RESILIENCE AND DISPOSITIONS FOR DEVIANT BEHAVIOUR AMONG HIGH SCHOOL STUDENTS IN KISUMU COUNTY

BY

Simon D. M. Karanja

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STUDENT’S DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than the United States International University Africa for academic credit.

Signed: _______________________________ Date: ________________________________

Simon D.M. Karanja (ID: 645846)

This project has been presented for examination with my approval as the appointed primary supervisor.

Signed: _______________________________ Date: ________________________________

Dr. Peter C. Kigwilu

Signed: _______________________________ Date: ________________________________

Professor Martin C. Njoroge, Dean, School of Humanities and Social science

Signed: _______________________________ Date: ________________________________

Professor Ruthie C. Rono, Deputy Vice Chancellor, Academic Affairs
ABSTRACT

According to Morewood (2017), establishing a worldwide culture of resilience needs to be at the top of every school’s agenda as a means of addressing the alarming prevalence of mental health issues among young people. This study looked at the levels of resilience among adolescent students between the ages of 13-18 of forms one and two in Kisumu County, with a sample size of 414 students. This was a correlational research study that looked at the relationship between the different variables of resilience and deviant behaviour in Kisumu County. The study sought to find out the levels of resilience among students in the rural and urban schools of Kisumu County, and compared these findings to self-reported levels of suicide ideation and risk of violence. A questionnaire, which was an adaptation of the Child Youth Resilience Measure, was used to collect data on resilience, while separate questionnaires were developed for the suicide and violence data. The study revealed that adolescents in Kisumu County generally had acceptable levels of resilience. The male adolescents from rural areas showed levels of resilience that were lowest and there was a weak correlation between the resilience and deviant behaviours (suicide and violence) among the students.
DEDICATION

To my amazing parents, loving and caring Dr. Githeko and Dr. Karanja, who have taught me the value of persistence and perseverance, and to always make sure to do what I love.
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CHAPTER ONE

INTRODUCTION

1.1 Background of the study

The American Psychological Association (2017) defines psychological resilience as “the process of adapting well in the face of adversity, trauma, tragedy, threats or significant source of stress. It means ‘bouncing back’ from difficult experiences”. Even with this definition of what resilience is, there has been debate about what the universal components of resilience are (Robinson, 2015). In other words, can the kind of resilience a person with terminal illness needs, be described as the same kind of resilience needed to progress through life successfully in the face of adversity? There are nuanced differences in the ways resilience is defined. This study’s focus is on the resilience needed to overcome challenges such as economic hardship, academic pressure or social isolation. Resilience that requires the person to use a combination of components or resources, as opposed to just one element of resilience such as physical resilience.

Robinson (2015) quoted Ungar (2004) who suggested that healthy resilience is an individual’s ability to achieve and maintain a view of themselves as healthy and in their ability to use resources and opportunities that are available and accessible to them. Robinson however explains that having resilience does not necessarily lead to pro-social and healthy coping mechanisms. This is because individuals have been known to act out in anti-social behaviour as a means of self-preservation in situations where their safety and health is threatened, which could be argued is a form of resilience.

Resilience can be categorized into four types, these include, physical resilience, which is the ability to physically move even when the desire is absent. This type of resilience can be seen among marathon runners. There is mental resilience, which is an
ability to stay challenged mentally. This includes individuals who relish activities such as doing puzzles regularly. Emotional resilience involves an ability to find positivity especially when one is feeling down while social resilience is an ability to stay engaged with social circles (Wallace, 2015). When it comes to the school environment, students need a combination of the four mentioned types of resilience to help them adopt, and complete what needs to be done despite any adversities in their lives. According to Simuforosa and Rosemary (2014) because a majority of the students who take part in deviant behaviour come from homes that do not have a nurturing family structure, the ripple effect leads to economic decline. Because if children leave school, the money spent on their education is wasted as a result of indiscipline, and this means less professionals who will boost the economy. Socially, crime rates go up as some of these indiscipline individuals commit whatever crimes to satisfy their basic needs.

One of the main problems in schools today is the issue of indiscipline and antisocial behaviour. Studies have shown this tends to be a problem that stems from outside the school environment, mainly due to a lack of parental guidance (Njendu, 2014; Simuforosa & Rosemary, 2014). A research study done in Kenya showed that when it came to indiscipline and antisocial behaviour in schools, the leading contribution to this phenomenon was the lack of proper parental guidance. “The most popular cause with 53% was the lack of parental discipline, followed by poverty at 20%, television violence at 19%, lack of school discipline at 15%, and finally broken homes, alcohol and drugs were cause 13% of the time” (Njendu, 2014). Hayden, (2009) tries to move away from describing these pupils as ‘problem children’ but rather as ‘children with a problem’ illustrating a belief in the individual nature and location of ‘the problem’.

According to Simuforosa and Rosemary (2014), people act on their subjective reality rather than on the reality that surrounds them, and as social beings all behaviour
including misbehaviour has its purpose and is directed towards achieving social approval. The authors also quote Dreikurs (1968) who asserts that “all behaviour is the result of a child’s mistaken assumption about how to find a place and gain access, thus when a learner is unsuccessful in obtaining acceptance, a pattern of misbehaviour begins”. Social incompetence is pointed out as one of the problems the child may have (Stepp, Pardini & Morris, 2011), which a family that does not provide a nurturing structure could result in. However once a student learns how to access and use the resources around him/her in developing social and emotional resilience, there is a likelihood s/he will develop social competence in the process.

Children are the wealth and pride of a nation. The fact that acts of indiscipline in schools, especially at the secondary level, are a global challenge as reported in several reviews, means that caregivers and teachers have their work cut out for them. Simuforosa and Rosemary, (2014) quoted Maphosa and Mammen (2011) who reported that UK students are known to be noisy, rowdy and disrespectful to their teachers, a trend also seen in the US and Caribbean.

According to Banda and Mweemba (2016), schools in Zambia still face the same indiscipline problems, quoting Simate who stated that in 1992, indiscipline included vandalism, strikes, bullying, smoking, drug abuse, promiscuity, aggressive and disruptive behaviour, absconding from classes, drunkenness, stealing, careless school work and other offences against school rules and regulations. This is a pattern also seen in Lagos.

In Kenya, the three major shadows of behaviour that deviate from the norm include substance abuse, violence and destruction of school property, and suicide. Klonsky, May and Saffer (2016) distinguish suicidal ideation from the actual act that leads to death. They state that the ideation-to-action framework is broken down into (a)
the development of suicidal ideation, and (b) the progression from ideation to suicide attempts, and should be seen as two distinct phenomena.

In a survey conducted by UNICEF (2005) in Nairobi, investigators found that young people were left to take care of themselves in violence torn communities that did not provide support services, which meant a lot of the deviant behaviour seen in schools was an attempt to cope with devastating circumstances (Mideva, Emily & David, 2016).

1.2 Statement of the problem

In recent years, there have been reports of suicides and cases of destruction of property in schools in Kenya. Examples of such cases include an incident at a Moi Girl’s High School in Nairobi County in 2017. In this incident, a student lit a fire that destroyed school property, killed eight other students, and injured dozens more (Gathura, 2017). In Kisumu, a form four student committed suicide by jumping into a river on March 22nd of 2017 after a teacher allegedly mocked the 16-year-old girl, however, the head teacher denied allegations that the teacher was the cause of the suicide (Standard, 2017).

A survey done by NAYS in 2015 on the youth of Kisumu County, showed that the main health problems affecting youth include sexually transmitted infections, drugs and substance abuse, teenage pregnancy and, sexual and gender based violence (NAYS, 2015). According to a report on teachers’ and students’ perceptions on bullying behaviour in public secondary schools in Kisumu East sub-county, stated that “secondary schools in Kenya experience violence with Central province leading with 68 cases, while Nyanza (where Kisumu county is located) was third with 27 cases” (Okoth, 2015, p.126).

Njoki (2013) shares findings by UNODC (2004) who state that in Kenya, half of the drug abusers are aged between 10-19 years with more than 60% living in urban areas and 21% in rural areas. She goes on to discuss how consequently, this leads to problems
like student violence, poor performance and school dropout. It also leads to higher rates of HIV/AIDS, other blood borne disease such as hepatitis B, antisocial behaviour, rise in mass indiscipline, ill health and threats to security and integrity of a school. These statistics show an awareness of the problems faced by youth, but there is very little knowledge of why youth in the country behave in these maladaptive ways. Apart from depression being highlighted by media as the leading cause of suicide, there is little research on the prevalence of suicide among the youth and what drives it, or how well equipped youth are to handle adversity. This concerns motivated the current study.

There have been studies done globally on the issues of deviance in schools and importance of resilience in schools. However, the data that links resilience needed for successful progression through life as a means of avoiding deviance is minimal. Gardner (2007) discusses resilience as a self-regulatory process rather than as set of skills needed to find resources and ‘bounce back’. Gardner’s study found that self-regulation helped regulate and moderate deviant behaviour but it did not address the need for successful progression through life once the issue of deviant behaviour is addressed, or the need to counter suicide ideations. Therefore, this study sought to find a correlation between those students who show varied levels of resilience and their dispositions for violent behaviour and suicide, a correlation that may shade some light into possible avenues of intervention.

1.3 Purpose of the study

The purpose of this study was to determine the correlation between resilience levels and deviant behaviour, (deviant behaviour including violence and suicide ideation) among high school students in Kisumu County.
1.4 Research questions

The study formulated questions to determine how resilience and the two elements of deviant behaviour among high-school students affected one another. This was done to first find out what the levels of resilience are among high-school students in the region, the prevalence of suicide ideation and how violent/inclination for violence among the students. These questions were;

1. What are the levels of resilience among students in their first two years of high school in Kisumu County?
2. Is there a significant difference in resilience among high school students of the same gender in rural and urban sub-counties within Kisumu County?
3. What is the correlation between these levels of resilience and suicidal ideation?
4. What is the correlation between resilience and acts of violence?

