

**COMMUNICATION DETERMINANTS OF CONDOM
USE FOR HIV AND AIDS PREVENTION AMONG THE
YOUTH IN KILIFI COUNTY, KENYA**

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other university.

Signature..... Date.....

James Kapanya Nguzo

This thesis has been submitted for examination with our approval as university supervisors.

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DEDICATION

This thesis is dedicated to my father, the late Johnson Nguzo, whose inspiration has lived to inspire me; my mother, Esther Nyamvula who always supported my education through prayers and good wishes; and my wife Doris, who has been the pillar of my success during this period of my PhD studies.

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LIST OF ABBREVIATIONS AND ACRONYMS

ABC	Abstinence, Be faithful to one partner, correct and consistent use of condoms
AIDS	Acquired Immune Deficiency Syndrome
APHIA Plus	AIDS, Population and Health Integrated Assistance-plus
ART	Antiretroviral Therapy
ARV	Anti-Retroviral Virus
BCC	Behaviour change communication
CBO	Community Based Organization
CDC	Centre for Disease Control and Prevention
CSA	Centre for the study of Adolescence.
CFSC	Communication for Social Change
CSW	Commercial sex workers
ECD	Early Childhood Development
FBO	Faith Based Organization
FGDs	Focus Group Discussions
FPPS	Family Planning Private Sector
HIV	Human Immuno-deficiency Virus
IBM	Integrated behavioural model

IMBP	Integrated model of behavioural prediction
IDI	In-depth Interviews
IOM	Institute of Medicine
KAIS	Kenya AIDS Indicator Survey
KDHS	Kenya Demographic Healthy Survey
KCIDP	Kilifi County Intergrated Development Plan
KEMRI	Kenya Medical Research Institute
KMTC	Kenya Medical Training College
KNASP	Kenya National HIV and AIDS strategic plan
KNBS	Kenya National Bureau of Statistics
MARPs	Most at Risk Populations
MDGs	Millennium Development Goals
MSM	Men who have Sex with Men
NACADA	National Authority for the Campaigns against Drug Abuse
NACC	National AIDS Control Council
NACOST	National Council for Science and Technology
NASCOP	National AIDS & STI Control Programme
NCAPD	National Coordinating Agency for Population and Development
NGOs	Non-Governmental Organizations

PCC	Pearson's Correlation Coefficient
PEP	Post Exposure Prophylaxis
PEPFAR	President's Emergency Plan for AIDS Relief
PIWD	People who inject Drugs
PPMC	Pearson's Product Moment Coefficient
SCOPE	Strengthening Community Partnership and Empowerment
STI	Sexual Transmitted Infections
TB	Tuberculosis
TPB	Theory of Planned Behaviour
TRA	Theory of Reasoned Action
UN	United Nations
UNAIDS	United Nations AIDS Programme
UNICEF	United Nations Children Fund
UNPF	United Nations Population Fund
VCT	Voluntary Counselling and Testing centre.

DEFINITION OF TERMS

Youth- Refers to those persons between the ages of 15 and 24 years (United Nations 1999).

Behaviour change – this is the adoption of a new behaviour that reduces the risk of HIV infection such as avoidance of unprotected sexual practices as casual sex (Warren Parker, 1999). In this study it means adoption and use of condoms.

Behaviour change communication- behaviour change communication is an interactive process with communities (as integrated with an overall programme) to develop tailored messages and approaches using a variety of communication channels to develop positive behaviours; promote and sustain individual, community and societal behaviour change; and maintain appropriate behaviours (Family Health International, 2002). In this study it means all forms of communication that facilitate adoption and use of condoms

Behavioural Intention- Decision to perform a behaviour, which is determined by attitude, perceived norm and self efficacy (Fishbein & Ajzen, 2010).

Competency- Sufficiency of knowledge and skills that enable someone to act in a wide variety of situations (Sahlins, 1978 ; Hiller,Harrison & Warr, 1998).

Consistent Condom Use- Using condoms for every sex act (Paz-Bailey, Koumans,Stemberg,Pierce,Papp,& Unger,2005).

Correct Condom Use-Consistent use without any of the following: beginning sex without a condom, taking it off before finishing sex, flipping it over to avoid condom breakage or condom slippage (Paz-Bailey, Koumans,Stemberg,Pierce,Papp,& Unger,2005).

Environmental Constraints- Constraints are any limitations on strategy options due to political,external competition, social requirements and expectations, cultural or economic factors, technological or legal requirements (Heeren,Icard,O'Leary,Jemmott, Ngwane & Mtose, 2014).

Saliency- Most noticeable or important, prominent or conspicuous (Oxford Dictionary). In this study it refers to the prominence of condoms and HIV and AIDS among the youth.

ABSTRACT

The general objective of this study was to examine the communication determinants for condom use for HIV and AIDS prevention among the youth in Kilifi County, Kenya. Specifically, this study sought to find out the influence of knowledge levels of HIV and AIDS on condom use for HIV and AIDS prevention among the youth in Kilifi County; establish the influence of behavioural intention on condom use for HIV and AIDS prevention among the youth in Kilifi County; explain the influence of environmental constraints on condom use for HIV and AIDS prevention among the youth in Kilifi County ; assess the influence of saliency on HIV and AIDS and condom use for prevention of HIV and AIDS among the youth in Kilifi County and to analyze the influence of skills and competency on condom use that determine condom use among the youth in Kilifi County. The study was informed by the Integrated Behavioural Model, which indicates the determinants for health behaviour change to include the intention to perform a behaviour, knowledge level, skills and competency to perform the behaviour, saliency of the behaviour and environmental factors. The study used a mixed method design, relying mainly on descriptive survey to cross-sectionally study the youth and other HIV and AIDS specialists in Kilifi North Sub-County using in-depth interviews, focus group discussions (FGD) and questionnaires. A total of 390 participants were studied, of which 384 respondents were selected using systematic random sampling method and issued with questionnaires. Qualitative data were collected from six focus groups voluntarily drawn from the learning institutions, and from a total of six HIV and AIDS programme specialists drawn from the NGOs and CBOs in the sub-county for in-depth interview. Quantitative data were analysed using descriptive statistics and the

Pearson's Product Moment Correlations, while qualitative data in themes were used for triangulation purposes. Results showed that the youth in Kilifi had high knowledge of HIV and AIDS and condom use. Additionally, findings revealed that condom use among the youth was positively determined by skills and competencies, behavioral intentions, Saliency and knowledge, in order of importance. However, environmental constraints had a negative effect on condom use behavior among youth in Kilifi County. The study concluded that without behavioral intentions, skills and competency and saliency, the high knowledge level does not automatically lead to behavior change to use condoms for HIV prevention among the youth. The findings confirm the position of four constructs of the integrated behavioral model as positive promoters of behavior change. The study recommends interpersonal communication as effective in bridging the knowledge-behavior gap among the youth for effective behavior change.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The HIV and AIDS scourge has continued to take a toll all over the world at an alarming rate since its discovery and subsequent declaration as a national disaster and a global epidemic close to three decades ago (National AIDS Control Council, (NACC) (2010). By the end of 2011, the number of people (adults and children) living with HIV and AIDS was estimated to have reached 34 million in the world having risen from 8 million in 1990, although the overall growth has stabilized in recent years (United Nations AIDS Programme(UNAIDS), 2012). The annual number of new infections and the HIV and AIDS-related deaths have also declined (UNAIDS, 2012).

Africa remains the global epicenter for the disease, accounting for the high cases of HIV reported around the world. Poverty and civil wars have increased the prevalence of HIV in Africa, and more specifically the Sub-Saharan Africa (Kiai, 2009;Mulwo, 2009;; Ndati, 2011; Oriaso, 2013). According to UNAIDS (2012) it is estimated that about 23.5 million people representing 69 percent of the total global number of people living with HIV and AIDS were living in Africa, South of the Sahara, making the region have the greatest burden of the HIV and AIDS epidemic. This is followed by South and South East Asia with four million, Latin America, North America, Eastern Europe and Central Asia, each with 1.4 million, Western and Central Europe with 900,000 people, East Asia with 830,000 people, North Africa and Middle East with 300,000 people, the Caribbean with 230,000 and Oceania with the least of 53,000 people (UNAIDS, 2012).

Although, from the report, the prevalence trend in the East African countries is declining just like the trend globally, Kenya remains the most affected in the East African region and third overall in Africa. Globally, Kenya is fourth in HIV and AIDS prevalence just behind India, South Africa and Nigeria (NACC, 2014). Kenya's HIV and AIDS epidemic is often referred to as a generalized one, affecting all sections of the society. A number of studies have identified the most at-risk populations (MARPs) to be the youth (Kenya AIDS Indicator Survey(KAIS).2012; NACC 2014). This group includes men who have sex with men (MSM), commercial sex workers (CSW), people who inject drugs (PIWD), women among others (KAIS, 2012).

Since 1984 when the first HIV case was diagnosed and reported in Kenya, an estimated 1.5 million people have died due to HIV and AIDS and related illnesses. In 1999, the Government of Kenya declared HIV and AIDS as a national disaster, and established the National AIDS Control Council, to implement a multi-sectoral national response by coordinating three five-year strategic plans from 2000-2005/6 to 2009/10 and 2009/10-2013 (NACC, 2009; Ndatti, 2013). By 2009, around 1.6 million people were living with HIV and AIDS (NACC 2012; NACC, 2010; Ndatti, 2013).

The HIV and AIDS prevalence rate among people aged 15-49 was estimated at 6.0 percent in 2013 (NACC, 2014). Although the spectrum results show a continued decline in the HIV and AIDS prevalence among the adult population from the late 1990s to date, the prevalence has since stabilized at 6.0 percent (KAIS, 2012; NACC, 2012). It is also important to note that Kenya's HIV and AIDS epidemic is geographically diverse, ranging from a prevalence of 25.7 percent in Homa-Bay in Nyanza region to approximately 0.2 percent in Wajir in North Eastern Region with a high national

prevalence rate among women at 7.6 percent and men at 5.6 percent (NACC, 2014). The high burden of HIV and AIDS in Kenya accounts for an estimated 29 percent of annual adult's deaths, 20 percent of maternal mortality, and 15 percent of deaths of children under age of five years. This has negatively affected the country's economy by lowering per capita output by 4.1 per cent (NACC, 2009). According to NACC (2014) Kilifi County has the 22nd highest prevalence rate among the 47 counties in Kenya, with a prevalence rate of 4.4 per cent against the national prevalence rate of 6.0 per cent, and by 2011, there were 24,161 people living with HIV and AIDS in Kilifi County, where children constituted 14 percent of those living with HIV and AIDS (Kenya Demographic Health Surveys(KDHS), 2009).

There have been several efforts both communicative and non-communicative to combat the spread of HIV and AIDS in Kenya since 1984 when the first case was diagnosed (Oriaso, 2013). A wide range of interventions that can alter public behaviour, from communication campaigns designed to appeal to our self-interest, to economic and legal measures such as fiscal incentives or legal sanctions have been adopted. The eventual aim is to develop self-sustaining norms to which societies subscribe (Iliffe 1998). Since the discovery of HIV and AIDS and its subsequent declaration as an international disaster, it has found a place in the world's Millennium Development Goal number six (MDG-6) for combating HIV and AIDS, Malaria and other diseases. The approaches in addressing the spread of this disease have transformed rapidly from pure bio-medical to bio-psychosocial remedies (Govender 2010; Oriaso 2013; Schiavo 2007). This began being evident when Kenya launched the National HIV and AIDS Strategic Plan 2000-2005 in December 2000, mainly focusing on behaviour change (NACC, 2009). The change from

bio-medical to bio-psycho-social methods has received support from Hanan (2009) who observes that in the absence of pharmacological, immunological and medical interventions, the change in behaviour and attitude of the public may be considered a possible way to the prevention and cure for HIV and AIDS. Debates on the effectiveness of behaviour change campaigns in the reduction of HIV and AIDS infections have been witnessed. However, it remains clear that behaviour change campaigns have and remain to play an important role in the fight against the epidemic as evident in many case studies the world over, like in Uganda, Thailand, Malawi and Zimbabwe (Ndati, 2011; Mulwo, 2009; Oriaso, 2013; Govender, 2010).

Globally, it is estimated that 2,500 new infections occur each day among youth, 79 percent of which take place in the sub-Saharan Africa (United Nation Children Funds (UNICEF), 2011b). The 15 to 24 age group represents the largest risk category in contracting HIV and AIDS (Kiai, 2009). In addition to HIV and STIs, the youth are prone to early pregnancy and subsequent anaemia, high-risk births, maternal malnutrition and development of obstetric fistulae (Bankole, Singh, Woog,& Wolf, 2004; Hindin & Fatusi, 2009). The high-level teenage pregnancies, abortions, school dropouts and sexually transmitted infections confirm that the youth is engaged in early sexual activities that are increasingly predisposing them to HIV and AIDS (Gakahu, 2010). In Kenya, research from the Department of Obstetric and Gynaecology of the University of Nairobi, Centre for the Study of Adolescence (CSA) and Family Planning Private Sector (FPPS) concur that about 80 percent of the youth have had sex by the age of 24 years (Kamara, 2005; Mberia, 2009). This level of sexual activity may be the result of a number of factors such as physiological, social and economic. Drug abuse contributes to the spread of HIV and

AIDS and incidences. There exists a relationship between drug abuse and the spread of HIV and AIDS. Some drugs cause hallucinations and sexual excitement resulting to poor judgement that makes one vulnerable to risky sexual behaviour. Also, drugs depress the immune system and hence accelerate the progression of infection to full-blown AIDS. Gravel, (2012) argues that 10 percent of HIV and AIDS infections can be related to sharing of syringes when injecting some drugs like cocaine and heroin. The Sub-Saharan African youth between the ages of 15 and 24 are particularly vulnerable to HIV and other sexually transmitted infections (STIs) (Bankole, et al 2004; Khan and Mishra, 2008), representing 41 percent of all new infections across the continent (UNICEF, 2011b).

Approximately half of new Human Immunodeficiency Virus (HIV) infections are in youth aged between 15 and 24 years and that no fewer than 6,500 young people are infected with the virus each day (Bankole et al., 2004; Khan & Mishra, 2008). The analysis goes on to indicate that by the end of 2007, an approximated 5.4 million young people worldwide were living with HIV and AIDS (UNPF, 2008). As the Kenya National Coordinating Agency for Population and Development (NCAPD, 2005) puts it, the relationship between a nation's development and the health of its adolescents and young people is of paramount concern, and therefore, deserves great attention by the various stakeholders in the fight against the epidemic. The United Nations (UN) recognised health inequalities across generations and the importance of young people's sexual and reproductive health at the 2001 UN General Assembly Special Session on HIV and AIDS and pledged to reduce HIV prevalence in young people by 25 percent by the end of 2010. Many countries have worked to meet these targets and make health services and behavioural messages more accessible, but, by 2009, global HIV prevalence among youth

had only fallen by 12 percent (UNICEF, 2011b). Another strategy was developed in 2010 by the Joint United Nations Programme on HIV and AIDS (UNAIDS) called ‘Getting to Zero.’ This new programme acknowledged the inadequacy of prevention efforts among youth, and a new goal was introduced: to reduce new infections in young people by 30 percent by 2015 (UNICEF, 2011b).

The high rates of infection among the youth depict a situation whereby either the youth have not received sufficient information regarding the dangers associated with the disease, or they have ignored the message. This is because the youth have been more adversely affected by the HIV and AIDS pandemic compared with other population categories (Oriaso, 2013). Of the Eastern Africa countries comprising of Ethiopia, Kenya, Tanzania, Uganda, Burundi and Rwanda, Kenya is the most affected country by the HIV and AIDS pandemic (UNAIDS, 2012) and the face of the pandemic in the country is primarily young, with the majority of the victims aged 15-24 years (Gakahu, 2010). The Kenya National HIV and AIDS Communication Strategy for Youth (NACC, 2009), indicates that a majority of the youth are aware of the epidemic but many of them do not believe themselves to be at risk. This points to the fact that there exists a missing link between their knowledge and behaviour, thus, there is a need to think of more relevant, context-sensitive models and approach to health communication that can have a greater impact on youth behaviour change (Oriaso, 2013).

HIV and AIDS communication interventions have been used by the Government of Kenya, local NGOs and international bodies to promote the reduction in irresponsible sexual behaviour responsible for HIV and AIDS incidence and prevalence (NACC 2012). Specific HIV and AIDS communication efforts have involved mass media campaigns,

public communication campaigns, lobbying by civil society (advocacy), entertainment education in schools, social places and in churches and mosques through organized community voluntary counseling, condom promotion and distribution (NACC 2010; NACC 2012; Oriaso, 2013). The National AIDS Control Council developed the first Kenya National HIV and AIDS communication strategy for the youth in 2008 whose purpose was to provide a framework to guide partners and stakeholders in implementing evidence based as well as evidence-informed youth programmes for holistic development and success of the youth (NACC 2009; Ndati, 2013). This strategy emphasizes the use of communication approaches to address all aspects of prevention, care, and support as well as mitigation of the socio-economic impact of HIV and AIDS among the youth (Kiai, 2009; NACC, 2009; Ndati, 2011; Oriaso, 2013;). Hence, there is need to establish the communication determinants for condom use to prevent HIV and AIDS among the youth.

1.2 Statement of the Problem

The Kenya National AIDS Strategic Plan (KNASP) 2005/2006 identified the youth as a group at greater risk of contracting HIV. This group has been targeted by Behaviour Change Campaigns (Govender 2010; KDHS 2009; NACC 2014). Despite these efforts, the youth remains the highest HIV and AIDS victims. For instance, many youth in Kilifi County still engage in risky sexual behaviours associated with HIV and AIDS.

After abstinence, the most effective method for preventing the spread of HIV is by use of condoms (KDHS 2009; Mohany 1995; NACC 2012; Pinkerton, Abramson & Turk, 1998). In Kilifi County, for instance, condom adoption and use among the youth remain as low at 23 percent (NACC, 2014). In some places people still find condoms difficult to

acquire. For example, NACC (2012) showed how in rural northern Kenya, men could only afford to use condoms once due to their shortage.

According to KDHS (2009) only 32 percent of women and 37 percent of men reported using a condom in one year in Kenya (NACC, 2012). By contrast, Kilifi County had registered less than the national average rate of condom adoption.

This study examined the communication determinants of condom use for HIV and AIDS prevention among the youth in Kilifi County. According to Fishbein & Ajzen (2010) and Marco (2000) behaviour change is influenced by factors such as skills and competency, environmental, knowledge level, behavioural intentions and saliency. With a high level of HIV and AIDS awareness among the youth (KAIS 2009; Mberia 2009; Ndati 2011), it is difficult to understand why the youth continue to engage in risky behaviours such as unprotected sex that put them at risk of contracting the disease. It is also difficult to tell why condom use remains low among sexually active youth populations.

The earlier we understand the factors that determine health behaviour of the youth, especially condom use for HIV and AIDS prevention, the better able we are to design communication interventions to change the behaviour. Indeed, there is need to determine the factors most responsible determining condom adoption and use in order to identify and use suitable communication to promote behaviour change.

1.3 Research Objectives

1.3.1 General Objective

The general objective of this study was to examine the communication determinants of condom use for HIV and AIDS prevention among the youth in Kilifi County, Kenya

1.3.2 Specific Objectives

This study was guided by the following specific research objectives:-

1. To investigate the influence of knowledge levels of HIV and AIDS on condom use for HIV and AIDS prevention among the youth in Kilifi County.
2. To establish the influence of behavioural intentions on condom use for HIV and AIDS prevention among the youth in Kilifi County
3. To explain the influence of environmental constraints on condom use for HIV and AIDS prevention among the youth in Kilifi County.
4. To assess the influence of saliency that determines condom use for HIV and AIDS prevention among the youth in Kilifi County.
5. To analyze the influence of skills and competency levels that determines condom use for HIV and AIDS prevention among the youth in Kilifi County.

1.4 Research Questions

The study sought to answer the following five specific research questions:-

1. What is the influence of knowledge levels of HIV and AIDS on condom use for HIV and AIDS prevention among the youth in Kilifi County?
2. What is the influence of behavioural intentions on condom use for HIV and AIDS prevention among the youth in Kilifi County?
3. What is the influence of environmental constraints on condom use for HIV and AIDS prevention among the youth in Kilifi County?
4. What is the influence of saliency on condom use for HIV and AIDS prevention among the youth in Kilifi County?
5. What is the influence of skills and competencies on condom use for HIV and AIDS prevention among the youth in Kilifi County?

1.5 Justification of the study

Several studies have identified high poverty levels, traditional cultural practices, rigid religious beliefs and low levels of HIV and AIDS awareness as the major predisposing factors for high rate of HIV and AIDS prevalence in sub-Saharan Africa (Agadjanian,& Menjivar, 2008; Tanja, 2008; Tessler, Leitisch, Lunderberg & Jerome 2006). Also, other studies have shown other factors that promote HIV and AIDS prevalence such as economic, social and cultural factors. Most recent studies have stated that the communication-related factors are the most central in determining behaviour change (Fishbein & capella 2006; Oriaso 2013). However, these arguments are generally cross-cutting the population segments. It is important that the youth as a population segment be studied to gather information about behavioral intentions (attitudes, norms, efficacy, and

control beliefs), competencies, environmental constraints and saliency to the youth that will help in identifying appropriate measures for this particular segment.

The study is significant to the various stakeholders, namely the HIV and AIDS NGOs with information on the new communication-based approach of dealing with condom use for HIV and AIDS prevention among the youth. The findings of the study will assist both the county and national governments when developing policies to deal with the problem of low condom use in the prevention of HIV and AIDS. For HIV and AIDS researchers, the youth and health communication professionals, it will act as a guide to the development of more effective communication model used in promoting behavior change by various organizations or institutions that are engaged in the provision of HIV and AIDS support services to the youth. Further, at a theoretical level, the study is also intended to add to the existing body of knowledge, valuable information on the HIV and AIDS behaviour change communication factors for condom use that will be more effective for future health interventions among the youth.

1.6 Scope of the Study

The study was restricted to Kilifi North Sub-County. This is because, among other factors, various ethnic groups are fairly represented, and has the highest HIV and AIDS prevalence and incidence (Kilifi County Integrated development Plan (KCIDP), 2013). It targeted the youth in educational institutions and professionals in HIV and AIDS communication whereby the latter provided expert opinion on the subject. It limited itself to investigating the HIV and AIDS behaviour change communication factors for condom use among the youth aged 15-24 years. As stated earlier, this cohort represents the highest risk category in contracting HIV and AIDS (Kiai, 2009) and as Bankole et

al.(2004) and Khan and Mishra, (2008) put it, approximately half of new HIV infections are in youth aged between 15 and 24 years.

The study relied on the Integrated Behavioural Model (IBM) by Fishbein & Ajzen (2010). This theory is an improvement of the Theory of Reasoned Action (TRA) and Theory of Planned Behaviour (TPB). The Integrated Behavioural Model is central to this study especially through its five key constructs: competency and skills, the saliency of behaviour, behavioural intention, environmental constraints and habits, which are central to HIV and AIDS programmes and interventions. The theory addresses specific planning and implementation of HIV and AIDS communication interventions, based on the constructs and this is sufficient in guiding the study. This theory accounts for human behaviour. This theory is most suited as it incorporates all the constructs that affect condom use among the youth. Also, the theory is relevant to behaviour change communication, which is critical to HIV and AIDS programming as it deals with the cognitive and emotional aspects of understanding behaviour.

The study used mainly a descriptive design, utilizing both qualitative and quantitative data drawn both the youth and professionals working in the areas of HIV and AIDS. Data were collected using survey and personal interviews methods and analyzed using Pearson's correlation coefficient and thematic analysis, respectively.

1.7: Limitations of the study

The study focused on the youth in the educational institutions and not all the youth in the County. Also, because of the fact that the subject matter of investigations (condom use) is a sensitive one, information provided in the self-administered questionnaire was likely to

have been reserved as information on personal matters such as sexual practices are normally kept in secrecy. It is therefore with an appreciation of these limitations that the results of this study should be interpreted. These limitations were overcome by corroborating the quantitative data with focus group discussions and the in-depth interviews and the involvement of day scholars from the institutions.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter is a review of the literature on the topic of the study. The review is divided into two sections: theoretical review and empirical review of studies on communication for behaviour change and conceptual framework.

2.2 Theoretical Review

This study utilizes the Integrated Behavioural Model, which is also called the Integrative Model of Behavioural Prediction (IMBP). It is a theory that involves the use of different theories to come up with the best model that can be applied in understanding behaviour change. The Integrated Behavioural Model is the most recent formulation of Fishbein and Ajzen's (2010) Reasoned Action Approach. It is derived from the Theory of Reasoned Action, (TRA) and the Theory of Planned Behaviour (TPB). Glanz, Rimer & Viswanath, (2008) state five constructs that account for behaviour change,(which vary in degrees depending on the population).These are behavioural intention or decision to perform the behaviour; knowledge and skills to perform the behaviour; saliency of the behaviour; environmental constraints and habit.

This model is a tool for designing and evaluating health behaviour change interventions and includes constructs from the Theory of Reasoned Action, TRA and Theory of Planned Behaviour, TPB, as well as other influential theories. Like in the TRA/TPB, the most important determinant of behaviour in this IBM theory is an intention to perform the

behaviour (Glanz et al 2008; Montano & Kasprzyk, 2008). Without motivation, a person is unlikely to carry out a recommended behaviour. This theory points out to the fact that skills and environment are important when considering the performance of behaviour (Yzer, Fishbein & Hennessy 2008).

Jaccard, Dodge and Dittus (2002) identify the theory's components (constructs) that directly affect behaviour, which are important in determining whether behavioural intentions can result in behavioural performance. First, even if a person has strong behavioural intentions, he needs knowledge and skills to carry out the behaviour. Second, there should be no or few environmental constraints that make behavioural performance very difficult or impossible (Glanz et al. 2008; Triandis,1980;).The behaviour should be salient to the person (Becker,1974; Montano & Kasprzyk, 2008), and finally, experience in performing the behaviour may make it habitual, so that intention becomes less important in determining behavioural performance for that individual (Triandis,1980; Montano & Kasprzyk, 2008).Thus, a particular behaviour is most likely to occur if 1) a person has a strong intention to perform it, 2) has the knowledge and skills to do so, 3) there is no serious environmental constraint preventing performance 4)the behaviour is salient, and 5)the person has performed the behaviour previously. Montano and Kasprzyk (2008) and Yzer, et al (2008) assert that all these components or constructs and their interactions are important to consider when designing interventions to promote health behaviours.

