FACTORS INFLUENCING THE UPTAKE OF VOLUNTARY COUNSELING AND TESTING FOR HIV AND AIDS AMONG THE YOUTH ATTENDING NAGURU TEENAGE INFORMATION AND HEALTH CENTRE

BY

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DECLARATION

I, Denis Lewis Bukenya, declare that this dissertation is my own work, and that it has never been presented for a Degree award to any other University/or Institution.

Signed: ----------

Date ----------

APPROVAL

This is to certify that this dissertation has been submitted for examination with our approval as University Supervisors.

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Date: ---------- Date: ----------

DEDICATION

The HIV and AIDS epidemic is an unprecedented crisis that requires an unprecedented response;

in particular, Solidarity !

TO ALL IN SOLIDARITY

ACKNOWLEDGEMENT

To the Almighty God for guiding me throughout this process, I thank him very much.

I am grateful to my friends here and in the diaspora, my family (parents, brothers, sisters and in-laws). Thank you for your support that enabled me keep the grip on the pen, you are legends!

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LIST OF ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ARVs	Antiretroviral drugs
CBO	Community Based Organization
CSO	Central Statistics Office
FHI	Family Health International
HIV	Human Immuno-deficiency Virus
KAB	Knowledge, attitudes and behaviour
NAC	National AIDS Commission
NGO	Non Governmental Organization
NTIHC	Naguru Teenage Information and Health Centre
PLHA	People Living with HIV/AIDS
PMTCT	Prevention of Mother to Child Transmission
SHR	Sexual and reproductive health
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
UAC	Uganda AIDS Council
UNAIDS	United Nations program on HIV/AIDS
VCT	Voluntary Counseling and Testing
WHO	World Health Organization

ABSTRACT

The study examined the factors that influence the uptake of Voluntary Counseling and Testing for HIV and AIDS among the youth at Naguru Teenage Information and Health Centre (NTIHC). Specific Objectives were to: assess the extent to which knowledge influences uptake of VCT among youth, examine the extent to which attitudes influence the uptake of VCT among youth and investigate how the availability of services influence the uptake of VCT among youth at NTIHC. The sample size for this study was 169 respondents and 8 key informants. Data was collected by the use of self administered questionnaires, interview schedule and documentary review checklist. The study found out that knowledge of HIV/AIDS and VCT positively influences the Uptake of VCT, attitude influences uptake of VCT services, there was a significant relationship between the availability of services and uptake of VCT among youth as supported by the findings and that there was adequate knowledge on most aspects of VCT and HIV/AIDS by the youth. It is concluded that knowledge affects the uptake of VCT by youth, attitudinal related social determinants were not barriers for VCT uptake among youth and finally, that the availability of VCT services affects youth uptake of these services. The study recommends the promotion of VCT through sound and viable information and counseling interventions by involving mass media and parents to increase the level of knowledge about VCT. Health institutions and service providers also need to provide voluntary VCT services during extra working days and hours and Youth Friendly VCT services expanded. The existing facilities should be strengthened to address the needs of youth in the rural areas, HIV/AIDS awareness activities should be sustained and should address stigma and negative attitudes such as promiscuity that are associated with HIV/AIDS done by all health promoters working in the area of HIV/AIDS counseling, testing and care in Uganda and finally, Mobile VCT could help tap clients who are unable to travel to the VCT centres.

CHAPTER ONE: INTRODUCTION

1.1 Introduction

United Nations (2011) says that today's generation of young people is the largest the world has ever known, as 1.8 billion of the world's population is between 15 and 24 years of age. Approximately 87% of these young people live in the developing world (UN, 2011).

This study explored the factors that influence the uptake of VCT among the youth attending services at Naguru Teenage Information and Health Centre (NTIHC). This chapter presents the background to the study, the statement of the problem, the general objective, the objectives of the study, the research questions, the hypotheses, the scope of the study, the significance, justification and operational definition of terms and concepts used.

1.2 Background to the Study

1.2.1 Historical Background

Globally, since the beginning of the Human Immuno- deficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) epidemic, 34 million people were living with HIV by the end of 2011. An estimated 0.8% of adults aged 15-49 years worldwide are living with HIV, although the burden of the epidemic continues to vary considerably between countries and regions. Sub-Saharan Africa remains most severely affected, with nearly 1 in every 20 adults (4.9%) living with HIV and accounting for 69% of the people living with HIV worldwide (UNAIDS, 2012).

HIV/AIDS remains a global health problem of unprecedented dimensions. Young people (15-24 years) account for more than 50 percent of all new HIV infections worldwide. Youth have the highest prevalence rate about 5.6% (UNAIDS 2008).Young people are especially vulnerable to HIV infection due to early sexual debut, emotional and developmental factors, low condom use, biological and social vulnerabilities,

sexually transmitted infections (STIs), poor health-seeking behavior, and alcohol and substance abuse (Family Health International, 2003).

Sub-Saharan Africa remains the most affected region in the world with an estimate of 22.5 million people living with HIV. Approximately 1.7 million new infections occurred in sub-Saharan Africa in the year 2007 (UNAIDS, 2008). Ten million young people aged 15–24 years and almost 3 million children under 15 years are living with HIV (UNAIDS, 2008).

Studies among African youth have shown that even when youth are aware of HIV/AIDS and of the existing VCT sites, and even when a majority of the youth have a strong interest in knowing their HIV status, only a few go for the actual HIV testing. The reasons established for not going for testing are mostly age, education, sex, inaccurate risk perception (Anthony et al, 2012); fear, stigma and discrimination (Matswaled, 2011; Akhiwu, 2012; Tesfaye, Ingvild & Knut, 2012).

In Uganda, the national average adult HIV prevalence reduced from a high of 18.5 % in 1992 to about 5% in 2000 due to, among other reasons, strong political leadership, open approach to combating the epidemic, including massive encouragement and motivation for the people to get tested and a strong multi-sectoral, decentralized and community response (UAC,2010). The HIV and AIDS epidemic in Uganda is severe, mature and generalized with approximately 1.1 million people infected with HIV (UAC, 2010). The national HIV prevalence is 7.3% among the men and women aged 15-49 years. The annual incidence is 132000 new cases of HIV infection and sexual transmission of HIV accounts for 76 % (UHSBS, 2004/05).

To-date, more women than men are infected as the prevalence among women in age group 15-49 is 7.7% while that of men is 5.6% and the youths in age group 15-19 have only 2% prevalence, the peak in prevalence of the epidemic is among those in the age group 35-39 at 10.3%. There is also regional variation with the highest prevalence at 10.7% found in Central Region while the lowest is at 3.7% for Mid Eastern region. The epidemic is still predominantly heterosexually transmitted with 80% of infections attributable to

heterosexual transmission, Mother to child transmission accounts for 20% while blood borne and other infections account for less than 1% (UBOS, 2011)

Today's youth is the largest in history with nearly half of the global population being younger than 25 years of age (UNAIDS 2009). They have not known a world without AIDS. Young people are both the most threatened, globally, accounting for half of the new cases of HIV, and the greatest hope for turning the tide against AIDS (UNAIDS 2004). Voluntary counseling and testing, initiated as early as 1987 when the Immune Suppressive Syndrome clinic was founded at Mulago Hospital in Kampala, had within months, hundreds of clients registered for HIV counseling and testing. Despite the extensive availability of VCT services, utilization by the youths has been low (AIC, 2003). This limited use has been attributed to transport costs; hours of service, service not being youth friendly and at times lack of the necessary supplies (UBOS, 2002; AIC, 2003; UNAIDS, 2001).

Patient and Neil (2004) also provided some information on the stigma attached to VCT structures and also examined the whole process. The observers within the vicinity act as the referees and begin to speculate the reasons why a person is visiting such structures.

1.2.2 Theoretical Background

This study was guided by the Theory of Planned Behavior (TPB). The Theory of Planned Behavior (Ajzen, 1991), built upon the earlier theory of Reasoned Action (Ajzen & Fishbein, 1970), focuses on the theoretical constructs that are concerned with individual motivational factors as determinants of the likelihood of performing a specific behavior. The central factor of the theory is the individual's intention to perform a given behavior. Intentions capture the motivational factors that influence behavior and are indications of how much of an effort people are willing to exert in order to perform a behavior.

As a general rule, the stronger the intention to engage in a behavior, the more likely should be its performance. The TPB was designed to explain intention only if the behavior in question is under volitional

control; if the person can decide at will to perform or not perform the behavior. The theory predicts that the intention to perform a behavior is a function of three salient beliefs: the person's attitude, subjective norms and perceived behavioral control. The three predictors influence subsequent behavior indirectly through behavioral intention.

The theory specifies that the determinants of attitudes, subjective norms and perceived behavioral control combine multiplicatively and that one of the strengths of the Theory of Planned Behavior is its broad applicability. The theory has been able to account for a considerable proportion of the variance in intention and behavior in previous literature (Ajzen, 1991). For instance, the theory has often been applied to predict the likelihood of health behavior (Hardeman, Johnston, Johnston, Bonetti, Wareham, & Kinmonth, 2002), including condom use (Albarracin, Johnson, Fishbein, & Muellerleile, 2001), dieting (Bagozzi, Moore, & Leone, 2004), product choice, supportive behaviors, and voting (Cooke & Sheeran, 2004). The theory has also been applied to a broad array of cultures or continents, including Africa (Molla, Astrom, & Berhane, 2007) and empirical evidence suggests that the cognitions supplied by the TPB are useful in predicting sexual behavior in adolescents attending school in non-Western contexts (Bosompra, 2001).

Attitudes have been the most widely researched aspect of the TPB and continue to receive attention from social and cognitive psychologists (Ajzen, 2001; Bentler & Speckart, 1981). Attitudes toward performing behavior reflect favourable or unfavourable evaluation of the particular behavior. Attitude toward the behavior; in this case, uptake of VCT is determined by individuals' beliefs about the outcome of performing the behavior (behavioral beliefs; belief that VCT uptake is associated with certain attributes) weighed by the extent to which these outcomes are valued (belief outcomes; value attached to VCT uptake).

The construct of the theory is intended to account for situations where an individual has less than complete control over the behavior and includes two components. The first component is "facilitating conditions" (Triandis, 1979) which reflect the availability of resources needed to engage in a behavior. This might include access to the time, money and other resources required to engage in a behavior. The second

component is self-efficacy and refers to the individual's self-confidence in his/her ability to perform a behavior (Bandura, 1982). Ajzen argues that a person will expend more effort to perform a behavior when his or her perception of behavioral control is high. Beliefs about the presence of factors that might hinder the behavioral achievement (control beliefs; perceived likelihood of occurrence of each facilitating/constraining condition) and perceived ability to control factors that might hinder the behavioral achievement (power of control; perceived effect of each condition in making VCT uptake difficult/easy) provide the basis for perceived behavioral control.

According to the theory, an individual's intention to perform a specific behavior is a direct determinant of whether he or she will act. To accurately assess the behavior, one must take into account the target, time, context and behavior on which the intent is being judged (Ajzen & Fishbein, 2000; Ajzen & Fishbein, 1970). Thus, this study was modeled on the postulates of this theory; the decisions to willingly accept to get tested are largely linked to behavior.

1.2.3 Conceptual Background

Factors influencing Voluntary Counseling and Testing (VCT) services mean the key issues that are associated with decision making on whether an individual should take a test or not and in this study they included: knowledge, beliefs and attitudes. Uptake of VCT services on the other hand refers to the means by which the VCT services are utilized by the youth. For example, how many times youth visit the VCT centers and get tested or find out what it means to freely opt to test for HIV, explore and understand their HIV risks and eventually learn their HIV test results are all about. This relationship is indicated in the conceptual frame work *figure 1*

World Health Organization (WHO, 2008) defines "youth" as men and women aged between 15 and 24 years and "young people" as those aged 10 to 24 years (Karim & Karim 2005). These terms are used interchangeably in this study, as well as in the literature reviewed for the study.

An “integrated clinic” is a facility in which “…more types of services previously provided separately are offered as a co-ordinated and combined service. In such a service, a patient receives various services from one health care worker at the time of consultation (WHO 2008). For a facility to qualify as a “youth friendly clinic”, service provision must take into account the dynamics of adolescence, including “socio-psychological assistance” (UNICEF, 2010). According to this source, there are three principles which should guide service delivery in youth-friendly clinics: “accessibility, voluntariness and friendliness”. In the context of this study, an “integrated youth friendly clinic” is a healthcare facility where adolescents can access all clinical services during one consultation at one location.

VCT is a client-initiated process through which a couple or an individual undergoes counseling that facilitates an informed decision to be tested for HIV (Boswell & Baggaley 2002). The information given to the client enables him or her to understand the implications of testing, assess personal risk to HIV and adopt risk reduction behavior (WHO, 2008).

According to Bock (2009) VCT uptake is the proportion of clients who received pre-test counseling, consented to testing and received post-test counseling”. It is a “dynamic process with various determinants motivating different people to opt for an HIV test” (Rinke de Wit, Borght, Schim-vander Loef, Clevenbergh, van Craneburg, Rijckborst 2006). The voluntariness or lack of coercion to the client is central to VCT uptake. VCT uptake is also an important indicator for generalized epidemics5, as it specifies the percentage of people who willingly seek voluntary counseling and testing, actually get tested, and become aware of their results (WHO, 2008). In the context of this study, VCT uptake refers to adolescents‟ conscious decisions to actively request or seek VCT.

According to Holden (2004) susceptibility refers to the likelihood of being infected by HIV, which may be at individual or group level. This “chance of being exposed to the virus” is determined by behavioral, biological, cultural and environmental factors as well as power relations (such as gender imbalances between men and women) (Holden 2004).

Attitude towards testing means the perceived thoughts which include both positive and negative or good or bad whereby positive attitude is conceived in terms of getting a chance to receive help and a better life and negative attitude is taken as a curse, bad mannered person, an adulterer if one tests positive.

1.2.4 Contextual Background

HIV counseling and testing (HCT) is a key component of both HIV care, and HIV prevention. It's the entry point into prevention, care and treatment if anything is to be achieved in eliminating HIV, getting people to know their HIV status is the primary requirement. HIV Voluntary Counseling and Testing (VCT), one of the approaches to HIV testing is increasingly being recognized worldwide as a crucial component of effective strategies for HIV and AIDS prevention, care, treatment and support services. For communities, VCT is a means to create awareness, mobilize local responses and reduce denial, stigma and discrimination. Importantly, new developments in the dynamics and response to the epidemic have made VCT an essential component of providing a link between prevention and care (UNAIDS 2008).

WHO (2005) suggests that VCT is the process of giving people professional counseling before and after the HIV test. It reports that in this process people are helped to prepare for and understand their test results to either learn ways to avoid becoming infected or in the same way learn how to live longer, healthier lives and prevent transmission to others. In this regard, VCT tries to offer important entry point to early prevention, care and support to clients to cope with the life challenges of stigmatization by providing information, education and communication in turn to enhance awareness and facilitate positive living among clients' adherence to ARVs and other preventive measures (UNAIDS, 2001).

VCT is generally available throughout Uganda. However youths' utilization of VCT and participation is still low. Previous studies have indicated that factors such as non-youth friendliness at VCT centers as one of the reasons why youth are not utilizing the services. However, even in centers that have embraced this, youth do

not get tested. For instance Aids Information Centre (AIC) started providing VCT to the youth in September 2011. In May 2002, the service was expanded to be offered at Naguru Teenage Information and Health centre (NTIHC). In all the centers, the services were provided by youth friendly service providers however, this did not translate into youths going to get tested. There are no systematic studies that have been done to explore other factors that influence youths to get tested beyond the youth friendliness (Horizons, 2001). Thus, there was need to explore further the factors that influence the youth's participation in VCT. This study identified the factors that influence the uptake of VCT among youth aged 15-24 years.

1.3 Statement of the Problem

Voluntary counseling and testing (VCT) programs stand out among HIV/AIDS interventions because of their dual role: not only do they help youth adopt HIV-preventive behaviors, they also identify people that need HIV care. Given that many of those newly infected with HIV are young people (WHO, 2012), VCT program service providers like Naguru Teenage Information and Health Center (NTIHC), are increasingly recognizing the importance of encouraging youth to seek HIV counseling and testing and of modifying their services to meet youth's particular needs.

Open since 1995, NTIHC is a drop-in center that offers free reproductive health services to youth, including diagnosis and treatment of STIs, family planning, pregnancy testing and counseling, and antenatal and postnatal care. In 2002, NTIHC began offering VCT two days per week and expanded its facility to waiting and counseling space for youth seeking VCT including training peer counselors to do pre- and post-test counseling, orienting laboratory staff, implementing a client monitoring system, and ensuring a regular HIV testing kits supplies. The clinic initiated activities to inform young people about the new services through the media, collaborated with the Straight Talk Foundation in designing promotional posters and brochures, and in writing articles for the popular and widely distributed youth magazine, "Straight Talk." In addition, radio programs for youth managed by both NTIHC and the Straight Talk Foundation featured discussions of the need and value of VCT and also explained the procedures that youth would encounter when they went to the clinics for testing and to date the doors are open six days a week including Saturdays for youth to access such

services. Despite these efforts, evidence shows that uptake of VCT services remains low. VCT services are now available in all areas where NTIHC operates in Uganda including all public health units in Kampala and other areas. However, the uptake is still low (NTIHC, 2012 Annual Report). Also, a UAC report (2010) showed that in Uganda only 2 out of every 10 youth know their HIV status. In case this low level of youth uptake of VCT services continues, there is likely to be high prevalence of HIV among youth, increase in misconceptions about HIV/AIDS among youth, failure of infected youths to access early Antiretroviral Therapy (ART) and live longer. Consequently this may affect national development as the youths are the epitome of Uganda's development and driving population indices. This study thus sought to find out the factors that influence the uptake of VCT services among youth 15-24 years that attend NTIHC services.

1.4 General Objective

To examine the factors that influence the uptake of Voluntary Counseling and Testing for HIV and AIDS among the youth at NTIHC.

1.5 Specific Objectives

1. To assess the extent to which knowledge influences uptake of VCT among youth at NTIHC
2. To examine the extent to which attitudes influence the uptake of VCT among youth at NTIHC
3. To investigate how the availability of services influences the uptake of VCT among youth at NTIHC

1.6 Research Questions

1. To what extent does knowledge influence the uptake of VCT among youth at NTIHC?
2. What is the role of attitudes in influencing the uptake of VCT among youth at NTIHC?
3. To what extent does the availability of services influence the uptake of VCT among youth at NTIHC?

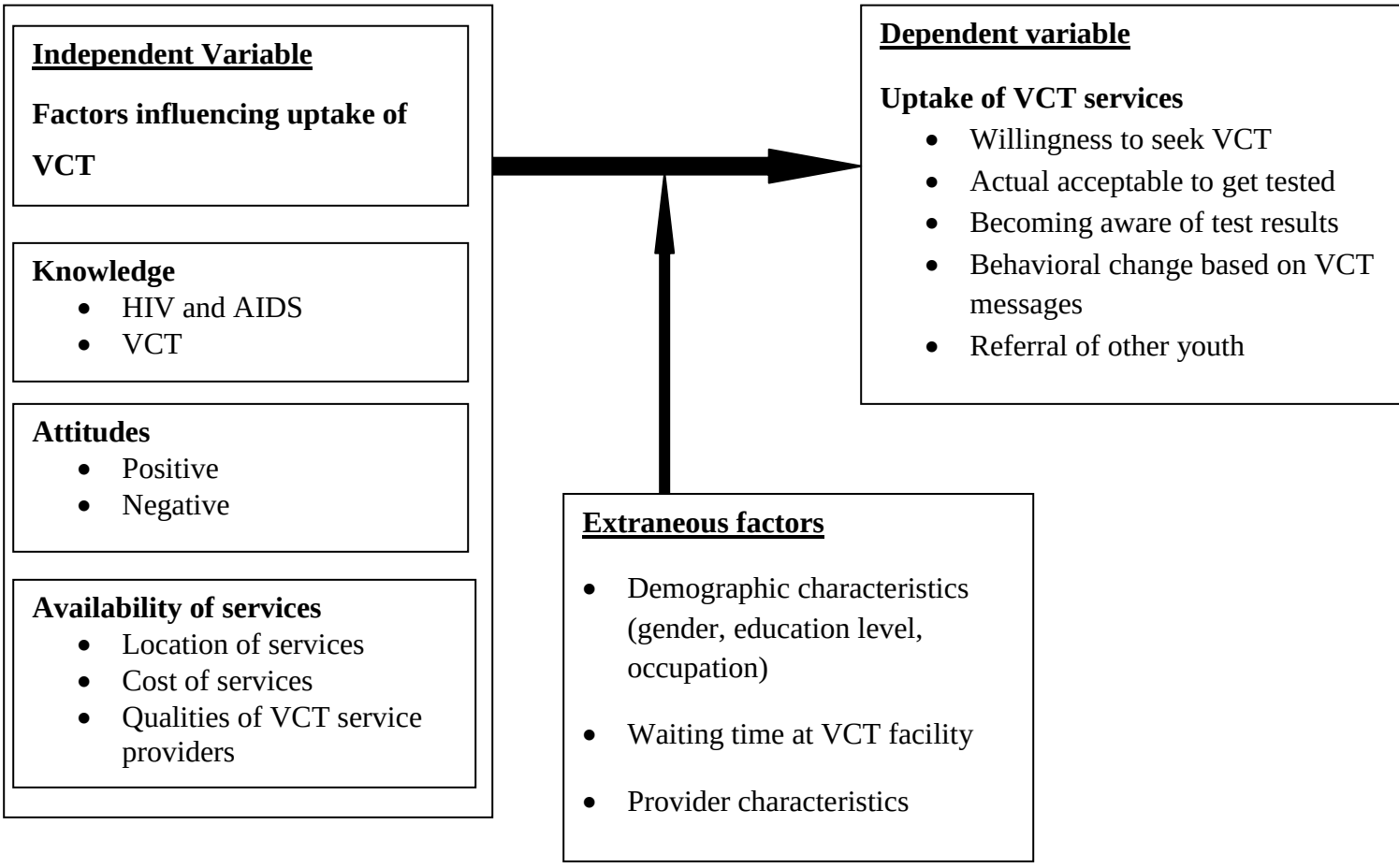
1.7 Hypotheses

1. Knowledge about HIV/AIDS and VCT has a significant influence on the uptake of VCT among youth at NTIHC
2. There is a significant influence attitudes have on the uptake of VCT among youth at NTIHC

3. There is a significant relation between availability of services and uptake of VCT among youth at NTIHC

1.8 Conceptual Framework

Figure 1: A conceptual framework showing the factors that influence the uptake of VCT among youth aged 15-24 years



Adopted from Bwambale F. M Etal (2008) and modified by the researcher

From the conceptual framework above, it was conceptualized that the three factors: knowledge, attitudes and availability of VCT services have an influence on the uptake of VCT services among youth. Knowledge was measured in terms of knowledge of HIV/AIDS and VCT among youth; attitudes were measured in terms of positive (favorable) and negative attitudes (unfavorable). On the other hand, it is expected that the availability (or non-availability) of services in terms of location, cost and qualities of VCT, may positively or

negatively affect the intake of these services by the youth. Uptake was measured in terms of: willingness to seek VCT, actual acceptable to get tested, becoming aware of test results, behavioral change based on VCT messages and referral of other youth.