1.5 Hypothesis

For the second research question, this study hypothesized that there is no significant difference in levels of resilience among students of the same gender in rural and urban sub-counties within Kisumu County.

1.6 Significance of the study

This study can be used by counsellors and mental health institutions to help inform their techniques and therapeutic procedures, by giving them some insight into what areas of treatment can be explored. School counsellors, teachers and private practitioners can also use the information to psycho-educate adolescents on what they are going through. Teachers, organizations working with adolescents in Kenya can also use
this study to better understand the mental state of this age group, therein enabling them to improve their engagement strategies. Researchers in the field of counselling can use the cultural context of this study to develop treatment and preventative measures that would suit the African context. Head teachers, schools and policy makers can make informed decisions on curriculum changes that include programs to help build resilience, and eliminate suicide risk among adolescents in schools, and in doing so, improve the economic and social problems faced when this age group is neglected. Parents and guardians can also benefit from this information to better understand their children’s social condition, and perhaps allow them to better understand the world their children are inheriting. Government/Ministry of education and schools have the benefit of using this information to develop programs that nurture the spirit, and emotional well-being of its youth/students. Programs that may have long-term economic value. And Finally guidance counsellors now have the advantage of knowing what levels of resilience are among some of the youth in some regions of the country, and how bad suicide ideation is among said age group.

1.7 Justification of the study

As stated earlier, deviant behavior among students such as violence and substance abuse lead to school dropout, which can lead to economic and social issues such as crime. Suicides cause psychological distress to those close to the victims and this means the spread of poor mental health. If a correlation between these acts of deviance and resilience is found, it may help create interventions that not only correct this behavior, but also allow for successful progression and prevention of suicides in schools. If this is possible, both the macro issues (economic and social) and micro/mezzo issues (families and institution of suicide victims) may be addressed.
1.8 Scope of the study

The study was carried out in Kisumu County, where participants from both public and private high schools were targeted, and the collection of data took roughly 13 days. The population of the study included those students in their first form and second form of high school within Kisumu County. The study sampled its participants from four sub-counties, of which, two were urban and two rural. For a population of 10,000 a sample of 300 is needed for an accurate representation of the population, this study expected to work with a sample of roughly the same size, both males and females. First form and second form students were selected for this study since they are the newest and most vulnerable among their fellow high school students; they are in a new environment and are still finding their footing.

1.9 Definition of terms

1. Resilience – A combination of environmental and psychological conditions that allow the individual to overcome whatever adversities they may be faced with in life.

2. Deviant behavior – This is behavior that is considered maladaptive, or behavior that is caused by an inability to express oneself properly in appropriate settings.

3. Suicide – An attempt by the individual to end one’s life because of an inability to cope with life stressors and negative stimuli.

4. Violence – Destructive acts that harm others, oneself and/or property as a way of acting out one’s frustrations.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter looked at some of the theories that explain resilience, and deviant behaviour as a behaviour that is not within the control of the population. It also looked at the conceptual framework of the study, which explains how the various variables in this study such as resilience and deviant behaviour interact, and their relationship with one another. The chapter also looked at what the literature has to say about resilience in schools, suicide in schools and violence in schools.

2.2 Theoretical framework

This section highlights two theories that provide a theoretical framework for the study, namely: Resilience theory and Strain theory.

2.2.1 Resilience Theory

Resilience science emerged more than half a century ago by curious parties in the fields of psychology, psychiatry, and paediatrics who were looking for clues to the origins and treatments of problems in child development observed, some of the pioneers being Norman Garmezy, Lois Murphy, Micheal Rutter and Emmy Werner (Yates, Tyrell & Masten, 2015). The resilience theory looks at both risk factors and protective factors, stating that resilience is determined by these two factors. Risk factors, being those that pose a threat to health, and protective factors being those that improve a person’s response to stress and strain producing positive outcome (Positive psychology program, 2016). Pioneers observed striking variations in outcomes among children at risk due to disadvantage and adversity (Yates, Tyrell & Masten, 2015).
Some determinants mentioned for conquering adversity in order to become resilient include acceptance, hardiness, mastery, hope and optimism, self-efficacy, sense of coherence and resourcefulness (Positive psychology program, 2016). An antecedent to resilience is adversity with the result being positive adaptation (Fletcher & Sarkar, 2013). When talking of resilience emphasis is put on competence despite exposure to adversity which is most appropriately conceptualized as a developmental process or a dynamic capacity as opposed to a static outcome or trait (Yates, Tyrell & Masten, 2015). However, when conceived as a trait, resilience is described as a constellation of characteristics that enable an individual to adapt to the circumstances they encounter (Connor & Davidson, 2003; Fletcher & Sarkar, 2013). Block and Block (1980) refer to this as ‘ego resilience’ which includes, traits reflecting general resourcefulness, strength of character, and flexibility of functioning in response to varying environmental demands (Fletcher & Sarkar, 2013). As a process that changes over time on the other hand, it is described as “dynamic process encompassing positive adaptation within the context of significant adversity” (Luther et al., 2000; Fletcher & Sarkar, 2013). This means of conceptualizing resilience, recognizes that the protective and promotive factors will vary from situation to situation, and throughout a situation and across an individual’s lifespan. Thus, although a person may react positively in one situation at one point in their life, does not mean they react the same in another to the same stressor, and those who advocate resilience as a process dispute the notion of resilience as a static state of existence (Fletcher & Sarkar, 2013).

Van Breda (2018) discusses the relevance of the resilience theory for social work in South Africa by stating that first, despite his critique of the resilience theory, it is applicable to the social work setting because it guides the kinds of research questions we ask. It allows the researcher to consider and understand vulnerability or adversity, which
is an important stage of the assessment phase in social work practice. A significant proportion of assessment requires that the researcher understand the challenges the client faces, and the history and context of those challenges. The resilience theory also considers mediating processes which allow the individual or system to achieve better-than-expected outcomes when faced with adversity or risk. And by understanding these mediating processes of resilience, it allows for better informed policy and practice, as opposed to only considering adversity when dealing with the client.

Secondly, Van Breda explains that the theory celebrates local and indigenous knowledge, which helps with the decolonization of social work. The cultural expression of resilience has generated a growing interest among resilience researchers. Researcher Theron, has been drawn and been particularly attentive to the cultural manifestations of resilience in South Africa. Her colleagues and her have noted that many of the resilience processes that are discovered in international studies, are also observed locally, including attachment, mastery and meaning-making (Theron & Phasha, 2015; Van Breda, 2018). But they also noted that local research shows processes that are embedded in indigenous world views and values, especially interdependence, spirituality, and duty to Kin. Finally, the theory provides research with a framework that bridges the micro and macro world of resilience which helps deepen social work development and theory (Petel, 2015; Van Breda 2018)

According to Osborne (2007), the building blocks of the resiliency theory include risk factors/mechanisms, vulnerability factors and protective factors. The resiliency theory constructs and models are frequently used by social workers and other theoretical perspectives who say it shows promise as an emerging theory. It offers a viable platform for developmental research and has the advantage of being empirically based due its incorporation of continuous findings and constructs from neuroscience, that is,
neuroplasticity and biology. However, one of the main criticisms of this theory is that it is limited in its application, because it only works with populations in adversity, trauma or high stress experiences. The theory may be misapplied when discussing normative life cycle issues and/or moderately stressful events. Hartling (2008) also argues that the term social support is not equivalent to connections, stating that the social support is a unidirectional relation i.e. one person supported by another, while connections were mutual bidirectional relations. This was done to point out a difference in cultural understanding of this process. Hartling goes on to demonstrate this by explaining that bidirectional relationships, centered the concept of resilience in African culture which aligns with the values of Ubuntu, emphasizing social connectedness as the crucible of personhood; connectedness with one’s cultural heritage as an important source of intelligence, as opposed to the unidirectional process of social support.

This theory was found suitable for this study because of its origins in research on children at risk. Researchers of this theory were looking to find out why some children present better-than-expected outcomes, whereas others did not. And, much of the data used in this theory is also based on comparisons made to empirical findings from epidemiology concepts of immunity and resistance to disease, to development and psychopathology (Osborne, 2007).

2.2.2 Strain Theory

The first person to develop modern strain theory of crime and deviance was Emile Durkheim. However, Merton’s classic strain theory managed to take lead in criminology during the middle part of the 20th century (Oxford Bibliography, 2015). Revise Sociology (2016) states that Robert Merton’s strain theory explained the rising crime rates experienced in the USA at the time, which makes it popular with contemporary
sociologists. The theory proposes that pressure due to social factors such as lack of income or lack of quality education drives individuals to commit crime (Encyclopaedia Britannica, 2016). According to Revise sociology (2016), Merton argued that the cultural system of the USA was built on the idea of ‘The American dream’, which assured Americans that they had equal opportunity to achieve this dream regardless of class, gender or ethnicity. It poised that through legitimate means such as education and work, the American people could acquire success, largely measured by wealth and material gains.

However, Merton pointed out that these goals were not realistic in their attainability, and that the structural organisation of the USA made the means to get on unfairly distributed, making it difficult if not impossible to compete and achieve financial success. He thus developed the concept of ‘anomie’ used to describe the imbalance and argued that such an imbalance in society produced anomie. This then causes a strain or tension between the goals and means, which produce unsatisfied aspirations (Revise Sociology, 2016). These strains then lead to negative emotions such as frustration and anger, which increase the likelihood of crime. The emotions create pressure for corrective action, crime being one possible outcomes or response. Crime may be used to reduce or escape from the strain, seek revenge against the source of strain, or alleviate the negative emotions. However, all strain theories acknowledge that only a minority of those strained, turn to crime (Oxford bibliography, 2015).