The first construct, behavioural intentions are required to affect behavioural performance. According to the *model*, behavioural intention is determined by three construct categories or three types of perceptions, namely attitude, perceived norm and self-efficacy. The first

is an attitude toward the behaviour, defined as a person's overall favourableness toward performing the behaviour. Ajzen and Capella (2008) and Glanz,et al (2008) state that attitude, or the general sense of favorability regarding performing a behaviour, is a function of very specific beliefs about the likelihood that performing the behaviour will have certain outcomes and an evaluation of these outcomes regarding good or bad. Many theorists have described attitude as composed of affective and cognitive dimensions (Fishbein, 2008; French,et al 2005; Montano & Karpsky, 2008; Triandis,1980;). Experiential attitude or affect (Fishbein, 2008) is the individual's emotional response to the idea of performing a recommended behaviour. Individuals with a strong negative emotional response to the behaviour are unlikely to perform it, whereas those with a strong positive emotional reaction are more likely to engage in it. Instrumental attitude is cognitively based, determined by beliefs about outcomes of behavioural performance.

Secondly, perceived norm reflects the social pressure one feels to perform or not to perform a particular behaviour. It is a function of both the injunctive norm (normative beliefs about what others think one should do and motivation to comply) and descriptive norms (perceptions about what others in one's social or personal networks are doing (Azjein & Capella 2008). As Glanz et al (2008) put it, perceived norm is a function of beliefs about the level of expected support from specific members of important social networks (injunctive norm beliefs) and beliefs about the extent to which these specific individuals act as referents.

Finally, personal agency, described by Bandura (2006) as bringing one's influence to bear on one's functioning and environmental events, is a major factor influencing behavioural intentions. Institute of Medicine (IOM), (2002) argues that personal agency

consists of two constructs-self efficacy and perceived control. Perceived control is one's perceived amount of control over behavioural performance, determined by one's perception of the degree to which various environmental factors make it easy versus difficult to carry out the behaviour. Self-efficacy, on the other hand, is the degree of confidence in the ability to perform the behaviour in the face of various challenges. It is a function of perceived capability in specific challenging or facilitating circumstances. When people do not have strong intentions, the interventions should aim to improve intention.

This route to behaviour change, that is, the route through intention change, uses informational or persuasive messages to change intention to perform a particular behaviour (Fishbein, 2008; Montano & Kasprzyk, 2008). More specifically, the goal of these messages is to affect the determinants of intention positively. Thus, to design an effective intervention to influence behavioural intentions, it is important to determine the degree to which that intention is influenced by attitude both experiential and instrumental, perceived norm (injunctive and descriptive), and personal agency (self-efficacy and perceived control) (Kasprzyk, Montano & Fishbein, 1998). Fishbein and Capella (2006) has emphasized repeatedly that although an investigator can sit in an office and develop measures of attitudes, perceived norms, self-efficacy, and perceived control, this process may not identify the correct beliefs relevant to the behaviour of the population. One must go to the population and identify salient behavioural, normative, efficacy and control beliefs associated with the behaviour.

Other than the construct of behavioural intentions, this theory predicts that people act on their intentions when they have the necessary skills and when environmental factors do

not impede behavioural performance (Fishbein & Capella, 1990; Glanz et al., 2008; Montano & Kasprzyk, 2008; Triandis, 1980). Thus, for example, when people do not perform a recommended behaviour but did intend to, the objectives of an intervention would not be to improve intention. The problem here is not of motivation but one of competence (that is, skills); and means (that is, environmental constraints or facilitators). In addition to the extent to which one possesses necessary skills, a wide range of contextual factors can also facilitate or impede behavioural performance (Fishbein & Ajzen, 2010). These are referred to as environmental constraints in the integrated behavioural model.

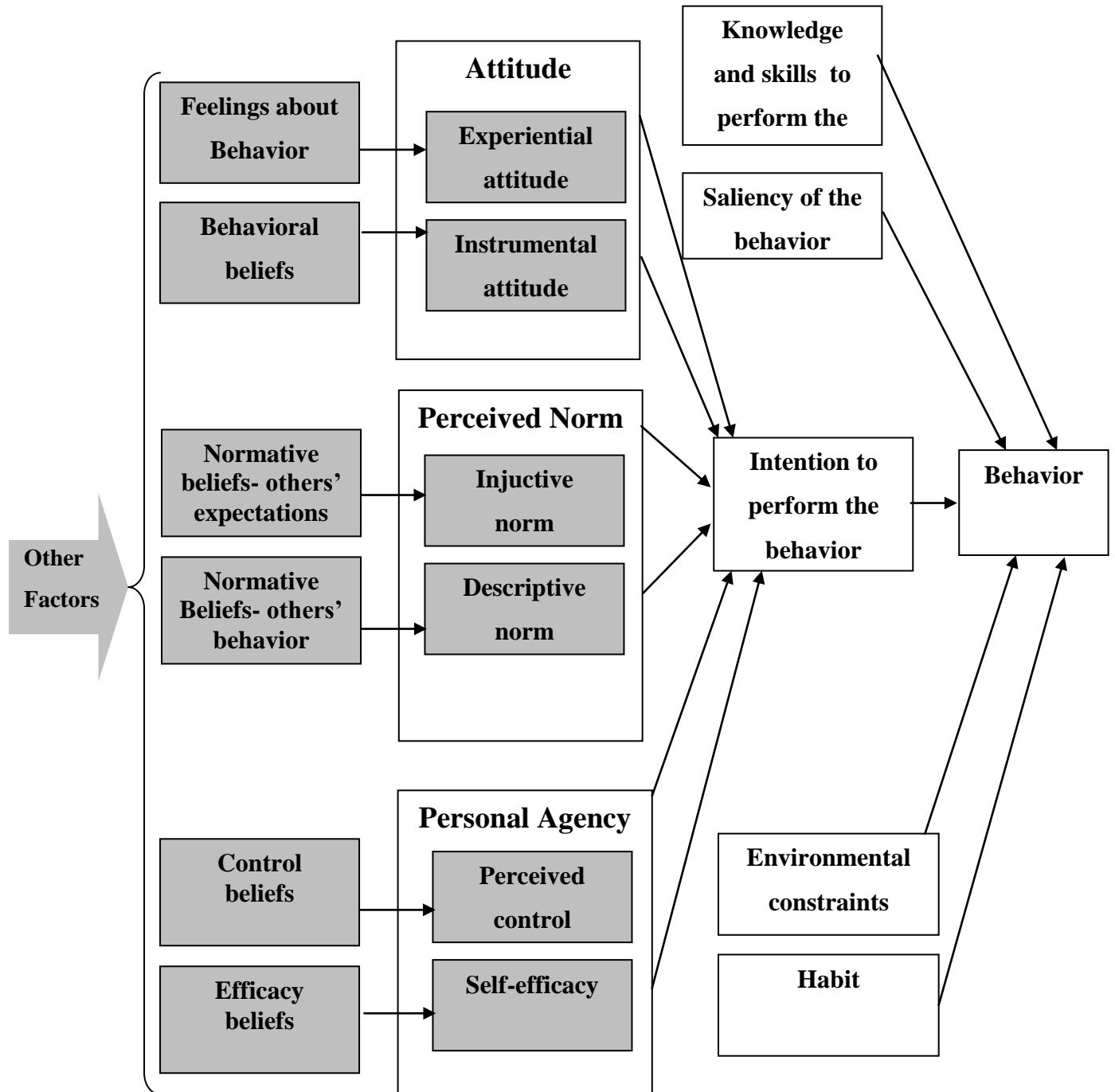
The model, therefore, makes it clear that behaviour can be influenced by changes in behavioural skills, Saliency,environmental factors and behavioural intention (Fishbein, 2008; Fishbein & Cappella 2006; Glanz, et, al, 2008; Montano & Kasprzyk, 2008).When people have formed appropriate intentions but are not acting on them, then an intervention should aim to help people act on their intention by addressing a possible lack of skills or environmental barriers. According to this model, the better we understand the variables that guide health behaviour in a particular population, the better able we are to design interventions to change the behaviour (Fishbein, 2008). The model, according to Fishbein and Azjen (1975 and 2010), can identify in any given population the variables that most importantly determine a given behaviour; and proposes that a health message should address those critical determinants to improve the recommended behaviour in the particular population. This theory, therefore, can identify the variables most importantly; that determine positive behaviour change among the youth.

An essential step in the application of this model is to conduct interviews with the population being studied to elicit information about the behavioural, normative, efficacy, and control beliefs about that behaviour and population. As Fishbein and Cappella (2006) put it, once these are identified, appropriate measures of the IBM constructs can be designed for that particular behaviour and population, a quantitative survey using those measures conducted, and analyses carried out to identify the specific beliefs that best explain the behavioural intention. In applying this model, it will be critical to investigate and understand the behaviour from the perspective of the study population-the youth in Kilifi County.

The Integrated Behavioural Model is relevant to this study in its emphasis on skills and competency which are key factors in this study as it relates to the assessment of the effectiveness of behaviour change in HIV and AIDS.

Also, the theory is relevant to behaviour change communication, which is critical to HIV and AIDS programming as it deals with the cognitive and emotional aspects of understanding behaviour. The behavioural intention, saliency, skills and competency and environmental constraints/facilities are central to HIV and AIDS programmes and interventions. The theory addresses specific planning and implementation of HIV and AIDS communication interventions, based on the constructs, and this is sufficient in guiding the study. This theory accounts for human behaviour.

Theoretical Framework



(Source: Adapted from Fishbein & Ajzen 2010)

Figure 2.1 Integrated Behavioral Model of behavior change

2.3 Conceptual Framework

A conceptual framework is a representation of the relationship of the research variables, which explains the present state of affairs as well as outline the possible solution to the problem being investigated (Oriaso, 2013; Kombo & Tromp, 2006). The conceptual framework outlines the relationship between the variables central to the study. In this study, there are two types of variables. These are the dependent variable and independent variables. The behaviour change for consistent and correct condom use to reduce the incidence and prevalence of HIV and AIDS is the dependent variable. The factors believed to determine the behaviour change among the youth for condom use such as behavioural intentions, environmental constraints, knowledge and skills, habit and salience are the independent variables. The relationships among these variables are captured in figure 2.1 below.

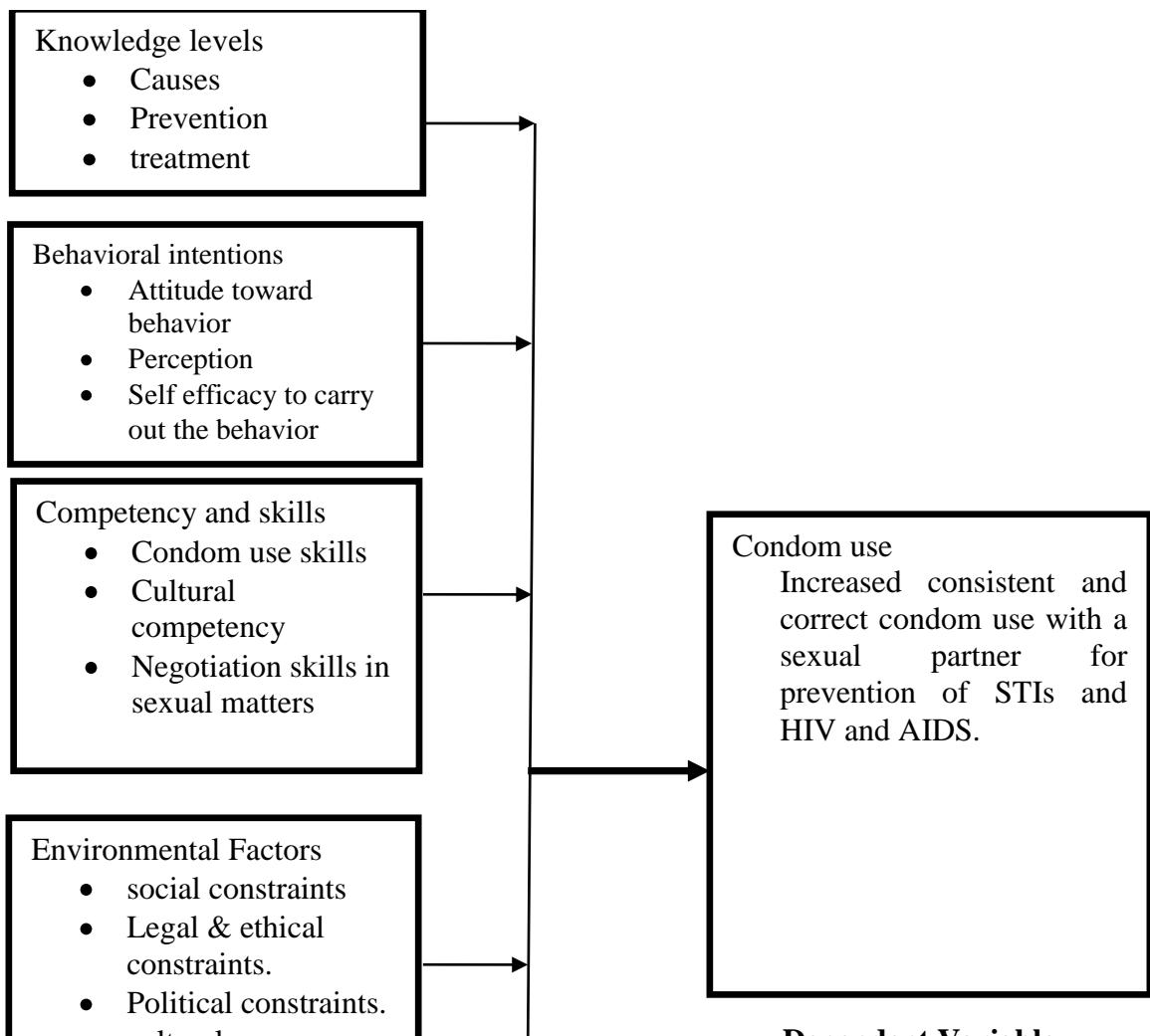


Figure 2.2 Conceptual Framework
2.4 Review of Variables.

- 2 Saliency of behavior
- The importance & prominence of the behavior
 - factors affecting saliency e.g. poverty
 - Individual perceived susceptibility to disease

associated with health literacy, which is the capacity to obtain health information and services needed to make appropriate decisions, Panzer, & Kindig, (Eds), 2004).

important role in disease prevention, for example, the spread of HIV and AIDS through the understanding of risks and identification of necessary behavioural changes (Kiai 2009; Nielsen-Bohlman, et al, 2004).

Different studies suggest an association between HIV and AIDS knowledge level of the youth and condom use (Govender ,2010; Kiai, 2009; Mberia, 2009; Mulwo, 2008) Other studies indicate that there exist knowledge-behaviour gap, as HIV and AIDS knowledge does not lead to behaviour change (Fishbein & Ajzen 2010; Oriaso 2013). In Kenya, there is need to establish the knowledge level of the most at-risk population of the youth for such conclusions to be made.

2.4.2 Behavioural Intentions

A particular behaviour is most likely to occur if a person has a strong intention to perform it among other factors. The Integrated behavioural model describes that intention to perform behaviour follows reasonably from beliefs that people hold about the behaviour (Fishbein & Ajzein, 1975; Fishbein & Ajzein, 2010; Marco, 2008). If people believe that performing a particular behaviour is a good thing, then they are more strongly motivated to actually perform the behaviour than if they believe that performing the behaviour is a bad thing (Fishbein & Ajzein,1975; Fishbein & Ajzein, 2010; Marco, 2008).

Clearly, strong behavioural intentions are required for an intervention addressing model components such as skills or environmental constraints, to affect behavioural performance. The Integrated Behavioural Model postulates that intention is a function of three types of perspectives: attitude, perceived norm, and self-efficacy. The three factors determining behavioural intentions are attitudes toward the behaviour defined as a person's overall favourableness or unfavorableness towards performing the behaviour's perceived norm that reflects the social pressure one feels to perform or not perform a particular behaviour. This has two aspects, namely an injunctive and descriptive norm. An injunctive norm is an extent to which important social networks are expected to be

supportive of the persons performing the behaviour, and a descriptive norm is an extent to which members of those networks perform the behaviour themselves. Perceived norm is the totality of these two normative perceptions and finally, personal agency, described by Bandura (2006) as bringing one's influence to bear on one's functioning and environmental events.

In integrated behavioural model, personal agency consists of two constructs-self efficacy and perceived control. Perceived control, as described previously, is one's perceived amount of control over behavioural performance, determined by one's perception of the degree to which various environmental factors make it easy versus difficult to carry out the behaviour. In contrast, self-efficacy is one's degree of confidence in the ability to perform the behaviour in the face of challenges. Self-efficacy should not be confused with competence. Competence refers to actual skills, whereas self-efficacy refers to perceived capabilities. Self-efficacy is one's perceived capability to successfully perform behaviour (Marco, 2008) and can be measured by having respondents rate their behavioural confidence on bipolar "certain I could not, certain I could" scales.

2.4. 3 Skills and Competency Levels

Skills are something one knows and learn while competencies are the effective application of skills. Competence can also be looked at as a cluster of related abilities, commitments, knowledge and skills that enable a person to act effectively in a job or a situation (Sahlins, 1978). Competence indicates sufficiency of knowledge and skills that enable someone to act in a wide variety of situations (Sahlins, 1978; Hiller,Harrison &

Warr, 1998). About condom use, the majority of the youth identify condoms with safe sex, but correct and consistent condom use is low. The reasons given to this is related to the problems of negotiation, difficulties in access and the risks that condoms gave no protection from, such a sullied reputation (Hiller, Harrison & Warr, 1988). Perhaps, because of this, some youth were looking to less secure methods of protection such as informal history-taking and monogamy (Hiller, et al 1998). Efforts should be put therefore into building HIV and AIDS competent community through the establishment of community strengthening interventions to provide skills and competencies to the youth. Campbell, Nair and Maimane (2007), defines HIV and AIDS competent community as one where community members work collaboratively to support each other in achieving sexual behaviour change, reducing stigma (a key obstacle to effective HIV and AIDS management), offer support for people living with HIV and AIDS cooperate with volunteers and organizations seeking to tackle HIV prevention and AIDS care and effective access to health care.

The youth should also be empowered with what is referred to as cultural competence. It is clear that culture does matter in behaviour change. Cultural factors are crucial in the prevention of HIV and AIDS, and more specifically condom use. Cultural factors shape related beliefs, behaviours and values. Indeed, as Marcus (1986) puts it, systematic attention to culture improves condom use. Culture is often made synonymous with ethnicity, nationality, and language (Marcus, 1986). For example, people of a certain ethnicity are assumed to have a core set of beliefs about illness owing to fixed traits. Cultural competencies therefore become a series of dos and don'ts. It is therefore important that cultural roots of a problem be identified for it to be adequately solved. In

condom use, therefore, cultural traits of a community can hamper the use of condoms by the youth. Other cultures abhor the use of condoms, as they say, this is an abomination and can bring bad luck, and religions like the Catholics and Muslims do not support the use of condoms. Efforts should, therefore, be made that stigmatisation of condom use is reduced and the youth equipped to deal with cultural orientations that hinder condom use. This cultural competence will result to increased condom use. There is, therefore, need to increase local competence to control HIV and AIDS through condom use by making the youth understand their biological and social knowledge about transmission of the disease to build competence among the youth.

Also, the youth should become increasingly skilled in presenting the social context and microbiology of HIV and AIDS in public places, fellow youth in active public dialogue about presentation strategies, stigma reduction, on condom use, among others. Drama is an innovative and interactive way for the youth to acquire knowledge about HIV and AIDS and openly engage community members in public performances and discussions. The drama has been an effective participatory method for HIV and AIDS education. The community-based dramas actively engage the youth and the entire community in participating in and ask questions raised by the performance. In dramas, therefore, the youth can be empowered. Heeren, Icard, O'Leary, Jemmott, Ngwane & Mtose (2014) argues that literature suggest that communication is a protective factor against the high-risk sexual behaviour. This therefore implies that it is important for the youth to be empowered with communication skills so that they can negotiate for safe sex, especially on matters of condom use.

A person will need knowledge and skills to carry out certain behaviour even if there is a strong behavioural intention (with no or minimum environmental constraints). As noted above, when people do not perform a recommended behaviour as they intended to, the objectives of an intervention would not be to improve intention, as the problem here is not one of motivation but one of competence, that is, skills (and means, that is, environmental constraints or facilitators) (Marco 2008). If, for example, a woman has a strong intention to get a mammogram, she requires sufficient knowledge of her health care system to act on this intention (with no serious environmental constraints). Those affected by diabetes may be highly motivated and thus intending to start an insulin self-injection regimen, but in the reality of a first unassisted injection attempt they may find themselves unable to use the syringe correctly, that is, actual deficient skills. In brief therefore, without the necessary skills, intentions will not predict behaviour.

2.4. 4 Environmental Constraints

A constraint is a limitation or restriction. Environmental constraints are any limitations on strategy options due to political, external competition, social requirements and expectations, cultural or economic factors, technological or legal requirements (Heeren, et al., 2014). Behavioural changes are affected by a host of environmental factors. They include social constraints, political constraints, legal and ethical constraints, cultural constraints among others. Social constraints influence tastes and buying patterns. Economic factors such as household income determine what one has to spend and what to buy. Political constraints will also affect the use of health products like medicines and condoms. It is not lost that in the earlier days of the scourge, Kenya's political leadership

was in denial and prevention measures like use of condoms were not promoted. It was not until the political leadership in 1999 when it declared HIV and AIDS as a national disaster that efforts to curb the scourge were put into place. In South Africa, President Jacob Zuma once claimed he had sex with a HIV positive lady without a condom but did not contract the virus because he had a cold shower. These are some examples of the political constraints. Also, political constraints affect the taxing system. Taxing health products like medicines and family planning contraceptives, including condoms thereby making them expensive and therefore out of reach of the youth is a political, environmental constraint. There are also the laws and ethics that act as an environmental constraint. Laws that bar the distribution of family planning, contraceptives and STI, preventive products like condoms to underage that are under 18 years, are a constraint to increased condom use among the youth. There are also technological constraints that act as environmental constraints. Condoms are not being manufactured in Kenya and sometimes are not adequate and become scarce, especially those which are freely distributed. Social requirements include the society's expectations of the individual, such as ethical issues. Rigid societal and gender norms that govern sexual behaviour for girls pose an environmental constraint, especially, where girls are just to submit to the men. Analysing and understanding environmental constraints and their dynamics are fundamental to positive behaviour change.

Social constraints are the things one cannot do because society says it is bad. To date, it is viewed as improper for a woman to initiate sex and more especially keeping condoms. Keeping condoms or even purchasing condoms is seen as a sign of promiscuity. It is seen to be bad for one to openly buy and keep condoms. Therefore, to date, buying condoms

openly is difficult because of the social constraints, which may lead to people engaging in sex without condoms. People may fear being seen buying condoms and so be forced to do unprotected sex. Generally, when one uses the phrase socially constrained, it means that people feel that they have to do or not to do certain things because of the manner in which others perceive such actions. for example, a man might really want to use condoms but will not do so because of the way society views such activity and therefore, he is constrained to use condoms.

The behavioural change will take place where apart from the existence of behavioural intention there are no serious environmental constraints preventing performance. These are what is referred to as environmental constraints in the integrated behavioural model. If, for example, someone's health insurance benefits include the use of a mail service pharmacy, the likelihood that syringes and insulin will be available will increase. Unforeseen heavy traffic is an example of impediment, as it makes it difficult to be at home in time for a scheduled injection. In brief, therefore without the necessary skills and resources, intentions will not predict behaviour (Fishbein & Ajzein, 2010; Marco, 2008)

2.4.5. Saliency of behaviour

The Oxford Advanced Dictionary defines saliency as most noticeable or important, prominent, conspicuous. More reasonably, salience describes something being prominent or noticeable. In the context of the Integrated Behavioural Model, the expected behaviour should be prominent to the person, thus making the idea of conducting the new behaviour available to the person, that is, how much an object stands out in the environment. Becker

(1974) states that, even if a person has a strong behavioural intention, the behaviour should be salient in the person to be able to perform it.

Salience is associated with the personal significance of health information to the individual (Johnson Andrew, & Allard, 2001). Personal perceived susceptibility of risk to health or relevancy of a disease increases an individual's anxiety (Lewis and Malow, 1997) and motivates or impedes one's health related preventive behaviours and information seeking (Johnson et al., 2001). Lewis, and Malow, (1997), have found that heterosexual college students engaging in risky sexual behaviours perceived greater susceptibility to STIs and HIV and AIDS and experienced more anxiety about contracting them. Under the threats of STIs, and HIV and AIDS, the youth will use condoms to reduce their uncertainty about being infected with HIV and AIDS.

As Lewis and Malow (1997) noted, only when individuals perceived greater susceptibility to being infected with STIs and HIV and AIDS will they become more concerned with the taking preventive measures like the use of condoms.

Saliency is a factor in decision making as to the use of HIV and AIDS prevention methods like condom use, for example, the example of salience (prominence) that is given in HIV and AIDS testing that occurs when a celebrity such as Magic Johnson is diagnosed with HIV and AIDS. News of such celebrities leads to increase in saliency about HIV and AIDS for many individuals that, in turn, lead to more HIV and AIDS testing.