The researcher however conceptualizes that the extraneous variables such as: waiting time at VCT facility and provider characteristics will have a conditional effect on the relationship between the independent (influencing factors) and dependent variable (uptake of VCT services). Therefore these variables should not be left out when trying to understand this relationship.

Relating the conceptual framework to the theory, according to the Theory of Planned Behavior model, an individual must possess sufficient knowledge, motivation, and favorable attitudes for health-related behavior change to take place. In the case of this study, VCT uptake is the desired behavior change. The TPB model proposes the use of qualitative or quantitative research methods to establish the level of knowledge, attitudes as well as perceptions of availability of services related to the specific health behavior. Using this theory and conceptual framework, the researcher and readers may be able to gain an in-depth understanding of the factors that influence youth to seek VCT services and to present the latter in their own words.

1.9 Significance of the Study

Most interventions addressing young people's access to VCT are based on the assumption that young people encounter barriers to accessing VCT, hence they need to deal with those barriers. Time has come to draw on the experiences of the young people who have gone through the process of VCT and to develop programmes that deal with the real issues and aim at sustaining the motivating factors.

Knowledge gained from this study may be particularly useful for policy makers. The results may assist policy makers to come up with policies that may be conducive to attracting more young people to access VCT. The results may also help training institutions for health service providers to incorporate the findings in their training curricular. This will ensure that all service providers are aware of issues related to young people.

The knowledge gained may further be useful to the community health workers including the village health teams to enable them target and understand the needs of young people as it relates to VCT.

Findings from the study will also be an essential step in the development, modification and implementation of programmes that will encourage more young people to go for VCT. The findings will also be beneficial to organizations that have an interest in promoting VCT access to young people particularly, the Naguru Teenage Information and Health Centre.

In addition, this study has the potential to shed light into the underlying risk factors that continue to predispose youth to HIV infection. Understanding these factors could in turn contribute to the design of a wide-range of strategies that not only target the provision of VCT, but other HIV/AIDS-related strategies in general. These may include stigma-reduction strategies and those strategies that target gender imbalances in relationships.

Finally, the findings might contribute to behavioral changes among young people by emphasizing the positive reasons why young people should go for VCT.

1.10 Justification of the Study

VCT among the youth should be emphasized in order to protect this productive age against HIV and AIDS. The various factors that influence youth to utilize VCT need to be further examined (Matovu etal 2005). The study will further point out the various factors that affect youth's attendance to VCT services so that the various stakeholders are able to work on the negative factors that stop the youth from accessing services.

Knowledge of a person's HIV status affords the individual the opportunity to access various HIV and AIDS-related services, including ART, psychosocial support, and prevention of mother to child transmission (PMTCT). VCT also affords youth an opportunity to plan for the future, among other benefits. Equally important is the opportunity VCT affords to individuals to minimize their chances of spreading or contracting HIV by adopting risk reduction behaviors (such as condom use). Literature reviewed from previous studied

however revealed that there is a low uptake of VCT by youth. Considering the extent of youths' susceptibility to HIV infection, this low uptake presents missed opportunities and efforts should be made to understand the factors that motivate them to seek VCT.

This study further checked on the influence, attitudes and beliefs have on the VCT services uptake by youth so that a clear understanding can inform the campaigns, interventions and programs to increase the participation of youth in VCT activities.

Also while carrying out the present study; it is important to note that increasing youth uptake of VCT would benefit not only the adolescents themselves, but also future generations. The current study could provide insight into youth experiences and perceptions regarding factors affecting uptake of VCT services, thereby informing programme and policy design.

This study provided recommendations that may remove the hindrances to youths' VCT uptake which will consequently help in the struggle to prevent and perhaps eliminate HIV and AIDS among the youths.

1.11 Scope of the Study

1.11.1 Geographical Scope

The study was conducted among 169 youth aged 15-24 years, `both male and female selected from the clientele of youth attending services of NTIHC, located in Nakawa Division of Kampala district. The reason for the choice is because the centre was the first facility in Uganda to support young peoples' sexual and reproductive health issues, specifically offering VCT services and youths 15-24 is their target population and many youths visit this place to access VCT because it's popular (Horizons, 2001). Furthermore, the centre is located in a division with such a diverse population of youths specifically with six higher institutions of learning, numerous secondary and primary schools as well as markets, washing bays, stone quarries where most youth are concentrated.

1.11.2 Time Scope

The focus of the study was mainly on the VCT services offered to the youth within a period of four years (2009 to 2012) due to the fact that during that period, a deliberate effort was initiated to promote VCT services to the youth under the centre's new strategic plan.

1.11.3 Content Scope

This study was on the factors influencing the uptake of Voluntary Counseling and Testing for HIV and AIDS among youths in NTIHC. It specifically sought to determine how the knowledge, beliefs and attitudes about VCT influence the uptake of VCT services among youth in NTIHC.

1.12 Operational definitions

According to NTIHC where the researcher carried out the study, a **Youth** means any person between 15-24 years based on the definition provided by the WHO, (2006).

Voluntary Counseling and Testing is the HIV testing model where individuals freely opt to test for HIV, explore and understand their HIV risks and eventually learn their HIV test results. It's basically an un coercive process that focuses on an individual's risk assessment, risk reduction, emotional support that is done using an approved HIV testing protocol to identify if a person has HIV or not. The information given to the client enables him or her to understand the implications of testing, assess personal risk to HIV and adopt risk reduction behavior

HIV/AIDS is a condition that comes as a result of a person's immune system gets too weak to fight off infection for example diarrhoea, loss of appetite, skin disease.

VCT uptake is also an important indicator for generalized epidemics, and in this study, it will specifically refer to the percentage of people who willingly seek voluntary counselling and testing, actually get tested, and become aware of their results

Cost of VCT services means the amount of money required for the services to be provided and how high and low costs impact the uptake. For example do youth access more VCT services when they are free or not?

Location of services means the distance at which the client lives in relation to where the services are found. For example, do youth find it easier to access freely by opting to test for HIV, explore and understand their HIV risks and eventually learn their HIV test results when the services are within their localities with a short distance which is less than 2 kilometers from the VCT centre or a long distance which is more than 2 kilometers from VCT centre.

Waiting time at VCT facility means the time at which clients in need of VCT services arrive at the testing centre unto the time when they have finished either accessing the services or leaving the centre. For example; not more than one (1) hour before they receive their test results after their blood has been drawn.

Provider characteristics refer to the understanding that the youth was welcomed well and respected as the accessed the services

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, literature related to the factors that influence the uptake of VCT for HIV among youth is reviewed. The review is conceptualized in line with the objectives of the study and focuses on the level of awareness about VCT, benefits of VCT, attitudes and beliefs associated with VCT in relation to the uptake of VCT services among the youth.

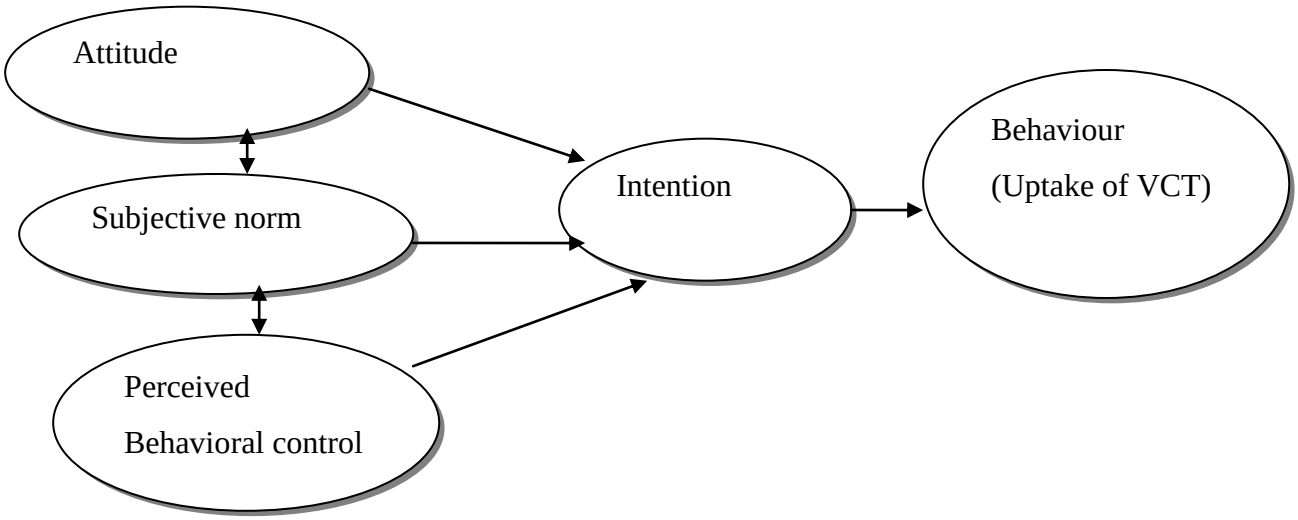
2.2 Theoretical Review

The study used the Theory of Planned Behaviour (TPB) (Ajzen, 1991), which is a social cognition model constituting a promising framework for understanding and predicting behaviours and behavioural intentions. TPB is an extension of the earlier Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) proposing that people are rational actors who voluntarily process and use available information before performing behaviour. According to the TRA, intention to perform the behaviour is a function of attitude and subjective norms and is the immediate determinant of behaviour performance (Ajzen, 1985). Given that the TRA did not account for behaviours that were not under volitional control, Ajzen and Madden proposed the TPB that consisted of perceived behavioural control (Ajzen & Madden, 1986) which is similar to Bandura's concept of self-efficacy (Bandura, 1982). Perceived behavioural control was therefore added on a level with attitude and subjective norms as a predictor of intention so as to measure persons' perceived ability to perform a particular behaviour in different situations (Ajzen, 1991).

In the TPB, attitude towards performing behaviour reflects a favourable or unfavourable evaluation of the particular behaviour; subjective norm refers to the perceptions of specific significant others' preferences of whether one should or should not engage in behaviour; and perceived behavioural control manifests the perceived ease or difficulty associated with behaviour performance. The three predictors of TPB influence subsequent behaviour indirectly through behavioural intention. However, perceived behavioural control may

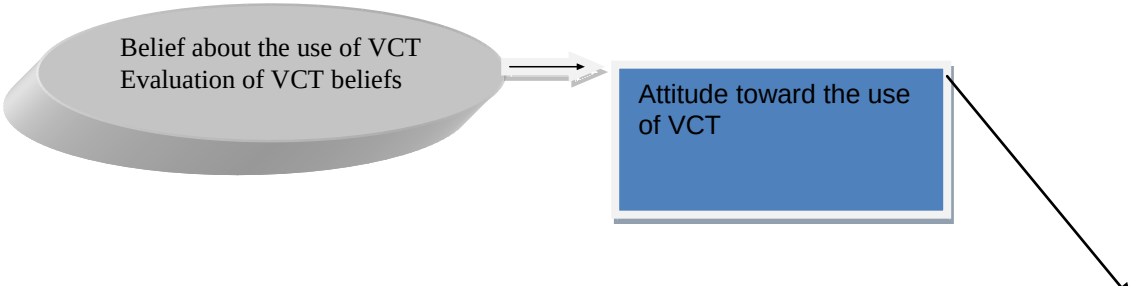
influence behaviour directly if it reflects actual control and whenever the behaviour in question is not under complete volitional control by the individual as shown in figure 2.1 below.

Figure 2.1: The Theory of Planned Behaviour (Ajzen, 1991)



The TPB specifies the determinants of attitude, subjective norm and perceived behavioural control that are assumed to combine multiplicatively. Attitude towards behaviour is determined by individuals' beliefs about the outcomes of performing the behaviour (behavioural beliefs) weighed by the extent to which these outcomes are valued (belief outcomes). Subjective norms are governed by perceptions of whether significant others think that one should or should not perform the behaviour (normative beliefs) and one's motivation to comply with the wishes of significant others (motivation to comply).

Similarly, beliefs about the presence of factors that might hinder the behavioural achievement (control beliefs) and perceived ability to control factors that might hinder the behavioural achievement (power of control) provide the basis for perceived behavioural control. Despite the success of the core components of the TPB model in predicting behavioural intention and subsequent behaviours, it has been recommended that the TPB is open to the inclusion of other variables if they increase the predictive utility of the model after the theory's core variables have been taken into account (Ajzen, 1991). Consistent with this reasoning about the sufficiency of this theory, the current study extended the TPB by adding a measure of perceived risk as indicated in **figure 2.2.**



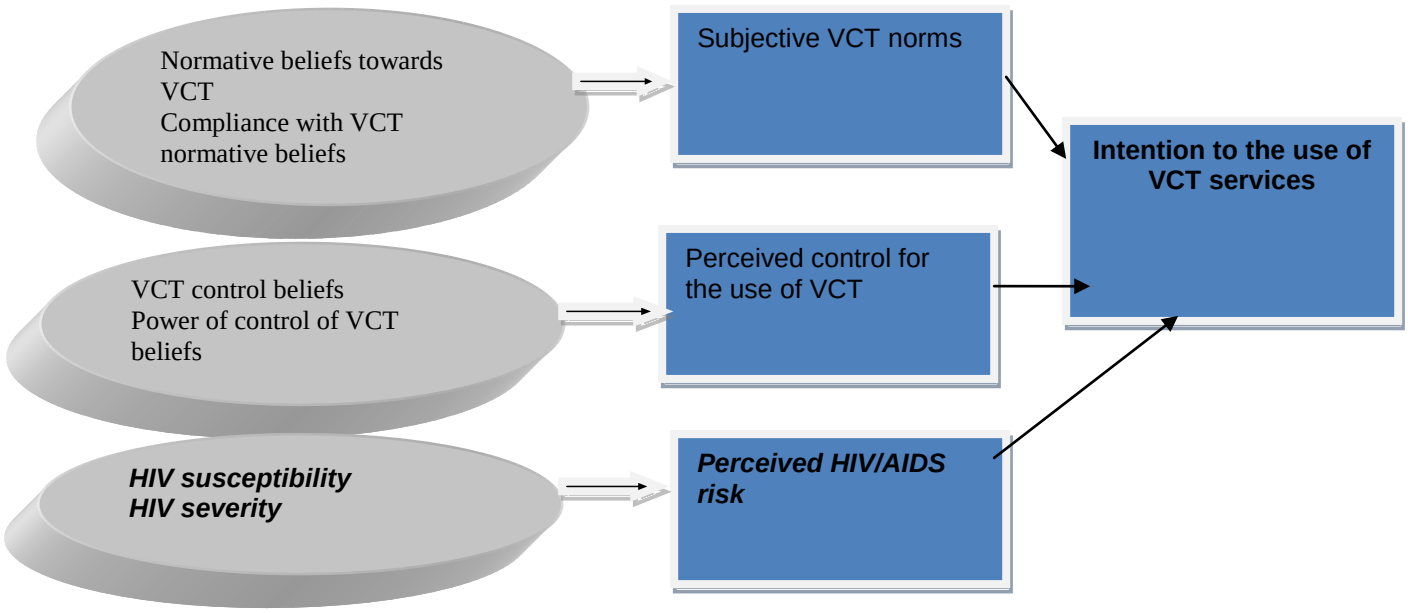


Figure 2.2: The extended theory of planned behaviour as applied to the present study

This inclusion of perceived risk was deemed necessary because of the high prevalence of HIV in Tanzania. In addition, perceived HIV risk has been reported to have a significant role in decisions related to HIV prevention in the previous studies that were not theory driven (Gage & Ali, 2005).

Another study by Donenberg et al (2005) used the TPB model to explain HIV risk behaviours among youth in psychiatric care. This study tested the model's cognitive constructs (information and motivation), as well as its behavioural constructs (behavioural skills), among boys and girls in psychiatric care. Information or knowledge about AIDS was assessed using a 37-item true-false self-report instrument, to assess knowledge and misconceptions about modes of HIV transmission. To assess the motivation construct, on the other hand, attitudes and beliefs towards HIV/AIDS (perceived risks of getting infected, peer norms) were investigated, and a 38-item-report was used to score the responses. Perceptions of self-efficacy to prevent HIV transmission, for example whether an individual found it very hard or very easy to enforce condom use (assertive, performance, and refusal self-efficacy) were used to measure behavioural skills.

Findings of this study indicate that although enhancement of the theory's constructs had the potential to contribute to increased uptake of VCT among youths in Naguru Teenage Centre. The researchers thus concluded that factors such as gender and age (which affects an individual's "intellectual maturity") of the target group, played a big role in the achievement of the final result. The researchers therefore conclude that in order to be able to practice behavioural skills to reduce risky behaviour (based on the information gained), *"a certain level of intellectual maturity is necessary abilities [which] have yet to develop in youths…"* (Donenberg *et al* 2005).

The TPB is the most widely tested and validated model in the prediction of health behaviours in different social-cultural contexts (Godin and Kok, 1996). Whereas most of studies have been conducted in western countries and cultures where the theory was developed, a few studies have been published in an African context. For instance, the TPB has been useful in predicting condom use behaviour in Tanzanian (Lugoe and Rise, 1999), Ghana (Bosompra, 2001), and Kimani (2011) in Kenyan study of VCT uptake among male youths. Similarly, the TPB was successful in predicting contraceptive use among adolescent girls in Ethiopia (Fekadu, 2001).

The TPB model emphasizes the individual rather than the social environment, as the determinant of health-related behaviour (MacDowell *et al 2006*). The challenge here is that it negates the importance of socio-economic and cultural contexts within which an individual exists (Solomons *et al* 2004).

Although MacDowell *et al* (2006) criticised this theory for its emphasis on the individual rather than the social, cultural, political and economic environments as determinant of health-seeking behaviour, the authors also commended TPB for including social 'normative factors' for instance influence of peers, availability of VCT services in explaining an individual's health-related behaviour. This inclusion makes TPB a suitable theory for this study, as it accommodates a holistic approach as proposed by the Youth Friendly Service (YFS) Package and allows for the important role that significant others could play in youth health related behaviour.

Since the present study was not prospective in nature, it was not possible to measure actual behaviour "use of VCT services". This study is therefore limited in terms of predicting and explaining the use of VCT among Tanzanian teachers. For example, it was not possible to understand whether uptake of VCT is a volitional or non-volitional behaviour. Nonetheless, TPB is argued to be a theory of intention formation and that reporting on the behavioural intention constitutes the major part of TPB studies (Fishbein & Ajzen, 2005).

2.3 Youth Knowledge and Uptake of VCT Services

Preventing HIV among young people is particularly urgent in sub-Saharan Africa, where in many countries young people comprise more than 30 percent of the population and general HIV prevalence rates often exceed 10 percent (UNAIDS, 2008). They however did not show the number of youths accessing VCT services globally which is a gap in literature.

Studies that have been conducted globally indicate that even if youth have adequate knowledge relating to transmission and prevention of HIV, this does not necessarily translate to uptake of VCT and behaviour change (condom use, abstinence or reduction in number of sexual partners) (Mwale 2008). In South Africa, evidence indicates that knowledge of HIV transmission and prevention is as high as 95% among 15 to 24 year olds (LoveLife, 2006), although studies conducted here indicate low perception of HIV risk among this population category (Anderson *et al*, 2007). The study however did not go into details of condom use but rather the factors that affect uptake of VCT among youth. One similar characteristic was that both studies used 15-24 years as age categories for youths.

Another researcher from Malawi by Mwale, (2008) found that although adolescents were well-informed about HIV and AIDS transmission and prevention, they did not change their risky behaviour based on this knowledge. Knowledge, attitudes and behaviour (KAB) questionnaires were administered and focus group discussions conducted with adolescents from three different schools with the aim of investigating the reasons behind the lack of behaviour change despite the amount of knowledge received. It was found that although 87.5% of the respondents knew the modes of HIV transmission and prevention, a significant percentage

(65%) indicated that they were not worried about dying from AIDS-related illnesses since one could die from accidents or any other illness. Regarding the existence of HIV/AIDS, 55% of the respondents indicated that they did not believe it actually did exist. This study also found that 87% of respondents believed that HIV/AIDS messages calling for abstinence were unrealistic as they found it impossible to abstain from sex. In the current study, qualitative interviews showed that these messages were important for increasing uptake of VCT among youths.

In Nigeria, a study by Wodi (2005) found that despite high levels of knowledge (93%) of HIV/AIDS, there was no accompanying behaviour change or an attempt to prevent HIV infection by study respondents (youths). Regarding how worried they were that they might contract HIV in future, 67% said they were either not worried or somewhat worried. The challenge with Wodi's study is that his sample stated that knowledge did not address HIV/AIDS-related misconceptions among youth such as seeking VCT even without observing symptoms of HIV.

A study conducted in Port Elizabeth, South Africa (Volkwyn 2010) sought to measure knowledge, attitudes, beliefs and reported sexual behaviour among youth in a healthcare centre. He found that although knowledge about HIV/AIDS was "moderately high" among the participants, it did not lead to actual behaviour modification. In addition, this knowledge did not result in improved (i.e. more positive) attitudes towards people living with HIV/AIDS.

VCT has become a widely accepted HIV prevention strategy among adults and most clients of VCT services are in their mid-20s (Genberg *et al.,* 2007). UNAIDS (2008) reported that 60 percent of all new HIV infections in sub-Saharan Africa, however, occur among young people between the ages of 10 to 24. Given that many of those newly infected with HIV are young people, VCT program managers and policymakers are increasingly recognizing the importance of encouraging youth to seek HIV counseling and testing and of modifying their services to meet youth's particular needs (UNAIDS, 2008).

