RELATIONSHIP BETWEEN SELF ESTEEM, RESILIENCE AND THE RISK OF HIV INFECTION AMONG MEN WHO HAVE SEX WITH MEN AT ISHTAR MSM NAIROBI

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DECLARATION

Student's declaration

I declare that this research project report is my original work and has not been presented for a degree award in any other university.

Signature___________________________________Date_________________________ ______

Jane Wairimu Ng'ang'a
C50/72239/2014

Supervisor's Declaration

This project has been submitted for review with my approval as the University Supervisor.

Signature_____________________________________Date________________________ ______

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DEDICATION

This research project is dedicated to my husband Samuel Ng'ang'a, my late brother Charles Maina Gichuki, my mother Mary Wanjiru Gichuki, our children, field officers at ISHTAR and all study participants.

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LIST OF ABBREVIATIONS

CDC	-Center for Disease Control
FSWs	-Female Sex Workers
HIV	-Human Immunodeficiency Virus
HIV	-Human Immunodeficiency Virus
IOM	-International Organization of Migration
KAVI-ICR	-KAVI Institute of Clinical Research
KNH	- Kenyatta National Hospital
MSM	-Men who have sex with Men
NACC	-National AIDS Control Council
NASCOP	-National AIDS and Sexually Transmitted Diseases Control Program
STIs	-Sexually Transmitted Infections
UAI	-Unprotected Anal Intercourse
YVC	-Youth Voices Count

ABSTRACT

Acquired Immunodeficiency Syndrome (AIDS) has continued to be a major public health concern in Kenya which has ranked number 4 worldwide together with Uganda and Mozambique. On average, the HIV prevalence in Kenya is 6% with approximately 1.6 million people living with HIV infection. Despite reduction in HIV prevalence in Kenya, the Men who have Sex with Men (MSM) population still has a high prevalence which cannot be ignored especially because majority would also be engaging in heterosexual relationships hence the reason why this population is viewed as a bridge of HIV infection in the general population .Studies conducted indicate that low self-esteem in MSM puts them at an increased risk of contracting HIV. The study aims at determining the level of self-esteem among MSM, determining the level of resilience of MSM, comparing the self-esteem and resilience of HIV infected respondents with the HIV uninfected respondents and establishing if there is a difference in self-esteem, resilience and risk of HIV infection between insertive versus receptive MSM at ISHTAR MSM, Nairobi County. The target population was 373 MSM from 3730 who have been reached out at ISHTAR MSM. Collected data was coded to ensure confidentiality and anonymity of the data. The data collection tools were; a demographic form, Rosenberg's Self-Esteem scale, resilience questionnaire and a risk assessment questionnaire. Data collected was processed through SPSS and analyzed through descriptive and inferential statistics. The results indicated a strong relationship between self-esteem, resilience and risk of HIV infection. There was also a significant difference between self-esteem and resilience of MSM who practice receptive anal sex versus MSM who practice insertive anal sex with the receptive respondents having a lower self-esteem than the insertive respondents do. Owing to fear of stigma and discrimination, the study recommends that any researcher conducting a study with HIV infected MSM needs to conduct a HIV test to ensure they are working with HIV infected participants. Disclosure of HIV status was a challenge, which can be mitigated through HIV testing.

CHAPTER ONE

1.1 Introduction

Acquired Immunodeficiency Syndrome(AIDS) has continued to be a major public health concern in Kenya which has ranked number 4 worldwide together with Uganda and Mozambique . UNAIDS (2017) indicated that Kenya had a population of 1.5 people living with the Human Immunodeficiency Syndrome (HIV). The national adult HIV prevalence (ages 15-49) is 4.8% with 53,000 new infections and 28,000 AIDS-related deaths. 75% of adults are on Antiretroviral Therapy (ART) which reduces the risk of an infected person transmitting the disease. This report also indicates that though the risk of HIV infection is presnt in the general population, the key population namely Men who have Sex with Men (MSM), Female Sex Workers (FSWs) and People Who Inject Drugs (PWID). The gay population is said to contribute the largest number of HIV incidence. In 2010, around 63% of new HIV infections approximated in the United States were from gay and bisexual men and 78% HIV incidence among all new infections in men. IOM (2010) estimated prevalence to be 18.2 %.Unfortunately, in Kenya, statistics about HIV prevalence in the gay population may not be as well represented.

Homosexuality is also highly stigmatized and unacceptable and so even when the MSM visit health care facilities, they don’t disclose their sexual orientation so they aren’t even examined for anal Sexually Transmitted Infections (STIs). The health facilities are also ill equipped to diagnose STIs in MSM since most of the health care providers are mostly familiar with STIs related to the heterosexual community only. STIs increase the risk of HIV infection. However, there are NGOs that work closely with the government of Kenya to reach out this population. An example is the Sex Workers’ Outreach Program (SWOP), ISHTAR MSM where the study was undertaken and GALCK which is a protection body for organizations working with key populations. These organizations offer MSM friendly health care services.

Quite a number of studies suggest that there is a relationship between self-esteem and possibility of taking sexual risks in gay and bisexual men, David and David (2011). However, minimal studies have been conducted to find out if self-esteem can

independently predict behavior related to taking sexual risks. Adam et al (2005) discovered qualitatively that there was a relationship between reduced self-esteem and diminished condom use among bare backers. Rosario et al, (2006) encountered similar results though here, the number of partners was the facilitating factor as far as risk of HIV infection was concerned. Preston et al (2007) established that among rural MSM, the risk of HIV infection was related to heightened stigma connected to decreased self-esteem and same was evident in African American MSM, Stokes JP, et al(1998).

Globally, homosexuality used to be classified as a disorder but ceased to be so in the year 1973after the American Association of Psychiatry struck it out from the Diagnostic and Statistical Manual of Mental Health Disorders (DSM). Despite this, homosexuality is still illegal in all African countries except South Africa and in Kenya, anyone who practices homosexuality can be imprisoned for a maximum of 14 years, The Law Library of Congress, (2014). This makes it challenging to reach out the MSM population even for health care since they fear arrest. Moreover, majority of them are closeted and it may take them a lifetime to “come out” so even giving them social support is challenging. In Pakistan, MSM are known to display bisexuality to rid themselves of societal dishonor by marrying female partners whereas they still have sexual interaction with fellow MSM, Rajabali A, et.al (2008). Certainly, MSM transmit HIV to the larger community by infecting their spouses and children and that is why MSM are termed as a “bridge” in HIV transmission to the general population. Culturally within the African setting, men and women will be looked upon to marry and bring forth children. When this does not occur, questions are raised if someone cannot get himself or herself a partner with some members of the society volunteering to get that person a suitable partner. Unfortunately, homosexuality is like a taboo word in Kenya and most of the members of the community would like to assume that it is non-existent yet the effects are now being felt due to the high HIV prevalence in this population.

Finlayson T. J. et.al (2008) carried out a study on “effects of stigma, community belongingness, and self-esteem on the HIV sexual risk behaviors of African American and Latino MSM.” The study revealed that assumed and endorsed dishonor associated

adversely to both sense of community and self-esteem. Both sense of belonging in the community and self-confidence shielded individuals from getting into Unprotected Anal Intercourse (UAI). This means that individuals who value themselves highly are more inclined to protect themselves against HIV infection. Unprotected receptive anal sex in men poses 10 times increased danger of contracting HIV as opposed to unprotected vaginal sex.

UAI is a major predictor of HIV prevalence among MSM. Unfortunately, most of the HIV prevention Information, Education and Communication (IEC) material says little about anal sex including the messaging about HIV transmission. Young Voices Count (YVC) program, underscored the damaging influence of psychosocial encounters, predominantly diminished self-esteem as well as confidence on young MSM and transgender people engaging in unsafe sexual involvements. This hampers young MSM and transgender people from gaining access to selected health provision as well as HIV related services, MSM and transgender youth (2013). In addition, respondents acknowledged the inability of the current HIV prevention programs failure to empower young MSM and transgender people to accept their sexual orientation or to provide a conducive environment which is accepting of gay people. This occurs notwithstanding the realization that men who are most accepting of their sexuality and identity are; more psychologically healthy, are said to have higher self-esteem, are more likely to disclose their HIV status to their casual sexual partners, and are less likely to engage in sexual risk-taking Waldo, C. et.al, (1998). This gave the researcher more reasons why it was necessary to conduct the self-esteem survey to help prepare programs that would empower the MSM population improve their self-esteem hence reduce the risk of HIV infection.

1.2 Problem Statement

Global HIV and AIDS (2018) statistics indicate that HIV prevalence is mostly dominated by key populations plus their sexual partners with a 47% global HIV incidence, while in Eastern and Southern Africa, they account for 16% HIV incidence. This drove the need to study the correlation between self-esteem, resilience and risk of HIV infection.

(McKinnon et al 2013) reckon that Kenya acknowledged the challenges HIV/AIDS posed to the nation in 1999 hence the declaration that the epidemic was a national disaster in the same year. MSM contribute most to the high HIV incidence. Owing to criminalization of homosexuality, the MSM have a complex danger of contracting HIV infection hence the term key population. They encounter challenges seeking health care for fear of arrest. They also engage in heterosexual activities due to pressure from society and are considered a bridging community to the general population.