Sub -Saharan Africa is the part of the world that is most severely affected by the HIV and AIDS, yet, surveys of attitudes to AIDS across African countries show that most people do not attach great importance to the issue. It is argued that the salience of HIV and AIDS

is low in Africa because many people are too poor to consider the disease important. HIV and AIDS is crowded with other issues such as poverty, hunger, and unemployment that have more immediate consequences for people's lives (Oriaso 2013). Today, the youth fear more getting pregnant than HIV and AIDS. It is common therefore to see girls and young ladies willing to engage into unsafe sex by not using condoms as long as they will be paid handsomely because of poverty as they say HIV and AIDS will come at a much later date, so, the salience of HIV and AIDS is not seen. Poverty and material living conditions have significant effects on the likelihood that individuals consider AIDS as salient socio-political issue. This supports the notion that poverty is a constraint on the importance people attach to AIDS and condom use. The Health Belief Model developed by Godfrey Hochbaum and others (Glanz,et al 2008),assumes that individuals will take preventive actions (risk-reduction behaviours) when they are susceptible to a disease (self-perception of risk) and acknowledge the consequences as severe and believe that taking preventive actions will be beneficial in reducing the threat of contracting the disease (for example, condoms are effective against HIV infection) and that its perceived benefits will be sufficient to overcome perceived barriers such as cost or inconvenience of undertaking the actions. Such therefore is the importance of saliency in behaviour change.

2.4.6 Condom Use.

Condoms can clearly play a major role in the prevention of sexually transmitted diseases including AIDS (Centre of Disease Control and prevention (CDC), (2006). After abstinence, the most effective method for preventing the spread of HIV is using a

condom (Pinkerton, et al, 1998). There are two basic types: male condoms and female condoms.

Stone, Warmer, Macaluso, Buerhler & Austin, (2006) reanalyzed several studies measuring condoms effectiveness in preventing sexually transmitted diseases. Used consistently and correctly, condoms are highly effective in preventing acquisition and transmission of HIV and AIDS.

Malcom (1992), states that one should use spermicidal latex condoms if the prevention of sexually transmitted diseases is a major reason for using condoms. The CDC states that use of spermicidal condoms is the best approach to the prevention of sexually transmitted diseases: herpes simplex virus, HIV, gonorrhea, trichomoniasis, hepatitis B, syphilis and Chlamydia.

Condoms should be used every time one engages in intercourse, even during pregnancy, when sexually transmissible infection is a concern for any reason.

Condoms are most effective if one follows specific steps. First, the condom is put on the erect penis before the penis comes in contact with the woman's genitals and, after intercourse, withdraw the penis immediately, holding onto the rim of the condom to prevent spilling.

2.5 Empirical Review of Studies

Communication is very central to the prevention strategies aimed at influencing individual and social behaviour (UNAIDS, 1999). Because of the many variations in the contexts that determine behaviour, it is evident that communication approaches for the HIV and AIDS prevention and care need to be re-evaluated, especially when behavioural

models are imported or adopted in Africa which bears the main burden of the HIV and AIDS pandemic.

UNAIDS (1999), notes that most theories underlying the models and frameworks used in HIV and AIDS prevention are based on individual psychology as opposed to collectivism. In the African context, the family, social group and community play a greater role in decision making while in the western society, behaviour change processes are based on individualism, the perspective that continues to dominate communication strategies for HIV and AIDS prevention and care the world over (Govender 2010, Oriaso, 2013). Approaches towards changing attitude, beliefs and behaviour for reduced HIV and AIDS incidences have been varied over time, with the application of several communication models in research and strategy development, which assumes a horizontal progression.

The paradigmatic shift has seen the progression from the use of linear models of communication to behaviour change communication (BCC), to social change communication (SCC) and to most recently the participatory approaches as strategies of HIV and AIDS positive behaviour change.

Indeed, there has been a shift from the use of linear models (mass media interventions) to participatory, dialogical processes of communication and the transition from the focus on individual behaviour to social change and the transformation of the perception of HIV and AIDS as a health problem to the adoption of it as a development problem (Govender 2010). The first approaches to the HIV and AIDS communication intervention utilized the linear models, which involve informational and educational strategies developed from the

understanding that communication is a very vital tool in development and HIV and AIDS prevention (Fishbein & Capella, 2006; Govender, 2010; Oriaso 2013). The linear models of communication assume that providing people with information and telling them how they should behave is enough to bring about behaviour change required for condom use for reduced HIV and AIDS prevalence (Oriaso, 2013). Initially, especially in the planning of health communication campaigns, it was believed that behaviour change was a matter of having information and making a personal choice (Govender, 2010; Oriaso, 2013).

In Kenya, the linear models have been employed to disseminate messages and experiences on causes, effects and control measures of HIV and AIDS through radio and television. During such sensitizations, youth-focused programmes are aired and billboards placed in most places where the key messages have included abstinence from sex, use of condom and being faithful to sexual partners (KAIS, 2009; Oriaso 2013). Like other countries, Kenya has had several HIV and AIDS behaviour change campaigns. Most of these campaigns are based on the ABC approach to prevent sexual transmission of HIV and AIDS. According to UNAIDS (2005), ABC stands for Abstinence, Be faithful to one partner and correct and consistent use of condoms. PEPFAR, an America's initiative to combat the global HIV and AIDS epidemic, follows an ABC strategy that emphasizes on abstinence for youth including the delay of sexual debut and abstinence until marriage, being tested for HIV and being faithful in marriage and monogamous relationships and the correct and consistent use of condoms for those who practice high-risk behaviours (UNAIDS 2005). These approaches are examples of linear models of communication applied in Kenya. However, its efficacy is put to question as it has been criticized that it does not take into consideration cultural context.

Another type of approach that has been applied in communicating HIV and AIDS messages is the behaviour change communication (BCC). The main flaw with the linear model is that it depicts communication as a one-way process where speakers only speak and never listens. It also implies that listeners listen and never speak or send messages. Schramm (1955) came up with a more interactive model that saw the receiver or listener providing feedback to the speaker or sender. This model also indicates the speaker and listener communicate better if they have common fields of experience, or fields that overlap. The behaviour change communication is an example of the use of this model.

According to Family Health International (2002), behaviour change communication is an interactive process with communities (as integrated with an overall programme) to develop tailored messages and approaches using a variety of communication channels to develop positive behaviours; promote and sustain individual, community and societal behaviour change; and maintain appropriate behaviours. First world countries placed emphasis on the behaviour of the individuals, raising the importance of behaviour change communication. The BCC is premised on the belief that the urgency of the disease necessitates a focus on individual behaviour and encourages people to make informed choices (Govender, 2010). According to NACC (2010), Kenya's HIV and AIDS report to the United Nations General Assembly indicated that the country's strategy encourages the use of BCC to promote sexually responsible behaviour. This report suggested that BCC has been successful in achieving positive behaviour change, particularly among the youth to curb the spread of HIV and AIDS.

It has been suggested that BCC has a major flaw of overdependence on behaviour transformation, neglecting other determining factors as it assumes that only behaviour

alone needs to be transformed, while, in reality, such change is unlikely to be sustainable unless it involves different kinds of social change (UNAIDS, 1999). This therefore calls for a consideration of other factors like local African cultural values and practices. UNAIDS (1999) argues that communication initiatives have a chance of succeeding only when situated within the cultural contexts of the target audience. A few critics of the BCC model have noted that behaviour change does not occur in isolation but within a framework of various factors such as the individual motivations, local community support and availability of resource agencies (Govender 2010; Kunda and Tomaselli 2009; Oriaso 2013).

The BCC model is audience specific. Using the BCC approach to HIV and AIDS communication, the audience is carefully segmented, messages are pre-tested, and both mass media and interpersonal channels are used to achieve defined behavioural objectives (Govender 2010; Oriaso 2013). Stokols (1996), states that the behaviour change approach to disease prevention and health promotion focuses on the modification of a person's health-related behaviours, for example, safe or unsafe sexual practices and substance abuse. The behaviour change communication involves the promotion of a particular behaviour or social norm through communication interventions that rely on mass media and social marketing techniques (Fishbein & capella, 2006; Govender, 2010; Oriaso, 2013).

Several potential limitations that are inherent in behaviour change models of health promotion exist. As Stokols (1996) puts it, a person's efforts to modify their health practices are often impeded by economic, social and cultural constraints. Also, efforts to persuade a person to adopt improved health practices may go unheeded if that person is

unmotivated to enact the suggested behaviours and that even when persons do manage to adopt new and improved health practices, the efficacy of their behavioural changes can be undermined by their exposure to environmental surroundings.

Critics of the BCC programmes called for a shift to Social Change Communication model that recognises people and communities as agents of their change (Govender 2010). Communication responses to HIV and AIDS must take into account the context in which the pandemic is embedded (Carey 2006; Govender, 2010). Lie (2008) asserts that behaviour change can usually be an outcome of social change and requires addressing social issues such as norms and values, stigma and discrimination, hegemonies, ideologies, power relations and repressive domination within a specific cultural, political and economic context. A shift beyond behaviour to focus on social or cultural change is crucial (Govender, 2010). The social change recognizes that people need the necessary skills and power to deal effectively with social change (Bandura 1989; Govender, 2010).

While social change is fundamental in a community through dialogue for collective action, empowerment of the people is crucial for collective action. Empowerment of the people is crucial to ensure effective development. All programmes should, therefore, reconsider the levels of empowerment given to the people before interventions are implemented in communities, ensuring the equal sharing of knowledge and solution alternatives among the "beneficiaries" and "benefactors" (Melkote, 2000). This shift to a focus on participatory and empowerment initiatives has led to the development of various communication and development models like the Communication for Social Change Theory (CFSC), which suggests that social change can only be effectively facilitated when the community and partners determine the levels of participation and ownership

between the development support communication professionals and the community (Govender, 2010). It is only when these communication professionals hand over all levels of participation to the community where there is effective ownership and active dialogue for collective action where consensus is made possible (Govender, 2010).

Participation is seen as the opening of dialogue, where the source and receiver interact continuously, thinking constructively about the situation, identifying developmental needs and problems, deciding what is needed to improve the situation, and acting upon it (Nair & White, 1993). It is clear then that communication plays an important role in the process of participation as people become included and involved through continuous dialogue about the challenges that they face with regards to development. Participation necessitates a move away from the top-down, one-way flow of communication model, as the people involved have the ability to discuss, negotiate and make collective decisions.

2.6 Critique of the Existing Literature

There have been studies related to the causes of the rise of HIV and AIDS incidences and prevalence among the youth and the general populace. However, few studies have focused on what determines the behaviour change among the youth on condom use. Studies that have been conducted in Kenya on HIV and AIDS have however not shown the major determinants for condom use among the youth. Mberia (2009), dealt with the examination of effective communication factors that influence university students in their response to HIV and AIDS prevention campaigns messages. This cohort of target leaves most of the youth below age 18 years. Another study on youth was that by Ndati (2013)

on the role of interpersonal communication in shaping and influencing behavioural responses to HIV and AIDS among the youth in secondary schools in Nairobi. This study did not address determinants for condom use among the youth.

Mulwo (2009) also did a study of the youth (students) responses to the ABC and VCT messages at three universities in KwaZulu-Natal Province in South Africa. It should be noted that South Africa is in the category of the newly developed countries comprising of Brazil, Russia, India, China and South Africa,(BRICS), a context different from that of Kenya ,a developing world or third world country. Oriaso (2013) had a study on the subject but zeroed in on women where he examined the interpersonal communication networks in HIV and AIDS prevention: What works for young women from low socio-economic statuses in Rachuonyo. Another study on HIV and AIDS was done by Kiai (2009) who analysed the planning and implementation of HIV and AIDS communication interventions by NGOs in Kenya. Her study did not target behaviour change, especially condom use among the youth. More so, the study examined the institutional implementation of strategy in NGOs. Nguzo (2012), also, examined the determinants of effective HIV and AIDS behaviour change campaigns among the youth. His study focused on all campaigns for behaviour change. The present study targets factors that determine condom use among youth in educational institutions.

This study therefore helps theoretically and empirically in providing answers to the key HIV and AIDS determinants of behaviour change for condom use among the youth in the age bracket of 15 and 24 who are the most affected cohort. Other studies have shown factors that increase the spread, but few studies have been conducted as to what should be considered most in the fight against the scourge among this age bracket.

2.7 Research Gap

Based on literature review, studies on HIV and AIDS communication did not fully illuminate the determinants of behaviour change especially condom use among the youth. Most studies concentrated on one variable of behavioural intentions which has guided them in message development of HIV and AIDS behaviour change campaigns. However, they have not gone further as to consider the other factors of environmental constraints, skills and competencies, saliency and habit. This has resulted to high awareness levels among the sections of the population, but with a gap still existing between the high awareness levels and the desired behavioural changes. This study therefore filled this gap by examining the influence of communication determinants for condom use among the youth in Kilifi County such as environmental constraints, skills and competencies, the saliency of behaviour, behavioural intentions and knowledge levels.

2.8 Summary

The theoretical review has revealed that to bring about behaviour change, five factors must be considered. These factors are the behavioural intention to perform the behaviour, which is a factor of attitude, perceived norms and self-efficacy; environmental constraints, knowledge on the subject matter and skills and competencies; saliency of the behaviour and habit. Thus, a particular behaviour is most likely to occur if a person has a strong intention to perform it and has the knowledge and skills to do it there is no serious environmental constraint preventing performance; that, the behaviour is salient, and that, the person has performed the behaviour previously (Montanno & Kasprzyk, 2008).

Empirical review has revealed a research gap, where a number of studies conducted have not been on factors that determine condom use behaviour, but on other issues in health communication (Kiai 2009; Mulwo 2008; Ndati 2011; Oriaso 2013).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the methods used in conducting the research. It is organized into subsections, namely: research design, target population, sampling frame, sample and sampling techniques, research instruments, data collection procedures, pilot testing and data processing and analysis procedure.

3.2 Research Design

A research design is a structure within which the research is conducted. It constitutes the blueprint for the collection, measurement and analysis of data (Kombo & Tromp 2006). The study used a mixed method design, with descriptive survey as the main design in the cross sectional study of the youth. A descriptive study is one in which information is collected without changing the environment. In human research, a descriptive study provides information about the natural occurring health status, behaviour, attitudes or other characteristics of a particular group. The present study was concerned with studying of youth in Kilifi County, to determine the communication factors affecting condom use. The study sought to describe the experiences, perceptions and behaviour of the youth within a specific time frame in their local environment. Through this design, information was obtained by use of a survey, focus group discussion and interview methods. Orodho (2003) observes that a study concerned with obtaining information by interviewing or administering a questionnaire to a sample of respondents is a descriptive survey.

The study utilized mixed methods of quantitative and qualitative techniques. Campbell, Cleveland, Columbian and Southwick (1999) observe that mixed methods are a powerful way of enhancing validity of results. Denzin (1978) argues that any bias inherent in one particular method would be neutralized by the other method. Also, it has been observed that data produced by combining methods enhance the validity and reliability of research findings (Nachmias & Nachmias, 1996).

3.3 Target Population

Target population is that population to which the researcher wants to generalize the results of the study (Kombo & Tromp 2006). According to Borg and Gall (1989) it is the number of real or hypothetical set of people, events or objects to which a researcher wishes to generalize the findings. The target population comprised of 45,256 students drawn from 120 secondary schools (37,529), nine tertiary institutions and Pwani University (Kilifi County Education Office 2016) and expert groups which include local NGOs, CBOs, FBOs as well as communication and health professionals in the area of HIV and AIDS. All students aged 15-24 years in Kilifi North Sub County educational institutions were eligible to participate in this study. The youth were chosen because they are a high HIV and AIDS risk population (KNASP 2015/2016) and that condom use has been recommended to help in HIV prevention among them (Pinkerton, *et al* 1998). According to Mberia (2009), everyone must now confront and cease being complacent about the reality of sexual behaviour and risks among all young people as the hard truth is that HIV and AIDS are already a reality among the youth, especially in our educational community. Indeed, the majority of new HIV and AIDS infections occur among the young people between the ages of 15 and 24 (UNAIDS, 2004).

3.4 Sampling Frame

A sampling frame is a list from which the sample is drawn and is representative of the population. The sample frame consisted of four secondary schools, a university and a tertiary college. In addition, there was also a group of six organizations dealing with HIV and AIDS projects in Kilifi North Sub-County.

Kilifi North Sub-County was the research site where the target respondents who are mainly the youth of between 15-24 years were studied. Kilifi North Sub-County was chosen because of the fact that various ethnic groups are fairly represented, it has the highest HIV and AIDS prevalence and incidence rates, (KCIDP, 2013), due to the existence of social amenities that the youth attend, and also hosts several institutions where this research study was conducted like Pwani University, Kenya Medical Training College, Kilifi Campus, and large secondary schools. Also studied were, Kenya Medical Research Institute; APHIA plus, World Vision, Moving the Goal Post, SCOPE Center, and Kilifi NASCOP. Additionally, Kilifi North Sub-County has high presence of NGOs support youth initiatives. The research site was also the capital of the County Government of Kilifi, especially located in Kilifi Town. Kilifi North Sub-County is also the most representative of population of both urban and rural youth apart from being the most accessible during research due to improved road infrastructure.

Kilifi North Sub-County has an approximate area of 530.30 square kilometres, with an approximate population of 207587 people (KCIDP 2013; Kenya National Bureau of statistics (KNBS) 2010). It is a coastal plain that runs several creeks with marine swamps that are endowed with mangrove forests.

3.5 Sample size and Sampling Technique

3.5.1 The Sample Size

The sample size for this study was 390 respondents, made up of 384 youth drawn from four secondary schools (Chumani Secondary School, Majaoni Secondary school, Kilifi Township Secondary School and Bahari Girls Secondary school) and the two public post-secondary institutions (Pwani University, KMTC-Kilifi) and six participants purposively selected from HIV and AIDS projects in the sub-county. Saunders, Lewis and Thornhill (2003) propose the following method for determining sample size for populations greater than 10,000 units as is the current situation which results to a total of 384. This was seen as being representative enough.

Minimum sample size

$$n^1 = p\% \times q\% \left\{ \frac{z}{e\%} \right\}^2$$

Where n^1 = minimum sample size

p= proportion of the population with given characteristic.

q= (1-p)

z= standard normal deviation at the required confidence level.

e = margin of error.

Fisher, Laing and Shoeckel, (1983) as contained in Mugenda and Mugenda (1993) recommended that since p and q are unknown, both are set at 50% at a confidence level of 95%, z= 1.96 and e = ±5%, then

$$n^1 = 50 \times 50 \left\{ \frac{1.96}{5} \right\}^2 = 384$$

The youth group from educational institutions were preferred because the youth were bound to demonstrate youth cultures that are relevant considerations in the study. The youth were also easily accessible in such like groups.

3.5.2 Sampling Technique

Purposive sampling method was used to choose six educational institutions in Kilifi North Sub-County. Purposive sampling was used since the research targeted youth between 15-24 years, who are in these institutions. The sample size of respondents was constituted with the assistance of the dean of students in Pwani University and Kilifi MTC, and heads of guidance and counselling departments in secondary schools. Within the KMTC Kilifi campus and all secondary schools, respondents were selected using systematic random sampling strategy, where class registers were used to identify and select participants based on class intervals. This was because in these institutions, students sit in class waiting for lessons. However, in Pwani University, the researcher waited at the door of lecture rooms before the lessons started and selected participants as they arrived based on class intervals. This was because at the university, students attend lectures at the time periods indicated in the time table (See table 1 below for more information). Qualitative data were collected from all study location through participants who were selected using volunteer method. Similarly, the key informants were purposively selected to represent the HIV and AIDS projects or activities they were engaged with during the time.

Table 3.1
Sample size distribution

Name of institution	Number students	of	Male	Female	Total sample
Pwani University	(6033-total)		(4005-total)	(2028-total)	
2nd years	1508		1012	482	129
KMTC	334		116	218	28
Chumanii Secondary School.	701		441	260	60
Majaoni Secondary school	671		441	230	57
Kilifi Township Secondary School	643		643	-	55
Bahari Girls Secondary school.	640		-	640	55
TOTAL	4,497		2,653	1830	384
SAMPLE SIZE					384

Source: Kilifi County Education Office, 2015

3.6 Research Instruments

The study relied on primary data. The data were both quantitative and qualitative. Quantitative data were collected by using questionnaires while qualitative data were collected using Focus Group Discussions and In-depth Interviews with Key Informants from professional organisations dealing with HIV and AIDS in Kilifi County. The researcher developed all the primary data collection instruments.

3.6.1 Questionnaires for the youth

Questionnaires were used to collect quantitative data on knowledge, behavioural intentions (attitude, norms and self-efficacy), skills and competency, environmental constraints and saliency and general personal information of the respondents. These data

were obtained from 382 youth respondents using self-administered structured questionnaires. The questionnaires were administered because the population could read and write (Fisher, Foreit, Laing, Shoeckel,& Townsend, 2002). Likewise, questionnaires were also expected to produce more accurate results on such sensitive topics as sexual behaviour and HIV and AIDS because they allow anonymity, which can encourage frankness when sensitive issues like HIV and AIDS are involved (Robson, 2002). Campbell et al (1999) observe that the use of self-administered questionnaires is particularly useful in the collection of data on sensitive topics, such as sexual behaviour. The questionnaires content was based on specific objective to get accurate insight into the HIV and AIDS. Specifically the questionnaire had the following sections: background information; knowledge levels; behavioural intentions; environmental constraints, saliency and skills and competency.

3.6.2 Focus Group Discussions

A total of six (6) focus groups were used each comprising of 10 participants drawn voluntarily from each of the institutions involved. Morgan (1988) notes that, where focus groups form a central and more substantive part of data collection for study, it would be difficult to justify fewer than six groups. Focus Group Discussions (FGD) consists typically of 8 to 10 members who shared certain characteristics relevant to the study with a moderator leading the discussions for about two hours on a particular topic, concept or product (Kombo, 2006; Sekaran, 2006;). Wimmer (1993) notes that, a focus group has from 6-12 participants being interviewed simultaneously with a moderator leading the respondents in a relatively free discussion about the focal point.

Focus Group Discussions (FGDs) were used primarily to examine the normative aspects of behaviour from youth respondents in groups of ten from the six research sites (institutions). The advantage of Focus Group Discussions was to capture greater breadth of ideas, opinions and experiences that were expressed by the participants. According to Morgan (1988) the hallmark of FGD is the explicit use of the group interactions to produce data and insights that would be less accessible without the interaction found in the group. Focus Group Discussions allow a group of participants to discuss subjects of common interest with the guidance of a facilitator or moderator.

In this study, only those youth who responded to the questionnaires were involved in the FGDs. Oriaso (2013) argues that it is necessary for such a study to allow the youth to give their collective opinions and beliefs on the determinants of condom use behaviour change for the prevention of HIV and AIDS. This will enable to get the social norms of the youth.

3.6.3 In-depth Interviews with Key Informants

A total of six key respondents were also purposively selected from HIV and AIDS projects within Kilifi North Sub-County to participate in the in-depth interviews to understand how individual perceptions and opinions conformed with or diverged from what was expressed in the focus group discussions with the youth. Each of these respondents was individually interviewed to allow for detailed probing and privacy. The researcher tried to reduce the limitation of the interviews such as participant reservations by establishing a friendly atmosphere and positive attitude towards the respondents. According to Ndati (2013) the establishment of rapport between the researcher and the participants is a prerequisite for a successful interview. The key informants were

purposively selected based on their active participation in the related projects or activities in the sub-county.

Campbell et al. (1999) observe that key informant interviews are a conversational style rather than a formal question-answer format. The informants were provided with the issues to be covered during the interviews that included behavioural intentions-attitude, norms and self-efficacy, competence and skills in performing the intended positive behaviour, salience levels of the intended behaviour, knowledge on condom use and environmental constraints.

3.7 Data Collection Procedure

This study collected both qualitative and quantitative data. Mixed method data collection was employed comprising of three data collection methods of surveys, focus group discussions (FGDs) and in-depth interviews (IDIs). As Creswell (2009) puts it, collecting both quantitative and qualitative data assists in the triangulation of the result to ensure validity and reliability. Campbell et al (1999) assert that while the survey is useful for measuring the incidence of a specified behaviour, it is often unsatisfactory for full investigation of motivations, beliefs and values that may have a major influence on behaviour.

Before the actual data collection, a research permit was sought from the National Council for Science and Technology (NACOSTI) in the Ministry of Education, Science and Technology. Research assistants were then recruited and trained. After that, principals of secondary schools and deans of students of Pwani University and KMTC, Kilifi were consulted. Participants of the study were first informed about the purpose, procedure and benefits of the study and their consent sought. They were assured of the privacy and

confidentiality of the exercise by the researcher and his research assistants. They were also informed that this was a voluntary process without any monetary gains. The youth who were underage had their consent forms signed by their class teachers while those above 18 years signed their consent forms. As for key informant interviews and FGDs, they were asked to consent to the audio recording of their discussions.

The study was conducted in April, May and June 2016 when the learning was in session. Questionnaires were self-administered using the drop and pick method. The structure of the questionnaire was clear and easy to understand and straightforward ensuring that respondents answered questions with ease. The data collection instruments had questions arranged according to research objectives to ensure relevance to the research questions. The questionnaire was divided into six sections. Section A focused on general information while the other sections (C, D, E, and F) focused on the five research objectives.

3.8 Pilot Testing

Testing validity and reliability was done by carrying out a pilot study. A pilot study is a feasibility study (trial runs), done in preparation for the major study (Mberia, 2009; Polit, Beck & Hunger, 2001). Pilot testing was carried out in two secondary schools, namely: Dzitson and Lutsangani, in Kilifi South Sub-County with a total of ten respondents who filled in the questionnaires. They comprised of five respondents from each school. As a result of the pilot testing, seven questions had to be reviewed as they were found to have some ambiguities. As for the qualitative data, the interview guides were tested with the heads of guidance and counselling departments from the two schools. Bell (1993) emphasises the role of piloting in ascertaining the validity and reliability of research

instruments. Pilot study helps in developing and pre-testing of the main research instruments (Baker, 1994). This provided feedback on the wording of the questions. After pilot testing, the researcher made changes to the instruments to remove ambiguity.

3.9 Data Processing and Analysis

Kombo and Tromp (2006) define data analysis as the process of examining what has been collected from the field, processing and managing it in a manner that permits easier deductions and inferences to be made based on the research data. It involves scrutinizing the acquired information and making inferences or generalizations based on it. Qualitative and quantitative data were analysed as shown in the sub-sections below.