Jang (2015) explain how strain theory was developed by Robert K. Merton (1938) and was used in criminology. They discuss how Merton argued that people in the United States were put in a state of conflict by encouraging them to strive for the cultural goals of monetary success, but, that this goal was hard to achieve by legitimate means, especially for those individuals from the lower classes. This theory goes on to explain
how individuals may choose or be forced to cope with their strain in different ways, one of which involves crime, choosing to achieve monetary success through illegitimate means, some of which include drug selling, prostitution and theft. These strains can also lead to drug use and violence against others, in an attempt to alleviate their frustrations. It can drive the individual to completely accept a life of crime, however, not everyone who experiences strain turns to a life of crime. Merton noted that most individuals would rather live with their strain, than turn to crime. One of the reasons for this choice was based on the extent to which the individual condemned crime.

Jang go on to explain how from this theory, other versions of the theory were developed, including that of Merton’s student Albert Cohen (1955), which was used to explain origins of lower-class adolescent male gangs which were common in the 1950s. Cohen explained that lower-class individuals desired middle-class status, a status which includes money and respect of others. But that these lower-class individuals were unable to achieve this status through legitimate means. Another version of the Strain theory was developed by Cloward and Ohin (1960) in an attempt to explain the formation and nature of lower-class gangs as Cohen did. Their theory differed from Cohen by adding to their argument that any explanation of crime, should not only consider the individual’s opportunities to achieve conventional success, but also the opportunities to illegitimate mean of achieving status. They stated that the theory must consider opportunities to engage in violence, theft, drug used and sale, and other crimes.

Heydari, Nouri and Ebrahimi (2013) discuss yet another version of the theory, stating that in 1992 Robert Agnew proposed a General Strain theory, which demonstrated that individuals with higher pressure and strain were more likely to commit crimes as opposed to Merton’s 1968 theory which suggested differences in socio-economic status as the cause of crime. Agnew’s theory focused more on the micro-level rather than the
macro-level which refers to the structural inequity, whereas the micro-level of Agnew’s theory focused on the psycho-social factors (Moon, Blutron & McCluskey, 2008; Heydrai, Nouri & Ebrahimi, 2013). According to Agnew (2001), the General strain theory builds on the previous versions of the theory by considering previously overlooked elements like the loss of positive stimuli such as loss of a romantic partner or death of a friend, and the presence of a negative stimuli such as physical or verbal abuse, and new categories of goal blockage such as the failure to achieve goals. These elements have been consistently present in recent research, showing that many of the specific strains falling under these categories are related to crime and delinquency.

Jang (2015), speak on one of the criticisms of the classic strain theory, which is that it tries to explain crime as a problem that stems from lower-classes, which as shown by study reports from the 1960s has no correlation. Class and crime share a weak correlation, and this is because of the existence of white-collar and corporate crime. Crimes associated with the middle and upper classes. The strain theory also asserts that the crime comes about as a means of coping with a lack of success, as experienced by the lower-classes. This notion however, was challenged by the fact that during the 1960s crime rapidly increasing despite increasing economic prosperity and efforts to reduce poverty.

The strain theory has also been challenged by the fact that by its premises, crime should be highest among those with high aspirations, yet studies have shown that instead, crime was highest among those with low aspirations and expectations (Agnew, 2000; Agnew et al., 1996; Kornhauser, 1978; Jang, 2015). Agnew (2001) also speaks on the General Strain Theory, saying that even this theory is criticized for being so broad that researchers have little guidance as to the specific types of strain to examine in their research. This also means that the broadness of the general strain theory makes it hard to
falsify. As Jensen (1995) stated, because strain can be defined in a variety of ways, it makes the theory virtually unfalsifiable because there is always a new measure that might salvage the theory (Agnew, 2001).

Despite criticism, Jang (2015) state that the strain theory has experienced a revival in recent years. It has been argued that the theory can explain higher class crime since success goals are relative and not absolute. This is because people in the higher social classes also experience strain by habit of comparing themselves to more privileged individuals (Passas & Agnew, 1997; Jang, 2015), which, helps explain the increase in crime in the 1960s. Suggesting these white-collar crimes came about because some people improved their economic statuses, while others did not. Still, the theory continues to be criticized, stating that the inability to achieve aspirations and goals was a poor measure of strain. This is because aspirations are said to be utopian or fictional in their finalism, which meant that not much strain is generated when the individual doesn’t achieve them. More recent studies have also found that dissatisfaction with one’s monetary status is a more elegant means of predicting how much strain the individual may feel. Contemporary research on stress in psychology and sociology, however, suggests that the classical strain theory as too narrow in its focus on inability to achieve conventional success.

This theory was however found to be suitable for this study because it lays a clear cause and effect path of deviant behavior. Even Though there is criticism as to the extent to which the inability to achieve conventional success truly is the antecedent to the effect i.e. crime, it does give an explanation for why individuals may choose to behave in deviant ways (because of dissatisfaction). The theory is a work in progress, however, improvements to the theory have highlighted how dissatisfaction with one’s achievement can lead to criminal behavior as a means of coping with this strain.
2.3 Conceptual Framework

The conceptual framework helps one to visualize or understand how all the moving parts of the study come together. Figure 1 shows the interaction between resilience and deviant behaviour. It shows that the two elements possess a relationship with adversity acting as the antecedent that pushes the person to seek their internal resources, and moderating variables being process between resilience and deviance.

![Diagram of Resilience versus Deviance]

**Figure 1. Resiliency versus deviance**

This study assumed that lack of sufficient resilience (independent variable) resulted in devastating consequences for students, their schools and communities when they turn to poor coping mechanisms such as suicide and violence- deviant behaviour (dependent variables), while presence of resilience lead to virtue of fidelity and a healthy mental state. The study also considered moderating variables such as an un-nurturing home environment and lack of role models which play a substantial role in determining behaviour.

Deviant behaviour can be used as a copying mechanism, i.e. stealing to satisfy a given need. This study focused on deviant behaviour such as destruction of school property, bullying and disorderly conduct (labelled as violent behaviour) and suicide, as
coping mechanisms to help deal with frustrations. If a correlation was found between positive/healthy resilience and this violent behaviour it would give insight into the types of students who act out in this way, just as finding a correlation between resilience and suicide ideation would give insight into what state the students who commit suicide are in. Because of strain and a lack of healthy resilience, the study suggested that violent behaviour and/or suicide are the resulting outcomes, violence, which may also be considered a learnt form of resilience to cope with frustration and unmet needs, however there has not been any empirical evidence among high school students to suggest this. Healthy resilience can be fostered at any given institute, negating the chances of deviant behaviour, despite the student’s circumstances. The kind of resilience measured in this study was an ability to find resources in order to avoid strain, rather than a tendency to keep going at any expense.

Students who are considered resilient and those not considered so, all go through the same situations in the school environment. They all face the same obstacles which include bullying, substance abuse, dissonance between ideal-self and actual-self, etcetera. Processes that may lead to deviant behaviour. If a correlation was found between the resilient and the different elements of deviant behaviour (violence and suicide), the study would be able to shade light into states of mind those who commit suicide and those who use violence as coping mechanisms are in.

The independent variable in this study is resilience, which refers to the students’ capacity to ‘bounce back’, having the knowhow or skills required to look for the necessary resources, be those social, economic or spiritual, in the face of adversity. As mentioned, resilience can be expressed as a form of deviant behaviour, therefore, for this study we emphasized a high/positive resilience. This is an ability to access necessary resources for successful progression through life within the boundaries of the law. Those
who scored below the average (as suggested by general population averages) on the resiliency assessment were considered low resilient, while those who score above average were considered high resilient.

The dependent variables are suicide and violence. Suicide is considered a negative coping mechanism. Because the student may feel overwhelmed by their circumstances or the unfamiliarity of their situation, in other words bullying, new school environment and expectations, they may find suicide to be their only option. Violent behaviour is behaviour that deviates from the norm in maladaptive ways as a means of coping; this means it is disruptive and counter-productive to the learning experience. Violence in schools is a problem that is faced worldwide.

The moderating variables of this study are the variables that strongly influence the kind of behaviour the student express and lead them down the path of identity crises. These variables include a lack of a nurturing home and lack of healthy role models in a constantly changing environment. These variables may be present despite the student’s level of resilience, however, with the presence of nurturing school environments that develop positive resilience, this study asserts that the effects of these moderating variables can be cancelled, and the student can find their way to virtue of fidelity.

2.4 Empirical Review

2.4.1 Levels of resilience in schools

There have been recent studies on resilience, some of which have looked at level of resilience among adolescents. In the past much of the information available pointed to ways of building resilience in schools and discussions on the pitfalls that surround the topic of resilience and its measurement. Cahill, Beadle, Farrelly, Forster & Smith (2014) talk about the building of resilience among students in schools and recommend that
teachers use pedagogical (activities of education and teaching), and relational strategies to foster the skills of self-awareness, self-management, social awareness and social management as the building blocks for the development of resilience. According to Morewood (2017), establishing a worldwide culture of resilience needs to be at the top of every school’s agenda as a means of addressing the alarming prevalence of mental health issues among young people. In many schools, the focus is to deliver an education regardless of what mental state the students may be in, which highlights a tragic fault in the current process of education. Morewood goes on to state that young people who are left with an emotional disorder are more likely to smoke, drink and use drugs, take time off school and fall behind in their education, and, are more likely to earn less money as adults or to experience unemployment. That is why this study wished to look at what the levels of resilience are in high schools in Kisumu County.