Owing to cultural expectations, most MSM have not "come out" so majority marry and have children to avoid some of the questions people are asked when they get to a certain age without families. This is why MSM will marry or engage in heterosexual relationships. Currently, the Government of Kenya has accepted the reality that MSM face an increased threat of HIV infection as opposed to previous notions that there was no room for homosexuals and lesbians. Kiama (1999). Homosexuality was also strongly viewed ungodly as evidenced in a statement made by the President Daniel Arap Moi (President then). This has perpetuated stigma and discrimination amongst MSM. Likewise, Maina Kahindo from the Ministry of Health was quoted in the document of HIV and Kenya's Homosexuals report (1998)having echoed the insignificance of concentrating on HIV transmission among homosexuals hence termed the population "undeserving" of funds and time allocation as stated in HIV and Kenya's Homosexuals report (1998).However, there was a turn of events when in October 2009, the Government deemed it fit conduct a survey as well as evaluate their needs (Wadhams, 2009). To date, the Government has included HIV risk reduction strategies among the gay community in its Kenya National AIDS Strategic Framework.

Low self-esteem has been correlated to the high HIV incidence among young MSM of color (Brooks et al 2003) hence the drive for the researcher's choice to study self-esteem. The study sought to establish the relationship between self-esteem, resilience and risk of HIV infection with the aim to develop programs on skills training to enhance self-esteem in the MSM community.

1.2 Research objectives

The objectives of this study were to;

1. Establish the self-esteem of MSM at ISHTAR MSM Nairobi.
2. Determine the level of resilience of MSM at ISHTAR MSM Nairobi.
3. Compare the self-esteem and resilience of HIV infected clients with the uninfected clients at ISHTAR MSM Nairobi
4. Find out if there is a variance between the self-esteem, resilience and risk of HIV infection between insertive versus receptive MSM at ISHTAR MSM Nairobi

1.4 Research questions

1. What is the level of self-esteem of MSM at ISHTAR MSM?
2. What is the level of resilience among MSM at ISHTAR MSM?
3. Is there any difference between self-esteem, resilience and risk of HIV infection among HIV-infected and HIV uninfected MSM at ISHTAR MSM?
4. Is there a difference in self-esteem and resilience between insertive and receptive MSM at ISHTAR MSM?

1.5 Justification of the study

Discussions on homosexuality have long been avoided yet when it comes to HIV infection, prevalence in this population is high. Ainswothet. al, (2003) determined that it is imperative to focus on the reality that MSM population is considered a facilitator of HIV infection in the general population. All these are an impediment to public health enhancement.

(NACC/NASCOP 2012) statistics indicate that by the end of 2011, the population of people living with HIV was approximately 1.6 million. The national adult prevalence is 6.2% but is 30% among FSWs and among MSM it exceeds 18%. In Kenya, like other regions of the world, HIV differentially affects vulnerable and highly stigmatized communities Swartz (2006). Sanders et al (2007) pointed out that among MSM who are not bisexual, the prevalence is as high as 43%. Male sex workers constitute an especially vulnerable group. Despite the reduction of HIV prevalence nationally, amongst MSM in Sub-Saharan Africa, HIV occurrence is still high at approximately four to five times higher than that of other

men. Owing to the aforementioned statement, the researcher would like to establish the relationship between self-esteem, resilience and risk of HIV infection to help tailor-make programs aimed at reducing risk of HIV infection.

This study's main objective was to establish the relationship between self-esteem, resilience and danger of contracting HIV among MSM at ISHTAR MSM Nairobi. The researcher has also realized that there is a lot of emphasis put on the attitudes of Health Care Providers and minimal information about psychological issues that could also contribute to that high HIV prevalence, self-esteem being one of them.

1.6 Significance of study

The study is significant because the findings will aid in understanding the social influences that escalate risk of HIV infection and also developing programs focused on empowering MSM to lower the risk of HIV infection. Chronic feelings of low self-worth and specific situations in which a person feels a challenge to self-esteem can lead to unsafe sex which in turn poses a risk to HIV infection. Often, people with low self-esteem give little priority to their own health. They may minimize the harm or risks of HIV infection or feel unmotivated or unable to avoid risk behavior. The findings will also help in tailor-made program development.

1.7 Scope of the study

The study was focused on four objectives namely; establishing the self-esteem of MSM at ISHTAR MSM Nairobi; determining the level of resilience of MSM at ISHTAR MSM Nairobi; comparing the self-esteem and resilience of HIV infected clients with the uninfected clients at ISHTAR MSM Nairobi; and establishing relationship between self-esteem, resilience and risk of HIV infection among insertive versus receptive MSM at ISHTAR MSM Nairobi. The study was carried out at ISHTAR MSM, Nairobi County.

1.8 Limitations of the Study

Due to the timing of the study, the participants encountered transport crisis where the researcher gave them transport reimbursement to facilitate their travel. Fear of

stigmatization of the participants was a hindrance where most participants were hesitant to disclose their HIV status and sexual orientation.

1.9 Definition of Terms

Closeted- this refers to a state of secrecy or cautious privacy concerning one's sexual orientation.

Coming out- it means the process in which one acknowledges and accepts own sexual orientation encompassing the process of disclosure of one's sexual orientation to others.

Gender expression-this refers to way one acts to communicate gender within a given culture; for example, in terms of clothing, communication patterns and interests. Association, 2008, p. 28).

Gender identity- this is the sense of self as male, female or transgender" (American Psychological Association, 2006).

Gender- this refers to the roles assigned culturally to a person owing to their biological sex. If one goes against that expectation, they are termed non-gender conforming.

Homosexuality – this refers to sexual attraction to members of one's own sex

Resilience- this means to "bounce back" or go back to one's feet after an adversity Agnes (2005).

Self-esteem-refers to a person's sense of worth or the extent one values him or herself (Blascovich & Tomaka, 1991)

Sex- this refers to a person's biological status which is characteristically male, female, or intersex

Sexism- "prejudice or discrimination based on sex or gender, especially against women and girls" (Encyclopedia Britannica, 2015).

Sexual orientation- denotes the sex of those to whom one is sexually attracted. This may be heterosexual, homosexual or bisexual.

Stigma- this is a component that shames an individual or group of people in the eyes of another person or crowd. (Engender Health, 2004).

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

Here, the study objectives are addressed in sub-topics with the theoretical frame-work at the end.

2.2 Self-esteem among MSM

In spite of the plentiful literature devoted, minimal settlement has been achievement on self-esteem's meaning. However, it has two essential constituents namely self-efficacy and self-respect. Self-efficacy can be described as the confidence in one's ability to cope with the challenges. It leads to a sense of control over one's being. Self-respect is described as experiencing self as worthy of happiness, accomplishment and affection. This makes a sense of community with others possible. Both self-efficacy and self-respect are the twofold pillars of healthy self-esteem, which is compromised in the absence of either of the two; California Task Force (1990).Self-esteem can be viewed as a basic human necessity, which makes a crucial contribution to the life process, normal and healthy development, and values endurance. Positive self-esteem can be equated to the immune system of consciousness, providing resistance, strength, and a capacity for rejuvenation and lack of it leads to stunted psychological growth.

The origin of self-esteem stemmed from the effort of James, W. (1892) who was a psychologist. He identified multiple dimensions of the self, with two levels of grading: processes of knowing (called the 'I-self') and the resulting knowledge about the self (the 'Me-self'). Scrutiny about the self and storage of those interpretations by the I-self generate three types of self; material, social and spiritual self. However, the social self comes closest to self-esteem, which encompasses all characteristics recognized by others. While material self consists of representations of the body and possession, the spiritual self is made up of descriptive representations and evaluative dispositions regarding the self. According to Schilder (2006), this view of self-esteem as the collection of an individual's attitudes toward oneself remains today. Nathaniel B (1995) stated that he has never encountered any psychological problem that has no origin from self-esteem deficiency for example violent

crimes, from underachievement at both work or school and others. Self-esteem is the value a person places on him or herself and is determined largely by the following factors, California task Force (1990).

2.2.1 Security

This is the feeling of being comfortable and safe in an environment. As it relates to self-esteem, security refers to both an environment that is free of violence and one in which individuals are respected for communicating and experiencing their feelings. Unfortunately, MSM experience a lot of hostility leading to a sense of insecurity.

2.2.2 Affiliation

This is termed as a sense of belonging and warmth that is accomplished as a result of relationships with significant others. Homophobia and stigma make affiliation for MSM a challenge owing to the rejection they undergo even from family.

2.2.3 Competence

A feeling of success in personally significant areas as well as awareness of one's strengths and acceptance of one's weaknesses.

2.2.4 Self-hood

This is a precise and genuine sense of one's attributes and physical features. Some MSM prefer different genders as opposed to their biological ones, which in most cases is unacceptable in society.

2.2.5 Mission

This is a feeling of influence over and responsibility for circumstances of one's life, improved by a self-motivated sense of determination. Surprisingly, while cumulative researches have established that low levels of self-esteem correlate with elevated risk-taking for HIV infection, most studies on the subject of self-esteem have focused on its relationship to such things as substance abuse, depression, suicide, seatbelt use, and emotional dependency on others, Walter H J, (1991. Findings from these studies are

relevant to HIV infection risks because they reflect the relationship between self-esteem and a person's decision to engage in harmful or dangerous behavior.

2.2.6 Societal and environmental factors

Both current and past, help shape a person's self-esteem. California task Force (1990), Walter H J (1991). These influences, which can extend back to a person's earliest experiences, include people like family members, schoolmates and work colleagues, while in the community, they would include civic, religious, or clique leaders. Negative influences, such as imbalances of economic power, classism, sexism, and racism can contribute to low self-esteem (California task Force 1990).