3.9.1 Quantitative Data

Quantitative methods of data analysis attempt to draw meaningful results from a large body of quantitative data and provide a means of separating out the large number of confounding factors that often obscure the main quantitative findings (Abeysekera, 2005).

Descriptive and inferential statistics were used to interpret the quantitative data on the communication determinants and condom use behaviour. While inferential statistics relied on Pearson's Product Moment Correlations to determine the relationship between dependent and independent variables, descriptive statistics used frequencies and percentages to analyze quantitative data and tables to present the data based on age of the respondents.

3.9.2 Qualitative data

Qualitative data analysis can be defined as an iterative and reflexive process that begins with data collection rather than one that ends with data collection (Stake, 1995).

Chambliss and Schutt, (2015) view qualitative analysis as an inductive process in which data is first organized into categories, pattern and connection identified and their influence on one another.

In this study qualitative, data were collected from the focus group discussions and the key informant interviews and were transcribed and coded into common themes. The themes were interpreted using thematic analysis. The narrative reports supplemented with quotations were written. The written qualitative data report from the key informants and FGDs were triangulated with the quantitative responses (survey data) to enhance the reliability and validity of the study.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents and discusses the findings of the study set to investigate the communication determinants of condom use for HIV and AIDS prevention among the youth in Kilifi County in Kenya. Specifically, the study aimed at answering five questions: a) what is the influence of knowledge levels on condom use among the youth in Kilifi County?, b) What is the influence of behavioral intentions on condom use among the youth in Kilifi County? c) What is the influence of environmental constraints on condom use among the youth in Kilifi County? d) what is the influence of saliency on condom use for HIV and AIDS prevention, and finally d) what is the influence of skills and competency on condom use in HIV and AIDS prevention among the youth in Kilifi County? Information on these questions was primarily collected by the use of a self-administered questionnaire as this method is particularly useful in the collection of data on sensitive topics, such as sexual behavior (Mberia, 2009; Robson, 2002). It has also been observed that where a quantitative study has been carried out, it is important to use other qualitative methods of data collection so as to capture greater breadth of ideas, opinions and experiences that were expressed by the respondents (Campbell et al, 1999, Mberia, 2009) as this helps in clarifying and illustrating the meaning of the findings from the questionnaires. Hence, focus group discussions and in-depth-interviews were conducted to collect the qualitative data to triangulate the survey data.

The response rate, data presentation and discussion are outlined in the sub-sections below.

4.1.1 Response Rate

Quantitative data were collected from 382 respondents, giving a response rate of 99.5 percent. This response rate was achieved because of the due diligence observed in the planning and implementation of the study. The respondents ranged between the ages of 15 and 24 years, drawn from Chumani, Majaoni, Kilifi Township and Bahari Girls secondary schools, the Kenya Medical Training College (KMTC), Kilifi and Pwani University, in Kilifi Town. The table below shows the response rate for youth respondents.

Table 4.1 : Response Rate

Age category	Frequency	Percentage
Under 15 years	13	3.39
15-20 years	236	61.46
20-24 years	122	31.78
Over 24 years	11	2.86
Total	382 (384)	99.49 (100)

A part from the above, qualitative data were also collected through six FGDs each made up of 10 youth participants drawn from the six institutions in Kilifi County where the survey data were collected. Additional qualitative data were collected using key informant interviews with specialists from HIV and AIDS based projects namely, Moving the Goal Post, World Vision, Aphia Plus, KEMRI and SCOPE and NASCOP in Kilifi County.

4.1.2 Data presentation and discussion format

The research findings have been presented under six thematic areas, namely, respondents' demographic information, knowledge level, behavioral intentions, skills and

competency, environmental factors and saliency of behavior, as guided by specific research objectives. In this chapter, quantitative data are first presented, followed by qualitative data, as the discussion of results and linking findings with literature and theory in each item follows. In this study, qualitative data have been used for triangulation purposes only.

4.2 Demographic information of respondents

The study began by documenting the demographic information of the respondents in terms of their age category, education level, and gender category, the frequency of living with parents, their sexual relationship status and social-economic classes. These were important in determining the relationship between these variables and condom use behavior. The findings on the respondents' demographic information are presented in the sub-sections that follow.

4.2.1 Gender distribution of respondents

The respondents were asked to state their gender, in order to establish the gender representation in the sample. The table below presents the findings in all age categories.

Table 4.2: Gender distribution of respondents

Age category	Gender	Frequency	Percentage
Under 15 years	Female	10	76.9
	Male	3	23.1
15-20 years	Female	103	43.6
	Male	133	56.4
20-24 years	Female	61	50.0
	Male	61	50.0
Over 24 years	Female	5	45.5
	Male	6	54.5

The respondents indicated their gender using male or female categories. From the table, the gender distribution was relatively fair, with females at 47% and males 53%.

Additionally, the gender distribution was equally fair along all age categories, except in under 15 years where almost three quarters of respondents, (76.9%) were females and 23.1% males. The latter implies that there were more girls in school than boys at the time of this study. It also implies that the empowerment of the girls had succeeded as more resources had been set aside to empower girls in education. From the results, fewer boys under 15 years are in secondary schools for certain reasons such as neglects or child labour.

In the 15-20 years category, the number of girls was relatively lower than the boys' with a percentage of 43.6% against that of boys at 56.4%. This implies that some of the girls at their reproductive age had begun to drop out of schools due to factors such as fee problems, early marriage or discrimination of girls in education. This has been reinforced by the findings in the 20-24 years category, where the number of males and females equaled at 50%, only for the disparity to be seen in the respondents from the age category of above 24 years. In summary, there is a tendency of the girls to exit the education system at an early age due to poverty, early marriage and cultural factors, which is also quite evident in other studies (Mulwo 2009; Ndati, 201; Nguzo 2012;). Many studies have attributed the low enrolment of girls in educational institutions to cultural factors which make most parents to prefer boy child education to girls' (Kiai 2009; UNAIDS 2012).

4.2.2 Age distribution of the respondents

The specific ages of respondents were documented although the study was meant to cover respondents in the ages of 15-24 years. This was meant to shed light on the effect of age on access, perception and use of condoms in HIV and AIDS prevention. The table below shows the age distribution of study respondents.

Table 4.3: Age distribution of the respondents

Age category	Frequency	Percentage
Under 15 years	13	3.4
15 – 20 years	236	61.8
20 – 24 years	122	31.9
Over 24 years	11	2.9

From the study, majority of the respondents were between the ages of 15-20 years which was represented by 61.8 percent. The respondents aged over 24 years were also represented by 2.9%. This implies that it is not true that there is age limit to education. Those who were between the ages of 20-24 years were represented by 31.9% while the respondents who were less than 15 years were 3.4%. From the study, it is clear that the higher percentage in the 15-24 years category is consistent with national demographic information (KNBS 2010) indicating that the youth between 20-25 years are the majority, accounting for over 50% of those in the education system and those highly prevalent to HIV and AIDS (KAIS 2014; KDHS 2009; NACC 2010; NASCOP 2005). This does not rule out the fact that some youth in these age categories are outside educational systems due to poverty, gender discrimination in education, early marriage, child labour and diseases (KNBS 2010; UNAIDS 2012).

4.2.3 Level of education of respondents

The table below provides a breakdown of education attainment of respondents according to their ages. The study covered the respondents in secondary, tertiary and university levels of education. The aim of this was to determine the link between educational level and condom use among the youth.

Table 4.4: Level of education of respondents

Age category	Level of education	Frequency	Percentage
Under 15 yrs	Secondary education	13	100
15-20 years	Tertiary education	2	0.85
	Secondary education	206	87.29
	University Education	28	11.86
20 – 24 years	Tertiary education	29	23.77
	Secondary education	11	9.02
	University Education	82	67.21
Over 24 yrs	Tertiary education	5	45.45
	University education	6	54.55

As shown above, results indicate that all (100%) of the respondents in the category of under 15 years were in secondary school, with only two and 28 respondents in tertiary and university levels, respectively. Additionally, majority of respondents from 20-24 years were in university at 67.21% and at 23.77%. This finding is consistent with demographic data available at the Kenya National Bureau of Statistics (KNBS 2010). Worth noting is that the respondents accurately represented the group that many reports and studies on HIV and AIDS indicate as high risk persons, who are sexually active and need to use condoms for HIV prevention (NACC 2014). Due to poverty, civil wars and child labour, some of the youth corresponding with the age categories above are out of the education system in most of the sub-Saharan African (UNAIDS 2012).

4.2.4 Socio-economic classification of the respondents

The socio-economic levels of families of the respondents were investigated to help understand its relationship with condom access and use behavior among the youth in Kilifi. The results are presented in the table below.

Table 4.5: Socio-economic classification of study respondents

Age category	Economic status	Frequency	Percentage
Under 15 years	Poor	3	23.1
	Middle class	10	76.9
15-20 years	Poor	30	12.7
	Middle class	199	84.3
	Upper class	4	1.7
20-24 years	Poor	11	9.0
	Middle class	109	89.3
Over 24 years	Middle class	10	90.9
	Upper class	1	9.1

From the table, it is evident that majority of the youth from across all age strata were from middle class families. About two percent were from upper class, and about 10 percent indicated that they belonged to low class. For instance, 76.9% of under 15 years were from middle class, 84.3% from 15-20 years, 89.3% from 20-24 years and 90.9% of those above 24 years indicated being in middle class. Many studies have suggested a strong connection between poverty and HIV and AIDS infection, due to sexual abuse for money, lack of basic education and difficulty in condom access and use (KAIS 2012; Mulwo, 2008; Nguzo 2012). There are, however, other studies that have demonstrated a lack of connection between socio-economic levels and HIV and AIDS prevalence, arguing that where behavior change communication is effective, such factors are least influential (Oriaso 2013; Fishbein & Capella 2006).

4.2.5 The living situation of the respondents

The belief that the environment where one lives determines their behavior created the necessity of establishing where the youth lived. This was to bring out the association between living in the school dormitories, at home, out of campus with roommates and off campus with boy or girl friends with youth decisions to access and use condoms during sexual intercourse. The results are presented in the table below.

Table 4.6: The living situation of the study respondents

Age category	Living situation	Frequency	Percentage
Under 15 years	In the dorms	7	53.8
	At home	6	46.2
15-20 years	In the dorms	138	58.5
	Off campus with girlfriend/boyfriend	2	0.8
	Off campus with roommates	19	8.1
20-24 years	At home	69	29.2
	In the dorms	33	27.0
	Off campus with girlfriend/boyfriend	11	9.0
	Off campus with roommates	62	50.8
Over 24 years	At home	10	8.2
	In the dorms	2	18.2
	off campus with roommates	2	18.2
	At home	4	36.4

The study found that respondents under the 15 years were either living in the dorms and at home represented by 53.8% and 46.2%, respectively. In the 15 – 20 age categories, majority were also living in the dorms at 58.5%, with only 0.8% living off campus with either a boyfriend or girlfriend. These findings had some difference with 50.8% of the respondents in the 20 – 24 age groups living off campus with roommates. However, the majority of those in over 24 years category were either living at home or off campus with

boy/girlfriends at 18.2% and 36.4%, respectively. The implication of these findings is that the more a person increases in age the more they begin to live independently and make independent decisions on matters of sex and life, as indicated in various reports (KAIS 2009; NACC 2010). It also implies that sexual behavior begins in earnest when youth start to have independent living status off campus or away from homes, an observation which challenges the finding of Ndati (2013) that sexual engagements are social actions that occur within social networks like the schools he studied.

4.2.6 How often the respondents stayed with their parents

The study also sought to examine how often the respondents from different age categories stayed with their parents. From the results, it was evident that majority of the respondents, especially those in the age group of 15 – 20 years were mostly living with their parents, constituting 62.03%. Following closely were those in the age of 20-24 years who were represented by 32.4%. What is important and interesting is that most respondents under 15 and above 24 years of age rarely stayed with their parents. Those below the ages of 15 years were not living with their parents because they were in boarding schools and could only visit their homes during school holidays. However, those who were above 24 years were also living in tertiary colleges or outside schools hence could not live with their parents. The influence from peers and self confidence associated with their ages also discouraged them from living with their parents as they felt mature enough to take care of themselves. It can therefore be concluded that the more people feel confident to make own decisions the more they keep off their parents and homes.

4.2.7 The status of sexual relationship of the respondents

The study also sought to find out whether the respondents were in a sexual relationship. This was important since sexual relationships are believed to determine a person's behavior like condom use and engagement in sex activities. The results are presented in the table below.

Table 4.7: The status of sexual relationship of the respondents

Age Category	Relationship status	Frequency	Percentage
Under 15 years	Not in a relationship	13	100.0
15-20 years	In a relationship	49	20.8
	Not in a relationship	183	77.5
20-24 years	In a relationship	66	54.1
	Not in a relationship	53	43.4
	Married	2	1.6
Over 24 years	In a relationship	4	36.4
	Not in a relationship	2	18.2
	Married	4	36.4

The results indicate that those under the age of 15 were not in a sexual relationship. Those who were in a relationship were 20.8% from the 15-20 years category, whereas a majority of respondents in a sexual relationship were from the ages of 20-24 years and above 24 years, at 54% and 72.8%, respectively. The findings confirm the national demographic statistics, that currently more youth who are between 15 and 25 years are in sexual relationship, and that the age of first sex is as low as 15 years (NACC 2010). The results also confirm the KAIS (2014) statistics indicating that more youth in this age category are hard hit by HIV and AIDS because of their involvement in early sexual intercourse. Most reports that form the background to this study agree that the youth in

this age category are sexually active and vulnerable to HIV and AIDS and other STIs (KDHS 2009; NACC 2010; NASCOP 2005).

4.2.8 Frequency of condom use during sexual intercourse

The table below presents the results on how frequent the sexually active youth used condoms during sexual intercourse. This was intended to show the connection between frequency of condom use in sexual intercourse with HIV and AIDS prevalence among the youth.

Table 4.8: Frequency of condom use by respondents during sexual intercourse

Age category	Condom use	N	%
Under 15 years	Never	10	76.9
	Always	1	7.7
15-20 years	Never	129	54.7
	Sometimes	23	9.7
	Almost always	7	3.0
	Always	38	16.1
20-24 years	Never	29	23.8
	Sometimes	28	23.0
	Almost always	11	9.0
	Always	36	29.5
Over 24 years	Never	3	27.3
	Sometimes	2	18.2
	Almost always	2	18.2
	Always	1	9.1

Results indicate that condom use was low among youth above 24 years who were married at 27.3% indicating never using it, with 18.2% and 18.2% using it sometimes and almost always, respectively. Only 9.1% used it always when not in marriage relationship. However, 76.9% of respondents from under 15 years category had never used a condom despite being sexually active. Majority of those aged 15-20 years who had used condoms were represented by 9.7% sometimes and 16.1% always during sexual acts. In the age category of 20-24 years, those that had used condom were represented by 29.5%. This

leaves out about 70% of sexually active youth within this age category at risk of contracting HIV during sexual intercourse.

From the results, most of the respondents who were not using condoms had the following attributes: had never had sex (under 15 years), not sexually active, not in a sexual relationship or were abstaining. These findings indicate that majority of the youth who are deemed to be at risk of HIV and AIDS infection (15-24 years) rarely used condoms despite their sexual activity and being high risk persons. This has been the assumption for the high HIV prevalence among the youth (KAIS 2014), where those targeted with condom use campaigns fail to adopt and use them for protection during sex, hence increase in HIV and AIDS risk among the youth (NACC 2014).

4.3. Knowledge and awareness level of respondents on HIV and AIDS and condom use

This section addresses the first specific objective of the study by assessing the knowledge and awareness level of the respondents concerning HIV and AIDS and condoms as a preventive measure against the HIV infection. Sub-sections below present detailed findings.

4.3.1 Knowledge of HIV and AIDS transmission modes

The study sought to investigate the knowledge of the youth about the transmission modes for HIV and AIDS. Generally, the study found that majority of the respondents knew about the main causes of HIV and AIDS across all age categories, gender and education levels at 92%. From across all these variables, respondents indicated that HIV was transmitted through casual sex with infected persons, contact with body fluids of infected

persons, sharing needles with infected persons, mouth to mouth resuscitation during fainting and mother-to-child infections during birth and breast feeding. These responses came from both questionnaires and focus group discussions with the respondents. During in-depth interview with the specialists, these modes of transmission were confirmed as true, indicating that the youth had had sufficient knowledge of HIV and AIDS transmission. This admission confirms findings from Kiai (2009), Mulwo (2009), Ndati (2013) and Oriaso (2013) who concluded that the HIV and AIDS awareness level of the youth was generally high, although knowledge-behavior gap still existed (Fishbein & capella 2006; Oriaso 2013). As the youth increased in age, the knowledge about HIV and AIDS even became more complex as the respondents discussed and isolated instances where HIV and AIDS could be transmitted less. For instance the youth from Kilifi KMTC and Pwani University during FGD sessions demonstrated that careless use of condoms regularly would expose the youth more to HIV transmission since the youth believed they could prevent the infection at higher rates. This is similar to findings from Mulwo (2008) that frequent condom use gives university students false hope that they are ever protected from HIV infection.

4.3.2 Knowledge of whether HIV and AIDS has known cure.

The table below shows the results on youth's knowledge of whether HIV and AIDS has any known cure. This was meant to examine the information that the youth have about HIV and AIDS and the cure for the same.

Table 4.9:Knowledge of whether HIV AND AIDS had known cure.

Age category		Frequency	Percentage
Under 15 years	No	10	76.9
	Yes	3	23.1
15-20 years	No	224	94.9
	Yes	10	4.2
20-24 years	No	114	93.4
	Yes	7	5.7
Over 24 years	No	11	100.0

From the results, it is clear that the youth are aware that HIV and AIDS currently has no known cure. In all the age categories there was a general consensus that HIV and AIDS was an incurable ailment with 76.9% of those under 15 years indicating this, even as 94.9% of the 15-20 years age group also agreeing, 93.4% of those in the 20 – 24 age category were as well in agreement on the absence of HIV and AIDS cure. These results are consistent with findings of most studies showing that most young people know that HIV has no cure (Mulwo 2009; Ndati 2013; Nguzo 2012; & Oriaso 2013). From FGDs the same view was expressed with participants even indicating the various medical researchers that have studied HIV and AIDS vaccines and medicines like Pearl Omega. Also the participants were aware that what exist are the ARVs that prolong the life of infected persons, without curing it. In reiterating this view, one FGD participant had this to say: “We know a lot of research has been done about AIDS, but the drug has not been found....only Pearl Omega by Professor Obel, which has ended nowhere (Laughter)”.

4.3.3 Awareness of the available medicines to prevent and treat HIV and AIDS

The respondents were also asked whether there were known medicines to cure HIV and AIDS. As stated above, the youth indicated no medication for HIV and AIDS as shown in the table below.

Table 4.10: Awareness on the available medicines to prevent and treat HIV and AIDS

Age category	Response	Frequency	Percentage
Under 15 years	No	10	76.9
	Yes	3	23.1
15-20 years	No	148	62.7
	Yes	86	36.4
20-24 years	No	88	72.1
	Yes	33	27.0
Over 24 years	No	7	63.6
	Yes	4	36.4

Across all age categories, there was agreement that HIV and AIDS had no known medications. Specifically, in the under 15 years age group, 76.9% stated that there was no medicine for cure or prevention of HIV and AIDS, while in the 15 – 20 years bracket, 62.7% confirmed the unavailability of the HIV medicine, even as 72.1% from the 20 – 24 years age group supported that there was no medication. However, a total of 36.4 % stated that there was medication for curing and preventing HIV and AIDS. When probed in the FGDs, participants indicated that the medicines they had referred to were the ARVs and other life prolonging drugs. This finding confirms high knowledge of the youth on HIV and AIDS and the corresponding knowledge-behavior gap (Ndati 2013). Critical is also the knowledge of how PEPs work especially after someone has been raped. This came out from the FGDs and during in-depth interview sessions.

4.3.4 Awareness of when HIV test can tell whether someone is infected with HIV or not

The study also sought the views of the youth on when the HIV test can confirm that a person is infected with HIV and AIDS or not. From across all ages, results are presented in the table below based on the age categories of the respondents.

Table 4.11: Awareness of when HIV test can tell whether someone is infected with HIV

Age category	Response	Frequency	Percentage
Under 15 years	Later	13	100.0
15-20 years	Immediately	11	4.7
	Later	225	95.3
20-24 years	Immediately	4	3.3
	Later	117	95.9
Over 24 years	Later	11	100

The results revealed that most of the youth agree that HIV test can reveal that someone is infected when done later and not immediately after sexual encounter. In most instances, such tests are repeated severally to declare HIV status. Specifically, respondents in the under 15 years category stated that a HIV test showed at a later time after someone contracts the HIV virus. Similarly among those in the 15-20 years and 20-24 age brackets, about 95.3% and 95.9%, respectively, held a similar opinion of HIV test yielding accurate result if done at a later date and several times. The same sentiments were expressed and agreed in the focus group discussions, where various participants gave experiences of instances when people who were declared HIV positive were later confirmed contrary through several later tests, which has proven a challenge to HIV tests (Mulwo 2009; Nguzo 2012;).

4.3.5 Awareness of whether HIV testing is done when a woman is pregnant

The table below presents the cross age group responses on whether HIV test is done to pregnant woman. The aim was to find out how much the youth knew about HIV testing and situations where the tests were done.

Table 4.12: Awareness of whether HIV testing is done when a woman is pregnant

Age category	Response	Frequency	Percentage
Under 15 years	No	7	53.8
	Yes	6	46.2
15-20years	No	34	14.7
	Yes	198	85.3
20-24 years	No	18	14.8
	Yes	102	83.6
Over 24 years	Yes	11	100.0

From the table there was slight difference of opinion regarding HIV test to pregnant women. For respondents in the age category of under 15 years, 53.8% indicated it was not done, which shows they lacked knowledge on the same, while 46.2% confirmed that it was done. From those in the 15-20years category, majority (85.3%) expressed knowledge of testing being done when a woman is pregnant while only 14.7% did not have that information

However in the 20-24 and over 24 years, a majority of respondents indicated that the test was done to all pregnant women. During the FGD sessions participants argued that pregnant women with HIV virus were at a higher risk of spreading the virus to the unborn child. It is therefore important to test the pregnant women for the disease so that early precautions on mother to child prevention can be taken. The same reason was confirmed by key informants during interviews, where an interviewee from KEMRI summarized it saying: “Currently it is a must for all pregnant women seeking prenatal services to be

tested for HIV to safeguard the unborn child”. In general there was high knowledge about this, and what is important is that such awareness increased with increase in age. This finding is consistent with the belief from many studies that HIV knowledge becomes complex with age and exposure (Ndati 2013; Nguzo 2012).

4.3.6 Awareness of whether HIV testing is done before a patient undergoes surgery

The knowledge of respondents concerning whether HIV testing was done before hospital surgery was also investigated. Results indicate that 46.2% of respondents under 15 years answered in the negative, while 53.8% of the respondents agreed with the statement that HIV testing was done before a hospital surgical procedure. 74.6% of the age group 15 – 20 years also agreed and 81.8% of age group over 24 years agreed, indicating high knowledge. Table 4.12 presents result.

Table 4.13: Awareness on whether HIV testing is done before a patient undergoes surgery

Age category	Options	Frequency	Percentage
Under 15 years	No	6	46.2
	Yes	7	53.8
15-20 years	No	57	24.2
	Yes	176	74.6
20-24 years	No	25	20.5
	Yes	96	78.7
Over 24 years	No	2	18.2
	Yes	9	81.8

Generally, majority of the respondents agreed that a HIV testing was done whenever one wanted to undergo surgery. This confirms the sufficient knowledge of the youth on HIV and AIDS, as suggested by previous studies (Mulwo 2009; Ndati 2013; Nguzo 2012).

4.3.7 Awareness of whether HIV testing is done during regular medical check-ups

The study also sought the opinion of respondents on whether HIV testing services were provided during regular medical checkups. For those under 15 years, 61.5% disagreed, while the remaining 30.8% confirmed it was done. The results are presented in table 4.13 below.

Table 4.14: Awareness on whether HIV testing is done during regular medical check-ups

Age category		Frequency	Percentage
Under 15 years	No	8	61.5
	Yes	4	30.8
15-20 years	No	148	62.7
	Yes	87	36.9
20-24 years	No	75	61.5
	Yes	47	38.5
Over 24 years	No	7	63.6
	Yes	4	36.4

For those in the age group of 15 – 20 years majority, about 62.7% did not believe it was done. Also, 61.5% from the 20-24 age group stated that HIV testing was a necessarily requirement during regular medical checkups. Additionally, 63.6% of the respondents did not agree that HIV testing services were provided during normal medical services. From the interview with HIV and AIDS specialists, it was confirmed that it was not necessary that HIV was tested during regular medical checkups, which confirms high knowledge among the youth, majority of whom indicated it was not done all the time (Mulwo 2009; Ndati 2013).

4.3.8 Awareness of the HIV and AIDS prevention measures

The respondents were also asked whether they knew the effective HIV prevention measures for the youth. From the survey across all age categories, education level and

gender, majority of the respondents knew some of key prevention measures at 75%. However, the more educated and older the respondents were, the more they mentioned the most complex control measures such as consistent and correct use of condoms, avoiding sharing syringes during treatment and drug injections. The latter is a common practice among beach boys and girls in the coastal region (Nguzo 2012). From the FGD sessions, the participants stated that HIV can be prevented through abstinence (under 15 years), being faithful to one unaffected partner (over 24 years, in marriage), through consistent and correct use of condoms during all acts of sex (from 15-20, 20-24 years) and testing and administering drugs to prevent mother-to-child infections during birth and breastfeeding.

This revelation confirms that the youth clearly understand the prevention measures of HIV and AIDS. Although this knowledge of HIV and AIDS has been confirmed by a number of studies targeting the youth, KAIS (2014) still indicates the high HIV and AIDS prevalence among the youth and a dismal condom use especially among the group that stated correct and consistent condom use as the most effective means of HIV and AIDS prevention (15-24 years). This confirms the presence of knowledge-behavior gap, well researched and illuminated by Fishben and Joseph (2006), Govender (2010), Ndati (2013) & Oriaso (2013). To be able to perform a behavior like condom use, integrated behavioral model observes that there is need for the youth to have enabling environment, skills and competencies, confidence and recognize the risk (HIV and AIDS) as salient among them, in addition to behavioral intentions as most studies reveal the disease to be dominant among the youthful population (KAIS 2014).

