PREVALENCE OF GAMBLING AMONG ADOLESCENTS IN THE INFORMAL SETTLEMENTS: A CASE OF KIBORO PRIMARY SCHOOL IN MATHARE INFORMAL SETTLEMENT IN NAIROBI COUNTY, KENYA

by

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# APPROVAL

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In accordance with Daystar University policies, this thesis is presented in partial fulfilment of the requirements of the Master of Art degree.

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# DECLARATION

PREVALENCE OF GAMBLING AMONG ADOLESCENTS IN THE INFORMAL SETTLEMENTS: A CASE OF KIBORO PRIMARY SCHOOL IN MATHARE INFORMAL SETTLEMENT IN NAIROBI COUNTY, KENYA

I declare that this thesis is my original work and has not been submitted to any other college or university for academic credit

Signed:  Date: 

Susan Vutare

21-0390

# AKNOWLEDGEMENT

I thank God for his grace and provision during my coursework and while undertaking this thesis.

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# LIST OF ABBREVIATIONS AND ACRONYMS

DSM-V Diagnostic and Statistical Manual of Mental Disorders

DU - ISERC Daystar University Institutional Scientific and Ethical Review Committee

ISERC Institutional Scientific and Ethical Review Committee

NACOSTI National Commission of Science, Technology, and Innovation

SOGS-RA South Oaks Gambling Screen-Revised for Adolescents

SPSS Statistical Package for Social Sciences.

TPB Theory of Planned Behavior

# ABSTRACT

There has been a rise in gambling activities in Kenya in the recent past (Ssewanyana & Bitanihirwe, 2018). Gambling is well acceptable among the youthful Kenyan population and is portrayed as an array of activities ranging from a sport displayed as pool tables, to radio engagements through trivia questions to win money, to sport betting which is legalized and seen as acceptable. This is according to a survey by Geopoll (2017) amongst Kenyan youthful population aged between 18-45 years.

Regardless of how gambling is perceived it involves risk taking behaviors and adventure. This study seeks to explore the prevalence of gambling among adolescents in Kiboro primary school in Mathare slums, Nairobi County. The population size is 871 pupils from Kiboro primary School. The study will adopt a descriptive research design and purposive sampling will be used to select the target population which will further be stratified according to gender. Simple random sampling used to select a representative sample of 201 respondents. The data will be collected using questionnaires and the Southern Oaks Gambling Screen assessment tool (SOGS-RA). The data will be analyzed using the Statistical Package for Social Sciences (SPSS). The presentation of the results will be by descriptive statistics. The research findings may be used by all stakeholders to mitigate early onset of gambling.

.

DEDICATION

I dedicate the work to God who has enabled me to navigate through my coursework and provided for the entire period. I also dedicate this work to all parents raising adolescents in this generation. The challenges you experience sometimes are beyond your own experiences.

# CHAPTER ONE

# INTRODUCRION AND BACKGROUND TO THE STUDY

# 1.1 Introduction

Chapter one will focus on the study background information, the underlying research problem, the aim and objectives of the study, its scope, questions that seek to be answered in this study, the limitations to conducting the study, and ends with the definition of key terms.

Gambling is among the few activities that are popular and widely spread-out through the globe while traversing through a people’s social class, culture, and age (Meyer, Hayer & Griffiths, 2019). The worldwide launch of internet has popularized gambling and contributed to a raise in cases of adolescents who engage in gambling activities (Petry & Gonzalez-Ibanez, 2017). In Kenya, the gambling industry has entrenched as an important social and productive venture that has remarkable impact on revenue production and employment creation (Geopoll, 2019). For instance, gambling through sports has gained lots of acceptance and is becoming the most favorable gambling business. International football is the most popular primarily, betting for the English premier league football teams (Geopoll, 2019).

Sammut (2016) argues that most communities, especially those experiencing economic hardships, regard gambling as an alternative to those ills. In fact, several communities afflicted by increasing levels of unemployment rate have discovered a form of economic resumption by gambling, mainly through casinos and betting centers advancement. In such cases the adolescents have turned to gambling or betting instead of education. In other occasions, people have died by suicide after loss of bets, others failed to sit for their examinations because they used their tuition money to bet and lost (Ahaibwe, Lakuma, Katunze, & Mawejje, 2016). In the 80’s and 90’s gambling had not been a significant problem in the Kenyan community, yet in the recent past it has become a weighty problem calling for research and understanding (Chimezi, 2018).

1.2 Background of the Study

Gambling describes the staking of funds or something of significant worth on an occurrence that has unknown results with the intention of gaining additional funds and/or fortune (Williams, 2017). It is an action of being involved in a game or making perilous action to gain funds or an anticipated outcome like a reward (Slade & McConville, 2018). In cases where one is hooked to this behavior it results into pathological gambling.

Over time, gambling has advanced from an offence to becoming legitimized and from physical gaming house to internet gambling (Schwartz, 2019). The upsurge in sanctioned gambling behavior all over the world has ignited soaring levels of gambling involvement in most countries including Kenya. Schwartz (2019) further indicated that gambling has caused distress and concern to some people as a result of its negative effects on persons, families, and community.

In as much as many people participate in leisure gambling in a regulated manner, majority of them get hooked. Experts (Derevensky, Gupta, Dickson and Deguire, 2016; Chimezie, 2018) have noted that gambling has far-reaching negative consequences. Some are psychiatric instances like anxiety, depression, and sleep deprivation (Abdi, Ruiter, Adal, 2018; Sharp, Dellis, Hofmeyr, Kincaid, & Ross, 2016). They may also manifest in physical conditions like high blood pressure and ulcers (Fong, 2015). Therefore, it is crucial to have a comprehensive understanding of both gambling and pathological gambling. At an individual, community, industry, and government levels the regulation of gambling needs to be well informed.

The frequency of gambling is advanced in some nations as compared to others. Many factors in the economy, culture, legal system, and political scenes may be used to expound on the difference in frequency (Calado, & Griffiths, 2016). A study done on the populace of Australia indicate approximately 70-80% of their youths frequently engage in gambling (Productivity Commission, 2016). An estimate of around 60 % of them place bets on lotteries, three quarters on scratch tickets, 30 % place their bets on betting machines, 20% on forms racing, and 10 % on other types of betting that include but not limited to table games like porker, and predicting sport results (Delfabbro & Le Couteur, 2015).

The rate of involvement may differ considerably according to age and gender. Usually, in comparison to women, men are likely to gamble more on sports betting, table games and casino. On the other hand, little gender variances are witnessed in involvement with reference to lottery machines and sweepstakes (Productivity Commission, 2016). Studies indicate that approximately three quarters (72%) of the United Kingdom population have participated in gambling (National Centre for Social Research, 2016). At the same time other studies indicate a high prevalence of gambling has been established among adolescents in developed nations (Bou Khalil Etel, Hlais, &Richa, Tabchi, 2017; McComb & Hanson, 2019; Mubaraka & Blanksbya, 2018;).

According to the survey report released by Nigerian opinion Polling center NOIPolls (2017), gambling is renowned in Nigeria, especially amidst their large youthful population and sports fans. Likewise, there is an increasing craze in gambling amidst Nigerian youths within the age bracket of 12-34 years. News Agency of Nigeria (NAN, 2019) reported that sixty million youths within 15-40 years engage in sport betting daily and spend approximately 1.8 billion Naira. Nigerian adolescents especially undergraduates engage themselves in gambling as a means of survival. This is a complex matter because the behavior puts them at risk of compulsive gambling (Oyebisi, Alao, &Popoola, 2019).

People of all ages are impacted by problem gambling, beginning with adolescents as early as 10 years to grownups in their older years (Williams, 2017). The problem is not an issue of being negligent; it is an obsession ingrained in the brain of loads of people in the same degree as alcohol and substance compulsions. Williams further argued that gambling should therefore not be referred to as a bad behavior or habit; it is a serious condition. Two million young people meet the criteria for problematic gambling in the United State, and a further four to six million are considered problem gamblers. Early introduction to gambling increases the certainty of an individual progressing towards compulsive gamblers later in life (GeoPoll, 2017).