Because young people naturally reflect their communities, the variety of their behaviors and practices is diverse in the same way as adults. Knowing how young people are infected and affected by HIV/AIDS in a given context is important in developing effective service delivery models. VCT services may have to be general or targeted depending on a range of factors including health-seeking behaviors and level of stigma. Few VCT services have been developed to help youths in developing countries who are at increased vulnerability to HIV/AIDS as a result of risk practice or exposure (Genberg *et al.,* 2007). Youth affected by AIDS typically face a wide range of stressful events and circumstances, including the loss of caregivers, the burden of adult-like responsibilities, and social isolation. Youth are a specific target group for VCT and yet they have not been studied as an independent group in reference to their attitudes and beliefs towards VCT uptake.

Other studies have focused on the term "youth" to be described as those aged 15 and above, yet very little concern themselves with those any younger. When 13% of 15–24 year old men in Harrison, Cleland, Gouws and Frohlich's (2005) study in South Africa experienced sexual debut before age 15, the failure to focus on young adolescents is a significant gap in the research literature about uptake of VCT. Their study was however comparative in nature between youths and older men above the age of 25 years, which is quite informative but different from my study.

Middelkoop, Myer, Smit, Wood and Bekker (2006) in their study established the effect of awareness of VCT and actual VCT uptake, using drama among youth in poor and peri-urban settings in South Africa. Results showed after the intervention, indicated a 172 percent increase in VCT use in the community. In comparison, no increase was reported in non-intervention communities. In this study, it is conceptualized hat increasing youth knowledge about VCT leads to its increased uptake, although other factors like peer pressure may also have played a part. The gaps identified in their study was that they made comparisons between intervention and non-intervention youths which had a number of methodological limitations for their study.

Furthermore, a study by Guttmacher Institute in 2007 on adolescents indicates that 90% of 15-19 year olds are aware of HIV and AIDS and these high levels of awareness have persisted overtime and across countries. In addition, most adolescents know the three main ways to prevent the sexual transmission of HIV, that is the ABC of prevention: Abstaining from sex, being in a mutually monogamous relationship with an HIV negative partner and using condoms if sexually active. Despite the fact that Guttmacher indicated a number of organizations that educate the adolescents about HIV especially the main ways to its prevention, they however did not talk about VCT which is also very important, for it is the entry route in prevention.

Youth people aged 15-24 years account for an estimated 41% of new adult HIV infections worldwide (UNAIDS, 2006). Studies have indicated that young people have a strong interest in knowing their HIV status. More than 75 % of youths surveyed in Kenya and about 90% in Uganda indicate that they would like to be tested while still healthy but they can't be tested for HIV (UNAIDS, 2006). VCT allows them to evaluate their behaviors and to understand consequences of their decisions. A negative test result offers a chance to work out along the risk reduction behaviors and a positive one helps in reception of referrals for care and opportunities to explore the knowledge and meaning of their HIV status. The study was done six years ago therefore a current one is needed. Such was the finding in the current study which noted that knowledge of VCT influences the attitudes of youths towards VCT and thus uptake of VCT.

In Ndola- Zambia, when VCT services were introduced, the services were shunned as the service was viewed by the residents as something without benefits but just a source of stress (Horizons, 2003). However when PMTCT was introduced the uptake increased as women became more aware of the benefits.

Another Uganda-based study indicated an important relationship between VCT client awareness and access to treatment (Nsabagasani & Yoder 2006). When interviewed, these clients mentioned that seeing an improvement in the health of community members who were taking ARVs gave them hope that they too would live longer. In addition, some clients tested for HIV because their relatives had promised to buy them ARVs if they tested positive for HIV.

Acknowledging one's susceptibility to HIV infection facilitates the adoption of preventive behaviour, and knowledge plays a key role in this (Anderson *et al* 2007). Failure to acknowledge one‟s susceptibility to HIV infection actually raises one‟s risks of being infected (UNAIDS 2008). Ironically, youths are "typically viewed as being unable to judge risk appropriately and as having strong beliefs in their invulnerability to harm" (Millstein & Halpern-Felsher 2002). This is evident in the studies cited in this section

One empirical gap identified what the failure to focus on youths in a single setting is a significant gap in the research literature about uptake of VCT. More so, in other studies also, it is evident that most authors (NTIHC 2011, Guttmacher 2007) concentrate on defining VCT, sighting the key knowledge that youth have on VCT, but there's inadequate focus on the knowledge that relates with factors influencing the uptake of VCT for HIV/AIDS among the youth, thus, it is imperative to find out why youths still cannot get tested even when literature has showed that there is substantial knowledge on what VCT is. Thus, limited knowledge about the benefits of knowing one's HIV status has been cited as hampering VCT uptake among youths.

2.3 Youth Attitudes and Uptake of VCT Services

Literature shows that the current reach of VCT services is poor and uptake is low, largely because of fears of stigma and discrimination (UNAIDS 2004). Other reasons cited by young people for not going for VCT include fear of being HIV positive, fear of losing a relationship, lack of confidentiality, not being sexually active, using condoms consistently (Munthali et al 2004). Some of these attitudes were found to affect uptake of VCT services.

Some authors have cited that negative attitudes of nurses and counsellors, sharing waiting areas and consulting rooms with the rest of the clients as well as concerns regarding lack of confidentiality at public clinics were mentioned as some of the issues that deterred youth from seeking VCT. Some youths also mentioned that they feared that their parents would access the test results while others said they could not test because the staff at the clinics knew their parents. In addition, there was also a feeling that it was not necessary for them to test as they "knew" that they were safe (Jaspan, Soka, Mathews, Mark, Flisher,

Middelkoop, Wood & Bekker 2010). The current study also found out that most attitudes depend on individual youths rather than those of service providers.

However in other studies, positive attitudes such as expectation of support from family members was regarded as important, as adolescents said they would disclose to those family members who were supportive (MacPhail, Pettifor, Coats & Rees, 2008). They however did not give the implication of these attitudes on uptake of VCT among youth. More so, their study was descriptive compared to the current cross-sectional study.

A study conducted in Kenya revealed that there is a perception that testing is for the ill. Those who did not go for testing did not feel at risk of HIV (Horizons Programme 2001). A study conducted in Zambia indicated that 57% of boys and 53% of girls said they would like to have an opportunity of going for HIV testing (Baggaley, 2001). However, the study failed to indicate the proportion that was keen to have an HIV test at that time, as they were worried that they might be positive despite HIV prevalence being relatively low in this age group.

Another study conducted in Malawi revealed that youth did not access VCT services due to worries about confidentiality and fears that the results would be shared with their parents without the youth's consent (Munthali et al 2004). Their study was however case study based on a single health facility. It studied specific youths as cases of reference.

It was further reported by Amuyumzu-Myamongo et al (2005) that one key barrier youth identified in a study conducted in Malawi, Ghana, Burkina Faso and Uganda was the shyness and shame that youths felt when obtaining services like those for sexual and reproductive health (SRH) and VCT. Youths might prefer traditional healers than health care workers, operating within the formal health care system because traditional healers might be perceived to be more discreet. Among adolescents who have ever had sex, the proportions of those who have been tested for HIV is relatively small. For example, the proportion of sexually experienced 15-19 year olds who have been tested ranges from 4% in Ghana to 15% in Uganda:

Among youth, 15-19 year old boys, the proportion ranges from 5% in Burkina Faso to 7% in Uganda (Guttmacher, 2007). This means that even adolescents who are at a great risk of HIV infection because they are sexually active as indicated above by Guttmacher have not embraced VCT, yet it's the only key way to know their HIV status. The gap identified here is that it creates a question on what could be the attitudes and beliefs that may be attributed to this.

Another analysis shows that most sexually active youth who access sexual reproductive health, where VCT is a key component, do so at public clinics or hospitals rather than other sources such as mobile clinics or stand alone testing centers. However, fear, shame and embarrassment characterized at those facilities are the main reasons for them not seeking the services (Guttmacher, 2008). Here, Guttmacher looks at how youth who are sexually active access reproductive health services at public clinics or hospitals and focuses at the associated reasons as to why they don't seek sexual reproductive health services including VCT. He did not identify why youths don't access VCT in the other designated testing centers.

According to the study by Family Health International (FHI) VCT services are viewed to be for the sick (FHI, 2008). Most people think all those who go for VCT are HIV positive and are probably already sick from HIV/AIDS related opportunistic infections. This is because most of the people who have gone for VCT are those who have already started showing symptoms. FHI's observation guided the understanding of the misconceptions about VCT which may limit the youth's access to these services.

In summary, it is realized that uptake of VCT in youth is still very low (Guttmacher 2008; 2007 and Glick, 2004). Further still, it can also be observed that youth still have perception issues on whether they should be tested or not and also the issues of VCT are always bundled among other SRH issues and treated as a whole (Guttmacher, 2008), thus a need to look at VCT alone as a component.

2.4 Influence of Availability of VCT and Uptake of VCT services

Availability and affordability of the VCT services have been documented as a factor that promote uptake of VCT. Studies done in Africa showed a drastic increase in the demand for VCT services when services were

made accessible and affordable for those people who want to know their own HIV status (USAID, 2000). The study however did not show whether this availability has impacted on uptake of VCT. It also did not mention whether the VCT services available were youth-friendly or not.

Other studies have revealed that long distances to VCT centres have been identified as a barrier to VCT uptake especially in rural areas (Nuwah *et al.*, 2002). For instance, studies in Kenya and Uganda revealed that youth were not accessing VCT services because of long distances that they have to travel to access VCT services centres (Horizons, 2001). These authors carried out their study in rural areas as compared to the current study which was done in an urban area and at a specific VCT centre for youths.

In Zambia, studies indicated that VCT uptake by youth was constrained by limited number of VCT facilities in rural areas (CSO-Zambia, 2005). NAC (2008) indicates that 1,028 centres are offering VCT services with majority of these sites situated in urban areas. This implies that those living in rural areas have to travel long distances to access the VCT services and this affects VCT uptake negatively. Their study was also carried out in rural areas whereas the current case study is in an urban area.

Cost of VCT services have been documented to have an effect on uptake and acceptability especially by young people (Boswell & Baggaley, 2002). In Zambia, though, the service is offered free of charge in government health facilities. However, the cost of transport to the health centre is seen as double payment for the health services among the low household income (KARA, 2006).

The qualities of the service providers in VCT settings were also reported in other studies to influence VCT uptake. For example, follow up counseling for positive living is a critical component of care and support (FHI, 2005). A study in Uganda revealed that availability of psychosocial support in form of on-going counseling increased VCT uptake (Kadowa & Nuwaha, 2009).

A study by Jaspan *et al* (2008) showed that youths mentioned specific elements which they thought would make a VCT centre youth-friendly. These included “warm and friendly staff and waiting rooms” as well as

having their peers as counsellors. The absence of these conditions acted as barriers to testing, such as combined waiting areas, judgemental staff and lack of confidentiality (Jaspan *et al* 2008).

Similarly, in a study conducted by Njagi & Maharaj (2006), students who had had an HIV test mentioned positive attitudes of counsellors and their willingness to answer their questions as having motivated them to test.

Poor service delivery, on the other hand in the form of limited operating hours, lack of training among staff and shortage of manpower have been documented as some of the factors limiting VCT uptake. Studies conducted in Uganda among urban youth revealed that fear of receiving poor services (poor counseling and lack of confidentiality) at health care facilities as one of the factors that hindered VCT uptake (Horizons, 2001).

On the other hand, 53% of the people interviewed in a study in Ugandan said they would go for VCT, only if they were well counseled. The same study revealed that adolescents were not accessing VCT services because of non flexible hours of VCT services. Similar studies by Boswell and Baggaley (2002) revealed that young people were not accessing VCT services because the services were not available or not accessible to them. They were also discouraged by the long time of waiting.

Insufficient time for counseling patients and workload has been identified as factors that influence VCT uptake (Sanjana *et al.,* 2009). High work load and associated lack of time among the health providers has resulted in poor counseling of patients thereby hindering people from using VCT services (HEART, 2001). Their study however did not statistically measure the extent to which these factors related to availability affected uptake of VCT

2.5 Summary of Key Findings and Identified Gaps

From the literature, it is observed that not only do motivating factors appear to be similar across different settings, but also the factors that prevent youth from seeking VCT. It is clear from the above discussion that

uptake of VCT is a result of complex and interrelated factors. All the three constructs of the TPB model appear to play a significant role in influencing an individual youth's final decision to seek VCT services.

Authors including; NTIHC (2011), HIV/AIDS report (2010), Guttmacher Institute (2008, 2007), UAC (2006), UDHS (2006), UNAIDS (2008/7/6), WHO (2006), Glick (2004), Sserwadda et al (2004), CDC (1994) ,(Horizons,2001) and others indicate that overall there is considerable knowledge among the youth on what VCT is, where they can access it but their understanding of the importance of VCT does not come out clearly. Furthermore, it is evident that most authors concentrate on defining voluntary HIV counseling, sighting the key knowledge that youth have on VCT but there's inadequate focus on the knowledge that relates with factors influencing the uptake of VCT for HIV/AIDS among the youth, thus, it is imperative to find out why youths still cannot get tested even when literature has showed that there is substantial knowledge on what VCT is.

In particular, the gaps identified by the authors are as follows;

Most studies concentrate on defining voluntary HIV counseling, sighting the key knowledge that youth have on VCT, but there's inadequate focus on the knowledge that relates with factors influencing the uptake of VCT for HIV/AIDS among the youth. Thus, it is imperative to find out why youths still cannot get tested even when literature has showed that there is substantial knowledge on what VCT is.(NTIHC, 2011, Guttmacher 2007, UNAIDS, 2006).

The uptake of VCT in youth is still very low and also the issues of VCT are always bundled among other sexual reproductive health issues and treated as a whole thus a need to look at VCT alone as a component .(Guttmacher 2008, 2007 & Glick, 2004).

The benefits of VCT are multiple and this cuts across whoever has accessed However, there is need to document further the key benefits of VCT to the youth. (Sserwadda et al, 2004).

In conclusion basing on the identified gaps, the study was suggested on the factors influencing the uptake of Voluntary Counseling and Testing for HIV and AIDS among the youth attending Naguru Teenage Information and Health Centre. Studies also indicate that information pertaining to youth knowledge regarding HIV/AIDS as well as VCT coupled with positive attitudes toward VCT and where and how it can be accessed are some of the factors that appear to lay the foundation for VCT uptake. It therefore leaves the researcher the choice to find out statistically and ethnographically (qualitatively) the extent to which these factors affect up take of VCT for HIV/AIDS among youth.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter presents the study area and population, research design, sample size and sampling procedure and techniques, methods of data collection, data processing and analysis, reliability and validity as well as limitations to the study.

3.2 Research Design

The study was cross-sectional in nature employing both qualitative and quantitative methods of data collection. A cross sectional design is a research design that ascertains the presence of an event/outcome and its associated factors at a specified point in time, looking at the population at a snapshot (one point at a time). It can compare prevalence of an event in people with certain factor (exposed) and those without (non-exposed).

The researcher identified youths who come to access VCT services at NTIHC at a specified period of time from Nakawa division. Cross sectional design enabled the researcher identify the factors that influence VCT uptake among youth by not necessarily looking at all the youth in the division which may require a lot of time and involving high costs.

The qualitative approach was used to gain deep understanding of youth's perceptions and attitudes towards the uptake of VCT. This approach gave them a chance to express their knowledge and perceived factors that shape and/or influence their uptake on VCT. It further allowed them to express their feelings about other ways that may influence them in any way. Quantitative approaches on the other hand enabled for enumeration of responses to give them values.

3.3 Study Population

This study was carried out at Naguru Teenage Information and Health Centre (NTIHC) found in Nakawa Division of Kampala the capital city of Uganda with the primary target of offering youth friendly reproductive health services including VCT primarily to youth in Nakawa division, though youth from neighboring districts like Mukono and Wakiso are among the highest users of these services as well.

On average, 21 first time visits are made by youth at the centre per day according to the centre's annual report of 2009. This study thus considered a study population of 300 youths, a number that is expected to access services within the period of two weeks (14 days) of data collection. This study specifically targeted male and female youths aged 15-24 years, accessing services at NTIHC. The reason for the choice is because the centre is one of the key facilities that support young peoples' sexual and reproductive health issues and the centre was the first ever facility in Uganda to offer VCT specifically to the youth.

3.4 Determination of the Sample Size

The researcher used the Morgan and Krejcie (1970) mathematical tables adopted from Amin (2005) to determine the sample size. Thus looking at the population of 300 youth, the sample size for this study was 169 respondents as suggested by the tables. The researcher also interviewed 10 key informants among which counselors, doctors, nurses and community health workers.

Table 3.1: Table showing sample size selection

Category	**Population**	**Sample size**	**Sampling technique**	**Percentage of population sampled**
Youths	300	169	Simple random sampling	56.3%
Key informants	10	8	Purposive sampling	80%

Total	310	177	

3.5 Sampling Technique and Procedure

Simple Random Sampling (SRS) technique was used to get respondents from the various service delivery points at the centre. Simple random sampling refers to selecting a sample without bias from the target or accessible population. It mainly aims at selecting a representative sample. In this study, the researcher used it to ensure that each member (youth) has an equal and independent chance of being included in the sample. Simple random sampling is preferred because it will help the researcher to avoid being biased but also to produce a random sample. The researcher was convinced that determining factors associated with something, needs to be as diverse as possible thus SRS helped have as various factors as possible from the youth.

Participants to the study was got from two broad sampling frames; tested and untested youth. A list of all tested and untested youth was obtained from the data room of the centre with the help of the coordinator HIV Counseling and Testing. Then, randomly, 169 respondents were selected to participate in the study.

In this study, 8 Key informants were purposively recruited and included VCT Counsellors/managers. Four of these were Youth Counselors, one counseling coordinator and the three where the managers of the line departments.

3.6 Data Collection Methods

The study will mainly be concerned with knowledge, views, opinions, attitudes, beliefs, benefits and such information was collected using a questionnaires and interviews.

3.6.1 Survey Method

Self-managing Ordinal Likert Scale Questionnaire designed on values assigned in order of being strongly in agreement or strongly in disagreement was used to collect quantitative data. Questionnaires were used for data collection because the study is concerned with variables that cannot be directly observed such as views,

opinions, beliefs, perceptions and the research environment is open to allow honest answers but also standardized data from identical questions is required (Denscombe, 2003). The target population is also largely literate and is unlikely to have difficulties responding to questionnaire items.

The questionnaire will comprise of close-ended questions and open-ended questions that will allow respondents to express their feelings, mind and suggestions to the problem. Open ended questions are expected to help the researcher to consider whatever the respondents will consider on their part. The researcher believes that this method gave respondents enough time to reflect, concentrate and be able to respond adequately.

3.6.2 Interview Method

Interviews are recommended for collection of data that is to be analyzed using qualitative data analysis techniques, where it is required to collect detailed information from the few informants. Interviews enable the researcher to get the story behind the respondent´s experience and it permits the interviewer to pursue in depth information, (Denscombe, 2003). They are flexible, adaptable and probing was possible. Thus interviews were used to collect data from key informants and an in-depth collection of information not easily collected using questionnaires.

The length of each interview varied between 20 minutes to 40 minutes depending on the response of the key informant (KI). All the recorded interactions between the researcher and the KI were transcribed on paper promptly. The purpose of conducting these interviews shed some light into such factors like youth knowledge, attitudes, and availability (particularly qualities of service providers), since these may influence VCT service uptake. In total, eight key informant interviews were carried out.

3.7 Data Collection Instruments

Data was collected by the use of self/researcher administered questionnaires, interview schedule and documentary review checklist.

3.7.1 Self-administered Questionnaire

The researcher used a self –administered questionnaire with mix of structured-closed ended and open-ended questions. Structured questions provide a list of possible alternatives from which the respondents select answers that best suits their situation (Mugenda and Mugenda, 1999). The advantage is that questionnaires captures honest opinion and offers confidentiality to respondents and protects them from victimization. The questionnaire is flexible and can be used to collect data within a short time

3.7.2 Interview Guide

The researcher obtained data from the respondents through verbal interaction. The interview guide helped to capture the respondents' demographic information and carried guiding questions for more in-depth collection of the information.

3.8 Validity and Reliability of Research Instruments

3.8.1 Validity

Validity refers to the degree to which an instrument measures what it is supposed to be measuring. It is the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration (Babbie 2001). To establish validity, the research instruments were pretested at NTIHC to evaluate the relevance of each item in the instrument to the objective. Findings were checked on and where possible make corrections and improvements on the instruments.

After identifying the vague and ambiguous questions, corrections were made and final instruments were prepared.

CVI = 15/17 = 0.882

Also Content Validity Index (CVI) was computed from responses of Two (2) Experts to ensure that the questionnaire is relevant. CVI was thus 0.882 which was higher than 0.7 meaning that the study instruments were ruled to be valid.

3.8.2 Reliability

Reliability of an instrument is the degree of consistency with which it measures the attribute it is supposed to be measuring and whether a particular technique, applied repeatedly to the same object, yields the same result each time (Babbie 2001). Reliability is the consistency of the measurement, thus, the degree to which an instrument measures the same way each time it is used under the same condition with the same subjects. To check the reliability of this study instrument, the Cronbach's alpha reliability test was used.

Cronbach's alpha can be written as a function of the number of test items and the average inter-correlation among the items. Below is the formula for the standardized Cronbach's alpha:

$$\alpha = \frac{N \cdot \bar{c}}{\bar{v} + (N-1) \cdot \bar{c}}$$

Here N is equal to the number of items, c-bar is the average inter-item covariance among the items and v-bar equals the average variance. From the above formula, it can be seen that if you increase the number of items, you increase Cronbach's alpha. Additionally, if the average inter-item correlation is low, alpha will be low. As the average inter-item correlation increases, Cronbach's alpha increases as well (holding the number of items constant). It gives the various ranges unto which the reliability of the questionnaires was determined. This is depicted in the table below

Table 3.2: Reliability table

	No of Items	**Cronbach's Alpha**
Knowledge of youth about VCT and HIV/AIDS	13	0.715
Youth Attitudes towards VCT services	22	0.864
Availability of VCT services	13	0.735
Youth uptake of VCT services	9	0.814

Table 3.2 presents the results of reliability test for each of the variables including Knowledge of youth about VCT and HIV/AIDS, youth Attitudes towards VCT services, Availability of VCT services, and youth uptake of VCT services. It can be observed that all of the alpha values are more than 0.7.