4.4 Behavioral intention of the youth for condom use

From the integrated behavioral model, a particular behavior is most likely to be performed if a person has strong intention to perform it. This follows from the beliefs and attitudes that one has about a behavior. According to Fishbein and Ajzen (2010), if people believe that performing a particular behavior is good, they are more strongly motivated to perform the behavior compared to if they believe performing is bad. The study sought to investigate the behavioral intentions of the youth towards condom use to prevent HIV and AIDS under various conditions that affect beliefs and attitudes, hence behavioral intentions. The following sub-sections present and discuss findings.

4.4.1 Key influencers of condom use among the youth in Kilifi County

The table below presents the results on who influences youth decision for condom use behavior and other life behavioral choices in Kilifi County. The responses are presented based on the age categories of the respondents.

Table 4.15: Key influencers of condom use among the youth in Kilifi County

Age category	Influencer	Frequency	Percentage
Under 15 years	Peers	5	38.5
	Media	8	61.5
15-20 years	Parents	13	5.5
	Peers	106	44.9
20-24 years	Media	111	47.0
	Parents	18	14.8
Over 24 years	Peers	38	31.1
	Media	61	50.0
	Parents	5	45.5
	Media	3	27.3
	Parents	3	27.2

The study sought to find out the key influencers for condom use among the respondents.

From the table above the most influential factor was the media as was affirmed by about

61.5% of those under the age category of 15 years, 47.0% of those in the 15-20 years and 50% in the age category of 20 – 24 years. From these results, it is clear that the main influencer of the youth within 15-20 years is the mass media such as television, radio and magazines, especially through youth programmes and advertisements. This finding is consistent with the findings of Kiai (2009), Mulwo (2008), Ndati (2013), and Oriaso (2013) and which indicate that media has played instrumental role in the attitudes, beliefs and behavior of the youth and the general population.

In some studies, peer influence has been highlighted as an important factor promoting or impeding behavior change among people (Fishbein & Capella 2006; Govender 2010; Mulwo 2009).

This study also sought to find out whether peer pressure had any influence and the results indicate that peer pressure carried more influence on condom use among youth from 20-24 years at 50 percent. This therefore underscores the importance of interpersonal communication. However, it was noted that parents had little influence on relatively older respondents, but some influence on the younger respondents. From the study by Ndati (2013), the youth in secondary schools indicated that group and media influence the youth to socially construct the world. This agreed with the notion of social construction of reality and media cultivation, where the youth in groups, cultivated by the media rationalize the world based on the world view that dominates their environment. From the FGDs, the participants indicated that the youth are more targeted by the media through advertisement and specific programmes, which are aimed at them as social entities. Also, participants expressed that parents shy away from discussing condom usage with their children as this would encourage the youth to engage in sex. The main conclusion is that

peer pressure and the media play a major role in youth behavior in general and condom use and sex in particular.

4.4.2 Youth belief in condom use as a good behavior in the HIV and AIDS prevention

The study assessed the views of the respondents regarding whether they believed condom use was a good behavior or a bad one. This was important because, according to integrated behavioral model, there is a belief that behavior change is preceded by positive attitudes towards the behavior. The results are presented in the table below.

Table 4.16: Youth belief in condom use as good behavior in the HIV and AIDS prevention

Age category	Response option	Frequency	Percentage
Under 15 years	No	11	84.6
	Yes	2	15.4
15-20 years	No	143	60.6
	Yes	89	37.7
20-24 years	No	35	28.7
	Yes	87	71.3
Over 24 years	No	2	18.2
	Yes	8	72.7

From the table, results indicate that majority of the respondents between under 15 and 15-20 years believe that condom use was a bad behavior at 84.6% and 60.6 %, respectively. From the FGD, the participants explained that early introduction of condoms among them was an approval that sex was acceptable in the age categories. However, a good percentage of those in the 15-20 years, 20-24 years and over 24 years agreed that condom use was a good thing at 37.7%, 71.3% and 72.7%, respectively. This implies that the recognition of the importance of condom use during sex and in the prevention of HIV and

AIDS increased with increase in age of the respondents. The study revealed that the more the youth are exposed to sex, and the realization of the reality of HIV and AIDS, the more measures to reduce risks become apparent. Studies by Mulwo (2008) and Ndati (2013) explain that youth in the 20-25 years category become independent from their parents and henceforth embrace peers and media to give them information, which ultimately boost their behavioral intention. This is especially noticed among the youth in secondary and university who despite the risk factors in their environment have the determination to finish school and become successful persons in the society. From the study it is also clear that a person's behavioral intention increases with increase age.

4.4.3 Youth's belief that consistent and correct condom use prevents HIV transmission

The youth were also asked whether consistent and correct use of condom would promote their effectiveness in HIV and AIDS prevention. This was important since many studies have found a disparity between condom access and reduction in the HIV infection rates in Kenya (KAIS 2014; KDHS 2009). The results are presented in the table below based on the age categories of respondents.

Table 4.17: Youth belief that consistent and correct condom use prevents HIV transmission

Age category		Frequency	Percentage
Under 15 years	No	7	53.8
	Yes	6	46.2
15-20 years	No	120	50.8
	Yes	114	48.3
20-24 years	No	29	23.8
	Yes	93	76.2
Over 24 years	No	1	9.1
	Yes	9	81.8

The results indicate that those who believed in the importance of condom use as important during sex for the reduction of HIV and AIDS infections agreed that consistent and correct use promoted their effectiveness at 48.3%, 76.2% and 81.8%, among the 15-20 years, 20-24 years and over 24 years, respectively. However, the respondents below 15 years believed it was not important at 53.8%. This implies that recognition of the value of condoms for HIV and AIDS reduction increased with increase in age. This finding was confirmed by experts in the HIV and AIDS management in the county who indicated that consistent and correct use of condom promotes their effectiveness. During the FGDs sessions, the participants demonstrated from experience that mere use of condoms cannot translate to their effectiveness, arguing that a visit to a condom dispenser reveals lack of them, while HIV and AIDS infection rates continue to increase in such places. This confirms the findings of Mulwo (2008), that the rate of condom use among students in three universities in KwaZulu Natal in South Africa was high despite HIV and AIDS infection rate being a serious issue in the universities.

4.4.4 Youth's confidence that they can effectively use condoms during sex

The study sought to investigate youth's belief in their confidence to effectively use condoms to prevent HIV infection during sexual intercourse. The results are presented in the table below based on their age categories.

Table 4.18: Youth's confidence that they can effectively use condoms during sex

Age category		Frequency	Percentage
Under 15 years	Most certain	2	15.4
	Certain	1	7.7
	Not certain	10	76.9
15-20 years	Most certain	50	21.2
	Certain	66	28.0
	Not certain	111	47.0
20-24 years	Most certain	38	31.1
	Certain	44	36.1
	Not certain	36	29.5
Over 24 years	Most certain	2	18.2
	Certain	6	54.5

The results revealed that majority of under 15 years were not certain at 76.9%. Similarly, 47% of those in the 15 – 20 years category were not certain, while all respondents in over 24 years were confident to use condoms effectively. From the results also, 49% from 15–20 years and 67% of those in the 20 – 24 years category were confident, with only 22% of the under 15 respondents indicating their confidence in condom use. The implication is that the confidence in condom us among the youth for HIV and AIDS prevention increases with increase in age, where the older and independent one is the more the recognition of risk and subsequent development of behavioral intention to perform an activity. Studies by KAIS (2014) and KDHS (2009) indicate that youth in their middle youthful ages who have well defined life goals such as educational success, are more confident in undertaking activities which promote the achievement of their life goals. The studies also indicate that they are more open to sources of information and experiences that promote the goal achievement. From the study, the youth who have confidence in condom use are those older enough and are in late secondary, tertiary and university level, compared with those with less confidence who have little experience and are at

lower level of education, in lower secondary levels. This confirms previous data (Ndati 2013).

4.4.5 Youth's belief on whether condom use is the best HIV prevention method

The respondents were also asked to show whether they believed condom use was the best method for HIV and AIDS prevention, and the results are presented in the table below based on the ages of respondents.

Table 4.19: Youth belief on whether condom use is the best HIV prevention method

Age category		Frequency	Percentage
Under 15 years	Strongly Agree	2	15.4
	Agree	3	23.1
	Sometimes	2	15.4
	Disagree	3	23.1
	Strongly Disagree	3	23.1
15-20 years	Strongly Agree	10	4.2
	Agree	40	16.9
	Sometimes	77	32.6
	Disagree	54	22.9
	Strongly Disagree	53	22.5
20-24 years	Strongly Agree	18	14.8
	Agree	29	23.8
	Sometimes	49	40.2
	Disagree	18	14.8
	Strongly Disagree	8	6.6
Over 24 years	Strongly Agree	1	9.1
	Agree	8	72.7
	Sometimes	1	9.1
	Strongly Disagree	1	9.1

From the results, majority of the respondents who denied that condom was the best means for HIV prevention were under 15 years at 46.2%, followed by 15-20 years at 45.4%, 20-24 years at 21.4% and above 24 years at 9.1%. However, those who agreed the condoms were the best protection against HIV and AIDS included over 24 years at

81.8%, 20-24 years at 38.6%, under 15 years at 38.4% and 15-20 years at 21.1%. From the results it is clear that recognition of condoms as the best HIV and AIDS prevention means generally increased with increase in age and exposure of the youth. However, the fact that results indicate a higher belief among under 15 years compared with those between 15-20 years was to be expected as not all old people perceive issues better than young people. The experience and exposure factors could have played an important role in recognition of condom as the best measure against HIV prevalence. These findings are consistent with the earlier assumption that recognition of behavioral intentions increase with increase in ages of people, and that the findings of Mulwo (2008) and Ndati (2013) are still factual despite the belief that situations and contexts of HIV and AIDS are dynamic with education and location.

4.4.6 Youth's views on why some of them do not use condoms during sex

The respondents were asked to indicate some of the reasons that make some youth not prefer condom use to prevent HIV infection during sex. This was meant to get their opinion on why, despite awareness of the reality and risks of HIV and the realization that condoms can prevent infections, many youth still shunned the use of condoms hence increasing the rate of HIV and AIDS infections. The results indicate that majority of the youth were influenced by their partner not to use them at 65%. However, some respondents indicated that their religion (47%) did not encourage condom use, while others believed that peer pressure was an instrumental factor (at 40%) limiting condom use as most of the youth wanted to try out sex without condoms. This scenario agrees with the findings of a 2011 study in Kilifi County which found out that only 23 per cent of sexually active adults had used a condom in that year (NACC, 2012).

From FGD sessions, it was clear that most of the youth did not believe that HIV and AIDS was a serious issue, but pregnancy, where the females preferred using pregnancy prevention contraceptives, oblivious of the HIV transmission that comes with no condom use. From this finding, it is clear that individual's behavior is determined by attitudes and beliefs which are controlled by knowledge, experience, group perceptions and peer influence. All these are described in the integrated behavioral model. This also implies that if a person recognizes the risk factor and work with enabling environment that promotes collective positive recognition, individuals can have the behavioral intentions necessary for behavior change. These findings are consistent with Fishbein and Capella (2006) and Oriaso (2013) whose studies indicated attitudes and beliefs as important variables that need to be changed through effective communication for behavior change to be realized.

4.4.7 Youth's belief on whether condom use kills the mood of sex

There are widespread circumstantial facts that most people avoid condom use since it interferes with the mood of partners during sex. This study sought to prove or disapprove this notion by asking the respondents their opinion on whether condoms kill the mood of sex. This was important to understand whether the youth prioritized sexual pleasure over risks associated with it. The table below presents the results based on the ages of the respondents.

Table 4.20: Youth's belief on whether condom use kills the mood of sex

Age category		Frequency	Percentage
Under 15 years	Strongly Agree	2	15.4
	Disagree	8	61.5
	Strongly Disagree	3	23.1
15-20 years	Strongly Agree	21	8.9
	Agree	48	20.3
	Disagree	108	45.8
20-24 years	Strongly Disagree	56	23.7
	Strongly Agree	13	10.7
	Agree	21	17.2
Over 24 years	Disagree	61	50.0
	Strongly Disagree	27	22.1
	Agree	1	9.1
	Disagree	9	81.8
	Strongly Disagree	1	9.1

Results indicate that condom never kills mood of sex, as evident among under 15 years at 84.6%, 15-20 years at 69.5%, 20-24 years at 72.1% and over 24 years at 90.9%. However, those who indicated that condom use killed the mood for sex were a minority, at 15.4% among under 15 years, 29.2% among 15-20 years, 27.9% among 20-24 years and 9.1% among the respondents above 24 years.

From the results, it is clear that condoms use does not kill the mood of sex, although the results also indicate that their feeling increased with increase in age, experience and exposure of the youth. This implies that condom use appears not to interfere with sexual activity of the older people who have had a lot of sexual relationship and can control sexual feelings. From the FGD sessions, participants described what they felt during first sex with and without condoms, and majority of the female youth indicated much more pleasure with condoms than without it, whereas male participants felt little pleasure during sexual activity with condoms. It is also clear that older youth have adapted to condom youth compared with the younger youth, as evident during FGDs in tertiary and

university institutions, compared with those conducted among students in secondary schools. The results compare well to existing facts. This finding is similar to that of Mulwo (2008) and Ndati (2013).

4.4.8 Youth's views on whether they feel embarrassed while purchasing condoms

The study also sought to investigate whether the respondents felt embarrassed or not during purchasing of condoms. This was important in gauging the confidence or behavioral intention of the youth regarding access and use of condoms. The results are presented in the table below.

Table 4.21: Youth's views on whether they feel embarrassed while purchasing condoms

Age category		Frequency	Percentage
Under 15 years	Not embarrassed	2	15.4
	Somewhat	3	23.1
	Embarrassed	8	61.5
15-20 years	Not embarrassed	83	35.2
	Somewhat	42	17.8
	Embarrassed	106	44.9
20-24 years	Not embarrassed	48	39.3
	Somewhat	47	38.5
	Embarrassed	26	21.3
Over 24 years	Not embarrassed	6	54.5
	Somewhat	2	18.2
	Embarrassed	2	18.2

While majority of respondents falling under 20 years category felt embarrassed about purchasing condoms at 44.9%, a majority of them were those under 15 years which constituted 61.5%. On the other hand, majority of respondents above 20 years never felt ashamed to be associated with the practice of condom purchase at 39.3% and 54.5% from

the age 20-24 and over 24 years, respectively. This implies that the confidence to access and use condom increases with increase in age, experience and exposure of the youth. These are important determinants in forming behavioral intentions which lead to behavior change to use condom for HIV and AIDS prevention. The findings are consistent with those of Mulwo (2008) and Ndati (2013) on the behavior of secondary and university students regarding forming behavioral intention, which has also been indicated to depend of a person's education and socio-economic goals in life.

4.4.9 Youth's views on whether they feel embarrassed negotiating condom use

In line with the responses above, the respondents were also asked about their behavioral intention to initiate condom use during sexual intercourse. This was meant to check the level of confidence they had to be able to negotiate condom use for HIV and AIDS prevention. The results are presented in the table below.

Table 4.22: Youth's views on whether they feel embarrassed negotiating condom use

Age category		Frequency	Percentage
Under 15 years	Not embarrassed	4	30.8
	Somewhat	1	7.7
	Embarrassed	8	61.5
15-20 years	Not embarrassed	112	47.5
	Somewhat	42	17.8
	Embarrassed	79	33.5
20-24 years	Not embarrassed	70	57.4
	Somewhat	33	27.0
	Embarrassed	18	14.8
Over 24 years	Not embarrassed	6	54.5
	Somewhat	4	36.4
	Embarrassed	1	9.1

The results show that the majority in the under 15 years category felt embarrassed while negotiating and using condoms at 61.5%, while 33.5% of those in the 15 – 20 years age group felt no embarrassment while negotiating condom use during sexual intercourse. For those over 20 years, about 57.4% of the respondents felt no embarrassment. Similarly, about 54.5% of their counterparts above the age of 24 held similar opinion of no embarrassment felt with regards to negotiation of condom use. Again this implies that the ability to negotiate condom use during sex depends on age, experience and exposure. Similarly such ability also depends on a person's goals, attitudes and beliefs which create behavioral intentions. It is important to note that, even among younger respondents, some behavioral intention exists which can be reinforced through mass media, peer influence and sex education. From the FGD sessions, it was clear that across all age groups, the determination to negotiate for better behavior is inborn even for those who have not had exposure. These findings are consistent with those of Ndati (2013) and Mulwo (2008), and confirm this study's critical revelation that behavioral intentions precede behavior change.

4.4.10 Youth's views on whether condom stigmatization affects condom use

The study also sought to investigate whether condom use faces some challenges among the youth. From KAIS (2014), there is a report where youth indicate that condom use is stigmatized with love for sex, extra-marital sex and commercial sex work. This study asked the opinion of the youth, and the results are presented in the table below.

Table 4.23: Youth's views on whether condom stigmatization affects condom use

Age category		Frequency	Percentage
Under 15 years	Strongly Agree	2	15.4
	Agree	6	46.2
	Disagree	4	30.8
	Strongly Disagree	1	7.7
15-20 years	Strongly Agree	40	16.9
	Agree	108	45.8
	Disagree	57	24.2
	Strongly Disagree	24	10.2
20-24 years	Strongly agree	25	20.5
	Agree	68	55.7
	Disagree	18	14.8
	Strongly Disagree	10	8.2
Over 24 years	Strongly Agree	1	9.1
	Agree	6	54.5
	Disagree	2	18.2
	Strongly Disagree	2	18.2

The results indicate that majority of the respondents from across all age categories believe condom stigmatization has affected its access and use, with 61.6% from under 15 years, 61.7% from 15-20 years, 76.2% from 20-24 years and 63.6% from those over the age of 24 years. However those who felt that condom stigmatization does not affect its access and use scored lower percentages, with 38.4% among under 15 years, 38.3% of 15-20 years, 23.8% of those in 20-24 years and 36.4% among the over 24 years. From the results, it is observed that perception of stigmatization reduced with increase in age, except among the over 24 years, especially those in marriage or more stable relationships who thought that access and use of condoms within stable relationship was a sign that one partner was cheating.

From the FGD sessions, it was clear that youth in marriage relationships believed that insistence on condom use was a sign of cheating partner as well as that one of the partners had not decided to be in a relationship. This finding is close to a NASCOP

(2005) finding that HIV and AIDS rates were higher among married couple, which made them to run a campaign targeting married couples called “Wacha mpango wa kando”, literally translated in English as “shun extra-marital sex”. This finding is similar to other studies which indicate that some of the factors in HIV and AIDS behavior change were mere constants that could be changed through effective communication (Fishbein & capella 2006; Oriaso 2013).

4.5 Skills and competency of youth in condom use behavior

From the integrated behavioral model, skills and competency of a person can increase the performance of a behavior. In this case, when the youth have adequate skills and competency in the use of condom, they will consistently and correctly use them for effective prevention of HIV and AIDS. There is a discourse that the rate of access to condoms by the youth is high but this access does not correspond with reduction in HIV prevalence, raising the question of whether the youth actually use the condoms accessed or have skills for correct use (Govender 2010; Mulwo 2009; Ndati 2013). This has necessitated the study to find out the skills and competency level of the youth regarding correct and consistent use of condoms for HIV and AIDS prevention. This section presents and discusses the findings from various questions.

4.5.1. Youth's position on whether they had had sexual intercourse before

The study sought to find out the respondents' status regarding whether they had sex before. This was an important backgrounder, and the findings are presented in the table below.

Table 4.24: Youth's position on whether they had had sexual intercourse before

Age category		Frequency	Percentage
Under 15 years	No	11	84.6
	Yes	2	15.4
15-20 years	No	152	64.4
	Yes	82	34.7
20-24 years	No	34	28.7
	Yes	87	71.3
Over 24 years	No	2	18.2
	Yes	9	81.8

With regards to having had sex, 84.6% of under 15 years, 64.4% of 15-20 years, 28.7% of 20-24 years and 18.2% of those above 24 years responded in the negative. However, those who confirmed having had sex were 15.4% of under 15 years, 35.6% of 15-20 years, 71.3% of 20-24 years and 81.8% of those over 24 years. This implies that the act of sex increased with increase in age of the respondents, such that the older participants had had sex, compared with the younger respondents. Worth noting is that respondents from all age categories had had sex. This confirms the information from literature that the age of first sex debut has lately reduced to about twelve years (KAIS 2014; KDHS 2009; NASCOP 2005). When the sex debut is low among the youth, there is a high likelihood that HIV and AIDS is a risk factor especially for the younger people who engage in it. The issue of condom use comes in at this stage.

4.5.2 Youth's position on whether they had previously used a condom

After finding out whether they had had sex, respondents were also asked whether they used condoms the last time they had sex. This was meant to find out whether the youth had had experience with condom use. The results are presented in the table below based on their ages.

Table 4.25: Youth's position on whether they had previously used a condom

Age category		Frequency	Percentage
Under 15 years	No	1	7.7
	Yes	1	7.7
15-20 years	No	25	10.6
	Yes	55	23.3
20-24 years	No	5	4.1
	Yes	81	66.4
Over 24 years	No	1	9.1
	Yes	7	63.6

From those who had admitted to ever having had sex, results show that those who had used condom were 23.3% among 15 – 20 years, 66.4% of the 20 – 24 age group and 63.6% of those over 24 years. However, those who indicated not having used condom are represented by 7.7% (under 15 years), 10.6% (15-20 years), 4.1% (20-24 years) and 9.1 % (Over 24 years). This implies that condom use had been experienced across the age groups. It is, however, clear that condom use among the youth increased with increase in age, exposure and level of education. Majority of those who accepted to having had sex and used condoms came from 15-25 years, in positive progressive format. It is also clear that while the number of respondents who had had sex was more, few of them used and continue to use condoms despite very high awareness level. This confirms the KAIS (2014) argument that not many people who need to use condoms due to their sexual activity actually use them during sexual intercourse. This aggravates the status of HIV and AIDS infection, where there is high awareness level but little behavior change, which causes the knowledge-behavior gap (Fisbein & Capella; 2006; Mulwo 2009; Ndati 2013; Oriaso 2013).

4.5.3 The number of sexual partners one had had in the last 12 months

The respondents were asked to indicate the number of sexual partners they had sex with over the last one year. This was to give the picture of the frequency of sexual intercourse among the youth, and the corresponding use of condom at every sexual act. The results are presented in the table below based on their age categories.

Table 4.26: The number of sexual partners one had had in the last 12 months

Age category	Frequency	Percentage
Under 15 years	1	7.7
15-20 years	0	3
	1	58
	2	1
20-24 years	0	15
	1	40
	2	1
Over 24 years	1	5

From the table, it is clear that over the last 12 months a respondent had had sex with at most two partners with about 7.7% of those under 15 having had sex with only one partner, 58% of those in the 15 – 20 years age group stated only one as was the case with 70% of the respondents in the 20 – 24 years category. From the table, it is clear that the number of partners one had had sex with increased with increase in the age of the respondents, which is consistent with the current trend on youth sexuality (Mulwo 2009; Ndati 2013; Nguzo 2012), where the youth value sexual relationship as vital part as their progress in age and education. Those in secondary school had had sex with no or very few partners, while those in the college and university had had sexual intercourse with more partners, as well as others having been married. This confirms the finding of KAIS

(2014) that the youth are engaged in sex early enough in life, which exposes them to the risk of HIV and AIDS infection.

4.5.4 The skills and competency to correctly and consistently use condoms

The study also aimed to find out the skill level of the respondents on the use of condoms. This was open to all respondents to demonstrate how condoms are correctly used, either through personal experience or having been taught by someone else. The results are presented in the table below based on their age categories.

Table 4.27: The skills and competence to correctly and consistently use condoms

Age category		Frequency	Percentage
Under 15 years	No	2	15.4
	Yes	31	13.1
15-20 years	No	51	21.6
	Yes	14	11.5
20-24 years	No	71	58.2
	Yes	2	18.2
Over 24 years	No	7	63.6
	Yes		

Results indicate the respondents knew how to correctly use condoms. Generally, the respondents confirmed that they knew condom usage as depicted in 20-24 and over 24 years age category where about 58.2% and 63.6%, respectively demonstrated skills to do this. On the other hand respondents from the lower end of age strata hardly knew how to properly use condom, as others skipped the question. This implies that skills of condom use increased with increase in age as more people in the upper age cadre knew the correct use of condoms compared with those in the lower age cadres. This confirms the KAIS report (2014).

4.5.5 Use of a condom more than once during sexual intercourse among the youth

The study also sought to find out what the respondents felt about condom use more than once during sex. This was to confirm the general information that most youth have on using two condoms during each sex act or use of a condom during two different sex acts. The results are presented in the table below based on their age categories.

Table 4.28: Use of a condom more than once during sexual intercourse among the youth

Age category		Frequency	Percentage
Under 15 years	Disagree	6	46.2
	Agree	6	46.2
15-20 years	Disagree	104	44.1
	Agree	130	55.1
20-24 years	Disagree	40	32.8
	Agree	81	66.4
Over 24 years	Disagree	2	18.2
	Agree	9	81.8

From the results it is evident that most respondents had used condom more than once with about 46.2% of respondents under 15 years, 55.1% of respondents in the 15-20 years, 66.4% of the 20 – 24 years and 81.8% of respondents over 24 years agreeing. This implies that condom use increased with increase in age of the youth. From the results, the youth who had attained between 15-24 years registered more respondents who had used condoms for HIV and AIDS prevention. This is consistent with previous findings, indicating sexual activity and perception of condoms are vital tools in HIV and AIDS prevention (Mulwo 2009; Ndati 2013; Nguzo 2012).

4.5.6 The use of condom with every act of sexual intercourse

The respondents were asked whether they used condom with every act of sex, to gauge their opinion on whether consistency and frequency of condom use was helpful in HIV and AIDS prevention. The results are presented in the table below.