Allami, Brendgen, Carbonneau and Tremblay (2018) argue that primeval onset of gambling impact mental health in advanced years of life. For example, an individual who begun gambling in his/her adolescent years is deemed to have high chances of developing substance use problems later in life than those who were initiated it in adulthood. Excessive dependency on alcohol is connected to gambling in adolescents in comparison to their non-gambling peers. However, gender differences are observed in relation to gambling where girls who gamble report depressive signs in relation to gambling than their male counterparts. (Desai, Maciejewski, Pantalon, & Potenza, 2018).

Findings of NOIPolls (2017) as reported by Week (2017) indicated that a substantial number of Nigerians particularly the youth (polled at 77%) confirmed to the high rates of gambling in their neighborhood. The report indicated 36% of those polled admitted to actively participating in gambling or have kin who praticipate. The very group reported that 60% of them win a bet ‘few times a month’, while 8% ‘never did win’. Furthermore, 36% of the active participants interviewed acknowledged that they are directly involved or have kin who are involved in gambling frequently.

A Geopoll (2017) survey assessed gambling-associated happenings in 3,879 persons within 13 and 35 age bracket (based on the African Youth Charter) in Kenya, Ghana, Uganda, Nigeria, South Africa, and Tanzania. It was found that 54% of the adolescents have participated in a type of gambling. It was pointed out as a substantial problem among young persons (Abdi, Ruiter & Adal, 2015; Collins & Barr, 2018). Another study curried out in Ethiopia amongst adolescents in high school revealed that 73% of them gambled in the recent past. From the same category 37% were in danger of developing compulsive gambling; and already 7% were compulsive gamblers (Abdi, Ruiter & Adal, 2018).

Some studies reveal that women are plausible to gamble to counter aspects within the mind like depression, emotional issues, loneliness, and to take charge of their lives. On the other hand, males gamble due to other factors such as peer groups and financial stressors (Petry, 2005). There are also other studies that have found no substantial differences in commencing or continuing gambling within gender (Clarke, Tse, Abbott, Townsend, Kingi, & Manaia, 2017). Differences in age as a factor in the gambling behavior motivation are poorly understood. Most of the research findings on prevalence and patterns of gambling are foreign based leaving a gap in the knowledge about patterns and prevalence of gambling in Kenya especially among the adolescents.

The gambling market in Kenya has steadily gained ground in the recent years. The most recent statistics show 57-76% of Kenyan adolescents have indulged in gambling (Geopoll, 2019) of which with 29% of them are students (Wangari, 2018). Mwadime, (2017) alluded that most gamblers in Kenya fall below 40 years of age. Gambling industry in Kenya has been known as a great social and economic powerhouse with substantial contribution in creation of jobs and growth of revenue (Rataemane & Ligthelm, 2019). This can be seen through increased openings for Kenyans in the entertainment space and advertising avenues on newspapers, radio, and TV. Despite this, the advantages are few in comparison to the negative impacts.

products, authorization of betting and gaming locations, tax imposing and recovery. The act further prohibits gaming and betting for persons under 18years and the sale of lottery ticket to persons under 16years. (Constitution of Kenya 2010). Despite government regulations, adolescents are at a danger of acquiring gambling problems due to an increased number of informal gambling centers that are emerging daily. This means the underage are continuously being exposed to illegal forms of gambling especially in the slum area where they are yielding daily to the urge and pressure to involve in the act (GeoPoll, 2017).

Amutabi, (2018) argues that gambling is a great concern that threatens to bring down development in Kenya and suggests that families have lost their earning due to gambling. Most families have been victims of gambling by a member of the family and huge amounts of finances have been lost in family savings due to gambling.

There are lmany indications proposing that desires of ‘get rich quickly’ that are devoid of hard work are present in the entire Kenyan society. Adolescents and youth are fantasizing of becoming tycoons out of gambling prior to attaining 25 years. They dissent working hard and opt for cheap ways of earning cash. This mindset leads to the deepening of the Kenya’s problem of economic development where the adolescents devote more hours idling and strategizing on the likelihoods of gambling (Kahura, 2018).

1.3 Statement of the Problem

The worldwide launch of internet has popularized gambling and contributed to a rise in cases of adolescents who engage in gambling activities (Petry & Gonzalez-Ibanez, 2017). This problem is less recognized as a looming danger within education investors and scholars (Chimezie, 2018). Most gamblers perceive gambling as a recreational engagement and as a common spectacle which Governments across the worlds have legalized. In Kenya for example, the Government collects taxes from the owners of various gambling companies such as Sport Pesa.

Experts (Derevensky, Gupta, Dickson and Deguire, 2016; Chimezie, 2018) have studied gambling effects and noted that gambling has far-reaching negative consequences. At a personal level, gambling problems may manifest in psychiatric instances like anxiety, depression, and sleep deprivation (Abdi, Ruiter, Adal, 2018; Sharp, Dellis, Hofmeyr, Kincaid, & Ross, 2016). They may also manifest in physical conditions, for instance high blood pressure and ulcers (Fong, 2015).

Individuals participate in gambling for the financial reward expected. (Lam, 2017; Splevins, 2018). Owing to the poverty levels and the low-income levels of families living in Mathare slums, adolescents living there face the danger of participating in gambling behavior. Kahura (2018) argues that due to the financial hardship and social challenges, a community may consider gambling as a cure to these. It is on this basis that the researcher opted to carry out the study amongst adolescents in Mathare. A focus on public schools is important because of their high intake due to Government sponsorship and it is representative population.

Several studies (Koross, 2016; Machoka, 2020; Muchiri & Mvungu, 2020; Wanjohi, 2016) have been conducted in Kenya on the effect of problem gambling on behavior among students in certain Kenyan university, the youth and the general population. However very few studies have focused on adolescent living in slums. It is on this basis that the present study seeks to fill this gap by assessing the prevalence of gambling among adolescents studying in Kiboro primary school located in Mathare slum in Nairobi County, Kenya.

1.4 Purpose of the Study

The study seeks to assess the prevalence of gambling among adolescents in Mathare slums with a specific focus on pupils schooling in Kiboro primary school in Mathare slums Nairobi, Kenya.

# 1.5 Objectives of the Study

The study will focus on objectives below that will enable the researcher find out the prevalence of gambling among adolescents in Mathare informal settle with focus on pupils schooling in Kiboro Junior secondary school in Mathare slums Nairobi, Kenya.

1. To determine the prevalence of gambling among adolescents schooling in Kiboro Junior secondary school in Mathare slums.
2. To investigate the motivational factors that influence gambling among adolescents schooling in Kiboro Junior secondary school in Mathare slums.
3. To Establish the types of gambling taking place among adolescents schooling in Kiboro Junior secondary school in Mathare slums.
4. To analyze the relationship between the socio-demographic factors and gambling among adolescents schooling in Kiboro Junior secondary school in Mathare slums.

1.6 Research Questions

1. What is the prevalence of gambling among adolescents schooling in Kiboro Junior secondary school in Mathare slums?
2. What are the motivational factors that influence gambling among adolescents schooling in Kiboro Junior secondary school in Mathare slums?
3. Which types of gambling do adolescents schooling in Kiboro Junior secondary school in Mathare slums participate in?
4. What is the relationship between the socio-demographic factors and gambling among adolescents schooling in Kiboro Junior secondary school in Mathare slums?

1.7 Justification for the Study

According to the United Nations Children's FundUNICEF (2020)it is expected that most pathological gamblers started gambling in adolescence. With the high acceptance of gambling among young people, the study seeks to find out the prevalence of gambling among the adolescents. These findings may be used by stakeholders to mitigate early onset of gambling.