2.2.7 Low levels of literacy, lack of education, and language barriers

These can also affect a person's views of him or herself. This is because these characteristics relate to how a person functions in a society which values and also requires a formal education and knowledge of English. Low self-esteem can also lead to destructive behavior toward oneself and others Walter H J, et.al (1991). The researcher thinks that this destructive behavior could include risk of HIV infection by not protecting oneself during sex.

2.2.8Adverse circumstances

These can feel far more severe for a person with low self-esteem compared to someone with a healthier level of self-esteem. Intense feelings related to adversity can lead a person to feel that life is out of control and can perpetuate dangerous or risky behavior. However, for others with low self-esteem, adverse circumstances can feel desirable because such circumstances offer a chance to focus energies toward problem-solving or escaping. This means that low self-esteem does not always yield negative outcomes because one can use it positively to overcome adversity.

2.2.9 Social and family support

This is important to self-esteem. Studies have found that people who have not received support from their parents experienced low self- esteem. MSM could be part of this population because; the sexual practice is still unacceptable at family as well as the societal level. Walter, et.al (1991), showed that people who have received little social and familial support are at a higher risk of engaging in harmful behavior than those who received support. MSM, especially those who have come out face the risk of rejection hence the possibility of engaging in harmful behavior HIV risk being one of them. While unhealthy self-esteem levels are often present in people who explicitly express low self-value, people who express what may seem like extraordinarily inflated or "superhuman" beliefs about themselves may actually have low self-regard. These people may be trying to mask or hide their negative feelings of themselves. They often have a false sense of security and avoid information that they find threatening, Gerrard M et.al (1991). For instance, someone may state that, regardless of risk behaviors, he or she is invulnerable to HIV infection or can use alcohol or other drugs to any degree without harm. The researcher thinks this could be related to her research findings since most of the participants had very high self-esteem. However, it is worth noting that majority also responded affirmatively to one item which stated that "I certainly feel useless at times" Chronic feelings of low self-worth and specific situations in which a person feels a challenge to self-esteem can lead to unsafe sex. Because people with low self-esteem often give little priority to their own health, they may minimize the harm or risks of HIV infection or feel unmotivated or unable to avoid risk behaviors.

It is a struggle for people experiencing low self-esteem to converse to partners their desire to engage only in safer forms of sex and needle-using behavior. These people may feel dependent on sex partners, they may fear rejection, or they may believe that their desires are not valid. During sex, when the desire to please others is often considered important, a person with low self-esteem is especially susceptible to putting a partner's needs first. Gold R. G (1995) conducted a study of gay men that examined the desire for unprotected sex once a sexual encounter started. They found that those who reported increased desire for unprotected anal intercourse during unsafe encounters also frequently reported feelings of

being depressed, bored, or stressed prior to sex; in some cases, general feelings of ambivalence may lead some people with chronically low levels of self-esteem to engage in unsafe sex or needle-using behaviors without concern for whether they infect their partners. Both substance abuse and absence of social support increase the likelihood of engaging in unsafe behaviors. Walter H J (1991) conducted a study, which indicated that; participants experiencing low self-value had a 40% likelihood of indulging in risky behavior than those who were considered to have healthier levels of self-esteem.

Young M, (1989) concluded that positive social support may provide people with an increased sense of self-worth and, therefore, allow them to feel more comfortable communicating their needs for safer sex. A person with chronically low levels of self-esteem may have significant insecurity about his or her sexuality and may view sexuality or sexual expression as unhealthy or wrong. To this person, negative consequences of becoming infected as a result of sexual expression may seem consistent with his or her negative views of sexual expression and personal value. Among those who did not sustain safer sex practices, risky behavior most often occurred when relationships had "broken down," a time when self-esteem may be lower, and during the use of alcohol and other drugs, often resulting from low self-esteem. Efforts to boost self-esteem appear to relate to safer sexual behaviors. Canadian officials found the availability of gay-affirmative psychotherapy, the presence of social activism, and education against homophobia to be important in limiting the spread of HIV infection among gay men.

2.3 Resilience among MSM

Pruchno et al (2015) propose that resilience is influenced by different variables. Of consideration in the course of examining resilience in older people are hostile encounters. Smith and Hayslip (2012) put forward that resilience fluctuates meaning one can experience high resilience at one time and low resilience at another time. Getting back to one's feet after an adversity could be hindered by intrapersonal, interpersonal, and environmental circumstances, as well as experiences of discrimination, victimization, internalized stigma, and depression which is common among MSM. However, confirmation of 'effects of these adverse experiences on resilience in gay and bisexual older

men is still scarce hence, there is a missing link in the effect of adversity on resilience on MSM. Interestingly, the MSM population interviewed was below 50years.

MSM encounter health inequalities compared to heterosexual men. This is evident owing to the increased level of hopelessness and other difficulties in psychological well-being, victimization, and substance dependence (Cochran and Mays 2008) and sexual compulsivity (Parsons, Grov, and Golub,2011). Links between mental distress, substance abuse and sexual risk-taking behaviors are further verified by the frequent use of sex and drugs for cognitive escape purposes (Alvy et al., 2011). Inadequate or negative coping skills are also prevalent in this population (Martin and Alessi, 2010) hence the researcher's aspiration to empower this population through life-skills training as well as other tailor-made trainings like in the area of self-esteem.

Studies indicate that enhancing resilience among MSM may be a productive approach for alleviating these health disparities Stall et al. (2008). Relating with MSM, resilience has been viewed as a coping and re-organization method, which could be social, psychological, or behavioral that transpires regardless of multiple personal and social losses Rabkinet al (1993). It may involve adaptations in psychological, social and/or behavioral characteristics. In the lesbian, gay, bisexual and transgendered (LGBT) literature, resilience has been largely operationalized by measures of coping skills or strategies (Siegel and Meyer, 1999), stress-related growth (Bonet, Wells, and Parsons, 2007) and social support (Gwadz et al., 2006).

De Santis(2008) reiterated that resilience literature on MSM is scant but suggests that, in spite of syndemic health inequalities, most MSM display resilience (Herrick et al., 2011). This is demonstrated in discontinuation of smoking and recovery (Greenwood et al., 2005), evading recreational drug use notwithstanding its popularity in the city MSM community (Mills et al., 2004; Stall et al., 2001), and involvement in the gay rights movement for the last 40 years (Herrick, 2011). These studies evidence health promotion, altruism, and social justice, which are all characteristics of resilience, Kent and Davis, (2010).

Schwarzer R, Warner LM (2013), Veselska Z, et.al (2009) established that there is a relationship between self-esteem and self-efficacy and resilience, and that resources for resilience can be found in the individual or his or her environment (Windle et al., 2011). According to Branden (1994), Mecca et al (1989), self-esteem has been viewed as the key to financial success health just to mention a few as well as dealing with most of life's adversities like crime, and drug abuse. Smith and Hayslip(2012) concluded that classically, resilience has been distinctive as a strategy of optimistic adjustment owing to past or current difficulty or danger. Presumably, individuals with healthy self-esteem have the likelihood of seeing and accepting challenges in their lives and then find solutions so that they can face them. Often, those with chronic low self-esteem have come to view life only as one large challenge. They no longer recognize specific challenges or solutions available to them. This portrays a probability of a relationship between self-esteem and resilience.

Modern psychology took a shift in 1998 with Martin Seligman and Mihály Csíkszentmihályi being significant figures in the initiation of positive psychology (Hücker and Jung, 2014). "Positive psychology tries to help people to achieve satisfaction of the past, optimism for the future as well as happiness currently on a scientific manner (Hergenhahn, 2008)." Innovative ways of supporting human beings had to be established to accomplish this goal hence the focus had to shift from correcting deficiencies, to empowering people with the help of positive psychology constructs (Seligman and Csikszentmihalyi, 2000). Several important resources in positive psychology are employed to help accomplish the goal of protecting humans from severe problems and make them happy. Hope, satisfaction with life Marques et al(2011), endurance, wide-ranging self-efficacy and happiness Khodarahimi (2014) and resilience (Martz and Livneh, 2015) are examples of those resources.

Resilience is one construct that is linked with many of the others such as hardiness, self-efficacy, thriving, sense of coherence and inner strength and is linked with emotional qualities like hope, self-esteem, optimism, acceptance of disability and more Martz and Livneh, (2015). Owing to resilience's effect on helping people to govern their lives with a variety of disabling circumstances, resilience has become popular in positive psychology

Martz and Livneh, 2015). Resilience is also significant for lifelong fitness and well-being (Windle, Bennett, and Noyes, 2011). Literature indicates that resilience is associated with less severe reactions to negative events, less aggression and renewal of relationships (Cohrs, Christie, White, and Das, 2013). Being a highly resilient person has different outcomes like; lower level of psychological disturbance, misery and apprehension and on the other side higher levels of constructive emotions, apparent well-being and recognition of disability were reported. All in all, resilience is associated with more effective coping strategies, better effects in therapy and less suicide attempts (Portzky, Wagnild, De Bacquer, and Audenaert, 2010).