Table 4.29: The use of condom with every act of sexual intercourse

Age category		Frequency	Percentage
Under 15 years	Disagree	6	46.2
	Agree	6	46.2
15-20 years	Disagree	80	33.9
	Agree	154	65.3
20-24 years	Disagree	25	20.5
	Agree	95	77.9
Over 24 years	Disagree	3	27.3
	Agree	8	72.7

From the results majority of respondents consented to the usage of condom in every act of sex. However the pattern was relatively high among the 20-24 and over 24 year age group with about 77.9% and 72.7% respectively. On the other hand, the practice was still upheld in the age brackets under 15 and in that of 15-20 as indicated above. This implies that the use of condoms with every act of sex increased with increase in the age, exposure and educational level. This result is consistent with previous findings in this study indicating the condom access and use depend on age, exposure and education (KAIS 2014; Mulwo 2009; NACC 2010; Ndati 2013).

4.5.7 The use of petroleum lubricants with condoms during sex

The respondents were asked what they felt about condom use with petroleum, in order to determine their understanding on correct condom use, and the results are presented below.

Table 4.30: The use of petroleum lubricants with condoms during sex

Age category		Frequency	Percentage
Under 15 years	Disagree	10	76.9
	Agree	2	15.4
15-20 years	Disagree	170	72.0
	Agree	62	26.3
20-24 years	Disagree	86	70.5
	Agree	35	28.7
Over 24 years	Disagree	7	63.6
	Agree	3	27.3

From the results, majority of respondents never used petroleum based products as lubricants with condoms during sexual intercourse with 76.9% of under 15 years, 72.0% of the 15 – 20 years, 70.5% of those under 20-24 years and 63.6% of those over 24 years. However, those who agree that they used petroleum products with condom comprised of 15.4% of under 15 years, 26.3% of 15-20 years, 28.7% of 20-24 years and 27.3% of respondents in over 24 years category. This implies that the use of condoms with petroleum lubricants increased with increase in the age, and vice versa. Many studies recommend use of lubricant to avoid condom bursting (NACC 2010), but these do not have to be petroleum products which are known to weaken latex condoms.

4.5.8 Whether the youth posses skills and competency to use condoms

The study sought to find out whether the youth had skills necessary in using condoms. This was important to determine relationship between skills and condom use. Below are the results.

Table 4.31: Whether the youth posses skills and competency to use condoms

Age category		Frequency	Percentage
Under 15 years	Disagree	6	46.2
	Agree	7	53.8
15-20 years	Disagree	95	40.3
	Agree	135	57.2
20-24 years	Disagree	29	23.8
	Agree	92	75.4
Over 24 years	Disagree	1	9.1
	Agree	9	81.8

The results indicate that majority of the respondents from across all age brackets had the necessary skills and competency to use condoms for HIV and AIDS prevention at 53.8% of under 15 years, 57.2% of those from 15 – 20 years, 75.4% from 20-24 years and 81.8% from respondents from over 24 years. This implies that adequate skills and competency in condom use increases with increase in age, exposure and education. From the results, minority of respondents lacked adequate skills at 46.2% from under 15 years, 40.3% of 15-20 years, 23.8% of 20-24 and 9.1% of those over 24 years. This implies that basic skills of condom use are inherent in all youth despite their ages. It is however, true that mastery of the skills depend on experience, exposure and education. This finding is consistent with the finding that there is knowledge-behavior gap (Fishbein & capella, 2006; Mulwo 2009).

4.5.9 Condom use frequency for HIV and AIDS prevention among the youth

The study assessed the frequency of condom use among respondents in different age groups, and results show that 84.6% of the respondents under 15 years had never used a condom with only 7.7% indicating that they always used condom during sexual activities, as seen in table 4.30.

Table 4.32: Condom use frequency for HIV and AIDS prevention among the youth

Age category		Frequency	Percentage
Under 15 years	Never	11	84.6
	Always	1	7.7
15-20 years	Never	137	58.1
	Almost always	22	9.3
	Sometimes	37	15.7
20-24 years	Always	13	5.5
	Never	31	25.4
	Almost always	18	14.8
	Sometimes	32	26.2
Over 24 years	Always	30	24.6
	Never	3	27.3
	Almost always	3	27.3
	Sometimes	2	18.2
	Always	2	18.2

Further in the age category of 15-20 years, 58.1% reported no history of condom use during sexual intercourse. However, among the 20-24 years and over 24 years it was evident that condom use was relatively high with about 14.8% and 27.3% reporting usage of condom always. This implies that the practice of frequent condom use increased with increase in age, exposure and education of the youth, which confirms the findings of Mulwo (2008) and Ndati (2013).

4.5.10. Skills and competency to initiate condom during sex

The study also investigated whether the youth had necessary skills to initiate condom use with their partners during sex. Results indicate majority of those under 15 years at 76.9% had never initiated condom use. The table below presents the results on skills to negotiate condom use.

Table 4.33: Skills and competency to initiate condom during sex

Age category	Response	Frequency	Percentage
Under 15 years	No	10	76.9
	Yes	2	15.4
15-20 years	No	159	67.4
	Yes	68	28.8
20-24 years	No	40	32.8
	Yes	76	62.3
Over 24 years	No	2	18.2
	Yes	8	72.7

From the table, as we move on to those between 15-25 years, condom use increased, especially at 28.8% (15-20 years), 62.3% (20-24 years) and 72.7% of those above 24 years. This implies that condom use initiation increases as one becomes older and more aware of the risks of HIV and AIDS and other sexually transmitted infections. This confirms KAIS (2014) on the fact that confidence to initiate condom use depends on skills that youth acquire as they grow older.

The results show that 72 per cent of the youth below the age of 20 years have problems in negotiating for safe sex by use of a condom. This is consistent with previous studies indicating that problem of negotiation has resulted to low condom use.

4.6 Environmental determinants of Condom use among the youth

Many studies have alluded to the fact that environmental factors of a person have an effect on behaviour change. This has been found by Mulwo (2008); Muturi (2008) and Ndati (2013). The same is explained by the integrated behavioural model, which indicates that environment has a role in access and use of condoms in HIV and AIDS prevention. In this study, the respondents were asked whether condom availability, cost factor, government policy on access, community support, culture and tradition, religion and the

role of parents affect access and use of condoms in HIV prevention. The results are presented and discussed in the sub-sections that follow

4.6.1 Youth's views on availability of condoms in their environment

The study sought to investigate the availability of condoms in the environment of the youth for the prevention of HIV and AIDS based on the age categories of the youth. This was important in analyzing the relationship between condom availability and the adoption and use of the same in the prevention of HIV and AIDS. The table below presents the results.

Table 4.34: Youth's views on availability of condoms in their environment

Age category		N	Percentage
Under 15 years	Not readily available	5	38.5
	Readily available	8	61.5
15-20 years	Not readily available	62	26.3
	Readily available	165	69.9
20-24 years	Not readily available	20	16.4
	Readily available	93	76.2
Over 24 years	Not readily available	1	9.1
	Readily available	9	81.8

In general across all age categories, results show that condoms were readily available as represented by a 61.5% of the respondents under 15 years, 69.9% of the respondents in the 15 – 20 years, 76.2% of the respondents in the age 20 – 24 years and 81.8% of the respondents over 24 years confirming the availability of condoms as both a contraceptive and HIV and AIDS control measure. The respondents who indicated that condoms were

not readily available were 38.5% of under 15 years, 26.3% among 15-20 years, 16.4% among 20-24 years and only 9.1% of respondents who were over 24 years. These results confirm that recognition of the availability of condoms increased with increase in age, whereby as the youth grew in age, education and exposure, they learn of various sources and ways of getting access to condoms. From the FGD sessions, it was noted that among those comprising relatively younger respondents, their knowledge of where condoms were was restricted to hospitals and pharmacies, while among the older respondents, many sources of condoms existed including dispensers in colleges, lodges and receptions of guest houses. The results are consistent with findings of and Mulwo (2008); Ndati (2013) continue to indicate that condom access has been improved over the years targeting the youth who are most at risk (KAIS 2014).

4.6.2 Key locations where condom are accessed for use by the youth

The table below shows the respondents' identification of key locations where condoms were readily found in case the youth wanted to use them for HIV and AIDS prevention. This was meant to gauge awareness of the youth on the various locations where condoms are found for access during sexual intercourse. Studies by KAIS (2010), KDHS (2009) and NACC (2010) suggest that condom availability for the youth is likely to promote their adoption and usage for HIV and AIDS protection as well as a birth control tool. This explains why NASCOP has rolled out campaign meant to promote condom access among the most at risk populations in Kenya. The table below presents the result.

Table 4.35: Key locations where condom accessed for use

		Disagree		Agree	
Age category		N	%	N	%
Under 15 years	Health facilities	1	8.3	11	91.7
	Bars	5	38.5	8	61.5
	Churches	12	92.3	1	7.7
	Schools	11	84.6	2	15.4
15-20 years	Chemist/Pharmacy	6	46.2	7	53.8
	Health facilities	19	8.3	209	91.7
	Bars	71	32.4	148	67.6
	Churches	210	95.5	10	4.5
20-24 years	Schools	177	79.4	46	20.6
	Chemist/Pharmacy	34	15.0	192	85.0
	Health facilities	1	.9	114	99.1
	Bars	27	24.5	83	75.5
Over 24 years	Churches	100	95.2	5	4.8
	Schools	18	15.3	100	84.7
	Chemist/Pharmacy	5	4.3	112	95.7
	Health facilities			11	100.0
	Bars	2	18.2	9	81.8
	Churches	9	90.0	1	10.0
	Schools	2	20.0	8	80.0
	Chemist/Pharmacy	1	9.1	10	90.9

The study investigated the availability of condoms in locations such as churches, pharmacy, bars and schools with regard to the various age categories. In general the study found that condoms were not stocked in churches and mosques at 92.3% among respondents under 15 years. In schools condoms were also unavailable with 84.6% of those in the under 15 years indicating this.

The study also found that respondents had general knowledge that health facility and chemists were the main places to find condom stocks, with 91.7% of the under 15 age set and 53.8% stated that condoms were available in chemist/pharmacy with a 95.5% of the respondents in the age 15 – 20 years affirming that condoms were not available in

churches while 79.4% of respondents stated condoms were not available in schools. In the same age set, 91.7% stated that condoms were available in health facilities and 85.0% stated that condoms were available in chemistry or pharmacy.

In general the study found the awareness of condom dispensing points increased with increase in age of the respondents. Generally, the results indicate that there are various locations where condoms can be found, which is likely to promote access and use of the same. These results agree with KAIS (2014), KDHS (2009) and other empirical studies confirming that the high awareness of HIV and AIDS and condom use, despite the fact that behavior has not changed for reduced HIV and AIDS prevalence among the youth (Mulwo 2009; Ndati 2013; Nguzo 2012).

4.6.3 Whether condoms were available freely or at a cost

The study also investigated whether condoms were available freely or at a cost. This was meant to determine whether cost factor affects availability and use of condoms in HIV and AIDS prevention. The results are presented in the table below based on their age categories.

Table 4.36:Whether condoms were available freely or at a cost

Age category		Frequency	Percentage
Under 15 years	At a cost	8	61.5
	Free of charge	5	38.5
15-20 years	At a cost	102	43.2
	Free of charge	128	54.2
20-24 years	At a cost	33	27.0
	Free of charge	86	70.5
Over 24 years	At a cost	3	27.3
	Free of charge	8	72.7

Results indicate that majority of those under 15 years obtained condom at a cost (61.5%) while some stated that they had free access to condoms at (38.5%). However,

interestingly, as age category increases there is the ease of access to condoms. For instance 72.7% of those above 24 years reported access to condoms at a zero cost with only 27.3% having incurred a cost in condom acquisition. This implies that condoms are both available freely and at a cost, with perception of condoms being freely available increasing with increase in age, as the opposite was true among the your respondents. The results revealed that cost was not a factor inhibiting condom use, and did not have much influence. This agrees with (NACC 2010) reports that the government of Kenya had made condoms available free of charge. From FGD and in-depth interview sessions, participants observed that the government has provided free and high quality condoms throughout the country to supplement the ones sold in private shops and markets, effectively confirming the assertion of NACC (2010).

4.6.4 The implications of cost on condom access and use in Kilifi County

The respondents were asked whether cost factor affected condom use for HIV and AIDS prevention among the youth in Kilifi County. The results are presented in the table below.

Table 4.37:The implications of cost on condom access and use in Kilifi County

Age category		Frequency	Percentage
Under 15 years	No	3	23.1
	Yes	5	38.5
15-20 years	No	55	23.3
	Yes	48	20.3
20-24 years	No	8	6.6
	Yes	25	20.5
Over 24 years	No	2	18.2
	Yes	1	9.1

From the table, the relationship between cost factors and condom access and use can be determined. As earlier speculated there was evidence that majority of under 15 years (38.5%) indicated that condoms were expensive. Additionally, those in the age group 15

– 20 years confirmed this as 20.3% of them shared similar opinion, just like the 20.5% and 9.1% in the age of 20-24 and over 24 years, respectively.

In general it can be concluded that cost factor affects acquisition of condom for the under 15, while the contrary was true with the successive age groups. This implies that the older one becomes the more information and awareness they have on access to the condoms. It may also imply that older people know sources of condoms but do not use them for HIV and AIDS prevention. This confirms that condom use may not be affected by their cost. The same finding is confirmed in the FGDs where there was a general consensus that if people want to use condoms for HIV and AIDS prevention, cost was not a hindrance, but people's attitudes and beliefs which affect behavioral intentions to use them (behavior), which confirm NACC (2010) reports on progress made in the fight against HIV and AIDS.

4.6.5 Effects of government policies on condom access and use among the youth

The extent of influence of government policies on access and use of condoms among various age categories was also the subject of the study. The table below shows youth's views on whether government policies affect condom access and use.

Table 4.38: Effects of government policies on condom access and use among the youth

Age category		Frequency	Percentage
Under 15 years	No	9	69.2
	Yes	4	30.8
15-20 years	No	138	58.5
	Yes	88	37.3
20-24 years	No	64	52.5
	Yes	51	41.8
Over 24 years	No	8	72.7
	Yes	3	27.3

The availability of policies impeding access and usage of condoms was disapproved by the results. Majority of respondents held the opinion that there are no known policies affecting condom distribution, with about 69.2% of the under 15 years stating absence of policies, even as a further 58.5% and 52.5% of respondents in 15 – 20 and 20-24 years age group respectively, held similar opinion. Finally, among respondents of over 24 years about 72.7% were in agreement that no such legal structures existed. Therefore it meant that there was no significant policy that hindered the access of condoms to the youths, making it a non-issue in condom access and use. These results confirm several empirical findings that environmental factors would not affect behavior change where behavioral intentions are high (Fishbein & Capella 2006; Ndati 2013; Oriaso 2013).

4.6.6 Whether community support condom use for HIV and AIDS prevention

The respondents were also asked to indicate their views on whether their community supports condom use for HIV and AIDS prevention. This was important to determine the impact of local community in condom uptake for HIV and AIDS prevention among the youth. Table 4.37 presents the result.

Table 4.39:Whether community support condom use for HIV and AIDS prevention

Age category		Frequency	Percentage
Under 15 years	No	7	53.8
	Yes	6	46.2
15-20 years	No	107	45.3
	Yes	122	51.7
20-24 years	No	41	33.6
	Yes	76	62.3
Over 24 years	No	5	45.5
	Yes	5	45.5

From the study, it is clear that community plays a role in condom access and use. The results indicate that the community had some role in encouraging use of condoms as

shown above where more than half of the respondents (53.8%) under 15 years, cited no community support in encouraging condom use, but as respondents increased in age, it was evident that community slightly supported condom use for HIV prevention. When asked to explain the findings during FGDs sessions, participants indicate that community includes many stakeholders such as friends, relatives, parents and various institutions. It is also clear that the perception of community influence increases with increase in age, exposure and education levels of the youth. This finding is consistent with empirical literature indicating the strong connection of environment and people's behaviors (Mulwo 2009; Oriaso 2013).

4.6.7 Effect of culture and traditions on condom use for HIV and AIDS prevention

The study investigated the existence of traditional or cultural barriers on condoms use. From the results in the table above, it is clear that majority of respondents negated the existence of cultural barriers to condom use, with about 69.2% of respondents in the under 15 years age bracket refuting the existence of cultural barriers. From across all age categories, the question of whether negatively affected condom use received a negative response from a majority of respondents, as indicated in the table below.

Table 4.40: Effect of culture and traditions on condom use for HIV and AIDS prevention

Age category		Frequency	Percentage
Under 15 years	No	9	69.2
	Yes	4	30.8
15 - 20 years	No	134	56.8
	Yes	86	36.4
20 - 24 years	No	94	77.0
	Yes	22	18.0
Over 24 years	No	6	54.5
	Yes	4	36.4

The findings from FGDs exhibit some difference as participants indicated gender roles, religious norms and others as important cultural implications for condom use. For instance, in an interview with a World Vision representative, it was clear that religion plays a major role in the decision of the youth to access and use condoms during sexual intercourse. This finding also confirms results in literature that insist that social factors influence behavior since individual behaviors and micro-variables as social factors are micro-variables affecting the lives of all as norms (Fisbbein & Capella 2006; Kiai 2009; Mulwo 2011; Ndati 2013).

4.6.8 Effects of religion on condom access and use decisions among the youth

The respondents were asked whether religion affects condom access and use. This was meant to establish the impact of religion among the youth following religious faith. The results are presented in the table below.

Table 4.41: Effects of religion on condom access and use decisions among the youth

Age category		Frequency	Percentage
Under 15 years	No	3	23.1
	Yes	10	76.9
15-20 years	No	35	14.8
	Yes	198	83.9
20-24 years	No	30	24.6
	Yes	92	75.4
Over 24 years	No	3	27.3
	Yes	8	72.7

From the table it is clear that religion plays a central role in the lives and decision making process of the members of religious community in general and the youth specifically. As was expected before the study, majority of respondents would rely on religion in day to day decision making with 76.9% of the respondents under 15 years, 83.9% of the

respondents in the age 15 – 20 years, 75.4% of the respondents in 20-24 age bracket and 72.7 of the respondents over 24 years confirming that religion has an influence on their day to day decision on condom access and use for HIV and AIDS prevention. Across all age categories, there was agreement that region affects condom use, with fundamental religious beliefs proving as key hindrance to condom use. There has been a public discourse began in Kenya by the catholic faith prohibiting their faithful from condom use, arguing that condom use is a form of killing of the unborn babies. Other religions have also followed suit in criticizing condom use indicating that it promotes promiscuity and premarital sex, which are prohibited in these faiths. This finding confirms empirical literature confirming the role of region in HIV and AIDS prevention especially among the youth in religions with prohibitive dogmas (Nguzo 2012).

4.6.9 The role of parents in condom access and use among the youth

The sharing of information on condom use as both a contraceptive and HIV and AIDS prevention measure within family set ups was investigated and interestingly it was evident that the older one got the harder the exchange of condom use information. Similarly, parents avoid sharing condom information with relatively younger people in secondary schools, as seen in the table below.

Table 4.42: The role of parents in condom access and use among the youth

Age category		Frequency	Percentage
Under 15 years	No	8	61.5
	Yes	5	38.5
15-20 years	No	140	59.3
	Yes	92	39.0
20-24 years	No	90	73.8
	Yes	32	26.2
Over 24 years	No	7	63.6
	Yes	4	36.4

It is also clear that there is little sharing of condom use information with young people. For instance, of those under 15 years, 61.5% had never shared with parents on condom use. Additionally 59.3% and 73.8% of the respondents aged 15 – 20 years and 20-24 years, respectively, held the same opinion as was the case with 63.6% of those above 24 years. This implies that generally, sharing with parents on the decision to use condom is difficult and hence an important factor in determining condom use. From FGD sessions, participants indicated that the parents were hell-bent on abstinence among the youth to prevent STIs, early pregnancy and HIV and AIDS. The participants reiterated that their parents were oblivious of the sex risks that their children go through in their lives. However, from the FGDs participants agreed that they could fully understand and appreciate if the information on condom use came from their parents as opposed to outsiders as they are now.

4.7 Saliency of condom use to prevent HIV and AIDS among the youth.

The respondents were asked about issues touching on saliency of HIV and AIDS and condom use in the environment of the youth. This was important to investigate whether the importance of condom and HIV and AIDS prevention were perceived by the youth. From the integrated behavioural model, saliency refers to prominence and visibility of something that promotes behaviour change. According to Becker (1974), even if a person has a strong behavioural intention, the behaviour must be salient in the person for it to be performed. In this study, saliency is associated with the personal significance of health information to a person. This may involve a person's perceived susceptibility to health risk and relevance of the disease which increases a person's anxiety (Lewis & Malow,

1997). In testing the saliency of behaviour and health concern among the youth, the study findings are presented in the following sub-sections based on specific question and age categories of the youth.

4.7.1 Whether condom use is beneficial to the youth in HIV and AIDS prevention

The first question was whether the respondents felt condom use was beneficial to them in the HIV and AIDS prevention. Results are presented in the table below.

Table 4.43: Whether condom use is beneficial to the youth in HIV and AIDS prevention

Age category	Response	Frequency	Percentage
Under 15 years	No	9	69.2
	Yes	4	30.8
15-20 years	No	108	45.8
	Yes	118	50.0
20-24 years	No	22	18.0
	Yes	94	77.0
Over 24 years	No	1	9.1
	Yes	9	81.8

From the table, when respondents were asked whether they thought the use of condoms was beneficial to them, 69.2% of the respondents aged under 15 years disagreed, 50.0% of the respondents between 15 and 20 years agreed, 77.0% of the respondents in the 20 – 24 years age set also agreed and 81.8% of the respondents over 24 years also agreed. It appears that the use of condom was beneficial to the respondents, and the age group of below 15 years had 69.2% disagreeing that condoms were helpful. This was further subjected to investigation in the FGDs where most of the youth who were not sexually active responded in the negative. This implies that the recognition of the importance of condoms among the youth increased with increase in age, education and exposure. This

has confirmed numerous findings indicating that age affects recognition of risks and mitigation measures (Mulwo 2009). It also implies that saliency increases with increase in risk awareness, which is affected by age, experience and education.

4.7.2 Whether other methods of HIV and AIDS prevention are more suitable than condoms

The study also sought to establish the place of condom among the other HIV and AIDS prevention measures available to the youth. This was meant to test the saliency of condom use and HIV and AIDS. The results are presented in the table below.

Table 4.44: Whether other HIV and AIDS prevention methods are more suitable

Age category	Response	Frequency	Percentage
Under 15 years	No	3	23.1
	Yes	10	76.9
15-20 years	No	65	27.5
	Yes	163	69.1
20-24 years	No	49	40.2
	Yes	65	53.3
Over 24 years	No	4	36.4
	Yes	6	54.5

Many HIV and AIDS prevalence reports indicate that practicing sexual intercourse with HIV and AIDS infected persons without a condom poses high risk of contracting the disease (KAIS, 2014; KDHS, 2009; NACC, 2010). In these reports, this is through vaginal or oral sex. However, oral sex poses much lower risk. The best way to prevent HIV and other sexually transmitted infections is to use a condom for penetrative sex (KAIS 2009). It is deemed the most effective form of protection. However, there are other methods of HIV and AIDS prevention which this question sought to answer. The respondents were asked which other methods they knew of preventing the disease. One of

the methods mentioned was screening of women during pregnancy, avoiding sharing of injecting tools like needles as well as male circumcision. Additionally, the respondents were asked whether the other methods of preventing HIV and AIDS were more suitable and effective compared with the use of condoms. 76.9% of the respondents under 15 years agreed, while 23.1 percent did not agree. Whereas 69.1% of the respondents between 15 – 20 years also agreed that other methods of HIV were effective, 27.5 did not agree. 53.3% of the respondents between the ages 20 and 24 years also agreed while 40.1 percent did not agree and 54.5 percent of respondents over 24 years also agreed while 36.4 percent did not agree. Generally, majority of the respondents agreed and supported other methods of HIV prevention but stated that the use of condom was the most prominent and effective method of HIV and AIDS prevention. The most effective method for younger respondents under 15 years was abstinence from sex, which was declared ridiculous among older participants during FGD sessions.

4.7.3 How often the youth had heard of condom use messages

The study also sought to establish whether the youth had heard some messages on condom use to prevent HIV and AIDS infection. The aim of this was to provide evidence that media had played some roles in ensuring the information and saliency of HIV and AIDS and condom use were in the public domain. The results are presented in the table below.

Table 4.45: How often the youth had heard of condom use messages

Age category		Frequency	Percentage
Under 15 years	Not heard	5	38.5
	Often	4	30.8
	Many times	4	30.8
15-20 years	Not heard	34	14.4
	Often	61	25.8
	Many times	135	57.2
20-24 years	Not heard	10	8.2
	Often	31	25.4
	Many times	69	56.6
Over 24 years	Not heard	2	18.2
	Often	3	27.3
	Many times	6	54.5

Results indicate that majority of respondents had heard condom use message, with few having not heard of condom use messages. For instance, 38.5% of the respondents under 15 years said not often, slightly being more than those who heard it often and many times, each at 30.8%. However, 57.2% of the respondents who were 15 – 20 years said they had heard it many times, 56.6% of the respondents in 20 – 24 years stated many times and 54.5% of the respondents of the ages over 24 years equally indicated having heard it said many times. It is, therefore clear that condom use awareness was high among all age categories of the youth. It is also clear that the number of times or frequency of condom use massages increased with increase in age, education and exposure level of the youth. The same findings were also recorded in the FGDs where all participants agreed that they had heard condom use messages.