Gambling in Kenya presents in different forms ranging from legitimate forms like sports betting firms, radio Quiz responses and lotteries to the illegal ones like poker. This makes gambling easily accessible to minors in the rural areas and urban poor. The study may consequently lay a foundation for various responses by policy makers, children welfare organizations and non-governmental organizations geared towards preventing or reducing any harm that may be occasioned by addictive gambling behavior.

According to the journal of African interdisciplinary studies (2018) poor families gamble more than wealthy ones in Kenya. It is the researcher’s contention that this study is timely in creating awareness and better comprehension of the prevalence and risk factors of the gambling disorder among adolescents from poor backgrounds like the informal settlements. The paper will also highlight some of the motivational factors for adolescents to engage in gambling. This may in turn help policy makers in the direction to take to reduce gambling uptake among adolescents in informal settlements.

1.8 Significance of the Study

The researcher envisages that the conclusions of this study may be important to several stakeholders. Firstly, policy makers may be able to better understand the prevalence and effects of gambling, and this may inform their awareness creation initiatives to counter its negative effects. Further, this study has the potential of enhancing the understanding of practitioners in clinical psychology and therefore facilitate the designing of intervention programs for those struggling with gambling addiction problems. Also, the study findings may help counselors and children workers providing preventive and treatment interventions to design programs and strategies towards countering the effects of the vice.

Future researchers and scholars may use this study to enrich their research and accumulate their body of knowledge regarding gambling and adolescents. At the end of the research, the researcher may identify the existing gaps which are not covered in this study and which future researchers could explore.

1.9Assumptions of the Study

The study will assume that:

1. Most of the adolescents in Mathare slums are engaged in gambling.
2. The adolescent gamblers in Mathare slums are ignorant of the severity of the gambling effects.
3. The participants will effectively cooperate and provide accurate information on this topic without holding back and hence facilitate realization of this study’s objectives.
4. A relationship exists between the socio-demographic factors and gambling among adolescents in Mathare slums.

1.10 Scope of the Study

The study will be carried out to assess the prevalence of gambling among adolescents in the slum areas. It will be based in Mathare slums in Nairobi County and will target adolescents aged 12-16 years studying in Kiboro Junior secondary school.

1.11 Limitations and Delimitations of the Study

1. Reluctance of the adolescents to share information that is necessary for the study’s objectives fearing that their parents and teachers may get know of their gambling activities. To delimit this, the researcher will assure the respondents that the feedback given will be treated with utmost discretion and that there will be no risk of their parents and teachers getting to know of their gambling activities.
2. The study will rely on the respondents’ self-assessments regarding their gambling activities. This may undermine the validity and reliability of the information they will give, and this can negatively influence the study’s findings. To mitigate this, the researcher will emphasize the importance of giving correct and unbiased responses that will ensure reliability of the study and lead to credible findings and recommendations favorable to the adolescents.
3. The information that will be sought may be sensitive hence the adolescents may be hesitant to provide the information. This limitation will be mitigated by assuring the adolescents that the information they give will only be for academic purposes and will be kept anonymous since their names will not be required.

1.12 Definition of Terms

Gambling: This describes the staking of funds or valuables on an event that has unpredictable

results while hoping to gain extra funds and/or physical benefits (Williams, 2017).

Pathological gambling: The American Psychiatric Association (APA 2013) defines it as

having five or more of the following symptoms: Committing crimes to get money to gamble, feeling restless or irritable when trying to cut back or quit gambling. Gambling to escape problems or feelings of sadness or anxiety. This study interchangeably uses pathological gambling, gambling addiction and problem gambling.

Adolescents: This refers to any young person between the ages of 10-19 years (Center for

Disease Control and Prevention, 2015). In this study, the term adolescents will refer to grade seven pupils aged 12-16 years schooling at Kiboro Junior secondary school located in Mathare slums.

Social-demographic factors: These are characteristics of a population such as age, education

levels, gender.

1.13 Summary

This chapter provides the study background, explaining prevalence of gambling among adolescents. The chapter has also introduced the statement of the problem being studied and has justified why it should be carried out. Additionally, the study has enumerated the objectives, research questions and configured a statement of beneficiaries. Assumptions of the study, scope of study and limitations and delimitations of the study have also been outlined. In the next chapter, the study discusses the theoretical framework and reviewed literature that is relevant to the study variables.

# CHAPTER TWO

# LITERATURE REVIEW

# 2.1 Introduction

In this chapter, the literature on theories and past studies applicable to the research problem are reviewed. It investigates research work done by other academicians and authors with regards to the prevalence of gambling among adolescents. The chapter concludes with a conceptual framework and variable conceptualization that illustrates the relationship between independent and dependent variables.

# 2.2 Theoretical Framework

A theoretical framework is a review of pertinent theories that serve as a foundational theory pertinent to the research problem to be studied (Vinz, 2022). This study will be guided by two theories, namely operant conditioning, and planned behavior theories.

## 2.2.1 Operant Conditioning Theory

This theory was put forward by Skinner (1953) to explain behaviour and was reviewed by Brannon, Updegraff, & Feist, (2018). According to Corey (2016) many of the significant responses made by people in their daily lives exemplifies operant behaviours. In this study, operant conditioning is related to the gambling behaviour that adolescents engage in. Operant conditioning refers to a kind of learning whereby behaviours are motivated mainly by the rewards that follow (Corey, 2016). If the behaviour produces pleasurable results, meaning if it produces rewards to the individual, then it is very likely that that the behaviour will be repeated. In the operant conditioning theory, reinforcement is key. Reinforcement includes events that heightens the occurrence of a certain behaviour and reinforcers can be either positive or negative.

Positive reinforcers refer to the favourable results or events due to a behaviour. It involves the addition of something of value such as attention, financial gain or any other reward (Schultz, 2016). On the other hand, negative reinforcement includes the adverse results that are removed after behaviour. Both types of reinforcement contribute to a higher probability of behaviour occurrence (Skinner, 1963). The main goal of reinforcers, (be they positive or negative) is to increase occurrence of the target behaviour.

The key to operant conditioning is the immediate reinforcement of any response that moves the individual toward the target behaviour which in this study is engaging in the gambling behaviour. Skinner (1963) established that positive or negative reinforcement, strengthens the behaviour that it follows. This means that with positive reinforcement, something of value is added to the environment and hence increasing the chances that the behaviour will be repeated. On behaviour, Skinner argued that if a behaviour reinforcement is lacking, the chances of it recurring are reduced leading to extinction of that behaviour.

The chances of a behaviour recurring can be increased through reinforcements, while punishment reduces the chances of the behaviour recurring. According to the theory, punishment is intended to cause behaviour reduction. Both positive and negative reinforcement have a role to play in adolescent gambling. Negative reinforcement happens when something is removed by engaging in an activity. Machoka (2020) on her work quoted Donahue and Grant findings that indicate gamblers are likely to gamble more when they are in trouble. The idea of randomness in winning or the unpredictability element of whether the following bet will be a gain sustains the gambling behaviour. If gambler gets small rewards, they stimulate the reward system in the brain and finally end up in addiction since they believe they are close to the greater price. This makes the gambler resist the urge to stop and end in addiction (Taylor, 2018). The operators of gambling sites have this knowledge, and therefore provide minor wins to keep the clients hooked besides the millions of shillings they promise can be gained. Extensive advertisements about any gain and promise that participants are guaranteed a win with more participation also contributes to participants being prone to the behaviour.

## 2.2.2 Theory of Planned Behavior (TPB)

This theory was brought forth in 1985 by Icek Ajzen. It was an improvement of the reasoned action theory (Ajzen, 1985). TPB is employed to predict intended behavior since behavior can be intentional and planned. A person’s intention of carrying out a given behavior is the best predictor of whether the person will indeed perform the behavior again (Ajzen, 1991). Therefore, the objective of the TPB is to understand and predict a person’s behavior. In applying the theory, the key assumption is that for one to exhibit behavior, he/she must from the onset have the intention or desire to exhibit it.