Stark (2014) states that a look into the mental health of high school students has found that one in three girls and a quarter of boys are depressed causing them to turn to violence, indulge in alcohol and unwanted sex to cope with problems. Stark also mentions a study (source of study unknown) done on almost 4,500 high schoolers that revealed 34% of girls and 30% of boys felt they were under constant strain and were unable to overcome difficulties. As a result of these difficulties, students turn to unhealthy coping due to a lack of knowledge and resources. Burman & Paul (2018) discuss a study that was conducted on primary school students in India that found that a majority of the students fell within the non-resilient category (62.3%) while only 37.7% of them were said to be resilient. This study was conducted on class 7 (48 students), class 8 (46 students) and class 9 pupils (57 students). These students varied between ages 12, 13, 14 and 15 year olds. In another study conducted by Manijeh et al., the number of students found to be resilient was slightly higher, but still below average, with 46.6% of the participants
showing signs of resilience (Burman & Paul, 2018). Some research studies show that levels of resilience are higher in girls while others show higher levels of resilience among boys. Different studies have also shown that there is no correlation between resilience and class, this is due to the fact that in a study conducted by Manijeh et al., findings showed that resilience of higher class students was better than that of lower class students, while in another study, discussed by Burman and Paul (2018), findings showed that with increase in class, resilience decreased and the association was significant, but become non-significant when adjusted for other factors in multivariable logistic regression. In the same study discussed by Burman and Paul, researchers found factors such as ‘time spent with father’, ‘time spent with mother’, ‘type of family’, and ‘physical activities’ were associated with high resilience and unlike class when adjusted in multivariable logistic regression analysis, these factors remained significant.

When speaking of resilience among young adults, studies in the past have shown that individuals have different vulnerabilities and protective systems at different times throughout their development (Anasuri & Anthony, 2018). Infants for example are highly vulnerable because of their dependence on caregivers and others within their microsystem (Wright, Masten & Narayan, 2013; Anasuri & Anthony, 2018). Infants however have the luxury of being comparatively more protected from experiences of adversity due to their lack of cognitive ability to understand what is occurring around them. Anasuri & Anthony go on to explain that as children mature, the social environment (school and neighbourhood) influence their exposure to traumatic situations, which forces them to become more capable of personally coping and handling or dealing with issues in their lives. This is because their lack of protection from caregivers and experience of freedom contribute to their exposure to traumatic events (Wright et al., 2013; Anasuri & Anthony 2018). Because of their cognitive abilities, adolescents and young adults are more
vulnerable to different types of loss such as the loss of family or friends. Because unlike children, these adolescents and young adults understand what these losses mean for their present and future times, hence the need to develop a sense of resilience (Anasuri & Anthony 2018).

According to Burman and Paul (2018), research shows lack of resilience in children and adolescents brings about psychosocial maladaptation and psychopathology in adulthood. Resilience is described as an individual’s capacity or ability to respond positively in an attempt to cope with adverse situations, it allows them to thrive in what is considered unpleasant situations, a quality that affects one’s ability to cope with tension. It is important to recognize resilience levels and factors at an early age because a lack of resilience has an effect on the outcomes of adverse situations. Resilience can also be taught as research demonstrates, which means, a lack of resilience is not a death sentence for individuals. Proper training programs for resilience can and should be included in every curriculum, and the screening for high-risk individuals who may be faced with the development of mental disorders, suicide tendencies and so forth.

Anasuri and Anthony (2018) discuss a study that was carried out on young adults in Alabama and Tennessee, a study whose purpose was to expose how the young adults coped when faced with adverse or difficult situations, and to compare their levels of resilience based on their individual, caregiver and context resources. The sample of this study consisted of young adults from both Alabama and Tennessee who responded to the Adult Resilience Measure (RRC-ARM). These responses were coded and the data was assessed for basic assumptions and statistical analysis. The study was carried out in order to test several hypotheses. One, stated that there would be no significant difference in levels of resilience among young adults in Alabama and Tennessee. Two, stated that there would be no significant difference in resilience levels between males and females in
young adults from Alabama. Three stated that there would be no significant difference in the resilience levels between male and female young adults from Tennessee. Four, stated that there would be no significant difference in the individual subscale on the resilience measure among young adults from Alabama and Tennessee, and Five, stated that there would be no significant difference in the caregiver subscale on the resilience measure among young adults from Alabama and Tennessee, where higher scores indicated higher levels of characteristics associated with resilience.

After carrying out their study and careful analysis, the researchers of this study found that, for their first hypothesis, results indicated there was no significant difference in the resilience levels between adult participants from both Alabama and Tennessee. For their second hypothesis, results suggested that young adult females in Alabama had higher resilience levels than the young adult males in Alabama. In their third hypothesis, results showed that there was a significant difference in the resilience levels between females and males in Tennessee, with the females having shown higher resilience levels than the young adult males in Tennessee, indicated by higher levels of characteristics associated with resilience. Hence their hypothesis three was not supported. For their fourth hypothesis, results showed that the young adults in Tennessee and Alabama had individual resilience components present in their lives which resulted in high levels of resilience, supporting hypothesis four which stated that there would be no significant difference in the individual subscales on the resilience measure among young adults from Alabama and Tennessee. Finally, in hypothesis five, scores from young adults in Tennessee and Alabama had caregiving resilience components present in their lives which resulted in high levels of resilience, supporting hypothesis five.

The available information clearly shows the need for resilience in schools, yet studies done to show these levels among high school students in different learning
environments is minimal. More research needs to be carried out to find out what the
different levels of resilience are among adolescents in different regions around the world,
to help find out what environments work to build resilience and which ones don’t. This is
a gap in research that needed to be addressed as a way forward.

2.4.2 Suicide ideation in schools

According to Peltez and Pengpid (2012), in 2004, the fourth leading cause of
death among 10-24 year olds globally, was attributed to suicide. It is more common to
have suicide ideations without a plan or an attempt, however, when this ideation is
accompanied by a plan and an attempt, it becomes a matter of concern. Peltez & Pengpid
(2012) discuss studies done on adolescents that show that the highest prevalence of
suicides was among low and middle income countries, with rates as high as 27.9% of
Kenyans having had ideations. Other countries included China at 17.1%, Uganda at
23.1% and Zambia at 31.9%. Peltez and Pengpid go on to discuss some of the factors that
are associated with the risk of adolescent suicide, these include social integration,
perception of family and peer support, childhood abuse/neglect and peer victimization,
which are all external factors that can be addressed.

A study conducted in California by Benbenishty, Astor and Roziner (2017),
showed that different learning environments had an effect on the chances of suicide, with
different levels of suicide ideations (rates ranged between 4% and 67%) regardless of
individual factors. This suggests that school-level factors explained more than twice of
the suicide ideations compared to individual factors (Benbenishty et al, 2017). According
to Benbenishty et al. suicide is a primary cause of death among adolescents and young
adults around the world, with suicide ideation increasing dramatically at the age of 12,
and continuing to increase consistently until the age of 18. Family environment is
sometimes reported as a critical factor to understanding suicide ideation. Studies have shown that 86% of parents “were unaware of their child’s suicidal behaviour” with 90% of suicidal youth feeling that their families don’t understand them (Suicide prevention coalition of Warren and Clinton Counties, 2010, p. 5).

This study however, did not look to confirm this finding on parental awareness. Ziaei et al. (2017) talk about the risk adolescents are faced with due to their proneness to suicide ideation, which eventually leads to suicide. This is because the ideation leads to attempts, and the more the attempts, the more likely the chances of success with each attempt. “According to a systemic review, around one third of adolescents aged 12-20 years have reported suicide ideation” (Ziaei et al, 2017, p1). Adolescence is a time of many changes for every individual who must go through it since it is a transitional stage from childhood to adulthood. Some of these changes include physical growth, new social relations, and emotions that cause strain, anxiety and a great deal of pressure on them. These pressures and anxieties can lead to risk of suicide without the guidance and support from society and parents. There are many other factors that can lead to adolescent suicidal behaviour, these can be divided into two categories, psychological problems such as loneliness and worry, and, socio-environmental factors such as lack of parental and peer support, substance abuse and being bullied or sexual abuse (Ziaei et al. 2017).

Benbenishty et al. suggest that this problem can be exacerbated by negative school climates. This is because positive school environments provide a sense of safety and security, providing the students with a shield from community insecurity, and, providing adult and peer social support, which helps moderate the effects of mental health difficulties. This study looked to confirm this by looking at the levels of resilience in boys, girls and mixed schools in the different sub-counties of Kisumu.
2.4.3 Violence in schools

Study.com (2003) describes school violence as activities that bring disturbances in an educational system. This includes verbal and physical altercations, and even destruction of property. It causes physical and/or psychological harm to another individual, school, or community. The USA has had some of the world’s worst examples of school violence. These include the February 2012 shooting that happened at Chardon high school in Ohio, where a 16-year-old was killed and four others were wounded. In addition, a more recent September 2017 Freeman high school shooting where one student was killed and 3 others injured (CNN, 2017). According to Study.com (2003), some of the causes of school violence include impoverished communities, poor academic success, history of violence, poor family structure, the use of alcohol, tobacco or drugs, being bullied by others, biological factors such as genetic makeup, and behaviour factors such as impulsiveness, attention deficit disorder and hyperactivity. Other psychological factors such as personality and stress disorders may also contribute, i.e. students with narcissistic personality disorder may have an inclination towards violence.

In Kenya, school violence includes the more common forms such as bullying. However, whereas in the USA shootings are more prominent, in Kenya school strikes that lead to tragedies such as loss of human life and destruction of property are a common place (Wango, 2003). Some of the reasons for these acts of violence in Kenyan schools were overloaded curriculums, autocratic school administration, drugs and substances, poor living conditions in schools, excessive use of corporal punishment and lack of effective guidance and counselling services among others (Juma, 2008). An example of the consequences of such conditions was an incident in 2001 where 68 students were burnt to death and many others injured after a dorm was set on fire by two boys (Juma, 2008). In addition, as seen in a more recent case where a 14-year-old girl was accused of
starting a fire in a dormitory that housed 338 form one students in a suicide attempt (Ndori, 2017). Studies that show what the correlations between healthy resilience and violent behaviour are hard to come by. There have been studies that look for the correlation between resilience in young people living with violence (exposure to violence) and self-harm. A study done by Huang and Mossige (2015) looked at this very topic among Norwegian youth. They found a negative correlation between the two stating, “Resilience scale for adolescents correlates significantly and negatively with psychological problems among all young people, and that this correlation is substantially stronger for those youths who reported violent experiences and those who engaged in self-harm” (Huang & Mossige, 2015, p231).