3.9 Procedure of Data Collection

Upon approval of the proposal, an introductory letter from Uganda Management Institute was obtained that was presented to the contact person at NTIHC, the manager Research, Monitoring and Evaluation where the main objective and purpose of the study were explained. This helped the researcher to gain entrée. On acceptance of the request to do the study, the instruments were pretested, corrections were made and data collection followed.

Data collection was done by the use of pre-tested self administered questionnaire that was handed over to the respondents by two research assistants. The researcher will make key appointments pertaining to the data collection and the schedule was drawn on which dates should the data collection begin for the study. Together with the two research assistants, a plan was put in place to ensure that self administered questionnaires are distributed to respondents and collected for editing. During the data collection process, the researcher and the research assistants was giving out the self administered questionnaires, collecting and checking for unanswered questions.

After data collection, the raw data was analyzed and presented following the order of the research objectives, interpretation of data in qualitative form was based on subjective judgment. Frequency percentage tables were used to present and analyze data to generate frequencies and percentages for easy presentation of the study findings. Besides, frequencies, percentages with the help of SPSS were used to explain and describe the result of the study.

3.10 Data Analysis

Data analysis involved searching for explanations and meanings out of the gathered data in order to draw conclusions relating to the variables under study (Blaxter 1996). Data gathered was analyzed as follows;

3.10.1 Quantitative data analysis

Data analysis will start with cleaning of data by the principal researcher after data collection by the research and research assistants. The analysis will involve going through the questionnaire and correcting obvious errors, grouping of responses according to how they are related, checking for consistency, summarizing and categorizing responses using Statistical Package for Social Scientists (SPSS). Later, the SPSS data was exported to a master sheet using MS Excel 2003. To ensure that the data is entered correctly, questionnaires were also entered in SPSS and the questionnaire was kept for further verification.

Key areas of analysis and tables of statistical tabulation were outlined. Data was analyzed descriptively and analytically. Descriptive statistics such as frequencies and percentages provided summaries about the sample. Inferential statistics such as Pearson's chi-square test of independence was used to determine significance of factors associated with VCT uptake using SPSS Version 16.0 and EPI Info Version 3.3.2. Results for Pearson's chi-square test were considered statistically significant at $p \leq 0.05$. Quantitative data was analyzed using descriptive techniques, factor analysis, correlation analysis and regression analysis.

3.10.2 Qualitative Data Analysis

Qualitative data analysis refers to non-numerical analysis of information in a systematic way in order to come with useful conclusion and recommendations (Mugenda and Mugenda, 1999), the data collected was cleaned, sorted and edited to remove errors. While editing, questionnaires were scrutinized for errors, omissions and ambiguous classifications which is necessary to check for accuracy and uniformity in the answers from the respondents.

Content analysis for data was done manually. There was reading and re-reading of the transcript in search for similarities and differences in order to find themes and develop categories (Amin, 2005).

3.11 Measurements of variables

The Likert scale of measurement was used to measure data. This scale includes; strongly agree, agree, disagree and strongly disagree.

Scale	1	2	3	4
	Strongly disagree	Disagree	Agree	Strongly Agree

The researcher used frequencies and percentages to utilize the significance to determine the findings.

3.12 Limitations of the study

The study experienced various limitations as discussed below.

The characteristics of youth that accessed VCT services may not have been similar to those who did not, thus extrapolating the results to youth who did not seek VCT from the Naguru Teenage Centre may not be possible.

3.13 Ethical Considerations

There were a number of ethical issues to be addressed before and during this study. Each of these procedures is discussed below:

Informed Consent

Prior to interviewing the research participants, the researcher furnished each one of them with complete and accurate information regarding the purpose of the study and how the findings would be used. This information was given verbally as well as in a form of an informed consent letter which they could keep. Also included was the researcher and UMI contact details. The researcher will also verbally explain to respondents how they are chosen as research participants.

Voluntary participation

In this study, participants were assured that they were not compelled in any way to participate and that they could withdraw at any point during the interview for any reason whatsoever and that there would not be any negative consequences for withdrawing. In addition, they could refuse to answer any questions if they felt uncomfortable answering them.

Respondents were further informed that there were no rewards for participating in the study. Permission to record the interviews was also sought from participants, and it was emphasized that transcripts was kept safe in a locked and destroyed at the end of the study.

Confidentiality and anonymity

Each interview was conducted in a comfortable setting, behind closed doors. These places were vacant consulting rooms or quiet areas in the compound of NTIHC. Participants were informed that they did not have to reveal their names. In addition, all recorded interviews were safely locked away with only limited access. The transcribed interviews were however made available to the supervisor upon request.

Avoiding harm to respondents

Respondents can be harmed emotionally, psychologically or physically. Specifically emotional harm, is more common in studies on HIV, as some youth may feel that the issues raised by the interview questions relate to them. This study provoked such feelings, considering that their status is unknown. The researcher was thus careful in the way he phrases the questions.

Debriefing, counseling and additional information

Babbie (2007) noted that a researcher must provide debriefing to the research participants, during which they are provided with information regarding the true purpose of the research, particularly to counter possible negative effects of participating in a study. As one of the ways to meet this ethical requirement, the researcher made prior arrangements with the In-Charge of Kiswa Health Centre - that should a need for counselling arise, those needing it would be referred accordingly, to the counselors, respectively.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTEPRETATION OF FINDINGS

4.1 Introduction

This chapter presents analyses and interprets the results of the study. The purpose of the study was to explore the factors that influence youth aged 15 – 24 to take up VCT services in NTIHC. Furthermore, correlations between these factors and uptake of VCT services are done, the qualitative responses from key informants are also presented and interpreted to back up the quantitative interviews. The objectives of the study were:

1. To assess the extent to which knowledge of the youth influences uptake of VCT among youth in NTIHC
2. To examine the extent to which attitudes influence the uptake of VCT among youth in NTIHC
3. To investigate how the availability of services influence the uptake of VCT among youth in NTIHC

The researcher planned to have 169 respondents (as explained in chapter three of this dissertation) who eventually took part in the study.

4.2 Response Rate

The data obtained from the 169 questionnaires were presented, analyzed and discussed in this chapter. All the 169 youth between 15 and 24 years of age completed the self-administered questionnaires with the assistance of trained research assistants and NTIHC personnel.

Table 1: Illustrates the response rate

Respondents category	**Sample**	**Response rate**
Youths (15-24 years)	169	169
Key informants	8	8
Rate in percentage	100%	100%

From the table 1 above, it can be seen that the response rate for the youths (15-24 years) plus that of the key informants was 100%.

4.3 Demographic Characteristics of respondents

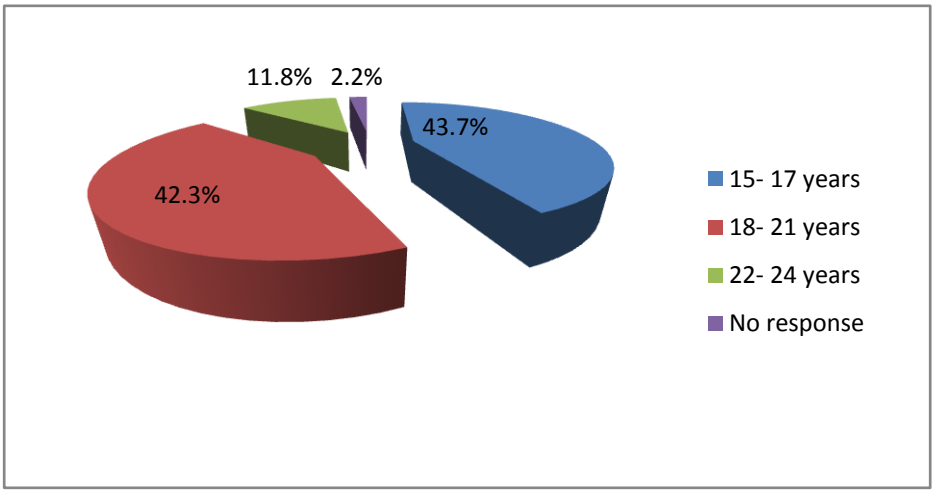
4.3.1 Distribution of Respondents by Sex

Table 2: Distribution of Respondents by Sex

Sex	Frequency	Percentage
Female	91	53.8
Male	78	46.2
Total	**169**	**100.0**

The study gave consideration to both female and male respondents because the centre serves both sexes. Females were 53.2% (n=91) constituting the biggest percentage compared to their male counterparts who were 46.2% (n=78) as indicated in table 2. This implied a higher attendance to NTIHC services and more willingness to participate in the study by females than males. In addition this was also evident that females are more affected by consequences of sexual behaviors and they seek such related services better than males (Biddlecom E tal, 2007).

Figure 2: Summarized age group distribution of youth



The ages of the respondents ranged from 15 to 24 years, the key population served by NTIHC. Figure 2 indicates the distribution of respondents by age. It was found out that of the total respondents, Majority 43.7% (n=74) of the respondents were aged between 15 and 17 years, 42.3% (n=71) were aged between 18 years and 21 years and 11.8% (n=20) were aged between 22–24 years. The mean age of the respondents was 19.5 years (male=20.5; female=19.9). Figure 2 also indicates a slight margin between youth aged 15 to 24 compared to those aged 18 to 21. Findings implied that youth aged 15 to 17 and 18 to 21 access VCT more compared to those of 22 to 24 years.

Table 3: Distribution of youth according to their education status

Education status	**Frequency**	**Percentage**
Presently in school	136	80.5
Out of school	33	19.5
Total	**169**	**100.0**

Results in table 3 above show that almost all study respondents had attended school to a certain level. However, the majority of the study respondents 80.5% (n=136) were still in school while only 19.5% (n=33) were not in school. The education levels of the respondents varied as indicated in Table 4 below. The above results may imply that VCT knowledge gained during the school going period may still be influencing these youth's access to VCT services.

Education status was anticipated to be a factor influencing access to VCT and this was confirmed by the results of the study as shown in Table 3. All youth who were interviewed (and had gone for VCT) were either in school or had attended school to a certain level. The implication here is that their knowledge may have increased as they attended school.

Table 4: Distribution of youth according to their education level

Education level	Frequency	Percentage
Secondary school education	97	57.4
University/ Tertiary Institution	40	23.7
Primary school education	10	5.9
Missing system	22	13
Total	**169**	**100.0**

Table 4 above shows that more than half of the respondents (57.5%;n=97) had secondary school qualifications, 23.7% (N=40) university or tertiary education while primary were 9% (n=10). These results support the findings of studies conducted in several countries which revealed that 69,0% of youth who had secondary and higher education, knew where to get tested compared to 38,0% and 20,0% of those who had primary education and no education respectively (UNICEF, UNAIDS & WHO 2002). This implies that educational levels influenced youth's decisions about and access to VCT services. Consequently, more youth who have never gone to school are missing an opportunity of accessing VCT information through the school

Table 5: Respondent distribution according to religion

Religion	Frequency	Percentage
Christian	115	68
Muslim	46	27.2
Other	4	2.4
Missing system	4	2.4
Total	**169**	**100.0**

Most of the youths were Christian (Roman Catholic, Anglican and Seventh Day Advents). This was represented by 68%. Muslims were well represented with 27.2% while other religions were 2.4%. Religion may influence the type of centers where youth seek VCT services although in the case of the current study, no significant relationship was found between religion and uptake of VCT

Table 6: Respondent distribution according to their marital status

Marital status	Frequency	Percentage
Single	152	89.9
Cohabiting	7	4.1
Married	5	3
Divorced / separated	3	1.8
Missing system	2	1.2
Total	**169**	**100.0**

Table 6 above shows that 89.9% of the respondents were single. These findings had been expected as most respondents were still in school as indicated in table 4 above. Only 4.1% were cohabiting while 3% were married. The implication here is that although most of the respondents were not married, they were involved in sexual activity that would have compelled them to access the services.

Table 7: Respondents distribution according to their occupations

Education level	Frequency	Percentage
Student	121	71.6
Dependant	20	11.8
Self-employed	18	10.7
Formal employment	10	5.9
Total	**169**	**100.0**

Most respondents 121 (71.6%) were students in various tertiary and secondary schools. Only 20 (11.8%) were dependants while 18 (10.7%) were self-employed, and 10 (5.9%) being in formal employment. This implies that more than a third of the respondents were therefore students and thus it helped the researcher get clearer responses as they could read and understand English.

4.4 The Extent to Which Knowledge of VCT among Youth Influences Uptake of VCT at NTIHC

In this study, it was hypothesized that knowledge of VCT among youth influences their uptake of VCT services. Information youth had with regard to VCT and the decision to go for HIV testing was one of the important areas of the study. In the following section the modes of HIV spread, knowledge of cure, knowledge of VCT are discussed. Also the views of youths based on VCT knowledge statements are presented. Finally the correlation coefficient and regression between knowledge of VCT and uptake of VCT services at NTIHC is presented and analyzed.

4.4.1 Modes of HIV Transmission

A wide range of modes of HIV transmission mentioned by youths were reported apart from the ones coded in the questionnaire. Among those; unprotected sexual intercourse with HIV positive individuals, sharing sharp materials with HIV positive individuals, infected mother-to-child transmission during delivery (MTCT), contaminated blood transmission or contact and breast feeding

Table 8: Distribution of responses according to knowledge of mode of HIV transmission

Modes of HIV transmission mentioned	**Frequency**	**Percentage**
Sexual intercourse with HIV positive individuals	86	50.9
Sharing sharp contaminated materials with HIV positive individuals	14	8.3
Contaminated blood transmission or contact	11	6.5
Infected mother-to-child transmission during delivery (MTCT)	9	5.3
Others	5	3
Knows three or more of the above	27	16
Missing system	17	10.1
Total	**169**	**100.0**

Table 8 above shows that out of the four modes of HIV transmission mentioned by respondents, 16% (n=27) correctly identified more than three modes of HIV transmission. However, half of the youth in the survey,

who were also the majority, knew that HIV was spread through sexual intercourse with HIV positive individuals (50.9%). This was followed by 8.3% who were aware that HIV was mainly spread through sharing sharp contaminated materials with HIV positive individuals, whereas 6.5% mentioned that HIV was spread through contaminated blood transmission or contact. Of the respondents only 5.3% were aware that HIV was spread to babies through infected mother-to-child transmission during delivery (MTCT).

Other modes mentioned by the youths included: breast feeding by an HIV infected mother and kissing an infected person.

Table 9: Distribution of responses on whether HIV infection can be cured

Response	**Frequency**	**Percentage**
No	128	75.7
Yes	23	13.6
Don't know	12	7.1
Missing system	6	3.6
Total	**169**	**100.0**

The majority of respondents (75.7%) knew that AIDS has no cure, 13.6% felt that HIV infection could be cured while 7.1% admitted that they did not know if HIV infection could be cured or not. This implies that knowing that HIV has no cure as indicated by majority of the respondents is one of the key reasons as to why youth get tested.

Table 10: Responses on whether respondents had ever heard of the acronym VCT

Response	**Frequency**	**Percentage**
Yes	72	42.6
No	80	47.3
Missing system	17	10.1
Total	**169**	**100.0**

Among the youths who participated in this study, 42.6% (n=72) of them had heard about the acronym VCT and 47.3% (n=80) were not familiar with the acronym VCT. However, generally the HIV knowledge was high among these youths with all interviewed admitting that they have heard about HIV. They were also familiar with the various modes of transmission. This implies that youth may not necessarily know the various approaches of testing but rather concentrates on getting tested and knowing their HIV status.

Most of the key informants agreed on lack of information to the public including youth about the various approaches of testing including VCT. Generally, what is known is that there is HIV testing whether voluntary or not. One key informant talked about it as follows:

> "What is known is that people get tested for HIV, youth in particular don't even care, for them they are interested in knowing their HIV status. This various approaches as voluntary counseling and testing for services seem less relevant to them"

This further implies that although majority youth had not heard of the acronym VCT, it did not mean that they had no knowledge about HIV testing in general. As indicated already above, youth had significant information on HIV testing in general regardless of the approach of HIV testing

4.4.2 Responses regarding youth level of knowledge of HIV/AIDS and VCT

Below is table showing a continum of responses that show the evel of agreement or disagreement with statements related to youth knowledge of HIV/AIDS and VCT.

Table 11: Responses on statements regarding youth knowledge of HIV/AIDS and VCT

Statements	SD	D	UD	A	SA	Missing response
HIV stands for Human Immunodeficiency Virus	12 (7.1%)	9 (5.3%)	2 (1.2%)	60 (35.5%)	77 (45.6%)	9 (5.3%)
HIV weakens the immune system	9 (5.3%)	7 (4.1%)	13 (7.7%)	53 (31.4%	81 (47.9%)	6 (3.6%)
HIV is not only cause of AIDS	62(36.7%)	29(17.2%)	13 (7.7%)	29 (17.2%)	25 (14.8%)	11 (6.5%)
HIV/AIDS is the disease for Uganda only	117(69.2%)	29(17.2%)	6(3.6%)	4(2.4%)	6(3.6%)	7 (4.1%)
HIV/AIDS is a disease of black people only	110(65.1%)	31(18.3%)	5(3%)	4(2.4%)	8(4.7%)	11(6.5%)
HIV/AIDS was discovered in the early 1980's	26 (14%)	14 (8.3%)	54 (32%)	42 (24.9%)	22 (13%)	11 (6.5%)
Youths (15-24) are not prone to HIV/AIDS yet	79 (46.7%)	35(20.7%)	23(13.6%)	10 (5.9%)	9 (5.3%)	13 (7.7%)
VCT stands for Voluntary Counseling and Testing	10 (5.9%)	5 (3%)	7 (4.1%)	58 (34.3%)	76 (45%)	13 (7.7%)
VCT services help inform youths about dangers of indulging in sexual activities	8 (4.7%)	6 (6.3%)	15 (8.9%)	79 (46.7%)	51 (30.2%)	10 (5.9%)
VCT should be used for the future generation to be HIV free	12 (7.1%)	15 (8.9%)	23(13.6%)	50 (29.6%)	58 (34.3%)	11 (6.5%)
We as youths do not have any control over the spread of HIV/AIDS thorough VCT	52 (30.8%)	45(26.6%)	17(10.1%)	28 (16.6%)	16 (9.5%)	11 (6.5%)
VCT for HIV is for every person	13 (7.7%)	12 (7.1%)	17	59 (34.9%)	61	7 (4.1%)

			(10.1%)		(36.1%)	
Youths are the group of people who need VCT most	16 (9.5%)	26 (15.4%)	11 (6.5%)	57 (33.7%)	51 (30.2%)	8 (4.7%)

NB: 1= Strongly Disagree (SD) 2= Disagree (D) 3= Undecided (UD)

4= Agree (A) 5= Strongly agree (SA)

Table 11 above shows that for the knowledge about HIV, majority of youth strongly agreed (45.6%) or agreed (35.5%) with the statement that"HIV stands for Human Immunodeficiency Virus". Majority of the respondents also strongly agreed (47.9%) or agreed (31.4%) with the statement "HIV weakens the immune system". on the statement whether "HIV is not the only cause of AIDS", most of the respondents either strongly disagreed (36.7%) or disagreed (17.2%). This formed 53.9% of the respondents who were in disagreement with the third statement.

Key informants pointed out that, knowledge about HIV gained or influence from the knowledge gained mark as among the reason for attending VCT services. This implies that knowledge seeking was said to be among of the reason to some youths attending the VCT services. Some youth attend VCT centers when seeking information on condom use and about HIV/AIDS in general. Besides them seeking information on condom use, counselors reported about few individuals who attend the services after encountering some problems when using condoms.

Moreover, other key informants said that some are attending VCT services as response to the information gained through HIV campaigns which are operating in communities. Counselors experience a big flow of clients who come for HIV testing and counseling as a response to HIV/AIDS campaigns. One counselor reported an outcome of the HIV/AIDS campaigns that they resulted in many youths seeking the VCT services:

"Sometimes uptake is associated with HIV information youths get through HIV/AIDS campaigns and they are motivated to come for HIV testing. For example here, we have a section which deals with Health Education, when they visit a certain place and conduct a seminar or HIV education to youths as well as to other people, they even tell them where they can access VCT services. By doing that, many youths are motivated and come for HIV testing" (VCT Male Counselor)

This may imply that the available VCT services in NTIHC cater for provision of adequate knowledge to youths about VCT services. This may motivate the youths to seek these services in large numbers thus affecting VCT uptake amongst youths.

The respondents were asked whether HIV/AIDS was a disease for Uganda only, majority seemed to show disagreement (strongly disagree-69.2%; disagree-17.2%). A similar result was observed in the fifth statement which inquired to understand knowledge of youth whether HIV/AIDS was a disease of black people only. In response, 65.1% disagreed, implying that they knew that HIV was a global phenomenon. On the other hand, 18.3% disagreed. Those who agreed with these statements were mainly known to be youth in lower age category with low levels of knowledge about HIV/AIDS.

The respondents seemed to be aware of their susceptiability as youth to HIV/AIDS. This arose from their strong disagreement with the statement that "Youths (15-24) are not prone to HIV/AIDS yet". Specifically, up to 46.7% strongly disagreed while 20.7% disagreed. To avoid misconceptions about HIV among youths, one key informant added that:

"Our main objective is to provide a forum for discussion on better understanding of HIV causes because of the misconceptions about it. We do also have trainings on HIV prevention methods, including the most at risk populations and also explore on stigma and discrimination…"

Statements related to youth's knowledge about VCT also had mixed responses although in general youths showed a considerably high level of knowledge. Close to half of the youth (45%) stronlgy agreed that "VCT

stands for Voluntary Counseling and Testing" followed by 34.3% who agreed with the same statement. On the other hand, 46.7% agreed and 30.2% strongly agreed that VCT services help inform youths about the dangers of indulging in sexual activities.

Another set of statements about VCT knowledge was on whether "VCT should be used for the future generation to be HIV free". In response, 34.3% strongly agreed and 29.6% agreed with the statement. However, 13.6% were undecided while a combined 16% were in disagreement. During the interviews, one of the key informants had this to say:

> "VCT is so vital to create a generation free of HIV, because it's not coerced testing and it fosters decision making as someone has to see the importance in the testing and it's that conviction that drives them to take an HIV test. With that conviction, it's easy for such a youth to mobilize even others to test".