The TPB utilizes three factors that influences behavior to describe itself. The factors include the attitude held toward a particular behavior, subjective norm, and perceived behavior control (Azjen, 1991). Hof (2008) stated that if the perceived behavioral control and the subjective norm and attitude are auspicious, the greater the intention of the individual to partake of the conduct more frequently.

If individual behave in a specific manner consistently without a prior clear deliberation, their behavior may become habitual. Hence, when individuals act in a certain manner for the first time, they naturally choose what to do and how to do it to realize certain outcomes and avoid others. But as individuals behave this way consistently within the same environment, informed decision making reduces and the behavior comes to be decided by the environment (Ajzen, 2011). An individual with a favorable intention towards gambling tends to participate in gambling more frequently and has a high chance of getting addicted to gambling (Salonen, Alho, & Castrén, 2017).

Attitudes are the views held by an individual towards an intended behavior, be they positive or negative. They get shaped by the consequences of a certain behavior. For instance, a mindset that gambling lowers stress and renders a happy feeling becomes a positive stimulus (Azjen, 1991). Subjective beliefs include an individual’s perception of the environmental pressures to participate or not to participate in the planned behavior (Peruggin & Bagozzi, 2011). Subjective beliefs can also include the social norms, that is humans are social animals and in the process of decision making, they will have in mind the views of those they consider influencers as vital. These influencers may be colleagues, age mates, caregivers, or partners. If their view of the intended activity is favorable, then the likelihood of it being acceptable is high.

The perceived behavioral control incorporates the expected degree of ease or difficulty in doing an expected behavior (Kopylov, 2018). If an individual thinks that he/she can control behavior, he/she will hold a greater willpower to execute it. Perceived control of behavior is determined by the innate power to control a situation and one’s self-efficacy.

Controllability is the external stimuli and one’s perception of their capacity to control them. If one perceives that they are in control of such forces, they gain a heightened resolve to perform the behavior. Situational factors or the environment are assumed to hamper the occurrence of the intended behavior. Some examples in the case of gambling include, lack of funds, time and even accessibility, that can hinder one’s control. If for instance a gambler thinks that he/she can give up gambling, then there is a high possibility that he/she will succeed in quitting. (Rizeanu, 2015). Therefore, if a gambler’s perception as well as those of the significant others towards gambling are favorable for gambling, then the person will have a higher intention to gamble.

In this study the theory explains the processes that initiates the prevalence and consistency of gambling behavior because it is based on the attitude held towards gambling as a major variable for behavior. Similarly, attitude can be used to reverse the gambling behavior by changing the subjective knowledge towards gambling through providing actual information of individuals trapped in the gambling behavior and the negative effect associated with the addiction. Similarly, when individual cultivate positive attitude towards gambling, they will consistently seek to engage in the behavior leading to addiction.

# 2.3 General Literature Review

In this section, literature from previous research regarding gambling among adolescents is presented. This is done based on the variables of the study, namely, the independent variable which comprise of the factors influencing gambling, and the dependents variable which comprise the prevalence of gambling among adolescents. The moderating variable which is age and gender are also discussed to explain how they alter the relationship between dependent and independent variable. Literature review is broken down in line with the research objectives.

## 2.3.1 Prevalence of Gambling Among Adolescents

According to Fong (2015), adolescence is a period of heightened addiction susceptibility. This is caused by, underdeveloped mechanisms of self-restraint, the developing brain and sensitivity to the effects of neuro- toxic substance (Derevensky, Hayman & Gupta, 2019). Adolescent gambling is a rising societal and public health concern that has grave psychological, economic, and sociological consequences. Whereas the occurrence of serious gambling problems in adolescents remains comparatively small, persons with serious gambling problems coupled with the ones at-risk of developing a gambling problem is extensive (Stein, Pretorius, Stein, & Sinclair, 2016).

The overwhelming long-term outcomes for the ones undergoing gambling issues are huge. Problematic gambling in adolescents is among a greater collection of concerns related to adolescent perilous behaviors which must be addressed. Common forms of gambling for youth in Kenya is Sports betting or wagering (Derevensky & Gupta 2019).

The speedy growth in gambling businesses accompanied by a weak regulatory environment in most of the sub-Saharan Africa countries makes the adolescent increasingly vulnerable to gambling activities (PricewaterhouseCoopers, 2017). A survey assessing activities related to gambling in 3880 youth of ages 17 to 35 (based in the African Youth Charter) in South Africa, Nigeria, Ghana, Uganda, Tanzania, and Kenya found that 54% of them had participated in a gambling activity (GeoPoll, 2017). According to the study, Kenya reported 76% representing the highest number of youths that had participated previously in gambling. Uganda reported 57%, whereas Ghana reported 42% which was the lowest (GeoPoll, 2017).

Adolescents have a high-risk taking tendency and are ignorant of the possible implications of those behaviors (Increased risk of crime, disrupted familial/peer relationships, poor physical health, an increased risk of mood disorders, poor academic performance, and suicide). Due to this, their participation in gambling may result in pathological gambling (Fong, 2015). Sub-Saharan Africa has the largest number of adolescent and young people in the world (Ashford, 2018), yet just a few studies are available on gambling disorder and the associated effects in this population.

Important to note is that some of the studies point to a substantial burden of problems associated with gambling among adolescents in sub-Saharan Africa (Abdi, Ruiter, & Adal, 2016). In Ethiopia, a study carried out amongst students in high school indicated that 73% of them had previously gambled. Amongst those who had gambled 37% were in danger of developing problematic gambling problems and 7% were already compulsive gamblers as they met the DSM-IV-Juvenile checklist (Abdi et al., 2016).

Gambling in the sub-Saharan Africa is in various ways such as legalized gambling options that are commercial (casinos, lotteries, scratch cards, pool games, sports betting, and bingo), to unregulated forms (card playing, pool tables). Most of the studies from this region agree that males had more chances of developing gambling disorder (Abdi et al., 2016; Sharp, Dellis, Hofmeyr, Kincaid, & Ross, 2018). On the other hand, females’ get involved in “closet” gambling forms, like internet-based games and lotteries more than males (Louw, 2017; Scott & Barr, 2017).

Studies show a high cultural disparity in local gambling options, their participation and accessibility, (Langa, 2015; Peltzer & Thole, 2016; Scott & Barr, 2017). For example, South Africa reported that adolescents in townships are more likely to take part in gambling activities that involve cards and dice that are seen to be “fairer” as compared to casino activities and lottery that are perceived to be unfair and “rigged” (Scott & Barr, 2017). This makes gambling within reach to those with inadequate funds, like minors and those in informal settlements.

Diverse gambling habits have been recorded across different socioeconomic sections and between girls and boys. A study carried out in three townships in South African reported that poverty-stricken households had a 7% prevalence in gambling as opposed to a 3% rate among affluent households (Ligthelm, 2018).

Several versions have been suggested to expound on the acquiring of gambling mannerisms amongst adolescents, like social learning theory (Gupta & Derevensky, 2019). Evidence suggests that adolescents may be involved in more hazardous behaviors when in the company of their peers, i.e peer-to-peer learning (Blakemore & Robbins, 2016). In light of this, a study done in Uganda reported 39% of respondents knew minors who participated in gambling related activities (Ligthelm, 2018). Other than peer influence and aggressive publicizing efforts from the gambling sector problems linked to gambling may trace their origin in family setups where adolescents are familiarized to gambling at an early age (Dellis, Spurrett, Hofmeyr, Sharp, & Ross, 2017).

Young people view gambling as a tolerable activity that some regard as a substitute livelihood and would somewhat give considerable time and resources to (Heap, 2016; Ahaibwe et al., 2016).

## 2.3.2 Risk Factors that Influence Gambling Among Adolescents

Knowledge of risk factors is important to enable the advancing of the knowledge of adolescent gambling. As a matter of fact, the basis of preventive action and intervention initiatives emanates from studies establishing risky factors (Griffiths & Delfabbro, 2016). Risk factors are the conditions related with a heightened likelihood of a negative outcome from gambling problems (Coie, 2015). Discussed here below are the gambling risk factors.