4.7.4 Whether the youth knew of adverts promoting condom use for HIV prevention

The respondents were asked whether they knew some adverts that were promoting condom use and across all age categories, gender and education levels, there was an indication of the existence of condom promotion at 73%. From the survey and FGD

sessions, *weka condom mpangoni!* and *kuwa true!* adverts came out as the main messages that the youth had known and identified with concerning condom use for HIV and AIDS prevention. These adverts served to improve prominence of condoms in HIV prevention, and they improved the confidence in the youth to use condoms during sexual intercourse. Acknowledging that sex existed, the adverts seemed to indicate the inevitability of the same and how the risks associated with sex can be reduced using condoms, both among the youth and the adults. This information was discussed and elaborated in the FGD sessions, and were confirmed by the specialists during key informant interviews, where there was consensus that knowledge on HIV and AIDS and condom use was high despite low behavior change to reduce HIV and AIDS infections.

4.7.5 Whether the adverts had some effects on condom use behavior of the youth

The respondents were also asked whether the adverts of condom use had any influence on their access and use of condoms during sex to prevent HIV spread among the youth. The results indicate that most youth who had not experienced condoms used them after the adverts. This was seen among the young respondents (under 15 and 15-20 years category) at 59%. However, among the respondents over 24 years, condom adverts had no serious impacts, with only 16% of the respondents answering in the affirmative. There were those who indicated that the adverts had no influence at all, especially those who were under 15 years (20%) and those above 24 years who were in marriage relationships, who eventually recommended abstinence and faithfulness, respectively, as the most effective measures against HIV and AIDS prevalence. From the findings, it is clear that advertisement has some impact on behavior transformation especially among the younger people, a situation reinforced by both social cognitive and media cultivation theories of Albert Bandura and George Garbner, respectively (McQuail, 2005). Many impact studies

have indicated a direct relationship between condom advertisement and their access and use for HIV and AIDS prevention (Govender, 2010; Mulwo, 2009; Oriaso, 2013).

4.7.6 Whether the youth were concerned about contracting HIV and AIDS

In order to find out saliency of HIV and AIDS and condom use, respondents were asked whether they were concerned about HIV and AIDS. The results are presented in the table below, according to age distribution of the respondents.

Table 4.46: Whether the youth were concerned about contracting HIV and AIDS

Age category		Frequency	Percentage
Under 15 years	No	5	38.5
	Somehow	1	7.7
	Yes	7	53.8
15-20 years	No	78	33.1
	Somehow	27	11.4
	Yes	127	53.8
20-24 years	No	13	10.7
	Somehow	11	9.0
	Yes	87	71.3
Over 24 years	No	1	9.1
	Somehow	1	9.1
	Yes	9	81.8

From the results, majority of those below the age of 15 years with 53.8 percent said they feared contracting the HIV and AIDS while 38.5 percent and the rest 7.7 percent were not sure. Also 53.8 percent of those between the ages 15-20 feared most contracting the disease. Only 33.1 percent of the respondents indicated that they did not fear, as the rest 11.4 percent were not sure. 71.3 percent of the respondents between the ages of 20-24 years said they feared the disease while 10.7 percent did not. Only nine percent of the respondents said they were not sure about the disease. Those above 24 years said they feared contracting the disease with 81.8 percent support. Consequently, those who were

not sure as well as those who were not concerned about contracting the disease stood at 9.1 percent. This implies that majority of the youth had perceived HIV and AIDS as a dangerous disease and had feared it. In conclusion, the youth from across age groups were very concerned about contracting HIV and AIDS. From this finding, it can be deduced that the respondents are more aware of the disease and would practice behaviors to reduce risks towards contracting it, such as use of condoms.

4.7.7 Diseases or conditions the youth were most afraid of contracting

Compared with HIV and AIDS, the study sought to investigate other diseases or conditions that the youth were afraid of contracting. This was to gauge which condition was most salient in the youth in terms of disease prioritization. From integrated behavioral model, people behave to address health concerns that are most salient to them. In this case, it is proposed that people are able to judge conditions most risky to them, which ultimately guide how they will behave. The table below shows the relationship between HIV and AIDS and other diseases in terms of how the youth rate their risks. The table below presents the results.

Table 4.47: Diseases or conditions the youth were most afraid of contracting

Age group		Disease	Yes	%	No	%
Under years	15	HIV/AIDS	5	38.5	8	61.5
		Cancer	8	61.5	5	38.5
		Syphilis	11	84.6	2	15.4
		TB	12	92.3	1	7.7
		Unwanted pregnancy	11	84.6	2	15.4
15-20 years		HIV/AIDS	97	41.6	136	58.4
		Cancer	140	60.1	93	39.9
		Syphilis	209	89.7	24	10.3
		TB	215	92.3	18	7.7
		Unwanted pregnancy	203	87.1	30	12.9
20-24 years		HIV/AIDS	43	35.5	78	64.5
		Cancer	80	66.1	41	33.9
		Syphilis	108	89.3	13	10.7
		TB	114	94.2	7	5.8
		Unwanted pregnancy	117	96.7	4	3.3
Over years	24	HIV/AIDS	2	18.2	9	81.8
		Cancer	8	72.7	3	27.3
		Syphilis	9	81.8	2	18.2
		TB	11	100.0		
		Unwanted pregnancy	10	90.9	1	9.1

As shown in the table, results indicate that those who were under 15 years argued that they feared most contracting TB with 92.3 percent, followed closely by unwanted pregnancy and syphilis at 84.6 percent. Cancer was also a major cause of fear among this age group with support of 61.5 percent.

Those who were between the age group of 15-20 years feared most contracting TB with 92.3 percent support. Syphilis was second most feared with support of 89.7 percent

followed by unwanted pregnancy at 87.1 percent. Cancer had a support of 60.1 percent, whereas HIV and AIDS was least feared with 41.6 percent.

Unwanted pregnancy was the most feared among the age groups of 20-24 years, followed closely by TB at 94.2 percent. Syphilis was relatively feared with 89.3 percent while the respondents who feared cancer were at 66.1 percent. HIV and AIDS was least feared with support of 35.5 percent. Additionally, the respondents who were above 24 years also feared getting TB than any other disease with 100 percent support followed by unwanted pregnancy with 90.9 percent. Those who responded to fearing syphilis were at 81.8 percent while cancer was at 72.7 percent. Also in this group HIV and AIDS was the least feared with only 18.2 percent of the respondents indicating that they feared contracting the HIV and AIDS. This implies that most of the youth fear contracting other diseases other than HIV and AIDS. From FGDs, it was clear than most participants fear getting pregnancy than they do with other fatal conditions. This finding is consistent with Oriaso (2013) that most poor women associated HIV and AIDS with food aid, and would get it in order to get support from many NGOs offering the same in Homa Bay County. The fact that result reveals that HIV and AIDS is not prioritize as a risk factor explains the findings that HIV and AIDS prevalence is still high among the youth, as condom use rate has reduced among the youth, who are considered the most at-risk group.

4.8 The relationship between dependent and independents variables in the study

The study sought to determine the relationship between the dependent and independent variables, using the Pearson's Product Moment Correlation (PPMC), also called the Pearson's Correlations Coefficient (PCC). These variables include the dependent variable of condom use (and its associates such as condom use in every act of sex, condom use

frequency and consistent and correct condom use) and the five independent variables such as youth knowledge level, behavioral intentions, skills and competencies, environmental and saliency factors. The PCC is a measure of the strength of linear association between two variables. With PCC, a line of best fit is drawn and it is shown how far away the two sets of data are to this line of best fit. Using PCC, a result of between negative one (-1) and positive one (+1) indicates that there is negative and positive relationships, respectively, while a value of zero (0) indicates no relationship or connection with each other. With PCC, the more the value of coefficient r is closer to +1 and -1, the stronger is the relationship between the dependent and independent variables. This section describes the relationship between dependent and independent variables.

4.8.1 Condom use with every act of sex and the independent variables

The table below presents the results of the correlations between condom use with every act of sex and the knowledge level, behavioral intentions, skills and competency, environmental factors and saliency of the youth.

Table 4.48**Condom use with every act of sex and the independent variables**

		Use a condom with every act of sex	Knowledge level	Behavioral intentions
Use a condom with every act of sex	Pearson Correlation	1	.059	.233**
	Sig. (2-tailed)		.257	.000
	N	377	377	377
	Pearson Correlation	.059	1	.103*
	Sig. (2-tailed)	.257		.045
	N	377	382	381
Knowledge level	Pearson Correlation	.233**	.103*	1
	Sig. (2-tailed)	.000	.045	
	N	377	381	381
Behavioral intentions	Pearson Correlation	.619**	.046	.359**
	Sig. (2-tailed)	.000	.367	.000
	N	377	381	381
Skills and competencies	Pearson Correlation	-.036	.006	-.100
	Sig. (2-tailed)	.487	.906	.053
	N	373	377	377
Environmental	Pearson Correlation	.211**	.146**	.159**
	Sig. (2-tailed)	.000	.004	.002
	N	373	377	377
Saliency	Pearson Correlation			
	Sig. (2-tailed)			
	N			

From the table above, results indicate that:

- a) Condom use in every act of sex was positively correlated with knowledge level of the youth ($r = 0.059$). Although there was a low correlation between knowledge with condom use, it can be concluded that the higher the knowledge of the youth on condom use the more they can use it with every act of sex.
- b) Condom use was positively and significantly correlated with behavior

intentions of the youth ($r = 0.233$). This implies that youth's behavioral intention is more significant than knowledge when it comes to making decisions to use condoms

- c) Condom use was positively and very significantly correlated with skills and competency of the youth ($r = 0.619$), even more than the behavioral intentions
- d) Condom use was negatively associated with the environmental factors ($r = -0.036$) around the youth, such as social, religious and cost/access factors
- e) Condom use was positively and weakly associated with salience of the youth ($r = 0.211$), implying that condom use was least affected by how the youth felt HIV and AIDS was a salient issue among them

From the results above, skills and competences, behavioral intentions, saliency and knowledge levels are positively correlated with every act of sex, in order of importance, while environmental constraints have negative correlation with every act of sex. These findings are in agreement with other studies which have indicated the existence of the knowledge -behavior gap in HIV and AIDS communication, which makes it not obvious for high knowledge to translate into behavior change (Fishbein & Ajzen, 2010, Fishbein & capella, 2006; Mulwo, 2009). From the results above, environmental constraints have negative correlation with every act of sex. This finding is inconsistent with other studies which have indicated positive relationship between environment of individual and behavior change (Govender, 2010; Kiai, 2009; Oriaso, 2013).

Based on these findings, skills and competencies are important factors in promoting

condom use. Also, the findings confirm Hoog, Stroebe & Wit ,(2005) and Mberia,(2009) who argued that unless individuals feel they are vulnerable to the health risk, they are unlikely to take protective action(condom).The integrated behavioral model used in this study is effective in understanding the factors that determine behavior changes among the youth. According to the model, to effect behavior change, there is need for a strong behavioral intention to change attitude, self efficacy and perceived norms. Mberia (2009) argues that if self efficacy can be heightened to accompany the already existing high levels of susceptibility and severity, it is likely that more self protective behaviors like condom use would be promoted.

4.8.2 Correct & consistent condom use and the independent variables

The study also sought to establish the correlation between correct and consistent condom use and youth knowledge, behavioral intentions, skills and competency, environmental factors and saliency. The table below shows the results.

Table 4.49
Correct and consistent condom use and independent variables

		Consistent and correct use with every act of sex	Knowledge level	Behavioral intentions
Consistent and correct use with every act of sex	Pearson Correlation	1	.074	.450 **
	Sig. (2-tailed)		.153	.000
	N	374	374	374
Knowledge level	Pearson Correlation	.074	1	.103 *
	Sig. (2-tailed)	.153		.045
	N	374	382	381
Behavioral intentions	Pearson Correlation	.450 **	.103 *	1
	Sig. (2-tailed)	.000	.045	
	N	374	381	381
Skills and competencies	Pearson Correlation	.612 **	.046	.359 **
	Sig. (2-tailed)	.000	.367	.000
	N	374	381	381
Environmental	Pearson Correlation	-.107 *	.006	-.100
	Sig. (2-tailed)	.039	.906	.053
	N	370	377	377
Saliency	Pearson Correlation	.310 **	.146 **	.159 **
	Sig. (2-tailed)	.000	.004	.002
	N	370	377	377

From the table results indicate that:

- a) Correct and consistent condom use was positively but weakly correlated with knowledge level of the youth ($r = 0.074$). This implies that correct use of condoms least depended on the education of the youth
- b) Correct and consistent use of condoms was positively and significantly associated with the behavioral intentions of the youth ($r = 0.450$) more than it depended on knowledge of the youth, implying that knowledge alone may not create change, but behavioral intention. This confirms the existence of knowledge-behavior gap in HIV prevention.
- c) Correct and consistent condom use was positively and most significant correlated with skills and competency of the youth ($r = 0.612$), implying that when the youth

have skills in condom use, it will positively influence correct and consistent use of them.

- d) Correct and consistent condom use had a negative correlation with environmental factors ($r = -0.107$), implying that most environmental factors prohibited condom use in the first place, thereby negatively affecting their use
- e) Correct and condom use was positively and significantly correlated with saliency of HIV and AIDS ($r = 0.310$), implying that the saliency of HIV and AIDS behavior change can make the youth to correctly and consistently use condoms, but less than behavioral intentions and skills and competency could do.

From the findings, skills and competences, behavioral intentions, saliency and knowledge levels factors are positively correlated with correct and consistent use of condom, whereas environmental constraints were negatively correlated with the dependent variable. These findings are in agreement with Fishbein & capella (2006), but differ with Kiai (2009) and Oriaso (2013) respectively. Again, the findings reinforce the existence of knowledge-behavior gap.

4.8.3 Condom use frequency and the independent variables

The condom use frequency was correlated with youth knowledge, behavioral intentions, skills and competency, environmental factors and saliency, in order to establish whether it was affected or not by these factors, and the results were presented as shown in the table below.

Table 4.50
Condom use frequency and the independent variables

		Condom use frequency	Knowledge level	Behavioral intentions
How often do you use a condom?	Pearson Correlation	1	.089	.307**
	Sig. (2-tailed)		.102	.000
	N	342	342	342
Knowledge level	Pearson Correlation	.089	1	.103*
	Sig. (2-tailed)	.102		.045
	N	342	382	381
Behavioral intentions	Pearson Correlation	.307**	.103*	1
	Sig. (2-tailed)	.000	.045	
	N	342	381	381
Skills and competencies	Pearson Correlation	.338**	.046	.359**
	Sig. (2-tailed)	.000	.367	.000
	N	342	381	381
Environmental	Pearson Correlation	-.093	.006	-.100
	Sig. (2-tailed)	.087	.906	.053
	N	338	377	377
Saliency	Pearson Correlation	.270**	.146**	.159**
	Sig. (2-tailed)	.000	.004	.002
	N	338	377	377

From the table results indicate that:

- a) Condom use frequency was positively but weakly correlated with knowledge level of the youth ($r = 0.089$), meaning that condom use frequency sometimes depended on knowledge of condom and HIV and AIDS
- b) Condom use frequency was positively and significantly correlated with behavioral intentions ($r = 0.307$), meaning that the belief and attitude to change the youth behavior outweighs knowledge they have on the behavior
- c) Condom use frequency was positively and most significantly associated with skills and competency of the youth ($r = 0.338$), meaning that when youth have

skills and competency in condom use, this can increase the frequency of its use, much more than behavioral intention and knowledge about condoms and HIV and AIDS

- d) Condom use frequency had negative correlation with environmental factors ($r = -0.093$), meaning that environmental factors negatively affected use and access of condoms
- e) Condom use frequency was positively and weakly associated with saliency of the youth ($r = 0.270$). This implies that salience was less important to behavioral intentions and skills and competency when it came to determining condom use frequency.

From the results above, skills and competences, behavioral intentions, saliency and knowledge levels factors are positively correlated with condom use frequency, while environmental constraints had negative correlation with the dependent variable. These findings are in agreement with Fishbein & Ajzen, (2010) and Fishbein & capella, (2006), but differ with Govender (2010); Kiai (2009); (Oriaso 2013). The findings similarly reinforce the knowledge-behavior gap hypothesis, where people with high knowledge on an issue do not automatically exhibit behavior change based on the knowledge.

4.8.4 Initiation of condom use and the independent variables

The ability to initiate condom use in sexual relationship was correlated with knowledge, behavioral intentions, skills and competency, environmental factors and saliency of HIV and AIDS among the youth. The results are presented in the table below.

Table 4.51
Initiation of condom use and the independent variables

		Have you at any time initiated the use of a condom?		Knowledge level	Behavioral intentions
Knowledge level	Have you at any time initiated the use of a condom?	Pearson Correlation	1	-.039	.339 **
		Sig. (2-tailed)		.456	.000
		N	365	365	365
	Behavioral intentions	Pearson Correlation	-.039	1	.103 *
		Sig. (2-tailed)	.456		.045
		N	365	382	381
Skills and competencies	Behavioral intentions	Pearson Correlation	.339 **	.103 *	1
		Sig. (2-tailed)	.000	.045	
		N	365	381	381
	Skills and competencies	Pearson Correlation	.271 **	.046	.359 **
		Sig. (2-tailed)	.000	.367	.000
		N	365	381	381
Environmental	Skills and competencies	Pearson Correlation	-.051	.006	-.100
		Sig. (2-tailed)	.337	.906	.053
		N	361	377	377
	Saliency	Pearson Correlation	.269 **	.146 **	.159 **
		Sig. (2-tailed)	.000	.004	.002
		N	361	377	377

From the table, results indicate that:

The initiation of condom use during sex was negatively correlated with knowledge of the youth ($r = -0.039$). It was also negatively correlated with environmental constraints ($r = -0.051$). This implies that the ability to initiate condom use during sex was significantly and negatively associated, meaning that environment factors and knowledge did not permit access and use of condom during sex

The initiation of condom use during sex was positively and most significantly correlated with behavioral intentions of the youth ($r = 0.339$), implying that when people have favorable attitudes and beliefs, they can act or behave to prevent HIV infection.

The initiation of condom use during sex was positively and significantly associated with skills and competency of the youth ($r = 0.271$), implying that initiation of an activity may not very much depend on the skills of someone, but a resolve to do this, always energized by positive attitudes and beliefs, which is why behavioral intention ranks higher

The initiation of condom use during sex was positively and significantly associated with saliency of the HIV and AIDS risk. However, behavioral intentions and skills factors outweigh the influence of saliency in determining behavior change.

From the results above, initiation of condom use during sex was negatively correlated with both knowledge levels and environmental constraints. The implication of this is that the ability to initiate condom use does not explicitly dependent on knowledge, but the behavioural intention and the role environment of the person. This Finding agrees with both the behaviourist and cognitive thinking on factors for behaviour change.

Results show that initiation of condom use depends on behavioural intentions, saliency and skills and competencies in the order of importance. This confirms the studies by Fishbein & Ajzen (2010), Fishbein & capella (2006), Govender (2010). Mulwo (2008) & Ndati (2011),

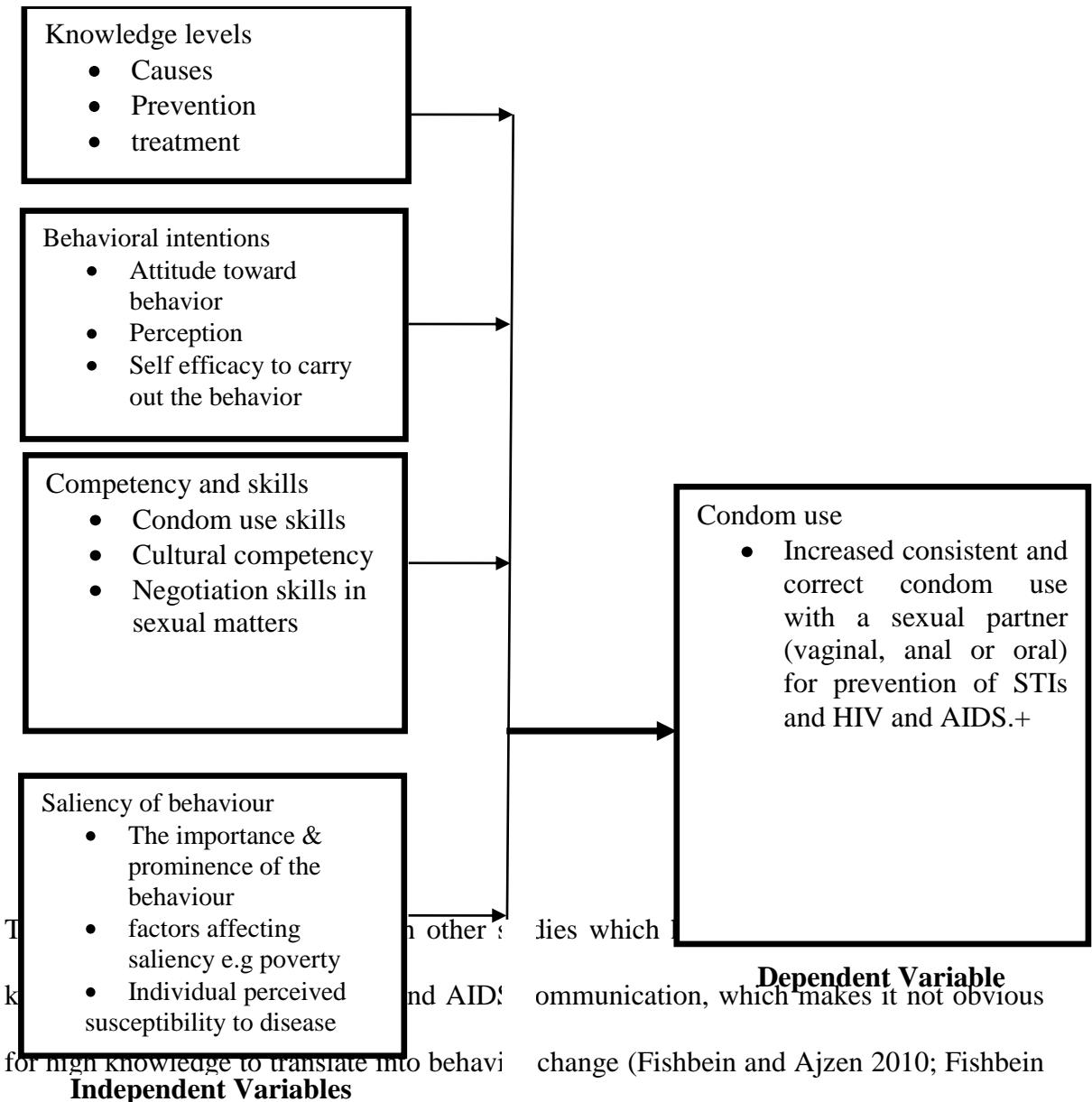


Figure 4.1: Modified Conceptual framework

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter deals with the summary of findings, conclusions and recommendations. This was done in line with the objectives of the study. Areas of further research were suggested and the limitations of the research were taken into account.

5.2 Summary

5.2.1 Knowledge levels

The first objective of the study was to investigate the influence of knowledge level on condom use for HIV and AIDS prevention. Results indicate that the youth have high knowledge and awareness about the HIV and AIDS pandemic. The focus group discussions revealed that the youth know how a condom is used since they were able to demonstrate the use of a male condom practically during the sessions. From the study, the more the youth advanced in age and education, the more knowledge of condoms for HIV prevention they had. This was quite evident with the older youth in the 15-24 year category in college and university.

From the results, knowledge of the youth includes knowledge of the causes and prevention measures of HIV and AIDS. Especially important was the awareness that HIV and AIDS was caused through unprotected sexual intercourse with infected persons. The youth also indicated that they were aware about HIV not having any known cure that prevents one from contracting the virus. Additionally, those infected already were using drugs to make them stay longer. On the frequency of tests to confirm HIV infection, the

youth indicated it should be done more often, but added that one had to be tested regularly to ensure they are free of the virus. According to the respondents, people are tested once admitted to hospitals for either treatment or surgical operation. This is to facilitate their treatment once they test positive. They added that testing is crucial for easier prescription of drugs to avoid resistance which may impair immune system of people.

On regular medical checkups, the youth agreed that it was not necessary for them to get tested, even though majority got tested as well in such situations. They however indicated that on such occasions testing was done on voluntary basis.

Most of the youth knew the only way to prevent the spread of HIV and AIDS is by either abstaining or using of condoms. Those who were sexually active were also aware that regular testing kept one aware about their status, hence helping them to live a normal life. Testing during pregnancy was also important to protect mother to child infection if the mother has been infected. This suggests that the youth from across the age divide were well vast with knowledge about the disease.

5.2.2 The degree of behavior intentions

The second objective of this study was to establish the influence of behavioral intentions on condom use among the youths in Kilifi County. There was need to determine the influence on youths that encourage them to use condoms during sexual intercourse. Findings show that the youth had positive attitudes toward condom use as they believed that use of the male condom was an effective strategy for preventing HIV and AIDS. This was supported by the results from the in-depth interviews conducted from the

professionals in the various organizations which also deal with condoms and also distribute them for free. It was however noted that there existed myths that could explain why other youth fail to use condom by altering positive attitude toward condom use. This explains why some youth agree that condoms transmit HIV and AIDS, as many youth had heard about condoms being infected with the HIV virus or having holes on them. The youth reported as having diverse sources of information including media, peers and parents. The study found out that media was the most influential with a percentage of 61.5 since the youth got first experience on condom use from media. Focus group discussions showed that the media have made the youth feel at risk of being infected with HIV which leads to inevitable death, thus resulting in self protective measures like abstinence or being faithful to one sexual partner or condom use. There existed different forms of media, among them print, broadcast and with the emergence of internet which has made information flow faster. These they got from the adverts placed on the media to sensitize people on safer sex. This continuous observation and message repeat in media formed an attitude in the youth towards condom use as a tool for protecting one from getting infected with HIV and AIDS.

Peer pressure was also another way that the youth used to learn about changing their perception towards condom and how to use them. From the study, it is clear that parents were the least influencers on condom use. This was attributed to the fact that parents are not open to sex and condom use discussions with their children and the youth hardly get information from them. The respondents indicated that consistent and correct use of condom was a safer way of protecting one from contracting the disease. Additionally, inconsistent and incorrect use of condom increased the risk of one contacting the disease.