Netshitangani (2014) discusses school violence as a common problem around the world that is multifaceted. This makes it a problem that is difficult for researchers and practitioners to explain its causes. School based violence is something that is especially common in South Africa, and according to the South African Human Rights Commission report on school-based violence (2008), some of the factors contributing to school-based violence include the different social settings within which young people operate, and these include their school environments, family and broader communities in which they live. Netshitangani quotes Burton and Leoschut (2012), who discuss the different settings in which children find themselves and the people they come into contact with, as some of the factors that converge to create a significant source of risk for violence. In South Africa particularly, some of the reasons mentioned to be cause of these risk for violence include poverty, unemployment, patriarchal notions of masculinity, vulnerabilities of families and exposure to violence in childhood, widespread access to firearms, substance abuse, peer group influences, expulsion and suspension of learners from schools due to bad behaviour, weak enforcement culture, and failure to uphold safety as a basic right.
Much of the information discussed in the literature by Netshitangani (2014) was compiled with reference to current international debate around learners who are exposed to different kinds of crime and violence at schools. These include physical and sexual assaults, robberies, intimidation, gang violence, bulling and so forth (Burton & Leoschut, 2012; SACE report on school-based violence report, 2011; Brown & Winterton, 2010; Burton, 2008a; Du Plessis, 2008; De Wet, 2007; White S, 2007; Netshitangani, 2014).

The reason given for school-based violence in this article followed the normalization theory, a theoretical framework influenced by the work of Ward (2007, in Burton, 2007). This theory suggests that the reason children are more likely to use violence in their lives is because of exposure to more risk factors than protective factors.

Metal detectors, security guards, closed-circuit television, locking all doors and windows except for one or two entrances, and conducting shake-down searches and locker checks are some of the conventional law enforcement methods applied in the school environments to help curb violence. And although these methods can sometimes prove effective, traditional law enforcement methods may carry with them or cause some negative side effects e.g. significant financial burden, a reduction of time for classroom instruction, and a decline in both teacher and student morale. These traditional law enforcement methods also create pervasive atmospheres of apprehension among staff, learners and parents.

Mncube and Harber (2013) speak on the impact of external violence on schools and how this has an impact on education. Quoting global information from UNICEF, Mncube and Harber portray the extent to which violence affects schools in other parts of the world, stating that children are not only unintended victims of violence but also deliberate targets in areas of armed conflict. Not only does this occur, it happens to enormous numbers of children, “millions who have been killed, disabled, orphaned,
sexually exploited and abused, abducted and recruited as soldiers, uprooted from their homes, separated from their families and faced with heightened risk of disease and malnutrition” (UNICEF, 2001; Mncube & Harber, 2013). What ends up happening when children are exposed to these conditions is the increase in school dropout, low attendance, teenage pregnancy, sexually transmitted disease, community disintegration and academic underperformance. This also means serious long-standing physical, emotional and psychological problems for both the teachers and students (Mncube & Harber, 2013).

According to Netshitangani (2014), there are many causes and reasons for in-school violence as discussed in the study, the most influential of these being the extent to which the child sees violence as normal because of how much violence they have been exposed to i.e. normalization. Normalization occurs when children are exposed to more risk factors than protective factors making them more prone to violence. A lack of values that should have been instilled by parents leads to lack of respect from children, which also exacerbates the situation. Unguided exposure to mass media means children are exposed to material that when imitated leads to acts of violence while poor socioeconomic backgrounds allows them the opportunities to engage in criminal activities in order to acquire basic necessities. It is because of the normalization to being violent that school-based reduction measures must incorporate invitational educational theories of practice rather than just the traditional law enforcement methods.

According to Grobler (2018), in South Africa, school based violence is a very real part of reality for those who must function within this environment, which includes teachers. This is why there is a growing interest in studies that investigate the effects of violence on teachers in South Africa. These teachers are affected both on an emotional/personal level as well as on a professional level. The personal level effects of school based violence on teachers include stress that manifests itself as increased anxiety and
headaches, depression, low self-esteem and feelings of worthlessness, helplessness, frustration, shame and guilt (Bester & Du Plessis, 2010; De Wet, 2010; Taole & Ramorola, 2014; Shields et al, 2015; Grobler, 2018) exhaustion and disillusionment (Davids & Waghid, 2016; Grobler, 2018). Grobler (2018) goes on to quote other authors who discuss the effects of school-based violence on the teachers’ personal relationships with family members and peers due to exposure to feelings of social isolation and violence. They are pushed into experiences that leave them feeling traumatized, distressed etc. These lead to stress related illnesses such as high-blood pressure, stomach ulcers and even making some of the teachers meet criteria for post-traumatic stress disorder. What these effects of school-based violence ends up having, is to create an overwhelming negativity towards learners by teachers. This is the effect school based violence has on teachers on a professional level, it creates an unwillingness to help or assist with learning in the classroom (Bester & Du Plessis, 2010; Grobler, 2018) which leaves the profession of teaching in a mediocre state, lack of enthusiasm, inability to control tempers, disintegration of teaching and learning, and diminished reputations. These effects also leave teachers feeling the need to use violence and aggression themselves, as a means of corporal punishment, which as stated earlier creates a continuous circle of negative effects (Grobler, 2018)

2.5 Summary

This chapter looked at the theoretical framework of the study, reviewing the different theories that encapsulate the workings of the study; these are Resilience Theory and Strain Theory. It also looked at the way in which the different elements and variables of the study come together in the conceptual framework, and finally a review of what the literature says about reliance, violence and suicide in schools. Some of the research gaps found included a lack of satisfactory information on levels of resilience in different
regions and learning environments, and a lack of data on levels of resilience in violent individuals.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Rajasekar, Philominathan and Chinnathambi (2013) describe research methods as that which involves the various procedures, schemes and algorithms that are used or applied in research. These include theoretical procedures, experimental studies, numerical schemes, statistical approaches etc., and are considered planned, scientific and value-neutral. The research methodology on the other hand is defined as a systemic way to solve a problem. It involves the procedures used by researchers in their work to describe, explain and predict phenomenon. This chapter looked at the research design, what the population group of the study was and which sub-counties they were selected from. The sample size was also calculated and discussed in this chapter as well as a brief of how the data was collected and analysed. This chapter also looked at some of the ethical considerations that were involved in the study and what was done to maintain a high standard of research in the face of these ethical boundaries.

3.2 Research Design

This study was a correlational research study that looked at the relationship among the different variables of resilience and deviant behaviour in different regions of Kisumu. Bhat (n.d) defines correlational research as non-experimental method of conducting research, when the researcher measures two variables and tries to understand and assess the statistical relationship between them, with little to no influence from any extraneous variable. Bhat goes on to explain that in correlational research there can be one of three outcomes, or, essentially, there are three types of correlational research. There is positive correlation, in which the relationship between two variables shows that as one variable increases, it leads to an increase in the other variable and vice versa. Next
there is negative correlation outcome, in which as one variable increases, the second variable decreases and vice versa. Finally, there is no correlation outcome, meaning that change in one variable may not necessarily see a change in the other variable. These correlations also have strengths of relation. With strong correlations, it means the two variables strongly influence one another, while those with weak correlations do not influence each other as strongly.

3.3 Population

The population for this study consisted of high-school students and teachers, more specifically those of form one and two. This is because these students are relatively new to high school and are still considered vulnerable; they are assumed to have a higher chance of suicide and deviant behaviour because of their lack of experience.

Corroborative information was collected from the teachers in charge of the form one and two classes, but was only used to compare with the data collected from students. There are 7 sub-counties in Kisumu County. These are Kisumu Central, Kisumu East, Kisumu West, Seme, Muhoroni, Nyando and Nyakach. According to data from the County, the number adolescents of secondary school age are 83,969, of which, 43,203 are female while 40,766 are male.
Table 1. High-school population in Kisumu County

<table>
<thead>
<tr>
<th>Sub-County</th>
<th>No. of Schools</th>
<th>Boys School</th>
<th>Girls School</th>
<th>Mixed School</th>
<th>Form One</th>
<th>Form Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>21</td>
<td>2</td>
<td>2</td>
<td>9</td>
<td>2969</td>
<td>2562</td>
</tr>
<tr>
<td>East</td>
<td>19</td>
<td>0</td>
<td>0</td>
<td>15</td>
<td>1824</td>
<td>1470</td>
</tr>
<tr>
<td>West</td>
<td>38</td>
<td>2</td>
<td>4</td>
<td>30</td>
<td>3971</td>
<td>3638</td>
</tr>
<tr>
<td>Seme</td>
<td>35</td>
<td>2</td>
<td>6</td>
<td>27</td>
<td>3169</td>
<td>2813</td>
</tr>
<tr>
<td>Muhoroni</td>
<td>38</td>
<td>2</td>
<td>5</td>
<td>27</td>
<td>3629</td>
<td>3003</td>
</tr>
<tr>
<td>Nyando</td>
<td>45</td>
<td>4</td>
<td>6</td>
<td>32</td>
<td>3384</td>
<td>3182</td>
</tr>
<tr>
<td>Nyakach</td>
<td>54</td>
<td>2</td>
<td>5</td>
<td>46</td>
<td>5133</td>
<td>4588</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>250</strong></td>
<td><strong>14</strong></td>
<td><strong>28</strong></td>
<td><strong>186</strong></td>
<td><strong>24079</strong></td>
<td><strong>21256</strong></td>
</tr>
</tbody>
</table>

Source: Ministry of Education (2018)

Because of the size of the population, the study selected four sub-counties as shown in Table 2. These sub-counties were selected based on their relatively close distance to one another. Two of these sub-counties are mostly rural (Seme and West) while the other two are mostly urban (Central and East). This study chose two rural and two urban sub-counties to compare whether there were differences in levels of resilience, and deviant behaviour in the two types of communities.
Table 2. Target Population for the study

<table>
<thead>
<tr>
<th>Sub-County</th>
<th>Form One</th>
<th>Form Two</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
<td>Boys</td>
</tr>
<tr>
<td>Seme</td>
<td>1407</td>
<td>1762</td>
<td>1282</td>
</tr>
<tr>
<td>Central</td>
<td>1539</td>
<td>1430</td>
<td>1327</td>
</tr>
<tr>
<td>East</td>
<td>946</td>
<td>878</td>
<td>755</td>
</tr>
<tr>
<td>West</td>
<td>2106</td>
<td>1865</td>
<td>1897</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5998</td>
<td>5935</td>
<td>5261</td>
</tr>
</tbody>
</table>

3.4 Sampling Design

3.4.1 Sampling frame

Sampling frame included a list of all students in forms one and two in the selected schools, from the head teachers or class teachers, and were verified by doing head counts of the students from the selected classes.