Expected Rewards

The anticipated gambling rewards influence adolescents to engage in gambling. The rewards may either be financial or psychological (Lam, 2019). The author continued to state that money acts as a great motivation for gambling and depending on the amount of win, the gamblers see a chance to change their lifestyle. In their need to get independent of their parents, financial freedom becomes a priority as gambling becomes an easy way out. Gambling is then taken as an opportunity to contribute to the financial family kitty and even showing off their self-worth (Splevins, 2016).

The motivation to get wealthy without spending much, ends up frustrating the gamblers after making losses. They therefore repeat the slots hoping to recover what they lost in the first trial only to end up losing more (Ariyabuddhiphongs & Phengphol, 2018). Naturally, this should discourage the gambler since they have failed. However, the loss in itself inspires the gamblers to invest more resources in the game with the hope of winning rather than deterring them (Ariyabuddhiphongs & Phengphol, 2018).

According to Clarke (2019), individuals may also be motivated by the psychological rewards to gamble. For school going adolescents, the piling up of class assignments and homework requiring their action may drive them to find a way to avoid the negative emotions. The perceived gains that may comprise of excitement, relieve from stress and boredom and removal of depression may drive them into gambling (Hilbrecht et al., 2019).

Impulsivity

Numerous research has pinpointed to fundamental personality characteristics connected to gambling. Impulsivity for instance was substantially linked to gambling. Impulsivity is a quick action devoid of thought or well thought out decision and involves engaging in an activity without being prompted or having self-control (Moeller, Barratt, Dougherty, Schmitz & Swann, 2016). The description of impulsivity explains several gambling features. Research done with 880 secondary school students (Secades, Martinez, Grande & Fernandez 2016) established that at-risk gambler scored higher on all impulsivity scores than non-problem gamblers.

Similarly, (Canale, Scacchi, & Griffiths 2016).) employing a sample of 110 college students found that impulsivity was a key predictor of the frequency of gambling. Further, Shenassa, Paradis, Dolan, Wilhelm, and Buka (2015) established that in relation to their non-impulsive peers, children who displayed impulsive behaviors at age 8 are likely to develop gambling issues in their later years. These findings therefore indicate impulsivity as a risk factor in relation to later problem gambling.

Sensation Seeking

Sensation seeking refers to the pursuit of experiences and intensesensations and the willingness to take physical, social, and financial risks for the sake of such experiences (Zuckerman, 2016). Even though impulsivity and sensation seeking are interconnected, they are separate concepts and linked to diverse neuro-developmental features (Ersche, Turton, Pradhan, Bullmore & Robbins, 2017). Empirical literature proposed that sensation seeking is related with gambling problems. Harris, Newby and Klein (2015) researched on a section of adolescents in secondary school found that sensation seeking score meaningfully correlated with levels of problem gambling. More recent research conducted by Kam et al. (2017) among college students revealed that comparatively to non-gamblers, gamblers had a higher score on the thrill-seeking scale. This implies that routine can quickly become boring for gamblers, and that gambling can be quite motivating and exciting.

Coping

Coping is a means through which individuals manage life situations and is influenced by experience and personality (Shead et al., 2018). Studies indicate that gamblers may have preexisting issues that make gambling to act as a way out (Felsher, Derevensky & Gupta, 2018). Gamblers site more negative life circumstances in relation to non-gamblers as a means to get away from difficult circumstances and situations they employ gambling as a maladaptive coping mechanism rather than handling the matter at hand. This implies that they are less self-regulating and participate in high-risk activities. Ultimately, gamblers report being more stressed and possess poor coping skills (Felsher et al., 2018).

Coping is classified into those meant to directly act on the stressors, (that is problem-oriented coping) and those aimed at regulating the emotional feeling related to or resulting from stressful life events (Endler & Parker, 2017). According to research, gamblers employ more emotion-based coping strategies than task-focused ones. (Bergevin, Gupta, Derevensky & Kaufman, 2016; Gupta, Derevensky & Marget, 2017). Actually, adolescent gamblers go through high degrees of emotional physical neglect in addition to childhood abuse (Felsher, Derevensky & Gupta, 2018; Jaisoorya et al., 2017). This may influence the adolescent to embrace defective coping ways like gambling to manage psychological challenges and demanding life circumstances (Hayer & Griffiths, 2015).

Socialization

Adolescents may participate in gambling for just because they want to socialize. According to (Gupta, Derevensky, & Kaufman, 2016), the adolescent may take gambling to socialize and make friends. It is important to note gambling points are found at places that are frequented and seen to be motivating and provide an entertaining opportunity, whether positively or negatively. Engaging in gambling together with others increases the excitement and acts as a motivation for more gambling as opposed to when gamblers do it alone (Browne et al., 2019).

Increased Availability and Accessibility

Increase in availability and accessibility of gambling sites enhances the gambling behavior. Abbott (2017) associates increased growth of gambling behavior to popularity and ease of internet access. According to Griffiths (2019), adolescents who gamble engage in online gambling are more prone to have gambling addiction issues since it can be executed from anywhere. Internet accessibility together with availability of smart phones implies that one can access the gambling sites at any time of the day and night (Wardle, 2017).

In an attempt to capitalize on the ready market, gambling sites are on the increase. Some gambling companies also provide incentives as an effort to keep the gamblers hooked. These companies can bid with online credit and therefore cannot suffer an immediate feeling of loss. Similarly, the gamblers have an opportunity to borrow the required money online for gambling (Kerkstra, 2016).

## 2.3.3 Relationship Between Social Demographic Factors and Gambling

Not much literature is available on details of specific societal factors likely to promote at-risk behaviors in gambling and successive challenges in Kenya. However, Poverty and Joblessness play a huge role (Kerkstra, 2016). Fong (2015) reported that adolescents living in disadvantaged socioeconomic groups are more susceptible to participate in gambling activities. It’s likely that the disadvantaged socioeconomic groups view gambling as a way of poverty elimination and consequently, keep taking part in it. On the other hand, they are vulnerable to negative effects of gambling because of their limited options and resources.

Research has consistently indicated that gambling is primarily a male pastime, with boys gambling much more than girls (Donati, Chiesi & Primi, 2015; Olason et al., 2018; Spritzer et al., 2017). As a result, men are therefore more likely to experience gambling-related issues. (Anagnostopoulos et al., 2017; Hanss et al., 2015; Kristiansen & Jensen, 2014). On the other hand, it has been noted that boys start gambling early in life (Dodig, 2018), which could provide insight into why boys are more likely than girls to develop gambling issues.

Fong (2015) studied gambling in the United States and found that the rates of gambling among boys were roughly twice as high as women's. Particularly considering the surge in acceptance and participation of women in gambling, the gender gap appeared to be shrinking. According to the UK Gambling Prevalence survey (2016), football pools, betting machines, and casino games were all activities that males participated in three to five times more frequently than did women. Men were at least twice as likely as women to gamble privately on non-sports events. In general men were more likely than women to take part in most gambling activities.

Hing (2016) analyzed risk factors of gambling by gender and noted that in comparison to female gamblers, men gamblers were noticeably more likely to have partake in some form of gambling at some time in their lives. Men had a lifetime gambling prevalence of 3.2%, which was double that of women which was at 1.8%. According to Fong's (2015) research, there are significant differences between male and female gamblers in terms of the types of gambling they engage in, their motivations for doing so, psychiatric comorbidities, and their engagement in treatment. Because of unique susceptibilities, it is important to consider each gender while screening or treating compulsive gamblers.

According to Volberg and Stevens (2016), culturally men are competitive and love activities that thrill them. This renders them more prone to gambling engagements compared to the women folk. Additionally, in the African setting, men as the bread winners, tend to engage in gambling as an easier way out towards meeting their demanding role for provision. It has also been argued that the gambling venues are masculine and therefore avoided by women due to negative publicity. This further makes men to be associated more with the gambling habit (McCormack & Griffiths, 2016). However, this reasoning is likely to be challenged by the argument that online gambling offers a platform that is easily accessible by both gender from their homes comfort (Corney & Davis, 2015).