This may imply that possession of knowledge alone may not necessarily mean that youths have made the decision to seek or use VCT services but also the choice of seeking is enhanced.

On whether VCT for HIV was for every person, 36.1% strongly agreed and 34.9% agreed with the statement while only 25 youths (14.8%) were in disagreement. Finally, the researcher posed a statement on whether Youths are the only group of people who need VCT, there were mixed reactions. However, a higher proportion of 30.2% strongly agreed, while 33.7% agreed. On the other hand, 15.4% disagreed, 9.5% strongly disagreed and 6.5% were undecided.

Table 12: Knowledge of specific places to seek VCT services

Places	**Frequency**	**Percentage**
VCT centres	111	65.7
Hospitals / health centre	41	24.3
Schools	3	1.8
churches	1	0.6

Other	5	3
VCT and hospitals	4	2.4
Don't know	4	2.4
Total	**169**	**100.0**

Several youth in the sample (65.7%), n=111 noted that they were aware that VCT centers were specific places for youth to seek VCT services. This was followed by 24.3% that reported in could be sought from hospitals r health centres. 1.8% reported that VCT could be sought in their schools, churches (0.6%) and 2.4% said both VCT centres and hospitals could provide this service. This implies that youths are aware of the existence of VCT centres and also aware that VCT services may be offered even in other places.

Table 13: Knowledge of implications of negative HIV test results

Response	**Frequency**	**Percentage**
True	75	44.4
False	70	41.4
Don't know	17	10.1
Missing response	7	4.1
Total	**169**	**100.0**

Most youth respondents (44.4%) indicated that they were aware that it was true to say that "when you test negative for HIV you would remain negative for the rest of your life despite any bad way of life". However, a closer proportion (41.4%) said this was false and thus showing awareness about responsible living through abstinence, use of condoms and being faithful. Up to 10.1% did not know and 4.1% never responded.

4.4.3 Correlation between youth knowledge of VCT services and uptake of VCT

The first hypothesis stated that *"Knowledge of the youth about HIV/AIDS and VCT has a significant relationship with uptake of VCT among youth".* Below is a Pearson Correlation table showing the relationship between the two variables.

Table 14: Pearson correlation between knowledge of VCT and Uptake of VCT by youths

Results of the Pearson Correlation analysis in table 14 below shows that, Pearson correlation coefficient is 0.204*, and the *p-value* for two-tailed test of significance is 0.000. This correlation is significant at the significance level of 5%. This figure 0.204, suggests that knowledge of HIV/AIDS and VCT influences Uptake of VCT, as originally stated in the research objectives of the study.

Correlations

		Knowledge	Uptake of VCT
Knowledge	Pearson Correlation	1	.204*
	Sig. (2-tailed)	.	.010
	N	163	157
Uptake of VCT	Pearson Correlation	.204*	1
	Sig. (2-tailed)	.010	.
	N	157	163

*. Correlation is significant at the 0.05 level (2-tailed).

Table 15: Results of Regression Analysis

Regression coefficient (B)	0.025
Standard error (SE)	0.003
t-value	8.224
Significance level (*p*)	0.000
Standardized Coefficient (β)	0.204
Adjusted R^2	0.217
F	67.640

Regression analysis was conducted with uptake of VCT as the dependent variable and youth knowledge of HIV/AIDS and VCT as the independent variable. The adjusted R^2 is 0.217 and F value is 67.640 ($p = 0.000$)

that reveals knowledge of HIV/AIDS and VCT variable has significantly explained the 21.7% of the variance in Uptake of VCT.

Regression coefficient (B) is 0.025(0.003) which is significantly different from zero (t = 8.224; p = 0.000) at the 1% significance level. Therefore, results of regression analysis support the first hypothesis. Thus null hypothesis is rejected and its alternative hypothesis that knowledge of HIV/AIDS and VCT is positively related to higher uptake of VCT is supported by my data from the findings.

4.5 Extent to Which Attitudes Influence the Uptake of VCT among Youth in NTIHC

The youth in the study were asked to give their opinion on a number of attitudes towards VCT- services.

Table 16: Distribution of responses on statements regarding youth positive attitudes of youth influencing uptake of VCT Services

	SD	**D**	**UD**	**A**	**SA**	**Missing response**
VCT encourages HIV preventive behaviors among youth	12(7.1%)	5(3.0%)	11 (6.5%)	67(39.6%)	69(40.8%)	5 (3%)
VCT services lower chances of HIV infection	10(5.9%)	20(11.8%)	8 (4.7%)	80(47.3%)	43(25.4%)	8 (4.7%)
VCT services make it possible to avoid transmitting HIV	15 (8.9%)	19(11.2%)	14 (8.3%)	75(44.4%)	38(22.5%)	8 (4.7%)
VCT services encourage positive living if one is infected with HIV	4 (2.4%)	5 (3%)	5 (3%)	81(47.9%)	56(33.1%)	18(10.7%)
VCT services result in a happy life if the HIV results are negative	13(7.7%)	6 (3.6%)	20(11.8%)	54 (32%)	70(41.4%)	6 (3.6%)
VCT services result in a happy life if the HIV results are positive	33(19.5%)	30(17.8%)	23(13.6%)	46(27.2%)	27 (16%)	10(5.9%)
VCT services help youth to plan	6(3.6%)	11 (6.5%)	14 (8.3%)	58(34.3%)	69(40.8%)	11(6.5%)

confidently for their future						
VCT facilitates youth in seeking therapy if HIV test results are positive	7(4.1.%)	17(10.1%)	31(18.3%)	63(37.3%)	42(24.9%)	9 (5.3%)
It is appropriate to have VCT anytime	13(7.7%)	16 (9.5%)	17(10.1%)	69(40.8%)	48(28.4%)	6 (3.6%)
Everybody who is sexually active need VCT services	9 (5.3%)	9 (5.3%)	12(7.1%)	54(32%)	75(44.4%)	10(5.9%)

NB: 1.Strongly Disagree (SD) 2. Disagree (D) 3.Undecided (UD) 4. Agree (A) 5.Strongly agree

Table 16 above shows that the first positive attitude that the youth strongly affirmed was that "VCT encourages HIV preventive behaviors among youth". In this regard, 40.8% strongly agreed, 39.6% agreed, 6.5% were undecided. Only 17 (10.1%) were in disagreement. On the second attitude whether VCT services lower chances of HIV infection, majority (47.3%) agreed while 25.4% strongly agreed.

The third statement inquired from youth whether VCT services make it possible to avoid transmitting HIV and in response, 44.4% agreed while 22.5% strongly agreed. Only 11.2% disagreed and 8.9% strongly disagreed with the statement.

The researcher also posed a question on whether VCT services encourage positive living if one is infected with HIV. Majority 47.9% agreed, 33.1% strongly agreed and only nine youth disagreed (representing 2.7%). One of the reasons for worry regarding contracting HIV infection, from the youths' perspective, is that HIV/AIDS is a deadly disease and has no cure, as such one has a short life span, and spouses can get infected with HIV from infected nurse partners.

When asked if VCT services result in a happy life if the HIV results are negative, the majority (41.4%) of the respondents indicated that they strongly agreed while 32% agreed. This implies that they were very much worried about contracting HIV infection.

Regarding youths' views about VCT services resulting in a happy life if the HIV results are positive, responses were skeptical as 19.5% strongly disagreed, 17.8% disagreed and 13.6% remained neutral. However, 27.2% and 16% agreed or strongly agreed respectively. This may imply that the views about disclosure of HIV status of students to the community and about the disclosure of their own HIV status to their colleagues respectively. In fact, most key informants indicated that the some youth who learn that they are infected with HIV should keep the fact/information private.

Asked whether VCT services help youth to plan confidently for their future, 40.8% strongly agreed and 34.3% agreed. And the next statement inquired whether VCT services facilitate youth in seeking therapy if HIV test results are positive. In response, 24.9% strongly agreed, 37.3% agreed while only 18.3% remained neutral.

In the final two statements about positives attitudes towards VCT, the researchers asked whether it was appropriate to have VCT anytime. In response to this 40.8% agreed, 28.4% strongly agreed and 10.1% remained neutral. Finally the researcher asked whether everybody who is sexually active need VCT services, and 44.4% strongly agreed whereas 32% agreed.

This implies that apart from negative attitudes, stigma (self-stigma) and discrimination from others in society may limit youth uptake of VCT services. They youth may fear to seek VCT services because other people perceive them to be promiscuous.

A counselor noted that:

"Some people…friends, peers, school mates, parents and relatives…may take advantage of discriminating this youth and this can affect his/her work, family life, social like and even academic performance at school" (Youth Counselor).

This implies that stigma goes beyond the individual to society and workplace or school, which may discourage youth in seeking VCT services.

The following are some of the excerpts of key informants about youths attitudes:

"Disclosing status to community helps one to live positively and cope with stigma since people will be able to give you care when you get sick. This can also lead as a good example that people should disclose their status." (Nursing officer)

This thus implies that youth should have a positive attitude towards VCT and the choices provided by the counselors to help them live positively in their day to day life. It also implies that youth can encourage other youths to seek VCT services.

Table 17: Distribution of responses on responses regarding youth negative attitudes of youth influencing uptake of VCT Services

Responses	SD	D	UD	A	SA	Missing response
I am afraid that if I sought VCT, my peers would discriminate against me if am HIV positive	46(27.2%)	52(30.8%)	29(17.2%)	24(14.2%)	13(7.7%)	5(3%)
I don't think it would be of any gain if I went for VCT	81(47.9%)	38(22.5%)	16 (9.5%)	15 (8.9%)	14(8.3%)	5 (3%)
It would bother me if someone I know sees me seeking VCT	61(36.1%)	51(30.2%)	22 (13%)	17(10.1%)	8 (4.7%)	10 (5.9%)
Youth who test HIV positive have only themselves to blame	56(33.1%)	49 (29%)	23(13.6%)	28(16.6%)	10(5.9%)	3 (1.8%)
One may die quickly if tested positive for HIV	81(47.9%)	48(28.4%)	13 (7.7%)	11 (6.5%)	12(7.1%)	4 (2.4%)
One may get unnecessary worries if he/she seeks for VCT services	39 (23.1%)	43(25.4%)	19(11.2%)	44 (26%)	18(10.7%)	6 (3.6%)
VCT services can lead to suicide if one finds out his positive status	34 (20.1%)	45 (26.6%	19(11.2%)	44 (26%)	17(10.1%)	10(5.9%)
One may be stigmatized if suspected of known to be HIV-infected	23 (13.6%)	30(17.8%)	31(18.3%)	51(30.2%)	24(14.2%)	10(5.9%)
Its not easy for youth to disclose their HIV positive test results	26(15.4%)	19(11.2%)	20(11.8%)	61(36.1%)	33(19.5%)	10(5.9%)
Only those suspected to be HIV positive need VCT services	71 (42%)	40(23.7%)	14 (8.3%)	17(10.1%)	19(11.2%)	8(4.7%)
High risk groups need VCT services	22 (13%)	12 (7.1%)	17(10.1%)	55(32.5%)	56(33.1%)	7 (4.1%)
Those to be married need VCT services	19(11.2%)	15 (8.9%)	8 (4.7%)	56(33.1%)	64(37.9%)	7 (4.1%)

NB: 1= Strongly Disagree (SD) 2= Disagree (D) 3= Undecided (UD) 4= Agree (A) 5= Strongly agree (SA)

Table 17 above shows that 27.2% and 30.8% strongly disagreed and disagreed respectively that "I am afraid that if I sought VCT services, my peers would discriminate against me if they found out that I am HIV positive: only 21.9% were in agreement with the statement. On the other hand it was said that anticipated consequences of being found positive would discourage HIV testing.

Among the negative consequences mentioned by key informants were: loss of hope leading to destructive behaviour, early death through worries, and sometimes suicide. One of the key informants noted that it is *a* common expression for youth to say "may be better not to know your status and you live longer.

The implication of this quote brings out the true thinking of youths regarding the impact of an HIV positive result after VCT. This has been a commonly held attitude by youths in Uganda and has been a major impediment to seeking of VCT services. It was also mentioned by some Key informants that once people are found positive they may decide not to "*die alone*" and may deliberately spread the HIV. Other negative consequences of VCT mentioned included stigma from society and rejection from friends, relatives, and sexual partners. In the individual interviews, people were asked the advantages and disadvantages of undertaking VCT.

On the second statement 81 youths out of 169 (represenging 47.9%) stronlgy disagreed with the statement that "I don't think it would be of any gain if I went for VCT". This shows that they knew the importance of VCT. More so, 22.5% disagreed.

Another negative attitude that was disregarded was that "It would bother me if someone I know sees me seeking VCT services". Here up to 36.1% strongly disagreed, 30.2% disagreed and 13% remained neutral. On whether most people who test HIV positive have only themselves to blame, 33.1% strongly disagreed, 29% disagreed and 13.6% remained neutral.

This implies that regarding positive living, it was said by some key informants that if one was found negative there is greater likelihood of adopting safer sexual practices or abstinence so as to jealously guard one's sero-negative status.

Another key informant said that some people after seeking VCT, become goodwill ambassadors in encouraging others to test and also protect themselves and others against infection.

The researcher went ahead to ask the youths whether one would die quickly if tested positive for HIV. In response, close to half of the sample (47.9%) strongly disagreed supported by 28.4% who disagreed. Only 13.6% felt that people with HIV can die quickly. Similalry, 23.1% stronlgy disagreed and 25.4% disagreed with the attitudinal statement that "One may get unnecessary worries if he/she seeks for VCT services". However an equal proportion 26% agreed and 10.7% strongly agreed with this statement. On the issue of seeking VCT services leading to suicidal thoughts, 26% agreed and 10.1% strongly agreed while 46.7% were in disagreement.

The responses on whether one may be stigmatized if suspected or known to be HIV-infected included 30.2% agreed, 14.2% strongly agreed and 18.3% were undecided. On the other hand, 17.8 and 13.6%; disagreed and strongly disagreed with the statement that respectively. During interviews, some important barriers and supports were identified that could encourage or discourage VCT for HIV. The most important of these were linked to access of VCT services through (reducing distance to VCT centres, providing free or subsidised services), increasing awareness, perceiving of personal risk, linking VCT with care (especially availability of Anti-retroviral); and improving quality of care especially in providing confidentiality in VCT centres. These issues are potential areas for remedial action as genuine improvements can be made in the majority of them. The issue of making anti-retroviral drugs more affordable deserves utmost attention as a measure to increase the number of people seeking VCT. In the individual interviews, it was noted that when youths were asked the disadvantages of undertaking VCT during counseling sessions, gender-based responses varied. The counselor gave a personal view that in most cases, it is said that female youths were more likely to mention

rejection whereas men were more likely to mention suicide. This implies that negative consequences of VCT mentioned included stigma from society and rejection from friends, relatives, and sexual partners.

Regarding youth's views about ease of disclosure of HIV positive test status 36.1% agreed, and 19.5% strongly agreed. 15.4% however strongly disagreed thus indicating that the youth who learns that he/she is infected with HIV should keep the fact/information private. Furthermore, 11.2% disagreed said that they would keep their HIV status information confidential. The following are some of the excerpts of respondents who expressed their views about sentiments that lead to disclosure:

> "I always counsel the youth that disclosing status to significant people helps one live positively and cope with stigma since people will be able to give you care when you get sick. This can also lead as a good example that people should disclose their status."

The above quote implies that youths need to adopt positive attitude towards disclosure as one of the perquisites for VCT counseling. This would help them live positively and encourage others.

The next statement was about whether "Only those suspected to be HIV positive need VCT services". In response, 42% strongly disagreed showing a favourable attitude, followed by 23.7% who disagreed with the statement. Only 21.3% were in agreement with this statement. The researcher learnt from the interviews that an important issue that could improve VCT is to encourage VCT before any AIDS related symptoms appear. Lay people need to understand that it takes a long time from infection with HIV to appearance of AIDS symptoms, and that most of the benefits of VCT accrue from early rather than late testing. Moreover, lay people need to understand that *"choice of partners carefully is very risky"*, and that indeed the only sure way of proving HIV infection is VCT. This could also increase the uptake of VCT for HIV.

The youths were asked whether "high risk groups needed VCT services. These high-risk or at-risk groups include pregnant women, prostitutes, truck drivers, bar maids, drug users among others. Most youth are in one way or another involved in these activities. Thus in response, 33.1% of the youth and 32.5% strongly

agreed or agreed respectively and only 34.4% disagreed with the statement. The challenge lies in defining risk. Yoder and Matinga (2004) established that people would not go for an HIV test if they think that they are not at risk; they do not want to be seen going to a VCT centre, to be suspected of having an HIV infection; and the fear of being told that they are HIV positive clearly keeps people from being tested.

Finally the last negative attitude tested was whether those to be married needed VCT services. Regarding this statement, 37.9% strongly agreed, 33.1% agreed and 20.1% were in disagreement. Norman and Gebre (2005) found out that youths, married persons, persons who had attended an HIV education forum, and those who knew someone with HIV/AIDS were more likely to report a previous HIV test, among University students in Jamaica.

From the above descriptive statistics, the researcher notes that a person's attitude towards attendance for VCT for HIV is a result of the consequences that a person expects from VCT for HIV. Social influence is as a result of social norms relevant to VCT for HIV, support from important others to attend or not attend for VCT, and whether important others attend or do not attend for VCT themselves.

4.5.1 Correlation between attitudes VCT services and uptake of VCT by youths

The second hypothesis stated that "There is a significant relationship between attitudes of youth and the uptake of VCT" Below is a Pearson Correlation table showing the relationship between the two variables

Table 18: Pearson correlation coefficient between attitudes VCT services and uptake of VCT by youths

In connection with hypothesis 2, Pearson Correlation analysis was conducted with Uptake of VCT as the dependant variable and attitudes towards VCT services as the independent variable. Correlation coefficient is 0.307** that is significant at the significance level of 1% . This number suggests that there is a strong positive relationship between attitudes towards VCT services and Uptake of VCT by the youths.

Correlations

		Attitudes	Uptake of VCT
Attitudes	Pearson Correlation	1	.307**
	Sig. (2-tailed)	.	.000
	N	159	155
uptake of VCT	Pearson Correlation	.307**	1
	Sig. (2-tailed)	.000	.
	N	155	163

**. Correlation is significant at the 0.01 level (2-tailed)

Table 19: Results of Regression Analysis

Regression coefficient (B)	0.099
Standard error (SE)	0.004
t-value	19.603
Significance level (*p*)	0.000
Standardized Coefficient (β)	0.307
Adjusted R^2	0.528
F	506.926

Results of regression analysis show that the adjusted R^2 is 0.528 and F =506.926 (p=0.000). These figures reveal that 52.8% of total variance in uptake of VCT is explained by positive or favorable attitudes towards VCT services variable. Regression coefficient (B) was 0.099(0.004) which was significantly different from zero (t = 19.603; p = 0.000) at 1% significance level. Thus, results of regression analysis support the second hypothesis. Thus null hypothesis is rejected and its alternative hypothesis that *"There is a significant relationship between attitudes of youth and the uptake of VCT"* is supported by my data set.

4.6 Influence of Availability of VCT Services on Uptake of VCT among Youth in NTIHC

Below are descriptive results, backed by qualitative findings and correlations to show the relationship between availability of VCT services and uptake of VCT among youth in NTIHC

Table 20: Distribution of responses on statements regarding avaiiablity of VCT services and its influence on youth uptake of VCT Services

Statements	SD	D	UD	A	SA	Missing response
I know where one can get an HIV test	13 (7.7%)	4 (2.4%)	5 (3%)	51(30.2%)	91 (53.8%)	5 (3%)
Long distances to the VCT service centre prevent youth from going for VCT	26(15.4%)	30(17.8%)	21(12.4%)	56(33.1%)	29 (17.2%)	7 (4.1%)
VCT centre has all facilities accessible	11 (6.5%)	26(15.4%)	28(16.6%)	57(33.7%)	42 (24.9%)	5 (3%)
There are few accessible VCT service centres near my home	22 (13%)	26(15.4%)	24(14.2%)	61(36.1%)	30 (17.8%)	6 (3.6%)
The centre provides confidentiality during VCT	11 (6.5%)	10 (5.9%)	19(11.2%)	64(37.9%)	57 (33.7%)	8 (4.7%)
This centre is accessible for youth to access VCT services	7 (4.1%)	6 (3.6%)	18(10.7%)	73(43.2%)	58 (34.3%)	7 (4.1%)
VCT services are free of charge	12(7.1%)	7 (4.1%)	23(13.6%)	41(24.3%)	78 (46.2%)	8 (4.7%)
Cost related to testing services are high	55(32.5%)	36(21.3%)	25(14.8%)	23(13.6%)	19 (11.2%)	11 (6.5%)
Youth cannot afford HIV treatment	55(32.5%)	34(20.1%)	16 (9.5%)	32(18.9%)	25 (14.8%)	7 (4.1%)
VCT service providers for are welcoming	7 (4.1%)	15 (8.9%)	17(10.1%)	65(38.5%)	58 (34.3%)	7 (4.1%)
VCT service providers are non-judgmental	14 (8.3%)	15 (8.9%)	33(19.5%)	47(27.8%)	51 (30.2%)	9 (5.3%)
VCT service providers provide information about HIV	9 (5.3%)	3 (1.8%)	7 (4.1%)	65(38.5%)	73 (43.2%)	12 (7.1%)
VCT service providers do referral to other places	15 (8.9%)	11 (6.5%)	43(25.4%)	49 (29%)	44 (26%)	7 (4.1%)

NB: 1= Strongly Disagree (SD) 2= Disagree (D) 3= Undecided (UD)

4= Agree (A) 5= Strongly agree (SA)

Table 20 above shows that 53.8% of the youths strongly agreed that they knew where to get HIV tests and 30.2% supported this by stating they agreed. Only 12.1% disagreed that they did not know where to get HIV tests? During qualitative interviews, key informants reported that availability of the treatment services in the VCT centers attracts them to look for the counseling and testing services.

The researcher learnt about youth's preference for STIs treatment at VCT, the counselors reported that VCT centers are limited from doing such activities (treatment), regardless of the fact that some of them are capable of doing that because many of them working in VCT centers are health providers from hospitals. A counselor's explanation to this was as follows:

> "In such situation you must advice the youth client and explain to them that it is important to go and see a Doctor for examinations which will lead into getting proper treatments. Counselors have limits; we cannot work on both duties at a time" (VCT Counselor)

This implies that apart from VCT for HIV/AIDS, youths also would like to get other services related to STIs including counseling, testing and free treatment. Moreover, youths were aware that AIDS has no cure and therefore the treatment provided in the VCT centers and in hospitals had to do with STIs treatment and opportunistic diseases.