Portzky et al,(2010) stated that defining resilience has its own share of problems since up to now, it is not clear if resilience is a static disposition or a dynamic development. Using resilience is important. For example; more than half of human beings undergo at least one harrowing incident in lifetime, but most of them recover without developing mental illness Leontjevas et al (2014). However, to the contrary, 30-90% of people experiencing such events report an increased quality of life (Aspinwall and MacNamara, 2005). Martz and Livneh(2015) stated that in order to achieve positive results after stressful events, resilience seems to be an important factor. Resilience is said to protect and prevent from clinical psychopathology (Portzky et al., 2010). Even highly resilient people do show reactions to traumatic events, for example being upset, but those reactions are rather short-termed. Portzky et al, (2010) reported that highly resilient people return faster to their initial level of functioning unlike less resilient people whose recovery from traumatic events is characterized by a lack in functioning in everyday life. Owing to these outcomes, resilience is getting increasingly important in different professional fields, such as clinical psychology and medical sciences (Portzky et al., 2010).

Another construct that is most likely positively associated with resilience is health. A relationship can be deduced between self-esteem and resilience owing to a study which reported that resilience reduced mortality rates by 6% for people with more self-gratification,were less fretful and did not feel isolated (Shen and Zeng, 2010). Undeniably, resilience has been defined and measured in many forms one of them being the Brief Resilience Scale which the researcher used.

2.3.1 The Brief Resilience Scale

Smith et al. (2008) developed the Brief Resilience Scale (BRS) which aims at determining one's ability to stand on their feet again after an adversity. Majority of resilience assessment tools take into account factors cultivating resilience. Windle et al. (2011) rated this measure third among the highly valid and reliable resilience measurement tool and it was also the researcher's tool of choice in this study.

2.4 Self-esteem and risk of HIV infection

Interestingly, self-esteem features in very few researches as an independent contributor to influence the sexual risk practices of gay and bisexual men compared to stigma and social support which have been studied widely, Mahajan et al (2008 PubMed). David A.M and David W.S (2011) conducted a study which indicated that there were no variances among HIV-infected and HIV-uninfected men concerning self-esteem. The researcher wanted to replicate this study and see if the results would be the same. Neither receptive nor insertive condom use was related to self-esteem. Their other results pointed out that self-esteem was a significant independent predictor of HIV disclosure, though was it not influential over condom use. The results indicated that self-esteem has minimal significance on sexual risk-taking practices of HIV-negative men. Other literature reviewed indicates that the arbitrating role of self-esteem or "global feelings of self-worth" is also considered owing to its association with both stigma and sexual risk behaviors, Crocker and Major, (1989).

Stigma can be classified as external or internal. External stigma is about individuals being treated dishonorably and in a dissimilar way to everybody else like; MSM may be barred from health care treatment by health care workers. This in turn leads to internal stigma for example; MSM may encounter low self-confidence hence feel emotionally disturbed (Hamilton, 2006). Results from Huebner et.al (2004) study on experiences of harassment, discrimination, and physical violence among young gay and bisexual men, it was revealed that these forms of legislated stigma correlated to low self-esteem and suicidal tendencies.

According to Fullilove and Fullilove (1999), enhancing the self-esteem of African American MSM can lead to risk reduction behavior because “some men are so mixed-up by stigmatization rendering them powerless to care for themselves (p.1127).” This empowerment can only occur after carrying out a study on self-esteem in the MSM population in Kenya. In the mid-1960s, sociologist Morris Rosenberg defined self-esteem as a feeling of self-worth and developed the Rosenberg self-esteem scale (RSES), which became the most-widely used scale to measure self-esteem in the social sciences, Baumeister et al (1996).

2.5 Resilience in relation to risk of HIV infection

According to global estimate, HIV prevalence for young gay men under 25 years is 4.2% (UNAIDS 2014). Young MSM sex workers are more susceptible to HIV. A Kenyan study found a baseline HIV prevalence of 40% among young MSM sex workers in Nairobi, McKinnon LR et al (2014). In one study conducted among MSM sex workers in Nairobi, only about 1 in 3 reported consistent condom use (McKinnon et al 2013). Part of the MSM cohort that will be engaged in the exercise has an estimated HIV incidence of 10.9% (McKinnon et al 2013). The researcher hoped to check what another study revealed about a resilient person’s ability to counter the undesirable effects of ill health (Windle et al., 2010) by measuring resilience in MSM who are HIV infected. Dual studies have shown that resilience forecasts mental health in older adults (Nygren et al. , 2005; Mehta et al. , 2008). MSM encounter mental health issues as a result of stigma which could also be a hindrance in making decisions about protection from HIV infection.

Amazingly, resilience literature on MSM is scant (De Santis, 2008), but suggests that, most MSM are resilient even in the face of multiple health disproportions (Herrick et al., 2011). This was evident in this study with results of high resilience amongst MSM in ISHTAR MSM despite the social challenges they encounter like stigma and discrimination. Windle et al (2011) established that resilience is an important factor for life-long well-being both mentally and physically. A study by Ho, Louie, Chow, Wong and Ip (2015), in their cross-sectional study, resilience was found to be the intervening variable between physical activity and mental health. As mentioned above, a high value on resilience is clearly

associated with physical health (King and Richardson, 2016). It can be concluded that resilience should be positively related to health, as a result of studies finding relations of resilience with global health and with mental and physical health. Also, mental resilience is viewed as a shielding device that works in the face of negative stressors (Masten, 2001; Bonanno, 2004). Most MSM are faced with negative stressors like stigma, discrimination, homophobia and others.

2.6 Theoretical Framework

The study will focus on two theories of self-esteem that is Carl Rogers' humanistic theory, Abraham Maslow's Self Actualization theory and use Rosenberg's Self-esteem measurement scale. Carl Rogers defined self-concept as "the structured, steady set of opinions and beliefs about self". Carl Rogers (1959) viewed the self-concept in three different components: personal view (self-image); value placed on self (self-esteem or self-worth) and desired self (ideal self). To achieve a balanced self-concept, Carl Rogers believed that human beings required three core conditions namely; Congruence, Unconditional positive regard and Empathy. MSM don't get much of these conditions owing to homophobia, stigma and discrimination. At the same time, these are rare conditions even in general relationships.

2.6.1 Congruence (genuineness)

This denotes therapist's ability to be real and genuine with their clients in the sense that their inner experience and outward expression match. Authenticity indicates the therapist's trustworthiness which enhances a good therapeutic relationship with the client. This helps clients to be true to themselves, expressing their thoughts and feelings, without facades.

2.6.2 Unconditional positive regard (acceptance)

This depicts the therapist's absolute care for their clients and without judging the client's thoughts, feelings, or behaviors as good or bad. Generally in life, this rarely occurs since people have challenges separating behavior from the individual.

2.6.3 Accurate empathic understanding

The above denotes that the therapist endeavors to view the client's issue from the "client's unique perspective" and not vice versa especially through reflection of feelings. It assists clients to become more reflective with themselves, leading to greater self-understanding. Clients experience an "aha moment" in therapy if the therapist views their issues from the clients' "phenomenological world." Carl Rogers believed that peoples' growth is dependent on the three core-conditions which he likened to sunlight and water for a tree to grow. The person centered theory was selected owing to its elaborate view of conditions that would promote or hinder individual growth which in turn heightens or lowers self-esteem. Self-esteem is said to be related to risk of HIV infection. Jeanne Watson (2002) expressed that empathy after 60 years of research, remains the most powerful determining factor of client's progression in therapy.

2.7 Maslow's Hierarchy of Needs Theory

Abraham Maslow's hierarchical theory of needs is among the most popular theories of needs. He believed all human beings are born with innate needs which lead one to "grow, advance and flourish." He suggested that inspiration emanates from a person's endeavor to fulfill five basic needs: physiological, safety, social, esteem, self-actualization, and they can create "internal pressures" affecting a person's behavior.

2.7.1 Physiological needs

These are referred to as those essential for human existence such as air, food, water, shelter, clothing and sleep.

2.7.2 Safety needs

They comprise those needs which offer one a sense of security and well-being. They include personal safety, economic security, good health and safeguard from harm and their contrary outcomes.

2.7.3 Social needs, (love and belonging),

This symbolizes the need to experience belonging and approval. In order to fulfill social needs, one needs friendships, family and intimacy in order to feel "warm". This is a major challenge for MSM owing to the level of homophobia they encounter.

2.7.4 Esteem needs

These refer to those needs for self-esteem and admiration. Self-respect holds more importance than regard from others.