3.4.2 Sample Size

For a population size that is known, Kathuri and Pals (1993), offers a formula for estimating the sample size.

\[
S = \frac{X^2 NP (1-P)}{d^2 (N-1) + X^2 P(1-P)}
\]

Kisumu County

S – Sample size

N – Population

P – Proportion (0.5)
d – Accuracy level (0.05)

$X^2$ – Table value which is 3.841

$3.841 \times 22416 \times 0.5 (1-0.5)$

$(0.05)^2 (22416-1) + 3.841 \times 0.5 (1-0.5)$

$S = 378$

Information from teachers was only used to compare to information from students. Table 3 shows the minimum number of students and teachers that would be needed from each sub-county, to reach the target sample size of students and teachers for corroborative information.

**Table 3. Minimum number of students and teachers needed from each sub-county**

<table>
<thead>
<tr>
<th>Sub counties</th>
<th>Boys</th>
<th>Girls</th>
<th>Mixed</th>
<th>total</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seme</td>
<td>30</td>
<td>37</td>
<td>45</td>
<td>112</td>
<td>6</td>
</tr>
<tr>
<td>Central</td>
<td>30</td>
<td>30</td>
<td>40</td>
<td>100</td>
<td>6</td>
</tr>
<tr>
<td>East</td>
<td>0</td>
<td>0</td>
<td>44</td>
<td>44</td>
<td>2</td>
</tr>
<tr>
<td>West</td>
<td>35</td>
<td>40</td>
<td>47</td>
<td>122</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>95</td>
<td>107</td>
<td>176</td>
<td>378</td>
<td>20</td>
</tr>
</tbody>
</table>

**3.4.3 Sampling Techniques**

Four sub-counties were selected out of the seven sub-counties for this study, two of which were mostly rural (Seme and West) while the other two were mostly urban (Central and East). Using stratified sampling, the schools were divided into three strata, boys, girls and mixed schools. In Seme sub-county, there are 2 boys’ schools, 6 girls’ schools and 27 mixed schools. In Central sub-county there are 2 boys’ schools, 2 girls’ schools and 9 mixed schools. In East sub-county, there are 15 mixed schools, while in West sub-county there are 2 boys’ schools, 4 girls’ schools and 30 mixed schools. Once
these strata were complied, simple random selection was used to select 11 high-schools for this study. Kisumu East no boys and girls’ schools were available hence two mixed schools were selected. However, the study only used data from 10 schools because the students failed to sign their consent forms in one of the schools. Once the schools were selected, the researcher collected data from all the form one and two students from each school. For those schools with too many students in each form, 20 form one and 20 form two students were selected at random using class lists. It was done by selecting one student, then skipping the next and then selecting the one after from the class list. This was done until 20 students were selected.

3.5 Data collection instruments

This study used a questionnaire to collect data on resilience, suicide ideations and attitudes towards violent behaviour as a solution to one’s problems from the students, and a corroborative questionnaire, which the teachers completed. The data on resilience was collected using an adaptation of The Child and Youth Resilience Measure, 26-item measure that takes about 20 minutes to complete. For the information on suicide ideation, and violent behaviour, separate questions were developed. They are short Yes/No questions and Likert questions that look to determine the student’s attitudes and feeling when it comes to suicide and violent behaviour. From the teachers, the researcher collected information on how many years of experience they had at the school, what class or form they were in charge of, and how many students they had in that class. The researcher then sought to know if the teachers were aware of any suicidal students in their class with a simple Yes/No question, and how many if so.

This was repeated for violence to find out if the teachers knew of any violent students and how many if so. The resiliency questionnaire’s reliability and validity were
highly preferred due its testing across cultures, while for the deviant behaviour tools, simplicity of questions and literature reviews guided their reliability and validity.

3.5.1 Justification for adopting the Children and Youth Resilience Measure (CYRM-28)

According to the compendium of selected resilience and related measures for children and youth compiled by Darlene Kordich Hall (2010) who states that, “the CYRM is designed as a screening tool to explore the resources (individual, relational, communal, and cultural) available to youth aged 12-23 years old that may bolster their resilience” (Hall, 2010, p4). These individual, relational, communal and cultural elements of resilience are what this study wished to observe. The adolescents’ knowledge of their resources, “the measure has acceptable psychometric properties and is the only measure to look at resilience across cultures” (Hall, 2010, p4).

3.6 Data Collection Procedures

For this study to take place, research authorization was attained from the Institutional Review Board (IRB) at the university, showing that the study abided by the ethics governing research. Once this was done, a letter was presented to National Commission for Science, Technology and Innovation (NACOSTI), and to the County government, to allow the researcher to conduct research within the jurisdiction. Schools of interest were also required to give consent by asking the principals to give approval for the collection of data. Once the appropriate authorities at the schools gave permission, the researcher moved to the form one and two classrooms where the students were briefed on what was required of them. Students were then given 15-20 minutes to complete all questions and return their questionnaire. After completion, all questionnaires were collected, evaluated, and findings were shared with the schools that participated. To ensure confidentiality of the students, no names were required on the questionnaire. Once
the data were collected, the questionnaires were kept in a locked cabinet as they were reviewed, and once the data had been scored and entered into a secure database, the hard copies were destroyed immediately.

3.7 Piloting

To pilot this study, a group of 10-12 school going children from around the country, were randomly subject to a series of questions from the questionnaires. Questions were asked in combination, but not all questions were asked at once. This was done to see if the students had acquired an acceptable range of understanding, for the language used in the questions asked. All participants displayed acceptable understanding of questions asked, however these individuals did not participate in this study.

3.7.1 Validity of the instruments

The instruments used in the study were subject to a series of reviews by experts in the field who helped ensure the instruments remained as unambiguous as possible. This was done by removing, adding and paraphrasing questions to ensure the student understood what was required of them. The CYRM and the violence questionnaires had lower face validity for the participants compared to the suicide assessment tool. However, all instruments had good face validity to supervisors and other researchers who observed the study. All instruments showed good construct validity as they appeared to measure what they were designed to measure. Showing realistic levels of resilience, suicide ideation and violence in the selected regions.
3.7.2 Reliability of the instruments

Reliability analysis of the CYRM-24 was carried out in South Africa and showed a Cronbach’s alpha coefficient (1) on the individual/social scale (α= .82), for familial scale (α= .71), while the community/spiritual scale (α= .70) (Govender, Cowden, Asante, George & Reardon, 2017). The suicide ideation assessment tool showed a Cronbach’s alpha (α= .583) and Cronbach’s alpha based on standardized items (α= .876), while the violence assessment tool showed a Cronbach’s alpha (α= .959) and a Cronbach’s alpha on standardized items (α= .975).

3.8 Ethical Considerations

Because data were collected from young volunteers, consent was sought from the schools’ principals (Appendix II) and assent obtained from the students (Appendix III) who would volunteer to take part in the study. The schools and students were informed on the purpose and the importance of the study, allowing the schools to determine whether they would allow their students to participate.

Since this study involved sensitive matters, the students who would participate were debriefed and given guidance throughout the process. For privacy reasons, student names were not collected. However, where the study did detect cases with risk of suicide, the researcher returned to the respected schools (since school information was collected), and provided psychological assistance (psycho-education) to the class members of those schools with high-risk students. The researcher also left contact details with students for further assistance. Data collected were only kept for the duration of scoring and data entry, after which the questionnaires were immediately destroyed by shredding all questionnaires. Until then all questionnaires were kept locked up in a secure cabinet.
3.9 Data Analysis techniques

The data from the questionnaires were scored by giving each participant’s answer sheet a numerical value, and entered into a database that would indicate demographic information and scores on resilience, suicide ideation and violence. Data from the resilience questionnaire were scored by adding up all the values circled/selected by the students on their Likert scales (1-5), and dividing each total by 130 (for the CYRM-26 used in this study) to get the students’ average score. The suicide ideation questionnaire had 8 questions, starting from question 27 to 34. Q27 required a simple ‘yes’ or ‘no’ answer. A ‘yes’ response was scored one mark. Q28 required the students to give at most 6 reasons they might want to commit suicide and rate each reason on a 1-5 scale. This question could earn each student up-to 30 marks. Q29 required a simple ‘yes’ or ‘no’, with a ‘yes’ response worth 5 marks. Q30 was related to the duration of suicide ideation, and a student could score 3, 2 or 1 mark depending on the duration of suicide ideation selected. If the students selected ‘no’ on Q31 and Q33 this earned them 1 mark each, and Q34 earn them 2 marks. Q32 was not scored, as it was safety question. For the violence questionnaire there were 9 questions on a 1-3 Likert scale, and so points were either added or subtracted from the total of 27 points. For Q35, Q36, Q37 points were subtracted, Q38, Q39, Q40 points were added, Q41 was subtracted and Q42 and Q43 were added. This meant the students could score a high of 38 points and a low of 20 based on the type of questions, meaning the mid-mark/0-mark was 29 points i.e. 38 points is +9 points while 20 is -9 points. Once a total was calculated by adding or subtracting, this value was subtracted from 29 to get a +/- value then divided by 9 to get a percentage.