Long distances were also blamed by the youth to be a major impediment to uptake of VCT services. According to their responses, 17.2% strongly agreed and 33.1% agreed that Long distances to the VCT service centre prevent youth from going for VCT. However this depends on the location of the VCT centre and homes of the youths. On the other hand, 17.8% denied this allegation by disagreeing while supported by 15.4% who strongly disagreed. It is worthy to note that being able to secure HIV test appointment immediately was reported by some youth who had travelled for a longer distance for the test. To gauge the quality of the service offered at the VCT various questions relating to the client satisfaction with the service, service accessibility to the client, convenience of the counselling room, privacy enjoyment and the time spent with the counsellor and the Counsellor's attitude towards the client were asked.

Regarding the level of respondent's satisfaction with the VCT centre's facilities and their access of VCT service they received, respondents 33.7% agreed, 24.9% strongly agreed. Regarding the accessibility and convenience of the service to the intended users, key informants were of the opinion that there is a need to adjust the current service delivery time whereby it is offered between 8 am and 5 pm, to allow easy access for working people during lunchtime, early evening and weekends, a sentiment echoed in the following statement by key informant in one VCT centre.

> "Our VCT service is offered even on weekends because there are some youth studying or working…Others would want to be served even after 5pm in the evening as this is the time they are available. But sometimes we need to ensure that the service is offered for as late as 6 pm and over the weekend. (Key informant)

The above quote implies that extension of working hours and flexibility could increase youth uptake of VCT services. Youth would therefore feel encouraged and have nothing to blame for their failure to seek a free service such as VCT at NTIHC.

The respondents were asked whether there were few accessible VCT service centres near my home. In response, 36.1% agreed, 17.8% strongly agreed. This may arise from the fact that youth would prefer youth-friendly services which include among others STD treatment. Respondents talked about the location of the VCT centers whereby various thoughts were aired. The idea of the VCT centers to be implemented near education institutions such as secondary schools and universities where many youth can easily access them was supported by many respondents. They also talked about youths who have limited access due to the cost involved during following up the services will be accommodated in such arrangements.

Another issue emerged from the field were key informants agreed that youth could be influencing each other to attend the services if VCT centers are within their easy reach. In contrary, some of the youths talked about their experience to the services which are being brought to their schools. They said that most of the students are more interested with the entertainments which are integrated in the VCT services during the process and not to the health information or testing which is a core purpose of bringing such services near them. Others

believed that the VCT centers could be in any place within the reach of clients and there is no need to treat them different from other health services.

Asked whether VCT services are free of charge, majority 70.5% admitted that they were free of charge. However, we cannot leave out that 11.2% who felt that they were charged. Additionally, the cost of transport to the VCT centre was also mentioned as impediment by key informants. The fact that some VCT centres were located far from the target population increased the cost of transport much more than the participants could afford. Even so, the fact that the Naguru Teenage VCT centre is located far from the where some youth come from, this may increase the cost of transport much more than the youth could afford. This may discourage them from seeking VCT services.

A follow up statement on cost was "Cost related to testing services are high". In response, 35.5% specifically disagreed that this was not true; supported by 21.3% who disagreed. Only 24.8% agreed with the statement. In fact key informants noted that reported that many youths would be willing to go for a test if the services were free or affordable

The researcher went ahead to ask the youth about their view on affordability of HIV treatment by the youth. In response, 32.5% disagreed that HIV treatment was affordable by the youth, and 20.1% disagreed with the statement. However, 18.9% and 14.8% agreed or strongly agreed with the statement that "Youth cannot afford HIV treatment". Furthermore, being able to benefit from timely access to treatment in the event of a positive HIV result as well as being able to live a positive lifestyle was also mentioned as motivational factors for VCT uptake.

This implies that regarding affordability of treatment, youths prefer being attended to in one site rather than being referred to hospitals for treatment or other services because their doubts were on the attitudes of the hospital workers to them as youth, if they attend with medical problems like STIs. To their experience, reported that staffs from hospitals and similar other centers are having negative attitude to youths who have STIs, blaming them involving in sexual intercourse at early ages.

In this case youths suggested to find all the important services confined in the VCT centers. Youth agreed on counselors having polite language to youths regardless young people behavior compared to most of health providers from most of the health facilities. Counselor supported youth feelings by saying:

> "I agree with what is being suggested by youths because if in all of the VCT centers will have the treatment component it will serve time, costs of following up the services and those blames whereby youths with STIs are judged with promiscuous behavior by some of the health staff in our health facilities would be reduced."
>
> (VCT female Counselor)

This implies that if someone could reach the decision to attend the VCT services which they consider as a hard decision to be attained by individual then they thought it could be better for such individual to be attended fully at the center of their choice instead of going from one point to another. On the above issue, a Counselor also cautioned by emphasizing that knowing one's HIV status assists in determining appropriate treatment, including timely initiation on ARVs. She reiterated:

> It is important to know your status; when you are sick, like you can go to hospital and say you have a headache and you have not tested. What happens is that HIV uses an existing illness that you have, so if you know your status you can get ARVs in time and get better.

This implies that knowing one's HIV/AIDS status enables early life planning and ensures that one is able to get ARVs to reverse the effects of HIV/AIDS and plan well for life. For people who test negative to HIV, participants mentioned that they can expect to get advice on family planning, safe sex, and more HIV education.

The last four statements about availability mainly focused on the service providers such as counselors and medical personnel. In the first statement, the majority of youths (38.5% agreed and 34.3% strongly agreed that the VCT service providers for were welcoming. In the second statement, youth were asked whether VCT service providers are non-judgmental and to this, 30.2% strongly agreed, 27.8% agreed; only 17.2%

disagreed. Those counselors who have been involved in providing mobile services agreed on such services to be of much help to people whom access to the permanent centers are not within their reach.

> "From my experience mobile services are very important especially to rural areas where access to VCT centres is limited. We attend many people and they appreciate our services because in most of the areas we visit there are no such services" (VCT female Counselor).

This implies that one of the mechanisms of providing VCT and increasing its uptake could be use of mobile VCT centres. This would ensure that many youths area covered, including those in hard-to-reach areas. When counselors were asked if youths attend those mobile services in rural areas, they acknowledged getting some youth who come for the services. They reported that mobile services are not special for youths, they attend others as well. Furthermore they talked about the experience gained from field work that most of the youths whom they attend are coming from far distances. Voluntary counseling and testing centers are generally few; however, those that are specifically offering services for young are even fewer according to respondents' knowledge about this.

In the other statement, youth noted that VCT service providers provide information about HIV to the youths and to this, a combined 81.7% agreed with the statement with only 7.1% disagreeing. Apparently young people seem to be interested in attending the VCT centers that provide them with the result of HIV testing on very same day they attend the centers. Other commented that, they would like to receive the HIV negative results. Also they were concerned with counselors who keep clients secrets they were more appreciated and liked most. They agreed that contrary to counselor's confidentiality keeping might lead to some not using the VCT services.

The above finding implies that there is need for additional spaces in the Counselling centre for other activities such as providing a supervised space where children can play to enable less interrupted counselling session and where clients are kept comfortable. Other activities may include youth-friendly centre where

youth activities can take place. This was noted in the following comment by a key informant at a VCT centre:

> VCT should be given a good plan whereby there is good flow of clients. Like you see here patients are mixed, sometimes others do not want to be seen coming for VCT. If there was that good planning it would be possible to put a reception, and a place where the clients waits comfortable with reading material and a television set. Youths may need additionally facilities.

The implication here is that training was perceived as an important aspect when offering a comprehensive package of VCT services in NTIHC. This training not only ensures that youth get VCT but also ensures that the services are of quality and can be relied upon.

Finally on whether VCT service providers do referral to other places 29% agreed, 26% strongly agreed and 25.4% remained neutral. Only 15% were in disagreement with the statement

Asked to give to give some of the areas that need to be improved to make the service both effective and efficient, supervision, opening times, good planning of the building where VCT service is to be located as well as good budgeting were mentioned.

> One thing that personally I think it is not done well is about supervision. It is started quite late. For me supervision is important. Counsellors can observe each other in practice so that if one person is failing the can correct each other. Supervision is one of the things I would insist on. It should be that if one does not go for supervision then they should not practice (Head of Counseling at NTIHC)

This implies that apart from providing counseling services, there is need for counselors to observe each others to see whether they are applying the required skills that can enable clients to understand them. This was an aspect lacking at the centre, which if not implemented could affect the level of uptake of VCT services by youths.

Furthering the discussion on the STIs treatment component, most of the health facilities charge their patients for the services and treatments provided. This was the youth's concern, and they talked about the treatment services being expensive in some of the hospitals to which they are referred, which was said to be hard to be attained by many youths. They also narrated that, some of youth attend in particular VCT centers, only after confirming that, other services such as STIs screening and treatment are also done at the same centers. Key Informants agreed that the VCT without treatment services acts as a limiting factor to some youths accessing the services.

In the training course counselors are told that they cannot provide test to below sixteen without parental consent but nothing is taught to them on how to do such counseling. Finally in the final statement about availability of VCT services, from their experience, youth viewed adult counselors as obstacles who impeded their access to VCT services. They asserted that counselors are just like their parents. In this case, youth argued that, how are they going to share their personal life with such counselors, as others might judge as unworthy and lacking of respect.

4.6.1 Correlation between availability of VCT services and Youth Uptake of VCT

The third hypothesis stated that *"*There is a significant relationship between the availability of services and uptake of VCT among youth*"* Below is a Pearson Correlation table showing the relationship between the two variables:

Table 21: Pearson correlation coefficient between availability of VCT services and youth uptake of VCT

Correlations

		Availability of VCT services	Uptake of VCT
Availability of VCT services	Pearson Correlation	1	.400**
	Sig. (2-tailed)	.	.000
	N	164	160
Uptake of VCT	Pearson Correlation	.400**	1
	Sig. (2-tailed)	.000	.
	N	160	163

**. Correlation is significant at the 0.01 level (2-tailed).

Table 21 above shows that in testing with hypothesis 3, the Pearson Correlation analysis was conducted with Uptake of VCT as the dependant variable and availability of VCT services as the independent variable. Results of the correlation analysis show that correlation coefficient between availability of VCT services and Uptake of VCT is 0.400**, and the *p- value* for two- tailed test of significance is 0.000 (see table 21). This figure suggests that there is a positive relationship between availability of VCT services and Uptake of VCT as expected.

Table 22: Results of Regression Analysis

Regression coefficient (B)	0.213
Standard error (SE)	0.004
t-value	3.468
Significance level (*p*)	0.001
Standardized Coefficient (β)	0.234
Adjusted R^2	0.083
F	39.025

Results of linear regression analysis show that the adjusted R^2 value is 0.083 and F value is 39.025 that is significant at p = 0.001. This reveals 8.3% of total variance in Uptake of VCT is explained by availability of VCT services variable (see table 22 above). Regression coefficient (B) was .213(0.004) which was significantly different from zero (t=3.468; p = 0.001) at the 1% significance level.

Therefore, results of regression analysis support the third hypothesis. Thus null hypothesis is rejected and its alternative hypothesis that "There is a significant relationship between the availability of services and uptake of VCT among youth" is supported by my research. This implies that availability of VCT services has a significant and positive relationship with uptake of VCT among youth, thus answering the first research question. During the interviews, Counselors said that, before asking such questions they assure clients on confidentiality over content of their discussion. Moreover, they reported telling clients beforehand that the questions about to be asked are personal and the reason for such inquiries.

The researcher observed that questions were usually asked in open -ended way in order to provide room for open and free discussion. Counselors and young people seemingly agreed on the fact that those who have not

been to the VCT are those with such worries that they just hear or they have been told by friends who have been to VCT services that there are such questions which could have variability on individualized interpretation of the information.

Counselors reported their experience they go through when counseling the youths. They come across some youth who do not reveal the true reason made them attend the VCT service; they do so when they feel it is important. Moreover, counselors gave reasons to some of the issues previously raised by youths. For example, youth brought forward their concern about time spent in the VCT centers. When counselors were asked about this, they accepted that it is true youth spend much of their time on the Naguru Teenage Centre premises. However, counselors said that there are reasons behind all these as follow: due to few counselors available in the sites, nature of the services, they use a lot of time with one client, including youths lack of patience when they come for the services.

Another counselor commented about youths' patience to time spent in the VCT premises.

> Many youth when they come here, they want to be attended to immediately. They do not have time to wait, sometimes you might be having a counseling session with another client then they knock the door and tell you they are leaving and would come another day, so you allow them to leave
>
> (Counselor)

The above quotation implies that there are some misunderstanding between the generations, youth and adults. These two groups of people have different life experiences and practices which may lead to some seeing others acting in a wrong way. This is because, the counselors' commented on youths' preferences specifically that, if their preferences would not be considered their freedom might be denied.

4.7 Measurements for Uptake of Voluntary Counseling and Testing among Youth

Below are findings on the scores that particular sub-variables under the uptake of VCT among youth. They are presented in table showing continum of agreements and disagrements and later some qualittive information is presented.

Table 23: Measurements for levels of uptake of VCT among youths

Statements	SD	D	UD	A	SA	Missing response
I am satisfied with the VCT services provided at this centre	8(4.7%)	13(7.7%)	16(9.5%)	60(35.5%)	67(39.6%)	5(3%)
I have benefited from the VCT services	7(4.1%)	7(4.1%)	14(8.3%)	69(40.8%)	67(39.6%)	5(3%)
My future life is affected by these VCT services	58(34.3%)	35(20.7%)	25(14.8%)	25(14.8%)	20(11.8%)	6(3.6%)
I will take into consideration recommendations given during VCT session	9(5.3%)	9(5.3%)	9(5.3%)	84(49.7%)	52(30.8%)	6(3.6%)
Am willing to spread HIV/AIDS messages to fellow youth	5(3%)	3(1.8%)	5(3%)	67(39.6%)	83(49.1%)	6(3.6%)
Youth come for VCT services at this centre in large numbers	10(5.9%)	169.5%)	18(10.7%)	55(32.5%)	62(36.7%)	8(4.7%)
I have encouraged my friends to seek VCT services	3(1.8%)	9(5.3%)	17(10.1%)	70(41.4%)	61(36.1%)	9(5.3%)
Am now aware about availability of VCT services at this centre	6(3.6%)	1(0.6%)	12(7.1%)	64(37.9%)	78(46.2%)	8(4.7%)
I intend to seek VCT services next time	7(4.1%)	7(4.1%)	11(6.5%)	59(34.9%)	77(45.6%)	8(4.7%)

NB: 1= Strongly Disagree (SD) 2= Disagree (D) 3= Undecided (UD)

4= Agree (A) 5= Strongly agree (SA)

Table 23 shows that most youths were satisfied with the VCT services provided at this centre (39.6% strongly agreed and 35.5% agreed). On whether they had benefitted from the VCT services, 40.8% agreed and 39.6% strongly agreed. Up to 34.3% strongly disagreed and 20.7% disagreed with the issue that their future life is affected by these VCT services. This means that they disregarded the VCT as a key aspect of their health and future. Only 26.6% were in agreement with the statement that *"My future life is affected by these VCT services".*Majority (30.8%) strongly agreed that they would take into consideration the

recommendations given to me during VCT session while 49.7% agreed. The youth showed that they were willing to spread the messages about HIV/AIDS to fellow youth (49.1% strongly agreed while 39.6% agreed).

On whether the youth would come for VCT services at this centre in large numbers, 36.7% strongly agreed and 32.5% agreed with the statement. Only 15.4% disagreed. On the issue of whether they would encourage their friends to seek VCT services, 41.4% agreed, 36.1% strongly agreed and only 10.1% remained neutral. Another measure of uptake was whether youths were aware about availability of VCT services at this centre. In response, 46.2% strongly agreed, 37.9% agreed and the rest 7.1% were undecided. Only 4.2% disagreed. The 45.6% strongly agreed while 34.9% agreed that they intended to seek for VCT services next time

The key informants said that an individual decision may determine someone using the services or not. Therefore, an issue of accessibility was not counted as a problem rather lack of an individual determination which acts as barrier to uptake of VCT services regardless how close such centers are from such individual.

4.7.1 Key informant Perceptions of what would promote youth uptake of VCT

The key informants provided their views about suggestions aimed at promoting the uptake of VCT among youth. Below is a table showing the quantified responses from the key informant interview guides:

Table 24: Key informants' Perception of what would promote VCT uptake

Suggestions	**Frequency (N=8)**	**Percentage**
Good counseling	7	87.5
Availability of medical care for STDs	6	75
Mobile VCT	5	62.5
Increased opening hours	4	50

Empathetic attitude from VCT workers staff	3	37.5
Advertisements targeting youths	3	37.5
More awareness	2	25
Training counselors	2	25

NB: Multiple responses were considered in the suggestions thus for each case, frequency is above 8 key informants.

Majority of the respondents (87.5%) noted that good counseling would help increase uptake of VCT services by adolescents in the teenage centre. This was followed by Availability of medical care for STDs (mentioned by 75%). 62.5% of key informants suggested the use of mobile VCT services in various areas of Uganda to target youth whereas 50% mentioned the need for increased opening hours.

Table 24 also shows that there were up to 37.5% of the respondents who thought empathetic attitude from health workers and community members would increase VCT uptake. Another 37.5% suggested the need for special Advertisements targeting youths. Finally 25% respectively suggested Training counselors and more awareness about VCT among youths.

Some key informants argued that there are no government efforts which are invested in implementing such services. This counselor who work in the center which is special for youths, talked about the available VCT centers special for youth that:

"According to my understanding, it is okay there are many centers offering such services to the youths but I don't know if they are special for youth's and if they have the same component of services like ours whereby we offer treatment for STIs, we provide family planning services, different games and theater performance for youths…and youth are much involved. I know that there is another center in Kampala City which is special for youths I have never heard of others. (VCT male Counselor)

This implies that a range of attractive services are given to the youths at the centre to keep them coming and referring their clients. It also implies that apart from availability of the VCT services, innovations should be

put in place to ensure that youths are interested. The issue of participation of youth is also vital as this can create ownership of various activities such as drama, music and dance.

Youths however had a different experiences from what had been claimed by counselors by saying to some of the centers do not give any services to clients who are below 16 years instead they are sent back home without getting any service. More clarification on age limit for the VCT services was given out by another counselor supporting what had been presented previously and contradicting the latter:

> That is why I am saying even if they come alone without their guardians or parents we give them the counseling and we never send them home without giving them any services. You cannot do the blood test to him/her because he/she might fail to receive the results and what will you do, therefore even to us we follow the government policy that testing is from the age of 16 and above (VCT Counselor)

The above quotation implies that government policy on the age of consent for HIV/AIDS test has been a major challenge to VCT service providers. It is one of the factors that inhibit youth from coming for VCT at various centres.

CHAPTER FIVE

SUMMARY, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the study, discusses the findings, draws conclusions and proposes recommendations on policy and future research whilst cross referencing and giving the researcher's opinion on the findings.

5.2 Summary of Findings

Knowledge about HIV/AIDS and Uptake of VCT among Youth

The results of the correlation analysis show that, Pearson correlation coefficient is 0.204*, and the *p-value* for two-tailed test of significance is 0.000. This correlation is significant at the significance level of 5%. This figure 0.204, suggests that there is a positive relationship between knowledge of HIV/AIDS and VCT and Uptake of VCT as originally stated in this study.

The hypothesis is rejected and its alternative hypothesis that knowledge of HIV/AIDS and VCT is positively related to higher Uptake of VCT is supported by my data from the findings. This knowledge of HIV/AIDS and VCT has also been found useful in shedding light on sexual as well as health seeking behavior of youths. This may also imply that HIV and VCT knowledge gained during the school going period, at home, health facilities, peers or media may still be influencing these young people's access to VCT services

Youth' Attitude towards VCT and HIV/AIDS and Uptake of VCT services

The distribution of responses on statements regarding youth positive attitudes of youth influencing uptake of VCT Services, show that most youth agreed that "VCT encourages HIV preventive behaviors among youth (40.8% strongly agreed, 39.6% agreed, 6.5% were undecided). Asked whether VCT services lower chances of HIV infection, majority (47.3%) agreed while 25.4% strongly agreed; on the other hand, 44.4% agreed while 22.5% strongly agreed VCT services make it possible to avoid transmitting HIV. Majority 47.9% agreed, 33.1% strongly agreed VCT services encourage positive living if one is infected with HIV; 41.4% strongly agreed while 32% agreed that VCT services result in a happy life if the HIV results are negative. up

to 40.8% strongly agreed and 34.3% agreed that VCT services help youth to plan confidently for their future. Finally the findings show that most youth (44.4% strongly agreed and 32% agreed that everybody who is sexually active need VCT services.

On the selected negative attitudes, there were informative responses as 27.2% and 30.8% strongly disagreed and disagreed respectively that they were afraid that if I sought VCT services, my peers would discriminate against me if they found out that I am HIV positive. Up to 47.9% strongly disagreed supported by 28.4% who disagreed with the statement that one would die quickly if tested positive for HIV.

The second null hypothesis was rejected and alternative accepted. This is because the results of regression analysis support the second hypothesis. That *"There is a significant relationship between attitudes of youth and the uptake of VCT"* was supported by the findings. Youth in Naguru Teenage Centre also have a positive attitude towards VCT services as the majority of them went for HIV testing and are aware of VCT services. However, stigma and discrimination still exists as some respondents mentioned that they would not sleep and use same utensils as those who are HIV positive

Availability of VCT services and Uptake of VCT by Youth

Findings on availability of VCT services and its effect on VCT uptake among youth showed diverse responses on statements provided in the questionnaire. Firstly, 53.8% of the youths strongly agreed that they knew where to get HIV tests and 30.2% supported this by stating they agreed. Long distances were also blamed by the youth to be a major impediment to uptake of VCT services. According to their responses, 17.2% strongly agreed and 33.1% agreed that Long distances to the VCT service centre prevent youth from going for VCT. The last four statements about availability mainly focused on the service providers such as counselors and medical personnel. In the first statement, the majority of youths (38.5% agreed and 34.3% strongly agreed that the VCT service providers were welcoming. In the second statement, youth were asked whether VCT service providers are non-judgmental and to this, 30.2% strongly agreed, 27.8% agreed; only

17.2% disagreed. Various authors have focused on this single factor of provider skills and how it affects uptake of VCT by youths.