2.7.5 Self-actualization needs

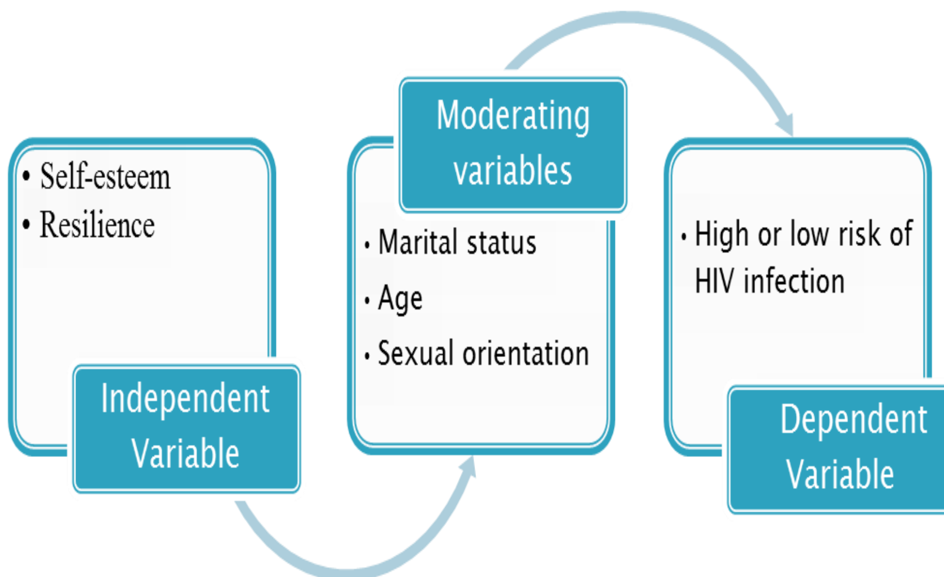
They define one's need to reach his or her full potential. This is extremely personal and differs from one person to another. Of interest in relation to Maslow's theory is the response in one of the questions in the self-esteem measurement scale which majority of the respondents reported they had little to be proud of. This speaks volumes since the respondents may be experiencing low self-worth. Owing to the fact that these needs are supposed to be met hierarchically, there is a possibility of MSM getting "stuck" at one point hence the need to tailor-make programs that would help them break through the impasse in whatever needs' stage they are.

However, Maslow believed that these needs exist in a hierarchical order with lower-level needs having to be met before higher-level need meaning; before a person can take action to satisfy a need at any level on this pyramid, the needs below it must already be satisfied. For resilience, the researcher focused on one theory by Professor Sir Michael Rutter a professor in child psychiatry. He has written extensively on how children develop, school efficiency and resilience. He has conducted extensive research on resilience since the late 1970s to date. Rutter, (2006) defined resilience as an experience of serious risk but one overcomes positively in spite of the incidence. He insists that resilience is not just social expertise. In 2013, he refined the definition asserting that resilience is when; one overcomes adversities better than others who experienced the same adversity (Rutter, 2013). This is evidenced by the fact that despite stigma and discrimination, most MSM were resilient from the study results.

One of Rutter's values are; that resilience has nothing to do with individual inner qualities but a typical coping mechanism provided with the correct resources. This statement makes the researcher wonder if MSM are ever given the correct resources owing to the level of stigma they encounter. He proposes variances in individual resilience could be related to hereditary properties making some children extra or lesser predisposed to biological reactions to dangers in the environment with the environment being responsible for those differences. Rutter takes a lifetime approach to resilience, since it keeps fluctuating in one's lifetime so cannot just be defined by one episode or moment (Rutter, 2007).One of the key discussion points in each of Rutter's papers is the protective factor of mental features/operations (planning, self-control, self-reflection, sense of agency, self-confidence, determination). Rutter suggests that individuals have mental features like self-control, determination and others, which provide a protective factor leading to control, and success at erratic events. Another protective factor he emphasized is the significance of societal affiliations. He specifies features such as motherly, sibling warmth, and a conducive environment in the family can shield one from expressive and behavioral disturbances. This seems to be lacking for most MSM since majority of them are still closeted.

2.8 Conceptual framework

The conceptual framework illustrates the correlation between self-esteem, resilience and danger of HIV infection among MSM at ISHTAR MSM. The variables guiding this study are; self-esteem and resilience which are independent variables, while risk of HIV infection is the dependent variable. However, the dependent variable may be influenced by confounding factors like age, sexual orientation, marital status, condom use, alcohol and drug use. Indicators of low or high self-esteem were derived from responses to Rosenberg's self-esteem measurement scale while a brief resilience scale was used to measure resilience. Indicators of low or high risk of HIV infection were; alcohol and drug use, number of sexual partners, condom use, Pre Exposure Prophylaxis use, HIV infected partner(s) andz use of Antiretroviral Therapy and contraction of Sexually transmitted infections.



Source: Author(2018)

Figure 2.1 Conceptual framework

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section summarizes the methodology applied in this study. Aspects discussed are research design, study area, target population, sample selection procedure, data collection and instruments of the study.

3.2 Research design

Above can be defined as a structure that monitors the collection and investigation of the data. It is a detailed plan for how research study was directed according to the data required in order to answer the research questions in an economical manner (Orodho, 2005). The researcher adopted a descriptive cross-sectional design to establish the relationship between self-esteem, resilience and risk of HIV infection among MSM at ISHTAR MSM. The aforementioned design was used because the variables under study were measured in their natural occurrence without any manipulation. The study was conducted at ISHTAR MSM, Nairobi County. The target study population was 3,730 of MSM from which a sample of 373 was taken which was the 10% of total population.

3.3 Study area

ISHTAR MSM offers health care to HIV infected and uninfected men who have sex with men with one clinic in Nairobi County. The cohort is open and currently, 3,730 MSM have been reached out through outreach programs carried out with the help of peer educators in different areas in Nairobi County. The peer educators requested the clients to visit the ISHTAR offices for the interviews.

3.4 Sample selection

The study population was MSM only. ISHTAR MSM clinic was purposefully selected owing to the fact that there is an already existing cohort of MSM. All MSM who access care at ISHTAR were eligible to participate since the researcher assumed that self-esteem varies between HIV infected and HIV uninfected MSM and the researcher would like to

carry out several comparisons between the two cohorts. Clustering was done in terms of age, risk of HIV infection, sexual practices and responses to the different questionnaires.

3.4.1 Inclusion/Exclusion Criteria

Owing to the vast number of MSM reached, this was based on willingness to participate. The field officers reached out to the potential participants under their jurisdiction.

3.4.2 Sample size estimation

The researcher used Fishers Sampling Technique and interviewed 361 of the sampled 373 participants from ISHTAR MSM. Target population was 3730 (from ISHTAR MSM) hence the sample size was 373.

3.5 Research instruments

The study tools included the Rosenberg self-esteem measurement tool, which had 10 statements for the participant to respond to; the Brief Resilience Scale with six questions and a self-designed HIV risk assessment questionnaire. Demographic data was also collected through a self-designed form. The researcher or her assistants administered all the documents. The responses ranged from; Strongly Agree, Agree, Disagree, Strongly Disagree for both self-esteem and resilience. However, resilience had a slot for Neutral response.

3.6 Data collection Procedure

The researcher made a formal request to carry out the research to the Director, ISHTAR MSM. The field officers contacted MSM within their jurisdiction and requested them to visit ISHTAR MSM offices for the interviews. The researcher and her three assistants carried out the interviews. A relatively conducive environment was provided for the study participants (one participant and interviewer per room). The participants were taken through the consent, which bore the purpose of the study, signed the consent and issued with a copy of the consent. They were allotted serial codes for confidentiality. The researcher and her assistants only handled the data collected.

3.7 Pilot study

This was carried out among 5 MSM to estimate the time required for each respondent and also how easy or challenging it could be for respondents to comprehend the questionnaires. Both the self-esteem and resilience tools are validated so the researcher did not require validation. As a result of the pilot study, the researcher made an amendment since the participants complained about compensation for their transport though the researcher interviewed MSM who had gone to seek services at ISHTAR MSM. This was not part of the data analysis in this study.

3.8 Data analysis

The researcher and three research assistants filled the questionnaires. The data was then computed into excel sheets at the close of business every day. SPSS was used for data analysis. Multiple linear regressions and Chi square was used to determine if there was a significant relationship concerning self-esteem, resilience and risk of HIV infection.

3.9 Ethical Considerations

Ethical approval was sought from NACOSTI while permission to conduct the study at ISHTAR MSM was sought from the Director. Each participant was requested for written consent, informed that participation was voluntary and confidentiality to his or her responses would be maintained. Extent to which confidentiality would be maintained was also included in the consent form. The questionnaires were coded to maintain anonymity and confidentiality. The participants were reimbursed for their transport expenses. No other payments or incentives were provided to ensure that the participation was voluntarily.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF THE FINDINGS

4.1 Introduction

This part entails data presentation on the study findings. It also has data analysis and interpretation of the generated data from the study. The data presented entailed the relationship between self-esteem, resilience and risk of HIV infection among MSM at ISHTAR MSM. The chapter also outlines analysis and study findings as stipulated in the research methodology. The study outcomes were presented on the self-esteem, level of resilience and risk of HIV infection. The data was gathered wholly from the structured questionnaires as the research data collection instrument. This pre-existing instrument was intentionally used in line with the study objective. The results were then presented in pie charts, data tables, and bar graphs.

4.2. Response Rate

The study targeted 373 participants after computation of the total MSM population which is estimated at 13,019. From the study, 361 respondents were interviewed so the response rate was 94.01%. According to Mugenda and Mugenda (1999) a response rate of 50% is adequate for analysis and reporting, a rate of 60% is good and a response rate of 70% and over is excellent; therefore, the response rate obtained in this study was excellent for analysis and reporting.

4.3 Demographic Information

Table 4.1The study indicates that 361(100%) males participated in the study. The findings indicated that 303(83.93%) of the respondents were singles, 10(2.77%) of the respondents were married by same sex partner, 40(11.08%) respondents were married/cohabiting with female partners but were bisexual, and 8(2.22%) of the respondents were widowed. The study also checked on education level of the respondents. From the study results, 235(65.09%) of the respondents had gone up to secondary school, 87(24.10%) of the respondents had gone up to primary school, 20(5.54%) of the respondents had gone up to college, and 19(5.22%) of the respondents had gone up to university. The findings

indicated that 224(62.05%) of the respondents were unskilled employees while 137(37.95%) were skilled employees.