Early exposure to gambling activities increases a person's potential or danger of developing a gambling addiction in later life. In these situations, reports of weak family ties, inadequate parental support, and guidance are frequent. Little parental supervision and surveillance of the children's social engagements is done because some parents may themselves have a gambling habit. If there is a positive family history, there may be a three to five times greater chance that a young person may develop a gambling disorder (Dowling, 2017). This implies that the likelihood of the adolescent engaging in the vice is significantly higher if the family and acquaintances do not think there is anything wrong with the gambling habit. According to Wood and Griffiths (2018), children who have grown with early introduction to gambling are able to develop expectations that are more realistic and therefore are able to make gambling decisions and expectations that are mature.

Broadly speaking, the gambling habit is discouraged by religion. The Muslims for instance discourage gambling by calling it ‘‘haram’’ meaning forbidden or sin. In countries where the law is implemented, those guilty of gambling are punished with lashes (Jarvis, 2017). Conversely, Christians have divergent perspectives to gambling, for example Catholics argue that there is no moral deterrent in favor of gambling if it is fair. They also contend that if the people engaged are not privy to the results, there is no fraud taking place. The Church reasons that gambling is acceptable if it is within control, and that anyone who willingly places a bet should be content with the associated loss. However, they are against gambling in a casino since it drives individuals into getting addicted (Poitras, 2016).

# 2.4 Empirical Literature Review

In America, Petry and Weinstock (2017) investigated the prevalence of problem gambling among adolescents. The study adopted a mixed methods approach where focus groups, survey and interviews were used in data collection. The study revealed that out of 1356 adolescent participants, 33% admitted to gambling online, 15% undertook online gambled online once a week, and about one third of these internet gamblers were categorized as possible pathological gamblers.

In Canada, Derevensky, Gupta, Messerlian and Mansour (2017) carried out a qualitative study involving 1288 adolescents. The principal goal of the study was to assess the prevalence and awareness of gambling and factors that contributed to their participation in gambling. The research revealed that adolescents considered gambling as a good source of entertainment, pleasant hobby, a way to relax and get away from stresses of daily life. The adolescents were mostly influenced by advertisements to believing in gambling as being a lifestyle of glamour, fame, fun and financial rewards. The vulnerability was influenced by the belief that the more you gambled the more you win. This maintained the gambling behaviour with the hope of winning is eminent.

In India, George (2016) carried out a prevalence of gambling study among university students. The study used a survey design and targeted 1090 students. A stratified technique was employed in sample size selection. The study found that 45% of the students were active participants in gambling. The study further indicated that those involved in gambling were from low socio-economic strata and that more male students participated in gambling activities. On the other hand, protestants shun gambling believing it is sin which promotes greed (Evangelical Wesleyan Church, 2015). They discourage their congregants from taking part in gambling.

In sub-Saharan African countries, Temitope (2019) explored the incidence and patterns of gambling behavior among the young people in south-west Nigeria Oyo and Ekiti State. A cross-sectional survey design was adopted, and questionnaires were used in data collection. According to the study's findings, sports betting (on basketball and football) and lotteries had a prevalence rate of 66% and were the most frequently practiced. The study also looked at the relationship between youth gambling habit and differences in gender and age, and it showed that these differences were quite significant. The study also found that factors such as age, personality, and financial stress might have a significant impact on gambling behavior. The motivating factors to gambling in this study include, excitement, socialization, monetary gain, and social recognition.

In Zambia, Sakala, Dalal, and Sheikh (2016) sought to find out how common sports betting was among University of Zambia students. They employed a descriptive cross-sectional design.. The study targeted 150 undergraduate students. Data was collected using questionnaires. From the findings, 75% of the undergraduate respondents stated they had placed a gamble and 56% of the respondents chose online gambling, 2% favored physical placing of a gamble, online and physical gambling had 13% preference. The study concluded that sports betting was the fastest growing gambling industry.

GeoPoll (2017) on the other hand sought to evaluate gambling activities among 3,800 youths aged between 17-35 years in Africa. The study revealed that 54% of the sampled youth had engaged in gambling related activities. Kenya ranked highest at 78% followed closely by Uganda at 56% and Ghana at 42%. Regarding factors that motivated the youth to engage in gambling activities, the study found that easy internet accessibility and internet availability together with the fact that the process is done in privacy, expected financial reward, the aspect of socialization were factors that influenced the behavior.

Koross (2016) investigated how gaming affected the conduct of university students in Kenya. The main goals of this study were to find out how common gambling is among university students in Kenya, what drives them to gamble, how gaming affects their behavior. A survey research methodology was utilized to gather information from a sample of 150 university students using questionnaires. Results indicated that the prevalence of gambling was high among the students. The motivation of gambling was primarily financial rewards and enjoyment and that gambling influenced student’s behavior.

Another study was carried out by Mwadime (2017) focused on assessing the impact of gambling in Kenya. To realize the purpose of the study, a descriptive research design was adopted and quantitative research method used. The study targeted persons partaking gambling activities in Nairobi County. Stratified random sampling was used in selecting a 120 respondents selected as a size of the sample. Data was analyzed using the Statistical Package for Social Sciences and MS Excel worksheets using descriptive statistics. It was established that most of the respondents who engaged in gambling were male of between 21-40 years. Most gambling bets were placed online more than once per week frequency and mobile money largely influenced gambling in Nairobi and it was an enabler of gambling.

Machoka (2020) studied the effect of problem gambling on behavior among students in selected universities in Nairobi, Kenya. The study used a descriptive research design and used cluster sampling technique to select a sample of 180 respondents. Raw data was collected through use of questionnaires which was then analyzed quantitatively. According to the report, 60 percent of university students engage in gambling, which is a significant number, at the same time male students engaged in gambling more (55%) than their female colleagues at 45%. The findings further indicated a correlation amongst respondent’s demographic characteristics and risk of gambling. That the students gambled to earn money, as a means of recreation, and to socialize.

# 2.5 Conceptual Framework

The dependent and independent variables serve as the key variables in a conceptual framework, which is a diagrammatic depiction of the study variables. The conceptual framework for the investigation is shown in Figure 2.1.

Independent (exposure) variables Dependent (outcome)variable

* Gender
* Age
* Prevalence of gambling

Motivational factors to Gambling

* Anticipated rewards
* Types of gambling
* Availability and accessibility to gambling sites
* Impulsivity/ Sensation seeking
* Socialization

t

Confounding variables

Figure 2.1 Conceptual Framework

Source: Vutare (2022).

Discussion

According to the conceptual framework depicted in Figure 2.1, there is a direct causal link between exposure and result. The arrow from the exposure to confounder factors shows that the exposure to confounder variables had an impact on how severe the outcome variables were.

Prevalence of gambling among adolescents comprise the dependent variable. The arrows start from the independent variable (motivational factors) have a causal effect and point to the dependent variable which is the variable being affected. Moderating variable affects the strength between the independent and dependent variables. In this study, moderating variable is gender and age. This means the age or gender of the adolescents can influence both the outcome and exposure variables both positively and negatively.

# 2.6 Summary

Chapter two has provided an overview of the operant conditioning and planned behavior theories that guide this study. The chapter has also covered an in-depth review of general literature as well as empirical literature related to the prevalence of gambling among adolescents, the risk factors that influence adolescent gambling the relationship between the social-demographic factors and adolescent gambling. Further, the chapter has depicted and discussed the study’s conceptual framework indicating the risk factors influencing gambling as the independent variables and prevalence of gambling among adolescents as dependent variable. Chapter three focuses on the research methodology to be employed towards answering the study’s research questions.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the methods and procedures that will be used collect, process and analyses the data collected. The discussions will feature various areas including research design, the target population and the sample size, instruments of data collection, data collection procedures, and data analysis. The chapter will finally conclude with the ethical considerations to be adhered to.