The study also found out that not all the youth believed in the use of condoms as a preventive measure against HIV and AIDS. From the focus group discussions, the youth reported to have seen condoms and demonstrations done in class on how to use them for the first time. This has boosted self efficacy to use them in future. However, some of the youth still reported not knowing how to use condoms. From the study, results indicate that through continued exposure to information on condom use, the youth formed a positive attitude towards the same and found it a safer means of protecting themselves from contracting HIV. The study found condom use as favorable method during sex. The outcome here as the theory states and the belief about the behavior is that the youth found it safe and had confidence that they cannot contract the disease while using condoms during sexual activities.

The results also indicate that consistent and correct use of condoms in protecting oneself will increase the percentage of guarantee for one not to contract HIV and AIDS. However, if one does not use it consistently and incorrectly it poses a risk of contracting the disease.

On the issue of condom as the best method to prevent HIV, there was a general agreement that condom use prevented people from contracting the disease. It was also found that condom use does not kill mood for sex. However, in the lower age strata respondents believed that condoms were not reliable in the HIV and AIDS prevention. On average and across all age groups over 50 percent believed that condoms were a reliable tool for HIV and AIDS prevention.

5.2.3 Environmental constraints

The third objective sought to investigate the influence of environment on condom use for HIV and AIDS prevention among the youth. On whether condoms were available and accessible, respondents across all age groups indicated that they had access to condoms with an average of 61.5 percent. Condoms were available in various locations, among them bars, hospitals and chemists. However, these condoms were not entirely given freely, hence reducing access for some of the youth. Also some regulations did not allow those below the age of 18 to attend social places like bars, where condom dispensing machines are found. This means that such condoms could only be accessed by those above 18 years. However, 72.7 percent of those above 24 years indicated that they accessed them at less or no cost at all. Results also indicated that communities where the youth lived influence condom access and use. It was noted that community makes discussions about sex and use of condoms difficult because such topics are regarded as taboos and can only be shared in absence of youth.

The study also sought to establish the connection between environmental factors such as legal constraints, culture, traditions, and religion, gender and peer pressure on condom use behavior. Although results from survey indicated a negative correlation between condom use and legal regimes, certain policies exist on access and places where condoms can be found. For instance, within church and mosque environments, dispensing of condoms is outlawed just as it is in secondary schools. Findings from FGDs and key informant interviews revealed that gender factors also affect access to condoms as in most communities; buying and negotiating condom is a masculine responsibility. In Kilifi, results indicate that young people do not have a variety of places to access condom

since society believes that young people do not practice sex. In an interview with a representative of a faith-based institution, it was clear that the doctrines of the church had outlawed the use and discussion on condom, despite the fact that there was consensus that HIV and AIDS had remained a serious challenge for the youth within these religious establishments.

In an FGD session, there were evidences that some youth had begun sexual act as a result of copying what other peers were doing. This implies that most of the youth behaviors are copied from the media, parents, teachers and other role models.

5.2.4 The influence of saliency

The fourth objective sought to find out the influence of saliency on condom use for HIV and AIDS prevention. Saliency, according to English dictionary is a state or condition of being prominent, most noticeable or important. In the integrated behavior model, when a behavior is salient it means that it is important to people who want to adopt, use it and experience the performance of such kind of behavior. With time this may make it a habit or norm, making them use it frequently. The study found that the youth in Kilifi County believed that condom use was beneficial to them as it would prevent contracting of HIV and AIDS. They took it as a safety measure hence practiced it. It is also imperative to note that this behavior was only adopted by the age groups of between 15 and 24 who were deemed to be sexually active and had experienced sex either once or more than once. Through message exposure by various media platforms which they had heard more than once it was easier for the youth to pick up the behavior of condom use in HIV and AIDS prevention.

The exposure to information on condom use was also experienced in a higher percentage to groups above the ages of 20-24 years as they had exposure to various platforms of media where they would access condom use information. The study also revealed that youth in Kilifi County feared contracting HIV and were very concerned hence sought information on how they would protect themselves. Besides HIV and AIDS, youths in Kilifi County were afraid of getting TB, unwanted pregnancy as well as syphilis, at a higher rate than HIV and AIDS.

There was fear among the youth of contracting the disease or other diseases which made them use condom as a prevention measure.

Additionally, saliency enhanced their decision making to the use of condoms as well as other methods of HIV and AIDS control. For instance, considering that the prominence of HIV spread through sexual intercourse with unprotected person, they would go a long way to ensure they use condoms and also get HIV tests to ensure they were not infected.

5.2.5 Skills and competency

The last objective of the study sought to assess the influence of skills and competency of the youth about use of condoms as a measure to prevent HIV and AIDS. The study found a lack of bargaining power for the females to insist on condom use during sex. Rachael Muthoga, the Chief Executive officer of Moving the Goalpost, Kilifi put it thus: “Most of these young girls engage in sex not with their peer age mates but with older men who they respect in the society, some of them are relatives hence cannot bargain for use of condoms”. Again, it was generally expressed in the FGDs that a female youth found with condoms was stigmatized and branded as a “player”. This implies that there is sexual

dominance in favour of the male population. Qualitative data also revealed that some of the youth feel that the use of condoms reduced sensation and pleasure during sex. One participant said that 'having sex with condoms is just like chewing a wrapped sweet'. The quality of condoms provided by the government was also found to be a hindrance to condom usage as they are viewed as of lesser quality and not appealing. The youth viewed them as inferior compared to those sold in chemists or supermarkets. They preferred a government branding of the same to create an appeal. The youth indicated that currently government condoms lack directions on how to use as opposed to those in chemists. The study also found that there existed myths like condoms having holes leading to high failure rate and that when one uses condoms, it shows untrustworthiness and unfaithfulness and therefore people do not want to be associated with unfaithfulness. Consequently, those who had used condoms more than once were represented by 46.2 percent.

For the fear of contracting HIV and AIDS, majority of the respondents between ages 20-24 years and above who practiced sex recommended the use of condoms.

Skills and competency were therefore important factors that determine whether a person will perform a behavior or not. From the study, the use of condoms was prevalent among the youths. From the results, the youth who were older, especially in the 20-24 and above 24 age categories, had more skills due to exposure to information and experience with sex once or more than once. They hence used condom as a protective measure against HIV and AIDS. They knew the risk of not using condoms hence every act of sex was done using condoms. When rated with other diseases or conditions based on saliency, HIV and AIDS became number three, headed by TB and early pregnancy.

5.3 Conclusions

5.3.1 Knowledge Levels

Based on the findings, the study concludes that the youth in Kilifi County have high knowledge level of condoms as preventive measures against HIV and AIDS. From the findings, the youth had high knowledge of causes, prevention and testing of HIV and AIDS. From the findings, it is also clear that condom use knowledge for HIV and AIDS prevention increase with increase in age and education level of the youth. From the findings, the youth in university and college had higher knowledge of HIV and AIDS and condom use compared with their counterparts in secondary schools.

Based on the findings it is also concluded that despite the high knowledge level on condom use for HIV and AIDS prevention, condom adoption remains low at 23 percent in Kilifi County, thus pointing to the existence of knowledge-behavior gap with regard to condom use among the youth.

5.3.2 Behavioral intentions

Based on the findings, behavioral intention is high among the youth regarding condom use. Behavioral intention has got to do with attitudes, beliefs and self efficacy that affect behavior change. This conclusion has been made based on the fact that the youth have positive attitudes towards condom use. Specifically, the youth feel that correct and consistent condom use are possible actions, and they feel that media has positive influence on their attitudes and self efficacy to adopt and use condoms. From the findings, it is also concluded behavioral intention for condom use increase with increase in age and education. This implies that the more the youth are exposed to sex and the

realization of the HIV reality, the more measures to reduce HIV risks such as use of condom are adopted.

5.3.3 Environmental Constraints

Based on the findings, environmental factors such as condom availability, government policy, condom costs, role of parents and religions affected the use of condoms for HIV and AIDS prevention. From the study, most of these factors do not hinder condom use and access especially among the youth of relatively higher in age within educational institutions. This conclusion is based on the findings that condoms are readily available at little or no cost, no strict government regulation on condom access and use, except in schools, especially among relatively younger populations. From the findings, religion and the role of parents still prohibit condom access and use among the youth. From the findings it is also concluded that the awareness of the influence of environment on condom use increases with increase in age and education level of the youth. From the findings, generally environmental factors negatively affect condom use. This conclusion implies that in similar set us, environmental constraints do not affect condom access and use. Lastly, it is concluded that media and peer pressure are the major influencers of the youth for condom use in HIV and AIDS prevention.

5.3.4 Influence of Saliency

Based on the findings, the study concludes that condom use in HIV and AIDS prevention is quite salient among majority of the youth in education institutions. The youth understand the need to protect them from HIV and AIDS using condoms. From the results, the mass media and interpersonal forms of communication have improved the

saliency of HIV and AIDS and condom use in its prevention, especially among sexually active youth. From the findings, it is also concluded that saliency of condom use for HIV and AIDS prevention increased with increase in age and education level of the youth.

5.3.5 Skills and Competency

Based on the findings, skills and competency are important factors in promoting condom use. From the results, most youth have skills on condom use. They demonstrated that these skills enable them to correctly and consistently use condoms to prevent HIV and AIDS. From the findings, it is also concluded that gender factors hinder females from acquiring skills and competency of condom use and condom use negotiation to the level of their male counterparts. From the findings, it is also be concluded that condom use skills and competency increases with increase in age and educational level of the youth. This conclusion is based on the fact that the youth in university and colleges had higher skills and competence than their counterparts in secondary schools.

Lastly, based on the findings from the Pearson's Correlation Coefficient, condom use is positively correlated with skills and competencies, behavioral intentions, saliency and knowledge levels, in order of importance. Conversely, environmental constraints were negatively correlated with condom use for HIV and AIDS prevention among the youth.

5.4 Recommendations

5.4.1 Recommendations for policy

The study sought to investigate the knowledge of the youth on the HIV and AIDS and condom use among the youths in Kilifi County. All the youth across the age groups had high knowledge on HIV and AIDS. The use of condom on every act of sex was also high due to the fear of contracting the disease. This knowledge, however, was majorly limited

to youth who were sexually active. Hence, there is need for a policy on sex education to be established to inform the youths from lower levels about the risks of engaging in unprotected sex.

Secondly, the national and county governments should formulate laws against stigmatization to the people affected by the HIV and AIDS and condom use. Social marketing of condom use should also be highly encouraged. This featured prominently among the youth during the focus group discussions where youth found it difficult to engage in social activities for fear of being stigmatized for the disease or condom use.

The finding that there is high knowledge of HIV and AIDS and condom use among the youth implies that there is need to address attitudes and behavior of the youth, using specialized communication and engagement, away from the use of informative platforms to address HIV and AIDS and condom use. The national and county governments need to leverage on their linkages to move behavior change communication to the next level through basing their HIV and AIDS communication strategies on facts of research such as this.

5.4.2 Recommendations for health communication interventions.

It has been found out that media and peer pressure are the major influencers on use of condoms for reduced HIV and AIDS infection. These two media should be seen as the foundation for building greater understanding of effective channels of communication to carry out HIV and AIDS activities amongst the youth. Peer pressure signifies the importance of interpersonal communication. It should therefore be noted that forms of interpersonal communication like the use of advocacy, drama, and discussions with

experts on health issuers be encouraged at the institutions. Advocacy should also be embraced so that issues of discrimination and our self efficacy can be remedied.

Interpersonal communication should be scaled up to reach the youth at personal and group levels. This could be through the formation of youth groups and networking where condom use discussions are held by peers. Again, because parents do not discuss sex with their children and religious leaders with strict dogmas, youth groups and networks are ideal to penetrate these social norms where interpersonal communication will influence condom use. Advocacy can be begun by youth groups, health workers and local NGOs. These initiatives should be backed by technical expertise in order to properly approach key issues affecting the society, and the realization that sustainable change is begun and implemented in the community with all participants. Through this approach the key HIV and AIDS advocates and peer advocates are identified and trained and networked with other community members in their regions. Once this happens, they act as local advocacy education implementers, in the rogerian fashion captured by diffusion of innovations and the convergence models (Oriaso 2013), where there is social consciousness raising, involvement, participation, cultural perceptiveness and seamless social interactions, also envisaged in Paulo Freire (1992) and Rogers and Kincaid (1981). The participatory and convergence models suggested to bridge the knowledge-behaviour gap in HIV and AIDS communication for behaviour change need to be interwoven in a multimedia communication platform of mass media and interpersonal communication for effective integration of lay and expert media (Govender 2010; Oriaso 2013; Muturi 2009).

5.4.3 Areas for further research

This study mainly focused on behavior change communication factors for condom use among the youth in educational institutions for HIV and AIDS prevention. Hence, there is need for further research on the youth outside the education system in order to check the difference in condom uptake and perception of HIV and AIDS control.

There is need for further research on tools of communication for effective behavior change on condom use as a preventive measure against for HIV and AIDS prevalence. This will be an important follow up study since the present study has revealed high knowledge-behavior gap still exists and effective communication can address it for successful behavior change, given positive behavioral intentions seen.

This study focused on condom use for HIV and AIDS prevention among the youth between 15 and 24 years in educational institution, leaving out most youth and general population who are presumed to be at higher risk. Another study would be important to examine the adoption and use of condom for the HIV and AIDS prevention among these populations.

Lastly a study should be carried out to evaluate condom use for HIV and AIDS prevention among married couples in extramarital sexual relationship as well as the other at-risk groups such as MARPs and commercial sex workers.

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APENDICES

Appendix I: Letter of Introduction.

James Kapanya Nguzo
Jomo Kenyatta University of Agriculture &
Technology
P.O Box 62000
NAIROBI.

Dear Respondent.

**RE: RESEARCH ON "HIV & AIDS BEHAVIOUR CHANGE
COMMUNICATION FACTORS FOR CONDOM USE AMONG THE
YOUTH IN KILIFI COUNTY, KENYA**

I am a student pursuing a Doctorate Degree in Mass Communication at Jomo Kenyatta University of Agriculture & Technology. I am required to undertake a research thesis as partial fulfilment for the award of the Degree.

The purpose of this letter is therefore requesting you to fill the attached questionnaire.

Kindly, complete it as honestly as possible. Do not write your name anywhere on the questionnaire and be assured that the information you give will be treated with confidentiality and used for academic purposes only.

Thank you

J.K Nguzo

Appendix 2: Questionnaire for the Youth Respondents

Kindly, answer the following questions by ticking in the appropriate brackets or filling the spaces provided.

The findings will be confidential and used for academic purposes only.

Section A: Personal Information (Please tick as appropriate)

1. State your gender :Tick appropriately: Male () Female ()
2. Under which category does your age fall? Tick appropriately
 - a) Under 15 years ()
 - b) 15-20 years ()
 - c) 20-24 years ()
 - d) Over 24 years ()
3. What level of level of education are you in? (Please tick one)
 - b) Tertiary education ()
 - c) Secondary education ()
 - e) University. ()
- 4) How would you classify your family economically? Tick appropriately
 - a) Poor ()
 - b) Middle class ()
 - c) Upper class ()
- 5).what is your living situation. (Please tick one)
 - a) In the dorms ()
 - b) Off campus with girlfriend/boyfriend ()
 - c) Off campus with roommates ()
 - d) At home ()
 - e) Other (please specify) -----

6). How often do you stay with your parents? (Please tick one)
a) Always. () b) during school holidays, () c) staying alone.()

7).What is your relationship status ? (Please tick one)
a) In a relationship ()
b) Not in a relationship ()
c) Married ()
d). other (please,specify)-----

8) How often do you use a condom during sexual intercourse? Please tick one
a) Never ()
b) Sometimes ()
c) Almost always ()
d) Always ()
e) Other (specify) -----

Section B: Knowledge Levels on HIV and AIDS Awareness Index Questionnaire

9) Is there a cure for AIDS? (Tick as appropriate)

Yes ()

No ()

10). Are there medicines available that can keep people with HIV/AIDS from getting sick or dying?

Yes ()

No ()

Answer by ticking the correct choice provided

11). How soon after contact with the AIDS virus can HIV test tell that someone is infected with HIV?

- (a) Immediately) ()
- (b) later ()

12). Is HIV testing done when a woman becomes pregnant? (Yes) (No)

13). Is HIV testing done when you are admitted to the hospital for surgery? (Yes) (No)

14). Is HIV testing done always during your regular medical checkups? (Yes) (No)

15)..HIV /AIDS can be prevented through the following. Tick as appropriate

a) Using a condom consistently and correctly	
b) Being faithful to one unaffected sexual partner	
c) Avoiding sharing of syringes	
d) Avoiding Intravenous drug injections	

Section C: Behavioural Intentions Index Questionnaire

16).Who influences you to use condoms. Please tick one

a) Parents ()

b) Peers ()

c) Media ()

17).Do you believe the use of condoms is a good behaviour to avoid contracting HIV and AIDS? Yes ()

No ()

18).Do you believe that you can protect yourself by consistently and correctly using condoms? Yes ()

No ()

19).If you want to use a condom, how certain are you that you can?

a)Most certain ()

b) Certain ()

c) Not certain ()

20). Condom use is the best method of HIV prevention. Tick the correct choice.

- a) strongly agree. ()
- b) agree ()
- c) disagree, ()
- d) strongly disagree. ()

21). Why would one continue to have unprotected sex by not using condoms despite the fact that he knows is risky? Please tick appropriately

a) Its not pleasurable to have sex with condoms. ()

b) Can not deny partner who does not want to use a condom. ()

c) This would be construed to be unfaithful to ones partner. ()

d) Do not believe this will cause HIV infection. ()

22). Condoms kill the mood of sex.

- a) Strongly agree. ()
- b) Agree ()
- c) Disagree, ()
- d) Strongly disagree.()

23). Do you feel embarrassed about purchasing condoms?

- a) Not, ()
- b) Somewhat, ()
- c) Yes ()

24) Do you feel embarrassed about negotiation and use of condoms?

- a) Not, ()
- b) Somewhat ()
- c) Yes ()

25) .Stigmatization of condom use, which connects condoms with high sexual activity, mistrust between partners and promiscuity, can decrease condom usage rates (tick one answer)

- a) Strongly agree. ()
- b) Agree ()
- c) Disagree, ()
- d) Strongly disagree. ()

Section D: Skills and Competencies Index Questionnaire

26).Please tick appropriately

	Yes	No
(a) Have you ever had sex?		
(b) If yes, have you ever used a condom?		
(c) Did you use a condom the last time you had sex?		
(d) How many people did you have sex within the last 12 months?		
Yes		
(e) Do you know how to correctly use condoms?		

Please, answer by ticking the choices-agree or not agree in the brackets.

26). Do not use a condom more than once

- a) Agree ()
- b) Disagree ()

27). Use condom with every act of sex

- a) Agree ()
- b) Disagree ()

28). Petroleum-based products (Vaseline) can be used as lubricants during sexual intercourse

- a) Agree ()
- b) Disagree ()

29).Consistent and correct use with every act of intercourse is the key to effectiveness in prevention

- a) Agree ()
- b) Disagree ()

30).How often do you use a condom?

- a) Never, ()
- b) Almost always ()
- c) Sometimes, ()
- d) Always. ()
- e) Other.....

31). Have you at any time initiated the use of a condom with your partner Tick appropriate answer a) Yes () b) No ()

Section E: Environmental Determinants Index Questionnaire

32). How easily available are condoms for HIV/AIDS prevention?. Please tick one

- a) Readily available ()
- b) Not readily available ()

33). The following are areas condoms can be accessed. Please tick appropriately.

- a) Health facilities (Agree) (disagree)
- b) Bars (Agree) (disagree)
- c) churches (Agree) (disagree)
- d) Schools (Agree) (disagree)
- e) Chemist/Pharmacy (Agree) (disagree)
- e) other -----

34) Are the youth able to get them free of charge or at a cost (purchase)? Please tick appropriately.

- a) Free of charge ()
- b) At a cost ()

35) If at a cost, does this limit the use of condoms in that they are expensive for the youth? Please tick appropriately

- a) Yes ()
- b) No ()

36) Are there policies you know that hinder the access and usage of condoms to the youth,e.g not entering bars to collect condoms?

- a)Yes ()
- b)No ().

37). Does the community support /encourage condom use?

a) Yes ()

b).No ().

38) Does your culture or tradition hinder you from using condoms?

a)Yes ()

b) No ().

Section F: Saliency in practising safe sex Index Questionnaire.

Answer by ticking the correct choice

39). Do you believe the use of condoms can be beneficial to you?

a)Yes()

b)No ()

40). Do you think other methods of preventing HIV and AIDS are more suitable and effective to you than the use of condoms?

a)Yes ()

b) No ()

41).How often have you heard of condom use messages?

a) Not, ()

b) Often, ()

c) Many times ()

d) Other.....

42).Do you know ant advert in the media promoting condom usage for HIV/AIDS prevention.

a) Yes ()

b) Not.()

43) Has it had any effect on your decision to use condoms for HIV/AIDS prevention?

a)Yes ()

b) Not .()

44).Are you concerned of contracting HIV.

a) Not, ()

b) Somehow, ()

c) Yes ()

45). Of the following issues below, tick one that you most fear to contract.

a) HIV/AIDS,()

b) Cancer, ()

c) Syphilis, ()

d) TB, ()

e) Unwanted pregnancy()

Appendix 3: Focus Group Discussion Guide for the youth participants

1. Provide specific instructions on how to correctly use and when to use a condom.
2. what are the basic facts about condoms. Demonstrate how to correctly put on condoms by using a model.
3. What effect has the declaration of a celebrity that he /she has HIV/AIDS has had on condom use by the youth.
4. Identify the various environmental constraints (political, cultural, legal/ethical, and social) that hinder youth from using condoms in practising safe sex.
5. What are the positive or negative feelings about using a condom i.e., how do you feel about the idea of using a condom? What do you like about it; what do you enjoy or dislike?
6. What are the positive or negative outcomes of performing a safe sex practice like the use of condom?(.behavioural beliefs)
7. Which individuals or groups of people to whom you might listen who are in favour of or opposed to your performing a certain positive HIV and AIDS behaviour?(normative reference).
8. If you want to practice safe sex like the use of condoms, how certain are you that you can?
- 9 what kinds of things would help you overcome any barriers to perform the above?
- 10Who would support you in using condoms, abstaining or being faithful to one partner?
- 11 If condoms are available in your community, how certain are you that you could always use condoms?
- 12 If you believe AIDS will affect you, how certain are you that you could always use condoms?
13. Can you give a personal experience of how you have wanted to stop risky behaviour like having unprotected sex without condoms but failed? What do you think such a scenario could be abated?

Appendix 4 :Interview Guide for Key participants,(IDI)

1. What in your estimation, are the practices, actives and behaviours that have made the youth more vulnerable to HIV and AIDS especially in having sex without condoms.
2. Do the youth have self efficacy to use condom for HIV/AIDS prevention?
3. In your estimation, do the youth believe its important to promote positive HIV and AIDS behaviour change like the use of condoms?
5. To what extent do you think the youth accord any importance /prominence to HIV/AIDS menace and condom use as a prevention method.
6. How prepared are the youth in the fight against HIV/AIDS in terms of condom use skills,cultural competencies, and negotiation skills.
5. Has environmental aspects like legal and ethical constraints,cultural aspects, political and social constraints contributed to the use of condoms in preventing HIV/AIDS among the youth?
6. Do you think the youth are competent and skilled enough on condom use as a method of HIV/AIDS prevention?

Appendix 5: Letter of Approval



JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

DIRECTOR, BOARD OF POSTGRADUATE STUDIES

P.O. BOX 62000
NAIROBI – 00200
KENYA
Email: director@bps.jkuat.ac.ke

TEL: 254-067-52711/52181-4
FAX: 254-067-52164/52030

REF: JKU/2/11/HD421-2027/2013

14th JUNE, 2016

NGUZO JAMES KAPANYA
C/o SCDS
JKUAT

Dear Mr. Nguzo,

RE: APPROVAL OF PhD RESEARCH PROPOSAL AND SUPERVISORS

Kindly note that your research proposal entitled: "HIV and AIDS Behaviour change communication factors that determine Condom use among the youth in Kilifi County, Kenya", has been approved. The following are your approved supervisors:-

1. Dr. Hellen Mberia
2. Dr. Silas Odongo Oriaso


PROF. MATHEW KINYANJUI
DIRECTOR, BOARD OF POSTGRADUATE STUDIES

Copy to: DEAN, SCDS



JKUAT is ISO 9001:2008 and 14001:2004 Certified
Setting Trends in Higher Education, Research and Innovation

Appendix 6: NACOSTIC Letter of Authorization



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,
2241349, 3310571, 2219420
Fax: +254-20-318245, 318249
Email: dg@nacosti.go.ke
Website: www.nacosti.go.ke
when replying please quote

9th Floor, Utalii House
Uhuru Highway
P.O. Box 30623-00100
NAIROBI-KENYA

Ref No: **NACOSTI/P/16/89092/12724**

Date:

1st August, 2016

James Kapanya Nguzo
Jomo Kenyatta University of Agriculture
And Technology
P.O. Box 62000-00200
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "**HIV & AIDS behavior change communication factors that determine condom use among the youth in Kilifi County**," I am pleased to inform you that you have been authorized to undertake research in **Kilifi County** for the period ending **29th July, 2017**.

You are advised to report to **the County Commissioner and the County Director of Education, Kilifi County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

A handwritten signature in blue ink, appearing to read "DR. STEPHEN K. KIBIRU".

**DR. STEPHEN K. KIBIRU, PhD.
FOR: DIRECTOR-GENERAL/CEO**

Copy to:

The County Commissioner
Kilifi County.

The County Director of Education
Kilifi County.

Appendix 7: Consent Form for minors

To be completed by the Minor and Guardian

Part A: To be completed by the minor.

I agree to take part in the study on *HIV and AIDS behaviour change communication factors that determine condom use among the youth in Kilifi County Kenya* I would like to take part in both filling the questionnaire and group discussion.

I have read and understood the introduction letter. I know what the study is about and the part I will be involved in. I know that I do not have to answer all of the questions and that I can decide not to continue at any time

Name.....

Signature.....

Age.....

Part B: To be completed by the guardian

I have read and understood the introduction letter and give permission for the child named above to be included

Name.....

Relationship to child.....

Signature.....