Table 4.1 Demographic information of the respondents

	Indicators	Frequency	Percentage
Age	**Below 20 years**	**19**	**5.26**
	21-30 years	**231**	**63.98**
	31-40 years	**111**	**30.74**
Gender	**Male**	**361**	**100**
	Female	**0**	**0**
Marrital status	**Single**	**303**	**83.93**
	Same sex	**10**	**2.77**
	Married : bisex	**40**	**11.08**
	Windowed/Divorced	**8**	**2.22**
Education	**Primary school**	**87**	**24.10**
	Secondary school	**235**	**65.09**
	Colleges	**20**	**5.54**
	University	**19**	**5.22**
Occupation	**Unskilled persons**	**224**	**62.05**
	skilled persons	**87**	**24.10**
	Others	**50**	**13.85**

4.3.1 Substances respondents consumed in the last one month

Table 4.2 Substances respondents consumed for the last one month

	Frequency	Percentage
Alcohol	204	56.51
Marijuana	117	32.41
Others	40	11.08
Total	**361**	**100**

In table 4.2 majority of the respondents 56.51% indicated that they took alcohol, 32.41% consumed marijuana while 11.08% consumed other drugs. These findings indicated that respondents were mostly using alcohol.

4.3.2 Influence of alcohol and other drugs on respondents' engagement in sexual intercourse.

Table 4.3 Shows whether alcohol, marijuana and other drugs influence respondents to engage in sexual intercourse.

	Frequency	Percentage
No	274	76
Yes	86	24
Total	**361**	**100**

In table 4.3 about 24% of the respondents indicated that they had sex under the influence of drugs while 76% indicated that the drugs did not play any role in their sexual activity. These findings indicated that only a few engage in sex under the influence of substance.

Table 4.4 Number of sex partners the respondents had in the last one month

	Frequency	Percentage
1-3 Partners	294	81.44
4-6 partners	49	13.57
Above 7 partners	18	4.99
Total	**361**	**100**

Table 4.4 shows the number of sex partners the respondents had. Majority 294(81.44%) of the respondents indicated that they had 1-3 partners, 49(13.57%) of the respondents had between 4-6 sex partners, 18(4.99%) of the respondents had above 7 sex partners. These findings indicated that majority of the respondents had more than one sex partner increasing risk of HIV infection.

Table 4.5 Frequency of condom use when having sex

	Frequency	Percentage
Never	94	26.03
Sometimes	89	24.65
Frequently	178	49.30
Total	**361**	**100**

Table 4.5 shows how often the respondents used condoms when having sex. Most 178(49.30%) of the respondents indicated they frequently used condoms, 89(24.65%) indicated that sometimes they used condoms, 94(26.03%) of the respondents never used condoms when having sex. These findings indicated that majority of the respondents are at risk of getting STIs including HIV because they do not use protection such as condoms.

Table 4.6 The number of new sex partners respondents had in the last one month.

	Frequency	Percentage
1-3 Partners	261	72.30
4-6 partners	43	11.91
Above 7 partners	39	10.80
Can't remember	18	4.99
Total	**361**	**100**

Table 4.6indicates the number of new sex partners respondents had in the previous one month. Majority 261(72.30%) of the respondents indicated they had 1-3 partners, while 43(11.91%) of the respondents had 4-6 new sex partners and 39(10.80%) of the respondents indicated they had over 7 new sex partners. The study showed that 18(4.99%) of the respondents said they could not remember having any new partner. Owing to the number of new partners and lack of condom use, this indicates that MSM are at high risk of being infected with HIV.

4.4 Respondents' sexual partners who had HIV

This shows whether any of the respondents' sex partners had HIV. About 78.39% of the respondents indicated that their partners did not have HIV while 8.86% of the respondents indicated their partners had HIV. The findings also pointed out that about 12.74% of the respondents had no idea of HIV status of their sex partners. This info might be inaccurate owing to the fact that majority had more than one partner.

Table 4.7 Indicates whether any of the respondents' sex partners had HIV.

	Frequency	Percentage
No	32	8.86
Yes	283	78.39
Don't know	46	12.74
Total	**361**	**100**

Table 4.8 Respondents' sex partners on antiretroviral therapy

	Frequency	Percentage
Yes	20	62.5
No	5	15.62
Don't know	7	21.88
Total	**32**	**100**

Table 4.7 presents data on whether the HIV positive respondents' sex partners were on Antiretroviral Therapy. 62.5% of the respondents said their sex partners were on ARVs while 15.62% of the respondents indicated that partner was not on ARVs. 21.88% of the respondents indicated they were not aware whether their sex partners were on ARVs.

Table 4.9 Respondents engaging in insertive anal sex in the last one month

	Frequency	Percentage
Yes	288	79.77
No	73	20.22
Total	361	100

Table 4.8 shows whether the respondents had insertive anal sex. Majority 288(79.77%) of the respondents had insertive anal sex while 73(20.22%) of the respondents reported they did not.

Table 4.10 Respondents engaging in receptive anal sex for the last one month

	Frequency	Percentage
No	234	64.81
Yes	127	35.18
Total	**361**	**100**

Table 4.9 indicates whether in the last one month, respondents had receptive anal sex. The findings indicated that 234 (64.81%) of the respondents said they had no receptive sex while 127(35.18%) of the respondents had receptive anal sex.

Table 4.11 Options that best describes respondents' sexual practice

	Frequency	Percentage
Insertive	193	53.46
Receptive	110	30.47
Versatile	58	16.06
Total	**361**	**100**

Table 4.10 indicates options that best describe respondents' sexual practice. Majority 193(53.46%) of the respondents indicated insertive anal sex as their preferred sexual practice, 110(30.47%) of respondents indicated they preferred receptive while 58(16.06%) of the respondents reported to be versatile in their sexual practice. Receptive anal sex increases the risk of HIV infection.

Table 4.12 Respondents on Pre Exposure Prophylaxis

	Frequency	Percentage
Yes	215	59.55
No	146	40.44
Total	**361**	**100**

Table 4.11indicates whether respondents were on Pre Exposure Prophylaxis. Majority 215(59.55%) of the respondents were on Pre Exposure Prophylaxis while 146(40.44%) of the respondents were not. These findings indicated that majority of the respondents use Pre Exposure Prophylaxis which reduces the risk of HIV if one is adherent. In this case, the researcher did not measure adherence so she is not sure whether the study participants who are on PrEP are at a lower risk of HIV infection.

Table 4.13 Duration the respondents were on Pre Exposure Prophylaxis

	Frequency	Percentage
Below 6 months	132	61.39
7-12 months	54	25.11
Over 1 year	29	13.48
Total	**215**	**100**

Findings in Table 4.12 shows duration, which respondents have been on Pre-Exposure Prophylaxis. Majority 132 (61.39%) of the respondents indicated they have been on PrEP for less than 6 months, 54(25.11%) for 7 to 12 months and 29 (13.48%) for over 1 year.

Table 4.14 Respondents' contraction of contracted sexually transmitted infections

	Frequency	Percentage
Yes	52	14.40
No	309	85.59
Total	**361**	**100**

In table 4.13 the findings show that 52 (14.40%) of the respondents had contracted a sexually transmitted infection in the last 3 months while 309 (85.59%) had not.

4.5 Establishing the self-esteem of MSM at ISHTAR MSM Nairobi.

Table 4.15 Being a person of worth as compared to others

	Frequency	Percentage
SA	220	60.94
A	141	39.06
D	0	0
SD	0	0
Total	**361**	**100**

In this Table 4.14Indicates whether the respondents felt as worth as other people. About 220(60.94%) of the respondents strongly agreed that they felt as persons of worth, at least on an equal plane with others, while 141(39.06%) of the respondents just agreed with the same statement.

Table 4.16 Respondents' feelings towards good qualities.

	Frequency	Percentage
SA	261	72.30
A	49	13.57
D	50	13.85
SD	1	0.28
Total	361	100

Findings in Table 4.15 shows that respondents feel they have a number of good qualities. Majority 261(72.30%) of the respondents have a number of good qualities. About 49(13.57%) of the respondents agreed they have a number of good qualities. However, 50(13.85%) of the respondents disagreed that they had a number of good qualities while 1(0.28%) of the respondents strongly disagreed.

Table 4.17 Respondents' inclination to feel like failures.

	Frequency	Percentage
SA	269	74.51
A	56	15.51
D	22	6.09
SD	14	3.87
Total	**361**	**100**

Table 4.16 Respondents reported an inclination to feel like they are failures; Majority 269(74.51%) of the respondents stated that they were inclined to feel like they are failures while 56(15.51%) of the respondents agreed they had the same feeling, 22 (6.09%) disagreed with the statement while 14 (3.87%) strongly disagreed with the statement.

Table 4.18Respondents' ability to do things as well as most other people.

	Frequency	Percentage
SA	290	80.33
A	71	19.67
D	0	0
SD	0	0
Total	**361**	**100**

Table 4.17 The study found out that majority of the respondents 290 (80.33) strongly agreed that they are able to do things as well as most other people while about 71(19.67%) of the respondents agreed that they are able to do things as well as most other people.

Table 4.19 Respondents' feeling that they do not have much to be proud of.