3.2 Research Design

A research design is a conceptual framework that includes collecting, measuring, and analyzing data for research purpose Kothari (2014). This study adopts descriptive research design, which is the process of collecting data to get current answers of the subject under study. The descriptive research design was preferred because it has an advantage of optimizing the effectiveness of gathered information and therefore lowers researcher bias. A research design is useful in collecting information about the understandings, views, behavior and values about a phenomenon under investigation (Bell & Harley, 2018). At the same time the design records and describe the situation as it is without interference by the researcher (Crossman, 2019).

# 3.3 Population

Population is the entire group that has the characteristics the researcher is interesed in. (Bryman, 2016). Kiboro primary school has a total population on 871 pupils where 429 are boys and 442 girls (Kiboro Primary School register, 2022).

# 3.4 Target Population

The target population is a set of elements to which the researcher desires to apply the study findings (Saunders, Lewis, & Thornhill, 2016). The criteria of deciding the population to target is to settle on subjects or individuals from the general population who are at a better position to share their experiences and information regarding the phenomena being studied (Asiamah, Mensah, & Abayie, 2017). The target population will be adolescents aged between 11-16 years schooling in Kiboro primary school. The researcher will further use purposive sampling to narrow to pupils within the 11-16years age group in grade five and six and class seven and eight whose total population is 407 pupils.

# 3.5 Sample Size

A sample is a segment of the target population that is selected for study is known as a sample and it is considered as a population subset (Bryman & Bell, 2017). The sampling technique can therefore be defined as the process of selecting the representative subset of the population. The larger the size of sample the more representative it is and the greater the ability of the study to reflect the effect of the sample size. (Kadam & Bhalerao, 2010).

Yamane Taro’s formula will be applied in defining the sample size for the study. The formula indicates that the required sample size is a function of the target population and the maximum acceptable sampling error and it is expressed as:



Where, n= sample size, N = population size, and e = Sampling error (MoE), e = 0.05 based on the research condition.

N= 97

e= 0.05

n= ­­\_407

1+407 (0.05)2

n= 407\_\_\_

2.02

n= 201 respondents

Given the possibility of attrition among the respondents. The researcher will consider a 10% attrition rate to carter for this. 10% of 201 respondents will mean an additional 20 respondents.

Therefore, the sample size for this study will be 221 respondents.

Table 3. 1: Target Population

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Gender | Class 5 | Class 6 | Class 7 | Class 8 | Total |
| Boys | 55 | 51 | 49 | 47 | 202 |
| Girls | 51 | 51 | 52 | 51 | 205 |
| Total | 106 | 102 | 101 | 98 | 407 |

Source: Author (2022)

# 3.6 Sampling Technique

Sampling is the selection of a portion of the population within a target population to provide responses that are representative of the entire population (Grey & Payne, 2017).

Therefore, in this study, purposive sampling will be used to select the grade five, six and class seven and eight pupils who are within the 11-16 years of age as respondents. The pupils will be categorized further into boys and girls through stratified sampling to get a representative number of each gender. This sampling technique will help in eliminating biasness (Crossman, 2019). Simple random sampling will be used to get the number of sampled students. This will be done by administering the questionnaires alternately between the two genders until the required sample size is attained.

Inclusion Exclusion Criteria

According to Salkid (2010) the inclusion and exclusion criteria is an eligibility criterion that can be used qualify the target population of a research study. The research population will be pupils in Kiboro primary school, and the study will include pupils in Grade five and six and those in class seven and eight who are 11-16 years of age. Any students within these classes and whose age falls outside this bracket will be excluded.

# 3.8 Data Collection Instruments

According to Kothari (2014), data collection instruments describe the tools that are used in collecting data. This study will use self-administered questionnaire in collecting data. Questionnaire allows the researcher to collect quantitative data in standardized way while ensuring consistency and coherence during analysis (Roopa & Rani, 2016). Further, questionnaires ensure anonymity and uniformity in procedures while collecting a huge amount of data in a short time (Wambugu, Kyalo, Mbii, & Nyonje, 2015).

This study will use a structured questionnaire as the data collection tool. The tool is designed to collect quantitative and qualitative data from the respondents.

The questionnaire will comprise of three sections. Section A is where social demographic information will be captured to provide a short background of the respondents. The information captured may include age, gender, and adolescents’ family background such as religious background, whether orphaned, brought up by married, single, or divorced parents.

South Oaks Gambling Screen-Revised for Adolescents (SOGS-RA).

This is a tool established to assess the occurrence of gambling. It was developed by Lesieur and Blume (1987) and has been tested and validated (Stinchfield, 2002). SOGS-RA was later adapted for adolescents by Winters, K.C., Stinchfield R.D. and Fulkerson, J. in (1993), and the version renamed as the South Oaks Gambling Screen-Revised for Adolescents (SOGS-RA). The tool is in line with the DSM-V criteria for pathological gambling in identifying the signs of problem gambling. In western counties SOGS has been used in different research. Erdogdu, Y., & Arcan, K. (2020) conducted a study among a Turkish high school students and found it reliable with an alpha value of 0.88. An alpha coefficient of 0.8 to 0.9 according to Wambugu (2015) translates to high reliability while below 0.5 is unacceptable reliability. Scores of the SOGS-RA are scored either 1 (affirmative) or 0 (non-affirmative). if respondent indicates “every time” or “most of the time” on item A its scores as 1 otherwise it is scored 0 (Winters, Stinchfield and Kim, 1995).

Section C of the questionnaire will include questions formulated by the researcher in order to answer the research objectives. The questions will cover the risk factors and social economic factors that influence gambling behavior.

# 3.8 Data Collection Procedure

In this study, data will be collected using self-administered questionnaires. The researcher will seek approval from the necessary authorities prior to data collection. First the researcher will seek ethical consent from Daystar University Institutional Scientific and Ethical Review Committee (DU-ISERC) then an authorization to collect data from the National Council of Science, Technology and Innovation (NACOSTI). These approvals will aid in seeking further approval from the Ministry of education to conduct the research in a school. Once this is granted the researcher will then visit Kiboro primary school and seek the headmaster’s consent for data collection in loco parentis.

The researcher will recruit three research assistants who will be trained on the topic of research, administering the questionnaire, ethical considerations, and confidentiality matters. The data collection is expected to take a day. The questionnaires will be issued in a classroom setup to the target population alternately to both genders to ensure fair representation until the required sample size is reached. The respondents will be given time to respond, and the questionnaires collected immediately after completion of the exercise. Once the whole exercise is completed, the filled questionnaires will be handed to the researcher for safe keeping and later analysis. The researcher will then review all the filled questionnaires for sorting and coding before the exercise of data entry and analysis begins.

# 3.9 Pretesting

The data collection instruments will be pretested prior to data collection. The reason for pretesting is to make sure the instrument is stated rightly and can be easily understood by all respondents. The questionnaire will be pretested at Mathari Primary Schools which is the only other public school in the ward and therefore has similar characteristics. Cooper and Schindler (2014) argue that 10% of size of the sample is adequate for pretesting and therefore 20 students within the age group in Mathare primary will be randomly selected for pretesting. This is agreement with Dejong (2015) who argue that the respondents participating in the pretest should not include the actual sample for the study.

# 3.10 Validity and Reliability of Data

Kothari (2009) argue that validity is an indicator of the degree of an instrument's precision in measuring what it was intended to measure. The pre-test will help the researcher to improve on the clarity and appropriateness of the research questions. Adjustments will be done before administering them with the respondents for the actual study. The changes will include, spelling mistakes, ambiguity of the questions and insufficient space to write the responses.

# 3.11 Data Analysis Plan

Data analysis according to Kombo and Tromp (2011) is the methodical a thorough review and examination of the information gathered throughout the research investigation with a view to drawing conclusions. The data analysis process will begin with data entry, cleaning and data editing. Data will be codded classified and keyed into the Statistical Package for Social Sciences (SPSS) version 25 for analyzing. The data collected be taken through an analysis process via descriptive1and inferential statistics. The descriptive statistics will be important in presenting study findings in the form of frequencies, and percentages that are easily understandable (Green & Salkind, 2016). They will further be used to interpret the prevalence of gambling and the risk factors that influence gambling among the adolescents in Mathare. These findings will be displayed using tables, figures and narratives.

