marks this on the class list.</li> </ul>
<ul style="list-style-type: none"> <li>• The FWs get organised to start data collection.</li> </ul>
<ul style="list-style-type: none"> <li>• FWs hand consent forms to learners (in order to identify them).</li> </ul>
<ul style="list-style-type: none"> <li>• The questionnaire is handed out to learners, and consent forms collected. Learners are to be spaced far apart as if in an examination room set-up.</li> </ul>
<ul style="list-style-type: none"> <li>• FW (identified beforehand) reminds the learners (a) about the objectives of the questionnaire and the confidentiality (see ‘What to tell learners’: same document read out during introduction of study to learners before filling out the questionnaire), (b) how to fill in questionnaire (c) that they will have to wait in the venue until all learners have completed the questionnaire.</li> </ul>
<ul style="list-style-type: none"> <li>• TL fills out the data collection report</li> </ul>
<ul style="list-style-type: none"> <li>• In case of noisy learner(s), one fieldworker (identified beforehand) takes those learners outside and speaks to them. The learners will get a second chance to continue participation. If they continue to disturb the other learners, their participation will be ended and the fieldworker takes them to their class teacher.</li> </ul>
<ul style="list-style-type: none"> <li>• In case of a distressed learner, one fieldworker (identified beforehand) invites the learner to go to a quiet place (outside or in another class room) and helps the learner by listening and making a plan of action together.</li> </ul>
After completion of questionnaire
<ul style="list-style-type: none"> <li>• Learners are to place completed questionnaires in the drop-in box (placed in front of the room) provided.</li> </ul>
<ul style="list-style-type: none"> <li>• The learner is given the refreshments as well as <u>support services pamphlet</u> and is asked to wait quietly by FW (identified beforehand).</li> </ul>
<ul style="list-style-type: none"> <li>• When all learners have put their questionnaire in the drop-in box, TL goes to inform the teacher who is seeing the learners afterwards, that the learners are finished, or the learners have their break, or the learners go home (depending on the time of data collection).</li> </ul>

- |  |
|--|
| <ul style="list-style-type: none"><li>• The TL stays behind in case learners want to talk with him/her.</li></ul>  |
| <ul style="list-style-type: none"><li>• The TL (identified beforehand) checks if nothing is forgotten in the room and the team leaves the room with the drop-in box, the box with pens and the other materials used.</li></ul> |
| <ul style="list-style-type: none"><li>• The TL takes the <u>box with questionnaires and the data collection report to EL.</u></li></ul>  |



## **Appendix XX: What to tell learners before filling out the questionnaire**

### Good Day Learners

We are conducting research at your school and four other schools in Cape Town. We are trying to find out better ways of providing HIV testing at schools. Your responses are very important to us and will help us to work out the best ways to do this.

**What?** If you agree to participate in this project, you will fill out a questionnaire about your thoughts and experiences regarding HIV testing at school. This is not a test; there is no right or wrong answer. We need you to be honest and open when answering the questions, don't tell us what you think we want you to answer. We are interested in what you have to say.

It is possible that some questions you will answer may make you feel uncomfortable or emotional. If this happens, you can put up your hand and we will be there to discuss these issues with you, or to refer you to someone else who is trained to help young people with their problems. You will also receive a list with telephone numbers of organisations in the community where you can seek help.

**Confidentiality.** No one from your school (teachers/principal) or community will know what you answer and you do not have to write your name on this document. No one other than the research staff will know what you answered. No school or learners' names will be mentioned in the reports that we will write up.

**Do I have to participate? No.** Taking part in this project is completely voluntary. If you choose not to participate in the project, there will be no negative consequences. You can stop filling in this questionnaire at any time or skip questions that you don't want to answer. However, your participation is important for us to understand the thoughts around HIV testing at school that young people your age have.

If you agree to participate, we give you a letter to take to your parents for them to give permission for you to take part. You will need you to return the letter to your teacher (teacher's name).

# Where to get help

## Public Clinics offering ARV treatment

Langa clinic Washington Street, Langa 021 694 1740 / 1741

Woodstock CHC Mountain Road, Woodstock 021 460 9137 / 021 460 9189

Heideveld CHC Heideveld Road, Heideveld 021 637 8036

Inzame Zabantu CHC Erf 2495, Msingezane Street, Phillipi 021 374 6063

**24-hour Aids  
Helpline**

**0800 012 322**

**Treatment Action Campaign  
(TAC)**

**021 422 1700**

**IVAN TOMS  
CENTRE FOR  
MEN'S HEALTH  
(021) 447 2844**

**loveLife Sexual  
Health**

**0800 121 900  
(toll free)**

**The Gay and  
Lesbian Helpline  
(Triangle Project)  
021 448 3812**

**CRISIS AND SUICIDE LINE  
0800 567 567 (toll free)**

## Appendix XXII: Data collection form (survey)

School	
Class(es)	
Date	
Total number of learners in the class	
Number of learners present on day of survey	
Number of learners who completed the questionnaire	
Number of learners absent	
Number of learners who forgot consent form	
Number of learners who declined	
Number of learners no longer in the class	
Fieldworkers present	
Time data collection started	
Time data collection ended	
This form was filled out by	