	Frequency	Percentage
SA	72	19.94
A	108	29.91
D	144	39.88
SD	37	10.24
Total	**361**	**100**

Table 4.18displays results that respondents feel they do not have much to be proud of. 144(39.88%) of the respondents disagreed that they do not have much to be proud of. However, 72 (19.94%) strongly agreed that they do not have much to be proud of.

Table 4.20 Respondents' positive attitude towards themselves

	Frequency	Percentage
SA	201	55.68
A	142	39.36
D	18	4.99
SD	0	0
Total	**361**	**100**

Table 4.19 presents information on whether respondents take a positive attitude toward themselves. Majority 201(55.68%) of the respondents take a positive attitude toward themselves by strongly agreeing while 142(39.36%) agreed.

Table 4.21 Respondents' self-satisfaction

	Frequency	Percentage
SA	154	42.65
A	175	48.47
D	32	8.86
SD	0	0
Total	**361**	**100**

Table 4.20 shows whether respondents are satisfied with themselves. About 154 (42.65%) strongly agreed that they are satisfied with themselves while 175(48.47%) of the respondents agreed that they are satisfied with themselves.

Table 4.22 Respondents' wish that to have more self-respect

	Frequency	**Percentage**
SA	107	29.64
A	194	53.74
D	42	11.63
SD	18	4.99
Total	361	100

Table 4.21shows respondents' wish of more self-respect. About 194 (53.74%) of the respondents agreed while 107(29.64%) of the respondents strongly agreed that they wish they could have more respect for themselves and 42(11.63) disagreed with the statement.

Table 4.23 Respondents' occasional feeling of uselessness

	Frequency	**Percentage**
SA	8	2.22
A	209	57.89
D	124	34.35
SD	20	5.54
Total	**361**	**100**

Table 4.22 Respondents reported certainly feeling useless at times. Majority 209(57.89) of the respondents indicated they agreed that they certainly feel useless at times while about 124(34.35%) of the respondents indicated they disagreed that they certainly feel useless at times.

Table 4.24 Respondents' thoughts about being no good at all

	Frequency	Percentage
SA	18	4.99
A	126	34.90
D	127	35.18
SD	90	24.93
Total	**361**	**100**

Table 4.25 Respondents' thoughts about being no good at all

	Frequency	Percentage
Strongly disagree	90	25
Disagree	127	35.18
Strongly agree	18	5
Agree	126	34.90
Total	**361**	**100**

4.6 Identifying Level of Resilience in MSM at ISHTAR MSM Nairobi.

Table 4.26 Resilience

	SD	D	N	A	SA
Respondents tend to bounce back after hard times.	11(3.04%) S=11	22(6.08%) S=44	12(3.32%) S=36	121(33.52%) S=484	195(54.02%) S=975, HR
It does not take respondents long to recover from stressful events.	S=0		230(71.65%) S=720	125(34.62%) S=1000	213(63.99%) S=1065,HR
Respondents had hard times making it through stressful events.	3(0.83%) S=3	10(2.77%)	5(3.38%) S=15	22(6.09%) S=88	321(88.91%) S=1605,HR
It is hard for respondents to snap back when something bad happens.	236(65.37 %) S=236,LR	52(14.40 %) S=104	10(2.7%) S=30	25(6.93%) S=100	38(10.53%) S=190
Respondents usually come through difficulty times with little trouble.		11(3.05%) S=22	12(3.32%) S=36	122(33.80%) S=488	216(59.83%) S=1080,HR
I tend to take long time to get over setback in my life.	145(40.17 %) S=145	125(34.63 %) S=250,NR	19(5.26%) S=57	32(8.86%) S=128	40(11.08%) S=200

Table 4.25 shows the level of resilience where majority 195(54.02%) of the respondents indicated they tend to bounce back quickly after hard times (Score =975, High resilience = 5). The findings indicated that most respondents 213(63.99%) had a hard time making it

through stressful events, (Score =1065, HR =5). The study showed that about 321(88.91%) of the respondents took longer to recover from stressful events (Score =1605, High resilience = 5). About 236(65.37%) of the respondents indicated that It is hard for them to snap back when something bad happens (Score =236, Low Resilience = 1). Most 125(34.63%) S=250, NR of the respondents indicated that they usually come through difficult times with little trouble (Score =1080, High resilience = 5). Majority 125(34.63%) of the respondents indicated that they tend to take long time to get over setback in their lives (Score =250, Normal Resilience = 2).

4.7 Comparison between self-esteem and resilience of HIV infected clients with the uninfected clients at ISHTAR MSM Nairobi

Table 4.27 indicates number of respondents who contracted sexually transmitted infections

	Frequency	Percentage
HIV	10	2.77%
Gonorrhea	52	14.40%
None	299	82.83%
Total	361	100

Table 4.26 indicates number of respondents who had contracted Sexually Transmitted Infections in the last 3 months. About 52(14.40%) of the respondents indicated they had contracted gonorrhea while 10(2.77%) of the respondents were HIV-infected. However, 299(82.83%) of the respondents indicated they have never contracted STI.

Table 4.28 shows the comparison between the self-esteem and resilience of HIV infected clients with the HIV-uninfected clients

Cross tabulation

		comparing the self-esteem and resilience of HIV infected clients with the uninfected clients Cross tabulation		
		self-esteem	**resilience**	**Total**
respondents status	Infected	6	4	10
	Not HIV infected	251	100	351
Total		**257**	**6**	**361**

Table4.27 presents Cross tabulation results comparing the self-esteem and resilience of HIV infected respondents with the HIV-uninfected respondents. The findings indicated that HIV-infected had low self-esteem (6) and low resilience (4) compared to those who have healthy self-esteem (4) and with resilience of (100) (2.257 d.f 8, not significant, P value 0.001).

4.8 To establish if there is a difference between the self-esteem, resilience and risk of HIV infection between insertive versus receptive MSM at ISHTAR MSM Nairobi

Table 4.29 Chi square and cross tabulation

Group		Value	Characteristic d.f	P-Value
Insertive	Pearson Chi-Square	63.499[a]	8	.000
Receptive	Pearson Chi-Square	36.156[a]	12	.000

Results showed that from the top row of the table below, Pearson Chi-Square statistic, 2= 63.499[a], and $p < 0.001$. Meaning $p < 0.05$ (in fact $P<0.001$). Self-esteem, resilience and risk of HIV infection seems to be related to receptive ($p < 0.001$). From second row on the table 4.28, Pearson Chi-Square statistic, 2= 36.156[a], and p <<0.001.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter covers the summary of research findings, the conclusions drawn and the recommendations resulting from the study.

5.2 Summary

The summary is organized according to the objectives which include; to measure the self-esteem of Men who have sex with men (MSM), measure level of resilience among MSM, establish if there is a difference between the self-esteem of HIV infected MSM and HIV uninfected MSM, and establish if there is a relationship between self-esteem, resilience and risk of HIV infection among MSM.

5.2.1 Measuring the level of self-esteem among MSM at ISHTAR MSM

The findings of this study indicated that self-esteem has minimal significance on sexual risk-taking practices of HIV-negative men. This is because majority of the respondents whether receptive or insertive felt to be persons of worth. Crocker and Major, (1989) who says that the worth of a person does not lead to being susceptible to contracting HIV infections support this finding.

5.2.2 Measuring the level of resilience among MSM at ISHTAR MSM

Majority of the respondents indicated they tend to bounce back after hard times with a score indicating they have high resilience. The findings indicated that most respondents 213(63.99%) tend to have a hard time making it through stressful events, that it does not take them long to recover from a stressful event. Majority also indicated that it is hard for them to snap back when something bad happens. Majority of the respondents indicated that they usually come through difficult times with little trouble and that most respondents indicated that they tend to take long time to get over setback in their lives. This means that MSM have high resilience. De Santis (2008) suggested that most MSM are resilient even in the face of multiple health disproportions.

5.2.3 Comparing the self-esteem and resilience between HIV infected and HIV uninfected MSM at ISHTAR MSM

The findings indicated that 60% of the infected respondents had low self-esteem and low resilience. However, this was not comparable to the results derived from the HIV uninfected respondents since the sample size for the HIV infected respondents was small.

5.2.4 Relationship between self-esteem, resilience and risk of HIV infection between insertive versus receptive MSM at ISHTAR MSM

The study indicates that there is sufficient evidence to suggest that low self-esteem has a relationship or influences the risk of HIV infection among MSM. This indicates that self-esteem, resilience and risk of HIV infection are statistically associated with receptive anal sex. The findings from the comparison of self-esteem, resilience and risk of HIV infection indicated that HIV-infected respondents had low self-esteem and low resilience compared to those who have normal self-esteem and resilience.

The findings show majority of the respondents indicated that they took alcohol, marijuana, and other drugs. These findings indicated that respondents were abusing drugs. Results from a study by Kahler C. W., et al (2015) suggest that very heavy drinking increases the risk of engaging in sexual behavior that has the potential for transmitting HIV to other men. 24% of the respondents could be considered to be at a high risk of HIV infection since they reported having sex under the influence of the substance consumed. The study also pointed out that most respondents had more than one sex partner and some of their partners were HIV infected increasing the respondents' risk of HIV infection. This group of respondents is at risk of transmitting STI infection as well as contracting HIV or if infected, become re-infected even with a different strain of HIV. The HIV positive respondents indicated that half (50%) of the respondents' partners were on ARVs while only 10% of the respondents indicated partner was not on ARVs. The study revealed that some respondents had STIs despite using condoms frequently increasing their risk of HIV infection.