Inferential statistics on the other hand will be employed to analyze the data collected to allow the researcher draw inferences and generalize findings beyond the study sample to other groups. Correlation analysis through use of Pearson’s Product Moment Correlation design enables the researchers to determine the nature of the influence between the independent and dependent variables. The Pearson1Correlation analysis will be done to assess the intensity of the relationship1between the independent1and the dependent variables, namely the socio-demographic factors and gambling. This information will then be presented in the form of tables.

# 3.12 Ethical Considerations

Ethics are rules controlling human behavior and have a big effect on people's welfare. (Minja, 2009). The researcher will observe the following standards of behavior in regard to the process and the subjects of the study. The researcher will take several steps to adhere to research ethical standards. Prior to collecting data the researcher will seek permission from all relevant authorities. First the researcher will seek ethical consent from Daystar University Institutional Scientific and Ethical Review Committee (DU-ISERC) then an authorization to collect data from the National Council of Science, Technology and Innovation (NACOSTI). These approvals will aid in seeking further approval from the Ministry of education to conduct the research in a school.

Once the above approvals are granted the researcher will then visit Kiboro primary school and seek the headmaster’s consent for data collection in loco parentis. This will be achieved by writing a letter of introduction that indicates he area of study, the objectives and purpose of the study to the school and a consent form. After consent is granted, first the participants will be informed of the research objectives and their confidentiality will be assured. Participation will be voluntary and the right to participate or not to participate will be observed. The participants will then be informed on the objectives of the study and how the data collected will be used.

To ensure confidentiality the questionnaires will be pre coded and the respondents advised not to indicate their names. The anonymity will be enhanced through use of codes for the participants. The filled questionnaires will be used for purposes that serve the study objectives only. Sharing information provided by respondents for other purposes than the research is unethical (Kumar, 2011).

# 3.13 Summary

The research approach that will guide the study has been covered in this chapter. A descriptive research design will be used. The study will be conducted in Mathari Mental Hospital and the target population will be adolescents between ages 12-16 years in Kiboro primary school. The study will use a sample size of 102 respondents. Stratified random sampling will be used and questionnaires the main research tool used. The chapter has also addressed the data collection procedures, data analysis and the ethical considerations.

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# APPENDICES

## Appendix A: Introduction Letter

Dear Respondents,

I am Susan Vutare, a Master of Arts in Clinical Psychology student at Daystar University. As part of my course requirement, I am undertaking research on the prevalence of gambling among adolescents in Mathare slums with a specific focus on pupils schooling in Kiboro primary school in Mathare slums Nairobi, Kenya.

To complete the research, I have to collect data on the same and therefore your cooperation and assistance is required to enable me to complete the exercise. I will be grateful if you could spend 20-30 minutes of your time to respond to questions on the study. It is hoped that you will provide factual, honest and reliable answers to help me gather information for this study. You will enjoy absolute anonymity and confidentiality as your name is not needed. Your responses to the questions will be used purely for research and academic purposes. Thanking you for your support in this regard.

Yours faithfully,

Susan Vutare

## Appendix B: Consent Form

Consent to allow students participate in a Research study

Title of study: *Prevalence of gambling among adolescents in the informal settlements*

Researcher: susan vutare 21-0390

Department: Counseling Psychology Daystar University

You are requested to read this form before giving consent for the pupils to take part in the study.

Purpose of the study

* The researcher wished to establish the prevalence of gambling among adolescents living in the informal settlement of Mathare.
* The research is entirely for academic purposes.

Risks/Discomforts of being in the study

* There are no known risks associated with participating in the study.

Confidentiality

* The study is anonymous and will not include any identity information.

Payments

* The participants will not receive any incentives before, during or after the study. The study is for academic purpose only.

Fee Entry and Exit

* Participation in the study is purely voluntary and participants can pull out at any point during the process.

Right to ask Questions and Report Concerns

Participants have the right to ask questions or raise any concerns during and after the research. For further questions regarding the research, you ca also reach the researcher on Susan vutare at [suevutare@yahoo.com](mailto:suevutare@yahoo.com) or by calling 0714677770

Consent

By appending your signature here, you have read and understood the information above and have decided to give consent for the pupils to participate in this study in loco parentis

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The Headmaster Kiboro Primary school.

## Appendix C: Questionnaire

Section A: Demographic Data

1. Kindly indicate your gender by ticking appropriately

Male

Female

2. What is your age? (Kindly tick appropriately)

11-12 years

13-14 years

15-16 years

1. For how long have you schooling in Kiboro Primary school? (Kindly tick appropriately)

3 years and below

4-6 years

7-8 years

Above 8years

1. How Long have you been residing in Mathare (Kindly tick appropriately)

3 years and below

4-6 years

7-8 years

Above 8years

1. Which of the following types of gambling have you ever engaged in?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Type of Gambling | Not at all | Less than a week | Once a week | More than once a week |
| Betting on sporting events |  |  |  |  |
| Played cards for money |  |  |  |  |
| Played slot machines/poker machines |  |  |  |  |
| Played on lotteries on radio |  |  |  |  |
| Went to casinos |  |  |  |  |
| Internet betting |  |  |  |  |
| Electric gaming machines |  |  |  |  |
| Pool table betting |  |  |  |  |

Section B: Prevalence of Gambling

SOUTH OAKS GAMBLING SCREEN: REVISED FOR ADOLESCENTS (SOGS-RA)

1. How often have you gone back another day to try and win back money you lost gambling?

Every time

Most of the time

Some of the time

Never

1. When you were betting, have you ever told others you were winning money when you weren’t? Yes [ ] No [ ]
2. Has your betting money ever caused any problems for you such as arguments with family and friends, or problems at school or work?

Yes [ ] No [ ]

1. Have you ever gambled more than you had planned to? Yes [ ] No [ ]
2. Has anyone criticized your betting, or told you that you had a gambling problem whether you thought it true or not?

Yes [ ] No [ ]

1. Have you ever felt bad about the amount of money you bet, or about what happens when you bet money? Yes [ ] No [ ]
2. Have you ever felt like you would like to stop betting, but didn’t think you could?

Yes [ ] No [ ]

1. Have you ever hidden from family or friends any betting slips, lottery tickets, money that you won, or any signs of gambling?

Yes [ ] No [ ]

1. Have you had money arguments with family or friends that centered on gambling?

Yes [ ] No [ ]

1. Have you borrowed money to bet and not paid it back? Yes [ ] No [ ]
2. Have you ever skipped or been absent from school or work due to betting activities?

Yes [ ] No [ ]

1. Have you borrowed money or stolen something to bet or to cover gambling activities? Yes [ ] No [ ]
2. What is the source of the money you spend in gambling?

a).\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Section C: Motivational factors Influence gambling behavior

1. Which of the following represent the factors that influenced or motivated you to start participating in gambling activities (Tick all that apply)
2. To make money [ ]
3. To remove boredom [ ]
4. To relieve stress [ ]
5. To socialize [ ]
6. As a means of recreation [ ]
7. Gambling sites or places are easily available and accessible [ ]
8. For fun or excitement [ ]
9. Lack of self-control, just found yourself gambling [ ]
10. To what extent did the following factors influence or motivate you to participate in gambling activities.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Factor | Very large extent | Large extent | Small extent | Very small extent | No extent |
| To make money |  |  |  |  |  |
| To remove boredom |  |  |  |  |  |
| To relieve stress |  |  |  |  |  |
| Socialization |  |  |  |  |  |
| For recreation |  |  |  |  |  |
| Easy availability and accessibility of gambling sites |  |  |  |  |  |
| Lack of self-control/just found yourself gambling |  |  |  |  |  |
| For fun/excitement |  |  |  |  |  |