This data was then entered into SPSS for analysis. The final results have been presented to show the levels of resilience against suicide ideation and resilience against violence for each school. This information has been compared as resilience and deviant
behaviour in the different sub-counties in Kisumu using tables and graphs. Corroborative information from the teachers was analysed as follows; each teacher responsible for the class was asked a simple yes/no question to find out if there were any students in the class who they thought were at risk of suicide and violence, after which they were asked to give the number of students they thought were at risk of suicide and violence. These figures were then compared to findings from the final analysis of the students’ responses.

3.10 Chapter Summary

This chapter has discussed the research design of the study, which is a non-experimental correlational study. It has highlighted the population of the study which included high school students from form one and two, urban and rural sub-counties, the chapter also discussed the sampling design and the sample size which included at least 378 volunteers. The data collection instruments included questionnaires, of which one section was an adaptation of the Children and Youth resilience measure. The chapter also explained data collection procedures, ethical considerations and the how the data was analysed.
CHAPTER FOUR
RESULTS

4.1 Introduction

This chapter covers the results of the study, including related background information and demographic details of respondents and description of variables captured. The results have been presented by arranging all findings according to their objectives. For each objective, the statistically calculated and analyzed results are presented under their respective headings. The study used boys and girls in the first (Form one) and second (Form two) years of high school. A total of 414 students participated in the study, representing a 91% response rate, and all data collected from the students was corroborated by class teachers who participated. There was a slightly higher proportion of boys participating in the study due to the inability to get a girls’ school to participate from Kisumu west. The number of male respondents was therefore higher than female respondents by 58 participants.

4.2 Background Information

The goal of this study was to measure levels of Resilience, Suicide risk and Violence responses among high-school students in Kisumu County. The study collected data from 414 students from 4 sub-counties in Kisumu County. Out of this number 54.6% of the students were from form 1 (226 participants), and the form 2 students consisted of 45.4% (188 participants), 178 of them were females and 236 of them were males. 3.1% of the respondents said they did not have any siblings, 23.2% of respondents reported being in relationships and about 66% of the student still had parents who were alive and married, with the remaining 34% split between those whose parents had passed away, divorced or were from single parent home. Table 4 shows age range of the students in the study, that is, 13-18 years, and the frequency with which each age occurred in the sample.
A majority of the students being of age 16 and 15 respectively, and the mean age of students in this study was 15.52 years. Two of the respondents however did not indicate their ages.

Table 4. Student age range and frequency

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
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</thead>
<tbody>
<tr>
<td>13</td>
<td>6</td>
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<tr>
<td>14</td>
<td>37</td>
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<td>15</td>
<td>119</td>
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<td>16</td>
<td>237</td>
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<tr>
<td>17</td>
<td>11</td>
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<tr>
<td>18</td>
<td>2</td>
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<tr>
<td>Total</td>
<td>412</td>
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</table>

4.3 Levels of resilience among students in their first two years of high-school

The study found that the levels of resilience in these sub-counties were generally high with the mode resilience being 82%, and the mean resilience of the form 1 and 2 students being 80.14%.
Figure 2. Resiliency histogram with normal curve

The average score on the suicide risk questionnaire was 6.55% and the average score on the violence questionnaire was, -56.17%; negative scores being responses that are against violence while positive responses being pro-violence.

Figure 3. Suicide risk histogram with normal curve
Figure 3 shows that even though the mean suicide risk was 6.55%, a majority of the students fell within the 0% risk bracket. However, the average risk was pushed up due to the fact that there were students who scored very high on their suicide risk. Figure 4 shows that majority of the students showed an aversion to violence by scoring negative scores on their violence response, showing that the normal response for adolescents in Kisumu county is against violence.

Table 5 shows the difference in means between the boys and girls for resilience, suicide and violence.

**Table 5. Means**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Resiliency Score</th>
<th>Suicide Risk</th>
<th>Violence Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female Means</td>
<td>.8148</td>
<td>.0638</td>
<td>-.5643</td>
</tr>
<tr>
<td>Male Means</td>
<td>.7914</td>
<td>.0667</td>
<td>-.5597</td>
</tr>
<tr>
<td>Total</td>
<td>.8014</td>
<td>.0655</td>
<td>-.5617</td>
</tr>
</tbody>
</table>
In both the rural and urban sub-counties, the study found that the female population scored higher on their resiliency scores by 2.34% with the females scoring 81.48% on average and the males scoring 79.14% on average. In the Suicide risk responses, the males scored higher that the females by 0.29% with the males scoring 6.67% on average and the females scoring 6.38% on average. For the violence responses, the females showed a higher score against violence than the males by 0.46% with the females scoring -56.43% on average and the males scoring -55.97% on average. The means show that the females are considerably more resilient than the males, that on average, the males are at greater risk of suicide than the female population by 0.29%, and the boys are more inclined to be violent than the girls, but by a negligible amount.

The occurrence of moderate to high levels of resilience should not take away from the fact that there were responses on the resilience questionnaire that fell below average. The study found that the students who scored 70% and below on their resiliency questionnaire, composed of students who did not feel like they belonged or supported, either to/by their community or to/by their peer groups and in some cases did not know where to turn to for help if they had any struggles. And as the levels of resilience lowered the less the students felt in control of their lives. However, only 17% of the students in the study responded with a resilience equal to and below 70%. Out of all the 414 participants, the study found that only 5 students scored 50% and below on their resiliency score (and none of the participants scored less than a 31% on their questionnaires). This indicates that a majority of the form 1 and 2 students in Kisumu County have acceptable levels of resilience.
4.4 Differences in resilience among students of the same gender from different sub-counties

This research question hypothesized that there would be no significant difference in levels of resilience among students of the same gender between the rural and urban sub-counties. For the female sample, the study found that those from the rural county scored an average of 83.13% and had a mode of 82% on their resiliency questionnaires, while the females from the urban County scored an average of 80.03% and had a mode of 89% on their resiliency questionnaire, showing a difference in average of 3.1% between the two counties. However, the rural group’s lowest score on resilience was 47%, while the lowest score for the urban group was 50%.

For the male sample, the study found that the rural county scored an average of 78.27% and had a mode of 72%, while the urban group scored an average of 80.38% and had a mode of 82%, showing a difference in average of 2.11% between the two groups. The lowest score for the rural male population was 31%, while the lowest score for the urban population was 51%.

These results have disproven the hypothesis that stated there would be no significant differences in levels of resilience between students of the same gender in the rural and urban sub-counties. Results show that the females from the urban areas feel less resilient than the ones from the rural areas on average by 3.1%, while the males from the urban areas feel more resilient that the males from the rural areas on average by 2.11%. As whole in the rural areas, the females score higher than the males on resilience by 4.86%, while in the urban areas the males score higher than the females in resilience by 0.35% which is considerably negligible.
4.5 Correlation between the levels of resilience and suicide ideation among high-school students

A Pearson product-moment correlation coefficient was computed to assess the relationship between Resilience and Suicide risk. There was a negative correlation between the two variables $r= -0.222$, $n= 414$, $p= 0.000$.

![Figure 5. Correlation between resilience and suicide](image)

This indicates that in most cases as the levels of resilience increased, levels of suicide ideation and risk reduced. This however does not mean that students with high levels of resilience did not have any suicide ideation, or were not at risk if they did eventually have suicide ideation. During the data analysis, it was noted that even those students with high levels of resilience reported having suicide ideation at levels that were in some cases higher than average. However, the overall correlation indicates that as a whole, as resilience increases, suicide ideation and risk reduces in most cases.

To explore those cases in which students had high levels of resilience and equally high levels of suicide ideation and risk, various sub-sections of the resiliency
questionnaire were revisited to look for patterns that may have resulted in this relationship between resilience and suicide. There were sub-sections of the resiliency questionnaire that needed to be revisited, to see if there were sub-section that these students had in common. Questions 2, 7, 9, 11 and 19 indicated individual personal skills, questions 12 and 16 indicated individual peer support, and questions 4, 13, 18 and 23 indicated individual social skills. Question 5 indicated primary caregiver physical caregiving. The CYRM 26 used in this study did not include the question ‘is there enough to eat at home when you are hungry?’ making the physical caregiving sub-section less informative than it could have been. Questions 6, 10, 15, 22 and 24 indicated primary caregiver psychological caregiving. Questions 20, 21 and 8 indicated spiritual context, questions 3 and 14 indicated educational context and questions 1, 26, 17 and 25 indicated cultural context, all of which (context questions) showed the students’ sense of belonging.

To analyze the sub-sections, the study selected those schools with high resilience score and equally high suicide risk scores. One urban and one rural school were selected, and all the students who showed suicide risk were reexamined, regardless of their resiliency score. Table 6 shows all the average scores the students from the rural and urban sub-counties scored on the different sub-sections of their resiliency questionnaires. The study showed that for both the rural and the urban school, students scored lowest on their peers support sub-section, suggesting that this could be the primary driver for suicide risk amongst the form one and two adolescents. The analysis of the sub-sections also found that the rural adolescents scored higher on their individual personal skills than the urban students. However, both urban and rural students scored the same on their social skill. Both the rural and urban adolescents scored high on their physical caregiving sub-section but the urban students scored higher. When it came to the psychological caregiving sub-section, the rural students scored higher. The urban students scored higher
on their spiritual and cultural context sub-sections while the rural students scored higher on the educational context sub-section, perhaps an indication that education means more to the rural child than the urban child.