Finally, the third null hypothesis is rejected and alternative hypothesis is accepted. This is supported by the results of regression analysis. Thus null hypothesis is rejected and its alternative hypothesis that "There is a significant relationship between the availability of services and uptake of VCT among youth" is supported by the findings. Youths identified some barriers that they felt prevented them from accessing VCT services. These barriers included poor access of VCT services due to distance, lack of VCT services in the schools, lack of youth involvement in VCT services, cost of VCT services and the untrained personnel within the VCT services.

5.3 Discussion of Findings

Discussion of Knowledge about HIV/AIDS and Uptake of VCT among Youth

The first objective of the study was to assess the extent to which knowledge of the youth influence the uptake of VCT among youth attending services of NTIHC. Data analysis and interpretation of interview and questionnaire responses from the youth and key informants suggests that knowledge of the youth influence the Uptake of VCT as originally stated in this study. The findings indicate that knowledge about HIV/AIDS positively influence youth to take up VCT services. The hypothesis that knowledge of HIV/AIDS and VCT influences the uptake of VCT is supported by this research and thus upheld. Knowledge of HIV/AIDS and VCT has also been found useful in shedding light on sexual as well as health seeking behavior of youths. This implies that HIV and VCT knowledge gained during the school going period, at home, health facilities, peers or media influences youth's access to VCT services. This high level of knowledge about HIV and AIDS among adolescents is confirmed by findings of earlier studies conducted in the early 2000s. A study conducted by loveLife (2006) in South Africa revealed that knowledge about HIV prevention and transmission among youths aged 15 to 24 was high at 95%. The same was upheld by studies that were conducted by Pettifor *et al* (2005) and Mwale (2008).

The findings of this study, like those of other studies cited in the literature reviewed in Chapter 2 and mentioned below, indicate that adolescents possess extensive knowledge about VCT, what it is, what it entails as well as what its benefits are. Participants in this study, like those who participated in a study by MacPhail *et al* (2008) acknowledged the role played by VCT in preventing the spread of HIV, facilitating timely access to antiretroviral treatment as well as enabling people living with HIV an opportunity to live positively, thereby prolonging their lives.

Findings show that several youth were aware that VCT centres were specific places for youth to seek VCT services. This is in agreement with an earlier study by Mphaya (2006) that acknowledged that through VCT they could make decisions to protect themselves and their partners from HIV infection. Earlier studies done by Dirar, Mengiste, Kedir & Godana (2013) identified that there were differences in VCT uptake between female and male youth as witnessed in this study where less number of males utilized VCT compared to females. However,this research is not consistent with a study done among Nairobi undergraduate students by Zenebu (2005) in which the odds of HIV testing among rural is more compared to urban areas.

Finally, despite the influence that knowledge has on uptake of VCT, there is need to understand where this knowledge comes from. In a study conducted by Dirar et al (2013), all respondents had heard about VCT service. They went ahead to show that 57.1% had heard it from mass media. The most common benefit of VCT mentioned was to know HIV sero-status (90.1%) and that majority (96.8%) were willing to take HIV test whether they have or not in the past.

The study findings also show that youth are well informed about the methods of preventing HIV infection. However, a knowledge gap was identified among a significant number of respondents, where 33% (n=123) knew one or two methods of HIV infection. This may prevent youth from making a well-informed analysis of their situation and prevent them from finding ways out of exploitative situations. Thus, improving youth' knowledge on HIV transmission prevention methods has particular importance.

Respondents of this study knew some of the uses mentioned in the VCT toolkit. The VCT toolkit is an information box designed as an educational tool. The VCT toolkit categorizes the benefits of knowing VCT at two levels: individual and community. At the individual level, knowledge of VCT creates a more realistic self-perception of a client's vulnerability to HIV, promotes or maintains behaviors to prevent acquisition or further transmission of HIV, alleviates anxiety, and facilitates understanding and coping, facilitates prevention of mother-to-child transmission of HIV, helps client to plan and make information choices for future and leads to early referral to specific clinical care, treatment and support (USAID 2004). At community level, VCT creates peer educators; mobilizes support for appropriate responses; reduces denial, stigma and discrimination; and normalizes HIV and AIDS because of a clear and open communication (USAID 2004). Thus, public health officials and other concerned bodies should work to make students more knowledgeable about VCT.

Discussion on Youth' Attitude towards VCT and HIV/AIDS and Uptake of VCT services

Objective two of the study was to examine the extent to which youth attitudes influence the uptake of VCT among youth in NTIHC. Data analysis and interpretation responses from the youth and key informants suggest a relationship between attitudes and uptake of VCT among youth. Most youth agreed that "VCT encourages HIV preventive behaviors among youth and that VCT services lower the chances of HIV infection. Some other reasons cited by young people for not going for VCT include fear of being HIV positive, fear of losing a relationship, lack of confidentiality, not being sexually active, using condoms consistently (Munthali et al 2004). Middelkoop et al (2006)'s study established the effect of awareness of VCT and actual VCT uptake, using drama among youth in poor and peri-urban settings in South Africa.

In another related study, Mgosha et al (2009) in Tanzania found out that a considerable amount of respondents had favorable attitude towards VCT and total prevalence of uptake of VCT by youth students in different colleges is at 52.8%. In their study the following factors were associated with increased uptake of VCT: those ever had sex, had boy/girl friend, had sex with partner, willing to pay for VCT service, know

person living with HIV/AIDS, have colleague utilized VCT, have promoted VCT for others, discussed with family on HIV/AIDS.

Findings showed that most youth strongly agreed VCT services encourage positive living if one is infected with HIV; while majority strongly agreed and 34.3% agreed that VCT services help youth to plan confidently for their future. In similar findings, the attitudes that motivate for VCT as mentioned above were also identified in other earlier studies, such as ones conducted by Francis (2010); MacPhail et al (2008) and those cited by Mphaya (2006). These studies found that support from family, opportunity to live positively and the need to protect unborn babies played a major role in decisions to actively seek VCT. However, participants in the earlier studies (cited above) did not mention marriage as a motivation factor for VCT uptake.

On the other hand, findings show that that everybody who is sexually active need VCT services. In general it can be said that positive attitudes got high ranking and favourable responses among youths. Other studies have shown that potential benefits of VCT are alleviation of anxiety, increased awareness of vulnerability to HIV, promotion of behaviour change, facilitation of early referral for care and support and assistance in reducing stigma in the community through education (Baggaley & Boswell 2002). In the researcher's view, for those who are HIV-infected, there are also benefits because knowledge of their status allows them to take action, to protect their sexual partners, to access treatment, and to plan for their future.

A cross-section of studies done in Uganda and elsewhere have shown that most respondents in this study attended HCT without their sexual partners and disclosed their results only when they were HIV negative (Mugyenyi, 2008).. Other attitudes presented were that many youths live in denial, or fail to disclose their HIV/AIDS status in order to protect their families from social condemnation (Kalichman & Simbayi, 2003).

On the selected negative attitudes, findings shows that some youths were afraid that if they sought VCT services, their peers would discriminate against me if they found out that I am HIV positiveStudies have showed that positive attitudes such as expectation of support from family members was regarded as

important, as adolescents said they would disclose to those family members who were supportive (MacPhail, Pettifor, Coats & Rees 2008). Mgosha et al (2009) the following factors were recognized as barriers of VCT uptake, which includes: worries about confidentiality and fears that results would be shared with parents or partners without their consent, inaccurate risk perception, fear of being labeled and stigmatized by their families and communities expressed as the major reason. Volkwyn (2010) also found that although knowledge about HIV/AIDS was "moderately high" among the participants, it did not lead to actual behavior modification. In addition, he said that this knowledge did not result in improved (i.e. more positive) attitudes towards people living with HIV/AIDS. Njagi and Maharaj (2006) also found that fear of stigma, lack of support from significant others as well as fear of a positive HIV result were barriers to VCT uptake. In addition, having engaged in risky, behavior was also mentioned as one of the reasons why adolescents would seek VCT. Similar finding were made by Jaspan *et al* (2010).

From the above descriptive statistics, it's noted that a person's attitude towards attendance for VCT for HIV is a result of the consequences that a person expects from VCT for HIV. Social influence is as a result of social norms relevant to VCT for HIV, support from important others to attend or not attend for VCT, and whether important others attend or do not attend for VCT themselves. Self-efficacy expectations can be seen as a person's belief of case to attend for VCT and the ability to cope with barriers that may hinder actual attendance.

Findings for hypothesis 2 suggest that there is a strong positive relationship between attitudes towards VCT services and Uptake of VCT by the youths. FHI, (2008) found out that most youths think all those who go for VCT are HIV positive and are probably already sick from HIV/AIDS related opportunistic infections. This is because most of the people who have gone for VCT have been those who have already started showing symptoms. In other studies like Frances (2010), the negative attitudes that were mentioned as barriers to VCT uptake by participants of this study were fear of a positive HIV result and fear of stigmatization by family

and community (neighbors). These barriers were also mentioned in a debate in by adolescents in Shisana (2009).

Contrary to the study findings, Wodi (2005) found that despite high levels of knowledge (93%) of HIV/AIDS, there was no accompanying behavior change or an attempt to prevent HIV infection by study respondents (youths).

Counselling was also mentioned as being important to HIV testing. The counseling process includes evaluating personal risk of HIV transmission and discussing how to prevent infection (USAID/Family Health International 2004). HIV counseling plays two important roles: preventing HIV infection by promoting behavior change and providing psychosocial support to people infected and affected by HIV (USAID/Family Health International 2004). Most respondents provided good reasons for the need for counseling, because hearing the test results can be emotionally challenging.

Having to deliver HIV positive results is especially demanding in situations where support is inadequate and clients may be vulnerable to discrimination (USAID/Family Health International

2004). Those respondents who said counseling was not important for HIV testing did not mention their reasons, indicating a need for education about the importance of counseling along with HIV testing

Yet another important behavioral skill necessary for VCT uptake is the ability to negotiate VCT with a partner. In this study, although there was an emphasis of testing as a couple, especially when planning to get married, male participants were not confident that they would be able to enforce VCT to their partners or even end a relationship in case the partners refused to test. On the contrary, female participants emphasized that they could not only influence their partners to test, but would actually end the relationship if the partner refused to test. In addition, female adolescents were more likely to seek VCT and enforce condom use.

Discussion of Relationship between Availability of VCT services and Uptake of VCT by Youth

The third objective of the study was to investigate how the availability of services influences the uptake of VCT among youth in NTIHC. Findings suggest that the availability of VCT services influence the uptake of

VCT services. It further indicates the diverse responses on statements provided in the questionnaire. Firstly, 53.8% of the youths strongly agreed that they knew where to get HIV tests and 30.2% supported this by stating they agreed. To supplement on this, qualitative interviews revealed that availability of the treatment services in the VCT centers attracts them to look for the counseling and testing services. Other findings from previous studies show that respondents were aware of the importance of being tested for HIV for all persons, whether they tested negative or positive.VCT offers benefits to those who test positive or negative (Baggaley & Boswell 2002). Yet some respondents believed it was of value only if one was HIV positive. They also feared being identified at a VCT centre whether near home or far away.

Most youth (70.5%) admitted that they were free of charge agreed or strongly agreed that VCT services are free of charge. The researcher went ahead to ask the youth about their view on affordability of HIV treatment by the youth. Also regarding affordability of treatment, youths prefer being attended in one site rather than being referred to hospitals for treatment or other services because their doubts were on the attitudes of the hospital workers to them as youth, if they attend with medical problems like STIs. To their experience, reported that staffs from hospitals and similar other centers are having negative attitude to youths who have STIs, blaming them involving in sexual intercourse at early ages.

In relation to the above findings about VCT service provider skills, it can be argued that poor service delivery, on the other hand in the form of limited operating hours, lack of training among staff and shortage of manpower have been documented as some of the factors limiting VCT uptake. A study by Jaspan *et al* (2008) showed that youths mentioned specific elements which they thought would make a VCT centre youth-friendly. These included “warm and friendly staff and waiting rooms” as well as having their peers as counsellors. Insufficient time for counseling patients and workload has been identified as factors that influence VCT uptake (Sanjana *et al.*, 2009).

Finally on whether VCT service providers do referral to other places 29% agreed, 26% strongly agreed and 25.4% remained neutral. Only 15% were in disagreement with the statement. However, contrary to this,

Glick, (2004) found out that the uptake of VCT in youth is still very low and also the issues of VCT are always bundled among other sexual reproductive health issues and treated as a whole thus a need to look at VCT alone as a component.

Results from the analysis suggests that there is a positive relationship between availability of VCT services and Uptake of VCT as expected. This is supported by findings of UNAIDS & WHO (2011) that availability of a youth centre might motivate more young people to go for VCT and greater efforts are required to make more of these services available throughout the country.

In another study, Boswell and Baggaley (2002) indicated the following barriers to VCT for young people, lack of availability and acceptability of VCT services, long waiting times and high cost and pressure by health staff to notify partners. They noted that if these aspects were well provided, then uptake would increase for VCT services for the youths. Other authors have got similar results. Similar to the current findings, availability and affordability of the VCT services have been documented as a factor that promote uptake of VCT (USAID, 2000). Studies done in Africa showed a drastic increase in demand for VCT services when they were made accessible and affordable for those people who want to know their own HIV status (USAID, 2000).

Another related study was in Zambia, which indicated that VCT uptake by youth was constrained by limited number of VCT facilities in rural areas (CSO-Zambia, 2005). NAC (2008) indicates that 1,028 centres are offering VCT services with majority of these sites being situated in urban areas. Cost of VCT services have been documented to have an effect on uptake and acceptability especially by young people (Boswell & Baggaley, 2002).

5.4 Conclusions

There was adequate knowledge on most aspects of VCT and HIV/AIDS by the youth. This knowledge also had a significant relationship with youth uptake of VCT. It is thus concluded that the study could inform

improvements to VCT services offered. It may also ultimately help HIV/AIDS service providers to better combat the significant challenges posed in terms of imparting the right knowledge about VCT and HIV/AIDS among youths. This could create significant improvements in VCT uptake among youth.

Attitudinal related social determinants were not barriers for VCT uptake among youth. In fact, positive attitudes were significantly related to uptake of VCT. Thus, it can be seen that strategies to empower HIV/AIDS service providers on youth attitude-related challenges and programs targeted at changing negative attitude on VCT use can enhance intention of health professionals to use VCT.

Finally it is concluded that availability of VCT services affects youth uptake of these services. In conclusion, there is the need for a comprehensive provision of re-packaged VCT services to motivate more youth to seek VCT including mobile VCT testing and outreaches to rural areas. This can be a good strategy to help normalize HIV/AIDS, thereby reducing the stigma attached to the infection. It is also important to note that ensuring availability of linked VCT services that are easily accessible, youth-friendly and close to the youth can improve uptake of these services.

5.5 Recommendations

Based on the findings of this study, the researcher recommends that the following should be considered in policy formulation and program development and implementation. Improvements in the access to VCT services by youth in Uganda, based on the research results, might be enhanced if the following recommendations were implemented. It is recommended that:

Knowledge about HIV/AIDS and Uptake of VCT among Youth

To increase the level of knowledge about VCT, I recommend promotion of VCT through sound and viable information and counseling interventions by involving mass media and parents. Health institutions and service providers also need to provide voluntary VCT services during extra working days and hours. Youth

friendly VCT services have to be expanded and the existing facilities need to be strengthened to address the need of youth in the rural areas. Furthermore, VCT should be provided to youth through various media with special focus on the use of peer educators, youth radio programmes and schools as important sources of information.

Youth' Attitude towards VCT and HIV/AIDS and Uptake of VCT services

In order to deal with attitude towards VCT services, HIV/AIDS awareness activities should be sustained and should address stigma and negative attitudes such as promiscuity that are associated with HIV/AIDS. This should be done by all health promoters working in the area of HIV/AIDS counseling and testing and care in Uganda. In the same respect, VCT education should focus on avoiding stigmatizing and discriminatory behaviour, so that youths develop positive attitudes towards having the tests and people living with HIV and AIDS.

Availability of VCT services and Uptake of VCT by Youth

Regarding availability of VCT services, Mobile VCT could help tap clients who are unable to travel to the VCT centres. Therefore mobile VCT should also be scaled up in different areas to increase VCT uptake among youths. This should be done by HIV/AIDS service providers with support of government health service providers. Youth should also be provided with VCT services at their schools, with trained peer educators to increase access to the same service for the school age population. More so, regarding availability of VCT services, Government should ensure that all the public health facilities are providing VCT services and also provide support to mission and private hospitals to be able to provide VCT services. This support could be in the form of training, provision of HIV test kits and related supplies and technical support. This would ensure that VCT services are widely available for youth to access and utilize.

5.6 Recommendations for Further Studies

The findings of this study suggest that future researchers could investigate the following:

1. Replication of this study in other geographic areas because rural areas were not covered in the current study as the study was urban-based.

2. Duplication of the same study targeting youth who had never gone to school because the youth covered were mainly educated and currently in school.
3. Qualitative research should be conducted to determine youth's lived experiences of utilizing VCT services in Uganda. This is because
4. Investigate the perceptions of youth towards accessing VCT services from health facility versus youth centres and mobile services. This is because this factor was not fully explored in the current study.

REFERENCES

Ajzen, I & Fishbein, M. (2000). *Attitudes and the attitude-behavior relation: Reasoned and automatic processes.* New York: John Wiley & Sons.

Ajzen, I. (1985). From Intentions to actions: A theory of planned behaviour. In J. Kuhl & J. Beckman (Eds.), *Action-control: From cognition to behaviour* (pp. 11-39). Haidelberg: Springer.

Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes. Reading, MA: Addison-Wesley

Ajzen, I. (1991). The Theory of Planned Behaviour. *Organisational Behaviour and Human Decision Processes, 50,* 179-211.

Ajzen, I. (1998). Models of human Social behaviour and their application to health psychology. *Psychology and Health, 13,* 735-739.

Ajzen, I. (2001). Nature and operation of attitudes: Annual Review of Psychology. Reading, MA: Addison-Wesley

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behaviour.* EnglewoodCliffs: NJ: Prentice-Hall.

Ajzen, I., & Madden, T. J. (1986). Prediction of goal directed behaviour: attitudes, intentions and perceived control. *Journal of Experimental Social Psychology, 22,* 453-474.

Akhiwu P. 2012 Factors affecting the utilisation of voluntary counselling and testing (VCT) services for HIV/AIDS in Sowa, Botswana. *URI:http//hdl.handle.net/10539/10997*

Albarracin, D., E tal (2001). Theories of reasoned action and planned behavior as models of condom use: A meta-analysis. *Psychological Bulletin, 127,* 142-161. 44

Amin E, M. (2005). *Social Science Research, Conception, Methodology & Analysis.* Kampala: Makerere University Printery.

Amuyunzu-Myamongo, Etal. (2005). *Qualitative evidence on adolescents' views of sexual and reproductive health in Sub Saharan Africa:* Occasional report no.16. New York: The Alan Guttmacher Institute

Anderson, KG, Beutel, AM, Maughan-Brown, B. 2007. *HIV Risk Perceptions and First Sexual Intercourse among Youth in Cape Town. South Africa. International Family Planning Perspectives. 33(3):98-105*

Anthony M, Dinah W, Philomena N, Ngugi M, Haniel N, Amos N, Njagi I. 2012. Sources of VCT information and reasons for use and non use of VCT services by young people in selected rural locations in Kenya.*International journal of social sciences tomorrow:Vol 1, Num 2: 1-8*

Babbie, E. 2001. *The practice of social research*. 9th edition. Belmont:Wordsworth.

Baggaley, R. (2001). The impact of voluntary counseling and testing: a global review of the benefits and challenges. Geneva: UNAIDS.

Bandura, A. (1982). Self-efficacy Mechanism in Human Agency. *American Psychologist, 37*, 122 - 147.

Biddlecom. A.E Et al. (2007). Protecting the Next Generation in Sub-Saharan Africa: Learning from Adolescents to prevent HIV and Unintended Pregnancy, New York: Guttmacher Institute.

Blaxter, Et al. (1996). How to research. Buckingham: Open University Press.

Bock, ME. 2009. Factors influencing the uptake of HIV voluntary counselling and testing in Namibia. Masters dissertation. KIT (Royal Tropical Institutes). Development Policy and Practice. Vrije Universiteit, Amsterdam

Boswell, D, Baggaley, R. 2002. Voluntary counselling and testing and young people: a summary overview. *Family Health International/USAID.*

Boswell, D. & Baggaley, R. (2002). *Voluntary Counseling and Testing and young people.* New York, USA: Family Health International.

Central Statistics Office [CSO] & Ministry of Health [MOH] (2005). *Zambia Sexual behavior survey.* Lusaka, Zambia: Zambia Central Statistics Office & Zambia Ministry of Health.

Darabi. L Et al. (2008), Protecting the Next Generation in Uganda: New Evidence on Adolescent Sexual and Reproductive Health Needs. New York: Guttmacher Institute.

De Graft-Johnson, J, Paz-Soldan, V, Kasote, A, Tsui, A. 2005. *Voluntary counselling and testing services preferences in a rural Malawi population.* AIDS and Behaviour 9(4):475-484

De Graft-Johnson, J, Paz-Soldan, V, Kasote, A, Tsui, A. 2005. *Voluntary counselling and testing services preferences in a rural Malawi population.* AIDS and Behaviour 9(4):475-484

De Koker, P, Lefevre, P, Matthys, F, van der Stuyft, P, Delva, W. 2010. Barriers to VCT despite 13 years of community-based awareness campaigns in a peri-urban township in Northern Limpopo. *South African Medical Journal.* 100(6)

De Koker, P, Lefevre, P, Matthys, F, van der Stuyft, P, Delva, W. 2010. Barriers to VCT despite 13 years of community-based awareness campaigns in a peri-urban township in Northern Limpopo. *South African Medical Journal.* 100(6)

Descombe, M., (2003). The good research guide, second edition for small scale research projects. 2nd ED.Open University Press, Buckingham

DiClemente, RJ, Crosby, RA, Kegler, MC, Jossey-Bass, A. 2002. *Emerging theories in health promotion practice and research. Strategies for improving public health.* A Wiley

Dirar, A., Mengiste, B., Kedir, H., & Godana, W (2013). Factors contributing to voluntary counselling and testing uptake among youth in colleges of Harar, Ethiopia. Science Journal of Public Health. 2013; 1(2): 91-96

Donenberg, GR, Schwartz, RM, Emerson, E, Wilson, HW, Bryant, FB, Coleman, G. 2005. Applying a Cognitive-Behavioural Model of HIV Risk to Youths in Psychiatric Care. *AIDS Educ Prev.*17(3):200-216

Donenberg, GR, Schwartz, RM, Emerson, E, Wilson, HW, Bryant, FB, Coleman, G. 2005. Applying a Cognitive-Behavioural Model of HIV Risk to Youths in Psychiatric Care. *AIDS Educ Prev.*17(3):200-216

Family Health International & IMPACT (2007). *Kenya Final Report for USAID's Implementing HIV/AIDS Prevention and Care (IMPACT project). September 1999 –September 2007*. Arlington, USA: Family Health International

Family Health International (2008). *Family Health International's experience with HIV/AIDS Care and Support*. Arlington, United States of America: Family Health International.