5.3 Establishing the level of resilience among MSM

The findings on the level of resilience; 54.02% of the respondents indicated that they tend to bounce back after hard times (Score =975, High resilience = 5). The findings indicated 63.99% of the respondents had a hard time making it through stressful events Score =1065, High resilience =5). Further, the respondents agreed that they had hard times making it through stressful events (Score =1605, High resilience = 5). About 65.37% of the respondents indicated that it is hard for them to snap back when something bad happens (Score =236, Low Resilience = 1). Majority 34.63% of the respondents indicated that they tend to take long time to get over setback in their life (Score =250, Normal Resilience = 3). However, 34.63% Score =250, Normal Resilience of the respondents indicated that they usually come through difficult times with little trouble (Score =1080, High resilience = 5).

5.4 Conclusions

The study concludes that there is sufficient evidence to suggest that low self-esteem has a relationship with or influences risk of HIV infection among MSM. There is a strong correlation between independent variables and dependent variables. There is a statistically significant difference in the relationship between HIV infected MSM having lower self-esteem and resilience compared to the HIV uninfected respondents. Results were indicative that anal receptive MSM have lower self-esteem and resilience than anal insertive MSM.

5.5 Recommendations

Based on the findings in this study, the following recommendations are hereby suggested;

1. Results from this study will require to be disseminated to participants and other stakeholders working with MSM.
2. Explore further causes of negative self-evaluation like worthlessness out of the responses given to some statements
3. Education on HIV infection among MSM should be done regularly to enhance risk reduction.

4. Awareness creation on Alcohol and Drug Abuse and in relation to risk of HIV infection.
5. Life skills training to enhance self-efficacy.

5.6 Suggestions for further research

This study explored the relationship between self-esteem, resilience and risk of HIV infection among MSM at ISHTAR MSM. There is need to research further to know challenges facing MSM as far as behavior change is concerned in relation to risk of HIV. The researcher would also like to carry out this study randomly in the larger MSM population since she was working with a relatively controlled population whose respondents have some level of knowledge in HIV. The study focused on the study's general objective, which was to establish the relationship between self-esteem, resilience, and risk of HIV infection among MSM at ISHTAR MSM Nairobi only, thus the same study should be done in the other 46 counties to enable generalization of results.

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APPENDICES

APPENDIX I: INFORMED CONSENT

Dear participant,

My name is Jane Wairimu Ng'ang'a, a student at the University of Nairobi undertaking a Master's Degree in Community Psychology. As part of my course work, I will conduct a study to establish the relationship between self- esteem, resilience and the risk of HIV infection among men who have sex with men ISHTAR MSM, Nairobi County. This data will aid in capacity building programs for men who have sex with men both at the ISHTAR MSM and the larger community.

This study is voluntary and no risks are foreseen. However, should you require counseling as a result of self-disclosure during the interview; you will be referred to the counselors at ISHTAR MSM. You will be given a copy of your consent which you can take home or leave with the interviewer. You will also be reimbursed Khs. 200.00 for your transport.

The information you provide in this questionnaire will be used for research purposes. It will not be used in a manner which would allow identification of your individual responses. Disclosure can only occur with your permission or as required by law.

You will not be identified individually hence a code will be used in order to keep all your information confidential. Anonymized research data will be archived at the Sex Workers' Outreach Program (Central Business District offices) for three years (or more if deemed necessary) and thereafter, it will be destroyed.

Participant's code:______________________________________

Participant's signature:____

Date:____

Name of person obtaining signature__________________________________

Signature of person obtaining signature_____________________________

Date__________________________

Jane Wairimu Ng'ang'a

The University of Nairobi

JWairimu@kaviuon.org

APPENDIX II: DEMOGRAPHICS

CODE……………………………………………..

SITE……………………………………………...

1) Gender: Male ☐ Female ☐ Transgender ☐ her………………………
2) Age

   Below 20 years ☐

   21-30 years ☐

   31-40 years ☐

   41-50 years ☐

   51-60 years ☐

   61-70 years ☐
3) Marital status

   Single ☐

   Married: Monogamous ☐ Polygamous ☐

   Heterosexual ☐ Same sex marriage Bisexual ☐

   Years in marriage ☐

   Widowed ☐

   Separated/divorced ☐
4) Education level

   None ☐

   Primary ☐

   Secondary ☐

   College/University ☐
5) Occupation

   Unskilled ☐

   Skilled ☐

   Sex work ☐

APPENDIX III: RISK ASSESSMENT DOCUMENT

CODE………………………………..
SITE………………………………….

1) In the last one month, did you use any of the following substances?
   Alcohol ☐
   Marijuana ☐
   Cocaine ☐
   Other, specify……………………………
2) In the last one month, did you have sex while under the influence of any of the substance mentioned above?
   Yes ☐ No ☐ which one? ....
3) In the last one month, how many sex partners did you have?
   Numbers ☐ Can't remember ☐
4) In the last one month, how often did you use condoms when having sex?
   Never ☐
   Sometimes ☐
   Frequently ☐
5) In the last one month, how many new partners did you have?
   Numbers ☐ Can't remember ☐
6) In the last one month, how many of your sexual partners were male?
   Numbers ☐ Can't remember ☐
7) Is there any of your sex partners who is HIV infected?
   Yes ☐ No ☐ Don't know ☐

7b) If yes, is he or she on Antiretroviral therapy? Yes ☐ No ☐ Don't know ☐

8) In the last one month, have you had insertive anal sex? Yes ☐ No ☐
9) In the last one month, have you had receptive sex? Yes ☐ No ☐
10) What best describes your sexual practice? Insertive ☐ Receptive ☐ Versatile ☐
11) Are you on Pre Exposure Prophylaxis? Yes ☐ No ☐
    10b) If yes, for how long? ....
12) In the last three months, have you had any sexually transmitted infection?
    If yes, which one?...........................

APPENDIX IV: ROSENBERG'S SELF-ESTEEM SCALE

STATEMENT		Strongly Agree	Agree	Disagree	Strongly Disagree	
1.	I feel that I am a person of worth, at least on an equal plane with others.					0
2.	I feel that I have a number of good qualities.					0
3.	All in all, I am inclined to feel that I am a failure.					0
4.	I am able to do things as well as most other people.					0
5.	I feel I do not have much to be proud of.					0
6.	I take a positive attitude toward myself.					0
7.	On the whole, I am satisfied with myself.					0
8.	I wish I could have more respect for myself.					0
9.	I certainly feel useless at times.					0
10.	At times I think I am no good at all.					0

Reset

The scale ranges from 0-30. Scores between 15 and 25 are within normal range; scores below 15 suggest low self-esteem.

Your score on the Rosenberg self-esteem scale is: . Scores are calculated as follows:

- *For items 1, 2, 4, 6,* and *7:*

  Strongly agree = 3

  Agree = 2

  Disagree = 1

  Strongly disagree = 0

- *For items 3, 5, 8, 9,* and *10* (which are reversed in valence):

  Strongly agree = 0

  Agree = 1

  Disagree = 2

  Strongly disagree = 3

APPENDIX V: BRIEF RESILIENCE SCALE

1

Brief Resilience Scale (BRS)

	Please respond to each item by marking one box per row	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
BRS 1	I tend to bounce back quickly after hard times	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
BRS 2	I have a hard time making it through stressful events.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
BRS 3	It does not take me long to recover from a stressful event.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
BRS 4	It is hard for me to snap back when something bad happens.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
BRS 5	I usually come through difficult times with little trouble.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
BRS 6	I tend to take a long time to get over set-backs in my life.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1

Scoring: Add the responses varying from 1-5 for all six items giving a range from 6-30. Divide the total sum by the total number of questions answered.

My score: ______ item average / 6

Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: assessing the ability to bounce back. *International journal of behavioral medicine*, *15*(3), 194-200.

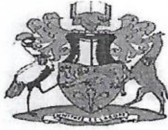
This 6-question survey should take around 1 minute to complete. Respond to each statement below by selecting the answer that best describes you.

Your Score =

A score of 1.00 - 2.99 indicates low resilience.

A score of 3.00 - 4.30 indicates normal resilience.

A score of 4.31 - 5.00 indicates high resilience.



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KENYA

October 30, 2018

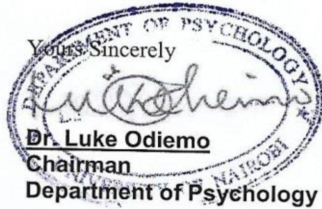
Sex Workers Outreach Programme
Nairobi

RE: JANE WAIRIMU NG'ANG'A – C50/72239/2014

The above named is a student in the Department of Psychology undertaking a degree in Community Psychology at the University of Nairobi. She is doing a project on ***"Relationship between self esteem, Resilience and risk of HIV infection amongst men who have sex with men at the sex workers' outreach program Nairobi". .*** The requirement of this course is that the student must conduct research project in the field and write a Project.

In order to fulfill this requirement, I am introducing to you the above named student for you to kindly grant him permission to collect data for his Degree Project.

Yours Sincerely



Dr. Luke Odiemo
Chairman
Department of Psychology

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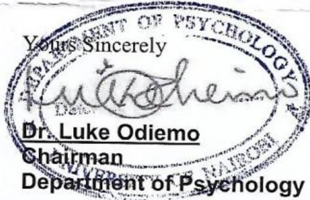

Dr. Luke Odiemo
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