Family Health International. (2003). Voluntary counseling and testing and youth. USA.2003.

Fishbein, M., & Ajzen, I. (1975). *Belief, Attitude, Intention and Behaviour.* New York: Wiley.

Fishbein, M., & Ajzen, I. (2005). Theory-based behavior change interventions: Comments on Hobbis and

Sutton. *Journal of Health Psychology, 10*, 27-31.

Gage, A. J., & Ali, D. (2005). Factors associated with self-reported testing among men in Uganda. *AIDS Care, 17*(2), 153-165.

Genberg BL, Etal. (2007). Assessing HIV/AIDS stigma and discrimination in developing countries. AIDS and Behavior.

Ginwalla, S.K., Grant, A.D., Day, J.H., Dlova, T.W., et al. (2002). Use of UNAIDS tools to evaluate HIV Voluntary Counseling and Testing Services for mine workers in South Africa. *AIDS Care,* 14(5), 708-712.

Harrison A, Cleland J, Gouws E, & Frohlich J. (2005). Early sexual debut among young men in rural South Africa: Heightened vulnerability to sexual risk? Sexually Transmitted Infections.

Holden, S. 2004. *Mainstreaming HIV/AIDS into development and humanitarian programs. Oxfam*

Horizons (2001). *HIV Counseling among Youths aged 14-21. Results from an exploratory study in Nairobi, Kenya and Kampala, Masaka Uganda.* Washington DC, USA: Population Council.

Horizons (2003). *Empowering Communities to respond to HIV/AIDS. Ndola demonstration project on maternal and Child health: Operational research final report.* Washington, DC, USA: Population Council.

Horizons (2006). *Social Relationships and Adolescent's HIV counseling and testing decisions in Zambia.* Washington DC, USA: Population Council.

Horizons, (2004). Equitable Access to HIV Counseling and Testing for Youth in Developing Countries; International Centre for Research on Women. Washington, DC: Population Council, 2004

Jaspan, Soka, NF, Mathews, C Flisher, Mark, D, Middelkoop, K, Wood Bekker, LG. 2010. A qualitative assessment of perspective on the inclusion of adolescents in HIV clinical trials in South Africa. *International Journal STD AIDS.* 21(3):172-176

Kadowa, I. & Nuwaha, F. (2009). Factors Influencing disclosure of HIV positive status in Mityana district of Uganda. *African Health Science,* 9 (1), 26-33.

Kalichman S, Simbayi L. (2003). HIV testing attitudes, AIDS stigma, and voluntary HIV counseling and testing in the black township in Cape Town, South Africa. Sex Transm infect. 2003;79(6):442-7.

KARA (2006). *Stigma and Discrimination*. Available: http:// www.kara.org. zm/stigma.htm

Karim SS, Karim, QA. 2005. *HIV/AIDS in South Africa.* Cambridge: Cambridge University Press

LoveLife 2009. *Report on activities and progress 2009.* LoveLife 2009 Annual monitoring report

MacDowell, W., Bonell, C., & Davies, M.2006. Health Promotion Practice: Understanding Public Health. London: McGraw-Hill International

MacDowell, W., Bonell, C., & Davies, M.2006. Health Promotion Practice: Understanding Public Health. London: McGraw-Hill International

MacPhail, CL, Pettifor, A, Coats, T, Rees , H. 2008. You must do the test to know your status: attitudes to HIV VCT for adolescents among South African youth and parents. *Health Education and Behaviour*. 35(1):87-1-4

Mathinti, V, Simbayi, LC, Jooste, S, Kekana, et al. 2005. Development of an HIV risk reduction counselling intervention for use in South African sexually transmitted clinics. *SAHARA* 2(2):267-276

Mathinti, V, Simbayi, LC, Jooste, S, Kekana, et al. 2005. Development of an HIV risk reduction counselling intervention for use in South African sexually transmitted clinics. *SAHARA* 2(2):267-276

Matovu JK, Gray RH, Makumbi F, Wawer MJ, Serwadda D, Kigozi G, Swankambo NK, & Nalugoda F. (2005). Voluntary HIV counseling and testing acceptance, sexual risk behaviour and HIV incidence in Rakai, Uganda. AIDS.

Matswaled M 2011. An investigation into the utilization of VCT among employee of Mittal Steel in Vanderbijipak. A case study. A Master thesis presented to the School of Graduate Studies of University of South Africa.

Mgosha P, Eliningaya S, Anth M, Longin R, Seif S, Hassan M, Ashaterabi L, Michael J. 2009. Evaluation of uptake and attitude to voluntary counseling and testing among health care professional students in Kilimanjaro region, Tanzania BMC Public Health. 2009; 9: 128. Published online 2009 May 9. doi: 10.1186/1471-2458-9-128

Middelkoop, K, Myer, L, Smit, J, Wood, R Bekker, LG. 2006. Design and evaluation of a drama-based intervention to promote voluntary counselling and testing in a South African community. *Sexually transmitted diseases. 33(8):524-526*

Ministry of Health (2011), National AIDS Indicator Survey 2011. Kampala, Uganda: Ministry of Health

Mugenda, O.M. & Mugenda A.G. (1999). Research methods: Quantitative and qualitative approaches. Acts, Nairobi.

Mugyenyi P. (2008). Genocide by Denial. 2008. Kampala, Uganda. The New Vision.

Munthali, AC, Chimbiri, A. & Zulu, E. (2004). Adolescent sexual and reproductive health in Malawi: a synthesis of research evidence. Occasional report No.15. Washington: The Alan Guttmacher Institute.

Mwale, M. 2008. Behavioural change vis-à-vis HIV/AIDS knowledge mismatch among adolescents: the case of selected schools in Zomba. *Nordic Journal of African Studies.* 17(4):228-229

National HIV/AIDS Council [NAC] (2006). *Joint Mid trem Review of the National AIDS strategic framework 2006- 2010*. Lusaka, Zambia: Zambia National HIV/AIDS /TB/STI Council.

Njagi, F, Maharaj, P. 2006. Access to voluntary counselling and testing services: perspectives of young people. *South African Review of Sociology* 37(20:111-127

Nsabagasani , X, Yoder, S. 2006. Social dynamics of VCT and disclosure in Uganda. *Measure Demographic and Health Surveys* NTIHC, (2011). Young People's Access to Sexual and Reproductive Health (SRH) Services in Central Region, Uganda: An Assessment Report for Strengthening Youth Friendly Services.

Onen David & Oso.Y.Willis. (2009), A General Guide to Writing Research Proposal and Report. (Revised Ed.), sitima Printers and Stationers Ltd., Nairobi-Kenya

Rew, L. 2005. *Adolescent Health. A multidisciplinary approach to theory, research and intervention.* Sage Publications. California

Rew, L. 2005. *Adolescent Health. A multidisciplinary approach to theory, research and intervention.* Sage Publications. California

Rew, L. 2005. *Adolescent Health. A multidisciplinary approach to theory, research and intervention.* Sage Publications. California

Rinke de Wit, TF, Van der Borght, S, Schim-vander Loef, M, Clevenbergh, P, van Cranenburg, K, Rijckborst, H. 2006. Determinants of VCT uptake in 5-year Heineken HAART programme in Africa. *International AIDS Society. 16th International AIDS Conference. Toronto, Canada. August 13-18 2006*

Ross DA, Dick B and Ferguson J, eds.,(2006). Preventing HIV/AIDS in Young People: A Systematic Review of the Evidence from Developing Countries, WHO Technical Reports Series, Geneva

Sanjana, P., Kwasi, T., Schwarzwalder, A., Simumba, C., Kasonde, P., Kakungu – Simpungwe, M., Kabaso, M. & Thomposon, C. (2009). Task- shifting HIV Counseling and Testing services in Zambia: the role of lay Counselors. *Health systems and human resources for health,* 7(1): 44.

Sekaran, U. (2003). Research methods for Business 4th Ed. John Willey & Sons Inc. New York

Serwadda et al. (2004). Assessing Voluntary Counseling and Testing acceptance, sexual risky behavior and HIV incidence in Rakai district.

Solomons V, Van Rooyen, H, Griesel, R, Gray, D, Stein, J, Nott, V. 2004. *Report. Critical Review and Analysis of Voluntary Counselling and Testing Literature in Africa.* Durban: Health Systems Trust

Taegtmeyer M, Kilonzo N, Mungala L, Morgan G, & Theobald S. (2006). Using gender analysis to build voluntary counseling and testing responses in Kenya. Transactions of the Royal Society of Tropical Medicine and Hygiene.

Tesfaye L, Ingvild FS, Knut F. (2012). Factors affecting voluntary HIV counseling and testing among men in Ethiopia. A cross-sectional survey. *BMC Public Health 2012,12: 438.*

Touliatos, J.S., & Compton, N.H. (1998). Research methods in human ecology/home economics. Iowa State University Press/AMES

Triandis HC. (1979). Values, attitudes, and interpersonal behavior in Nebraska Symposium on Motivation: Beliefs, Attitudes and Values. Lincoln, NE: University of Nebraska Press.

UAC), (2006), Accelerating HIV Prevention in Uganda: The Road towards Universal Access, Drivers of the HIV/AIDS Epidemic and Effectiveness of Prevention Interventions in Uganda; a Synthesis Report, Kampala, Uganda.

UAC, (2010), Global AIDS Response Progress Report: Kampala, Uganda.

UBOS (2006). Uganda Demographic and Health Survey 2006. Kampala: UBOS and Calverton, MD: ORC Macro.

UBOS (2011). Uganda Demographic and Health Survey 2011. Kampala: UBOS and Calverton, MD: ORC Macro.

UBOS). (2010). Uganda National Household Survey 2009/2010; Socio-Economic Module: A Bridged Report. Kampala.

UBOS). 2009. National Service Delivery Coverage Survey. Kampala,Uganda

UBOS.(2010). Statistical Abstract. Kampala. Available at http://www.ubos.org/

UNAIDS (2008). Report on the global HIV/AIDS epidemic .Geneva

UNAIDS, (2012). Global AIDS Report. Geneva

UNAIDS. Global report: UNAIDS report on the global AIDS epidemic 2008. Geneva: Joint United Nations Program on HIV/AIDS: 2008

United Nations. 2011. High level meeting on youth. General Assembly. 25-26 July 2011

USAID (2006). Engaging Communities in Youth Reproductive Health and HIV Projects; A Guide to Participatory Assessments, Family Health International, Care and RTI International

USAID. (2009). *HIV/AIDS. Prevention across the spectrum*. (ww.usaid.gov/our_work/global_health/aids/techAreas/prevention/youth/youthfactsheet.html).

Volkwyn, S. (2010). The knowledge, attitudes, beliefs and reported sexual behaviour in relation to HIV/AIDS amongst adolescents in a general practise population in Port Elizabeth. *African Journal of Primary Health Care and Family Medicine.* Available on http://www.phcfm.org/index.php/phcfm/thesis/view/40

Wodi, BE. (2005). HIV/AIDS knowledge, attitudes and opinions among adolescents in the River States of Nigeria. *International Electronic Journal of* Health Education. 8:86-94

World Health Organisation. (2003). *Annexes.* www.who.int/../adherence_annexes.pdf

Zenebu, Y. 2005. Determinant of voluntary counseling and testing utilization among youth in Nairobi. An MPH thesis presented to the School of Graduate Studies of Nairobi University.

LIST OF APPENDICES

Appendix A: Self-Administered Questionnaire for the Youth

Dear Respondent, My name is Denis Lewis Bukenya a student of Uganda Management Institute pursuing a Masters degree in Public Administration. As a partial requirement for the award of this degree, am carrying out research on the Factors Influencing the Uptake of Voluntary Counseling and Testing For HIV and AIDS (VCT) among the youth attending Naguru Teenage Information and Health Centre and the findings of this study will provide recommendations to Naguru Teenage Information and Health Centre and policy makers on ways of improving VCT services delivery to the young people.

All the information collected will be confidential and used for academic purposes only. Your participation will be greatly appreciated. Thank you.

Instructions:

Please answer the following questions appropriately by circling or filling in the blanks with the most accurate information asked for

SECTION A: DEMOGRAPHICS CHARACTERISTICS OF RESPONDENTS

A1. Sex: a. Male b. Female

A2. How old are you in complete years? a) 15 b) 16 c) 17 d) 18 e) 19
f) 20 g) 21 h) 22 i) 23 j) 24

A3. What is your education Status?

a. Presently in school b. Drop out c. Never been to school

A4. If in school, what is your education level?

a. Primary b. Secondary c. University/Tertiary institution

A5. What is your religion: a. Christian b. Muslim c. Others

A6. What is your marital status?

a. Single b. Co-habiting b. Married d. Divorced/Separated e. Widowed

A7. What do you do for your living?

a. Student b. Self-employed c. Formal employment d. Dependant

SECTION B: KNOWLEDGE OF YOUTH ON HIV/AIDS AND VCT

B1. How is HIV/AIDS spread? ***(Multiple responses)***

a. Sexual intercourse
b. Sharing of contaminated sharp piercing instruments
c. Blood transfusion with HIV contaminated blood and blood products
d. Mother to child transmission
e. Others (specify) ……..

B2. Can HIV infection be cured? a. Yes b. No c. Don't know

B3. Have you ever heard of the acronym VCT? a) Yes b) No

B4. Please indicate using a circle your level of agreement with the following statements. Please evaluate each statement using the following keys:

1= Strongly Disagree (SD) ***2= Disagree (D)*** ***3= Undecided (UD)***

4= Agree (A) ***5= Strongly agree (SA)***

STATEMENTS	**SD**	**D**	**UD**	**A**	**SA**
1. HIV stands for Human Immunodeficiency Virus	1	2	3	4	5
2. HIV weakens the immune system	1	2	3	4	5
3. HIV is not the only cause of AIDS	1	2	3	4	5

4. HIV/AIDS is the disease for Uganda only	1	2	3	4	5
5. HIV/AIDS is a disease of black people only	1	2	3	4	5
6. HIV/AIDS was discovered in the early 1980's	1	2	3	4	5
7. Youths (15-24) are not prone to HIV/AIDS yet	1	2	3	4	5
8. VCT stands for Voluntary Counseling and Testing	1	2	3	4	5
9. VCT services help inform youths about the dangers of indulging in sexual activities	1	2	3	4	5
10. VCT should be used for the future generation to be HIV free	1	2	3	4	5
11. We as youths do not have any control over the spread of HIV/AIDS thorough VCT	1	2	3	4	5
12. VCT for HIV is for every person	1	2	3	4	5
13. Youths are the only group of people who need VCT most	1	2	3	4	5

B5. Which specific place would one go to seek for VCT services?

a) VCT centers b) Schools c) Churches d) Mosques

e) Hospitals f) other ---------- g) I do not know

B7. When you test negative for HIV you would remain negative for the rest of your life despite any bad way of living?

a) True b) False c) I do not know

SECTION C: ATTITUDES INFLUENCING UPTAKE OF VCT SERVICES AMONG YOUTH

C1. Please indicate using a circle your level of agreement with the following statements. Please evaluate each statement using the following keys:

1= Strongly Disagree (SD) 2= Disagree (D) 3= Undecided (UD)

4= Agree (A) *5= Strongly agree (SA)*

STATEMENTS	**SD**	**D**	**UD**	**A**	**SA**
Positive attitudes					
1. VCT encourages HIV preventive behaviors among youth	1	2	3	4	5
2. VCT services lower chances of HIV infection	1	2	3	4	5
3. VCT services make it possible to avoid transmitting HIV	1	2	3	4	5
4. VCT services encourage positive living if one is infected with HIV	1	2	3	4	5
5. VCT services result in a happy life if the HIV results are negative	1	2	3	4	5
6. VCT services result in a happy life if the HIV results are positive	1	2	3	4	5
7. VCT services help youth to plan confidently for their future	1	2	3	4	5
8. VCT services facilitate youth in seeking therapy if HIV test results are positive	1	2	3	4	5
9. It is appropriate to have VCT anytime	1	2	3	4	5
10. Everybody who is sexually active need VCT services	1	2	3	4	5
Negative attitudes					
11. I am afraid that if I sought VCT services, my peers would discriminate against me if they found out that I am HIV positive	1	2	3	4	5
12. I don't think it would be of any gain if I went for VCT	1	2	3	4	5
13. It would bother me if someone I know sees me seeking VCT services	1	2	3	4	5
14. Most people who test HIV positive have only themselves to blame	1	2	3	4	5
15. One may die quickly if tested positive for HIV	1	2	3	4	5
16. One may get Unnecessary worries if he/she seeks for VCT	1	2	3	4	5

services					
17. VCT services can lead to suicide if one finds out his positive status	1	2	3	4	5
18. One may be stigmatized if suspected of known to be HIV-infected	1	2	3	4	5
19. It is not easy for youth to disclose their HIV positive test results	1	2	3	4	5
20. Only those suspected to be HIV positive need VCT services	1	2	3	4	5
21. High risk groups need VCT services	1	2	3	4	5
22. Those to be married need VCT services	1	2	3	4	5

SECTION D: AVAILABILITY OF VCT SERVICES

D1. Please indicate using a circle your level of agreement with the following statements. Please evaluate each statement by using the following keys:

1= Strongly Disagree (SD) ***2= Disagree (D)*** ***3=Undecided (UD)***

4= Agree (A) ***5= Strongly agree (SA)***

STATEMENTS	**SD**	**D**	**UD**	**A**	**SA**
1. I know where one can get an HIV test	1	2	3	4	5
2. Long distances to the VCT service centre prevent youth from going for VCT	1	2	3	4	5
3. The VCT centre has all facilities accessible	1	2	3	4	5
4. There are few accessible VCT service centres near my home	1	2	3	4	5
5. The centre provides confidentiality during VCT	1	2	3	4	5
6. This centre is accessible for youth to access VCT services	1	2	3	4	5
7. VCT services are free of charge	1	2	3	4	5
8. Cost related to testing services are high	1	2	3	4	5

9. Youth cannot afford HIV treatment	1	2	3	4	5
10. VCT service providers for are welcoming	1	2	3	4	5
11. VCT service providers are non-judgmental	1	2	3	4	5
12. VCT service providers provide information about HIV	1	2	3	4	5
13. VCT service providers do referral to other places	1	2	3	4	5

SECTION E: UPTAKE OF VCT SERVICES

E1. Please indicate using a circle your level of agreement with the following statements. Please evaluate each statement by using the following keys:

1= Strongly Disagree (SD) ***2= Disagree (D)*** ***3=Undecided (UD)***

4= Agree (A) ***5= Strongly agree (SA)***

STATEMENTS	**SD**	**D**	**UD**	**A**	**SA**
1. I am satisfied with the VCT services provided at this centre	1	2	3	4	5
2. I have benefited from the VCT services	1	2	3	4	5
3. My future life is affected by these VCT services	1	2	3	4	5
4. I will take into consideration the recommendations given to me during VCT session	1	2	3	4	5
5. Am willing to spread the messages about HIV/AIDS to fellow youth	1	2	3	4	5
6. Youth come for VCT services at this centre in large numbers	1	2	3	4	5
7. I have encouraged my friends to seek VCT services	1	2	3	4	5
8. Am now aware about availability of VCT services at this centre	1	2	3	4	5
9. I intend to seek for VCT services next time	1	2	3	4	5

Thank you very much for providing useful information for the study.

Questionnaire ID (For official use only)

Date:.....

Qnr No:.....

Appendix B: Interview Guide for VCT Service Providers

Dear Sir/Madam;

My name is Bukenya Lewis Denis a student of Uganda Management Institute pursuing a Masters degree in Public Administration. As a partial requirement for the award of this degree, am carrying out research on the Factors Influencing the Uptake of Voluntary Counseling and Testing For HIV and AIDS (VCT) among the youth attending Naguru Teenage Information and Health Centre and the findings of this study will provide recommendations to Naguru Teenage Information and Health Centre and policy makers on ways of improving VCT services delivery to the young people.

All the information collected will be confidential and used for academic purposes only. Your participation will be greatly appreciated. Thank you.

Participant:

Department ----------

Age ----------

Sex----------

Position ----------

Education level ----------

1. Experience in providing VCT services to young people as health service provider. (*Probe- how long they have worked as health service providers in VCT centers, with who as their clients, and what are the different experiences with the groups)*

2. Opinion on youth's knowledge of VCT for HIV/AIDS

3. Reasons for young people seeking the VCT services *(Probe for: positive and negative attitudes; do male and female youth look for the same things in VCT? Return rate for the post testing).*

4. Reasons for some youths not seeking the VCT services. *(Probe: what are the consent challenges related to accessibility)*

5. Why do you offer VCT services in this place? *(Probe for the most appropriate way to get the youth tested; response of youth to VCT services offered at the centre)*

6. How do you think your site is relevant to youth's interests? (*Probe: any specific services to young people, what is your site are perceived efficiency with regard to youths (female youth vs boys) as clients, confidentiality?*)

7. What are the factors behind youths seeking facilities that offer services on Voluntary HIV counseling and testing? *(Probe: Do male and female youth look for the same things in VCT?).*

8. Comments about the sites and the services you provide to young people. (*Probe: any improvement to sites and services*)

9. Comment on the availability of the VCT services to the youth (*Probes: quality of counseling, confidentiality keeping, costs, and therapy of HIV elsewhere other than this sites)*

10. What can be done to improve and make VCT services acceptable to young people?

END (Thank you for your time and cooperation)

Guide ID (For official use only)

Date:.....

IG No:.....