**Table 6. Sub-scales**

<table>
<thead>
<tr>
<th>Sub-scales</th>
<th>Avera</th>
<th>Person</th>
<th>Peer</th>
<th>Social</th>
<th>Physic</th>
<th>Psych</th>
<th>Spiritual</th>
<th>Educational</th>
<th>Cultural</th>
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| Rural   | 77% | 80% | 65% | 76% | 82% | 81% | 70% | 85% | 72% |
| Urban   | 77% | 76% | 68% | 76% | 95% | 77% | 75% | 73% | 80% |

**4.6 Correlation between resilience and violence response**

A Pearson product-moment correlation coefficient was computed to assess the relationship between Resilience and Violence response. There was a negative correlation between the two variables $r = -0.252$, $n = 412$, $p = 0.000$. This indicates that as the levels of resilience increased violence responses reduced in most cases.
Figure 6. Correlation between resilience and violence

When it came to violence, all students who scored a negative score, were regarded as those students who were against violence, but, that as the score moved towards the positive the more likely they were to be violent. Those with a 0% score were regarded as unpredictable and those with positive scores were regarded as violent students. The study found that about 13 out of the 414 students were unpredictable and violent. When these students’ resiliency scores were reviewed, results showed that none of them scored below a 50% on their resiliency response.

4.7 Chapter Summary

This chapter has covered the findings from the study and what they mean on the surface level. It has shown that the majority of students in Kisumu County have moderate to high levels of resilience but that there are still a few students who show dangerously low levels of resilience. Many of the students do not have suicide ideation or are not at risk, and the boys show slightly more risk of suicide than the girls but by a very small degree. A majority of the students responded with an opposition to violent behavior.
There are differences in levels of resilience between members of the same gender in different sub-counties i.e. the rural and the urban sub-counties. Finally, this study also showed that there are weak negative correlations between resilience and both suicide and violence. The outliers that were discovered in this study will be discussed further in chapter 5.
CHAPTER FIVE
SUMMARY, DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter includes a summary of the study, further discussions of the results that have been presented in chapter four, as well as the conclusions, and recommendations of the study.

5.2 Summary of the study

The purpose of this study was to study the relationship between resilience, suicide and violent behavior/ tendencies. The study looked at levels of resilience in schools, levels of resilience between same genders in different sub-counties, relationship between resilience and suicide, and the relationship between resilience and violence. By using correlational research, the study determined these relationships on a sample size of 414 high-school students from Kisumu County. Stratified sampling was used to place the schools into three strata: boys, girls and mixed schools. Once the schools were selected, simple random sampling was used to select the students that would be used in the study. The information for the study was collected using questionnaires, one of which was an adaptation of the CYRM. For the suicide and violence, questionnaires were developed for the purpose of this study, and were created with help of literature. These two questionnaires were used in this study for the first time and their validity is determined by their simplicity. The data collected were analyzed using computer software which include Excel and SPSS which is a statistical analysis software used to analyze large quantities of data. The results from the study showed that a majority of the adolescents in Kisumu County have acceptable levels of resilience, the females in the rural areas and the males in the urban areas score higher levels of resilience than their counterparts, and there is a
weak negative correlation between resilience and the described deviant behavior of this study.

5.3 Discussion

The study suggested that resilience was a key factor to the continuity of an individual in the face of great adversity, and hence chose this as its independent variable. Education is based on what a given society considers to be important for the future generations to survive and as means of passing on its culture, in a world that will soon be handed over to them, and so all children are forced to go through this process. But what happens when what was important for previous generations survival isn’t considered important by the next? E.g. due to advances in technology; this study looked to find out how such changes to life-space and environment might affect the youth. This study assumes that the most important thing in life is to ensure its continuity, and to give it purpose. For this to happen, resilience is needed, a need to continue living because one has a purpose and an absence of violence in that society is also important for its survival (absence of violence not including absence of healthy conflict). This is why the study looked to examine levels of resilience, suicide ideation and violence responses among the youth of a given community. The study picked Kisumu County because of ease of mobility in the city, allowing the study to examine several sub-counties within a respectable timeframe.

The study was a non-experimental, correlational research study which looked to correlate resilience and deviant behavior. It looked at high-school students in Kisumu County, two urban sub-counties and two rural sub-counties. The study collected data from form one and two high school students from eleven high-schools, selected at random from all the sub-counties. One boy’s, one girl’s and one mixed high-school was picked at random from each sub-county. However, one of the high-schools was left out of
the study because the students did not sign their consent forms as instructed. Data collection took roughly two weeks.

The study has reviled that there is a weak negative correlation between resilience and both suicide and violence. The lowest score a student could score in suicide is a 0% risk, while the next score is a 2% risk, which usually indicated that the student did not have someone to turn to when they did have suicide ideation. The higher the student scored on their suicide questionnaire, the higher their risk of suicide, however, none of the students scored 100% risk on their questionnaire. Out of the 414 students, results showed that 84 students score above 10% risk on their suicide scores, and that out of these 84 students, only 3 students scored below a 59% on their resiliency scores; scoring a 54%, 50% and a 31% on their resiliency questionnaires.

5.3.1 Levels of Resilience among students in their first two years of high-school.

This study has shown that form one and two adolescents (83%) in Kisumu county have acceptable levels of resilience, which is a better sign than findings from studies in India which found that 37.7% and in other parts 46.6% of the adolescents were found to be resilient (Burman & Paul, 2018). Having a high level of resilience however, is like having a cushion at the bottom of a fall; it only increases their chances of surviving a fall, but does not stop one from falling. The results also showed that the female sample had a higher level of resilience than the male sample. Anasuri and Anthony (2018) also discuss this as a finding on young adults in Tennessee and Alabama, a finding which seems to be consistent in many other studies done where levels of resilience were compared between the two genders. Lakomý and Kafková (2017) discuss women’s social engagement with their community, friends and family as the main reason women tend to show greater signs of resilience than men. They believe that through these engagements, women are able to
develop and sense of social resilience, which gives their overall resilience a tremendous boost. The resiliency data in this study comprised of personal skills, peer support, social skills, caregiver physical caregiving, caregiver psychological caregiving, spiritual context, educational context and cultural context. Scores on the resiliency questionnaire were simply a summary of all these elements, and the higher the score, meant the higher the total scores on each sub-section of the resiliency questionnaire. This however, does not mean the students scored highly on all sub-sections, even if their overall resiliency score was high. This meant that even though a student scored highly on their resiliency questionnaire they were still at risk of adversity and could suffer the consequences, however, their chances of overcoming these adversities were increased due to their resourcefulness, hardiness and sense of belonging.

According to Ziavian, Anstiss, Antonious, Baghurst and Sawyer (2012), when individuals possess low levels of resilience, it leads to the development of psychological symptoms such as depression and anxiety. Resilience is a determinant in the relationship between childhood adversity and psychiatric sequela. Sequela defined as “A pathological condition resulting from a prior disease, injury, or attack” (MedicineNet). It is a strong predictor of positive affect which helps regulate one’s proneness to depression and anxiety. This information is backed by studies such as those conducted on Norwegian adolescents, which showed that diminished resilience had a strong association with symptoms such as depression and anxiety, which makes it an important element when considering interventions to alleviating psychological symptoms. In a study conducted by Ziavian et al (2012), results indicated that resilience in refugee adolescents had a mean score of M=62.2 (SD=20.4) on the Connor-Davidson Resilience Scale (CD-RISC), where the CD-RISC produces results on a scale of 0-100 with higher scores reflecting greater resilience. To help put this score into perspective, this score was found to be lower than
that found in a different study by Connor and Davidson on the general population who had a mean of $M=80.4$ (SD=12.8). Primary care patients showed an average resilience of $M=71.8$ (SD=18.4), while psychiatric out patients scored an average of $M=68.0$ (SD=15.3), which is also the score found among generalized anxiety disorder patients who had a mean resilience of $M=62.4$ (SD=10.7), and finally post-traumatic disorder patients scored a mean of $M=47.8$ (SD=19.5).

This data shows that most of the resilience levels detected in Kisumu county adolescents, even though measured via the CYRM, is similar to those found in the general population in Connor and Davidson’s study; $M=80.14$ and $M=80.4$ respectively. Margaret Ness (2013) discusses how development and changes in society bring with them new experiences that could potentially be a source of stress for adolescents, stress and hassle which can potentially be a threat to healthy adolescent development and well-being. Adolescents however do experience stressors that are considered a normal part of their transitional period. Some of these include pubertal challenges, pressure from friends and romantic partners, conflict with parents, responsibilities, academic pressure, search for autonomy and concerns about the future.

In a study conducted by Ness (2013) on Norwegian adolescents to gain knowledge on happiness, daily stress and resilience in adolescents, several important findings emerged. First was that in general the adolescents were happy, which was a finding that was consistent with previous studies. The study also showed that the adolescents experienced moderate levels of daily stress, similar to previous studies. And finally, the adolescents also reported relatively high levels of resilience, similar to findings in other studies which demonstrated moderate to high levels of resilience among adolescents. This information is similar to findings from this study which found that
adolescents in Kisumu County (83%) presented with moderate to high levels of resilience.

The International Resilience Project defines resilience as “a universal capacity that allows a person or group to prevent, minimalize or overcome damaging effects of adversity.” (Kiswardy, 2012). Resilience may improve the lives of those who overcome their adversity and the resilient behavior may be an attempt to maintain normal development despite the adversity. It can also be seen as a promoter of growth and social cohesion beyond the present level of functioning. This resilience can also be said to be developed in anticipation of inevitable adversity rather than because of adversity (Grotberg 1997; Kiswardy 2012). Barnova (2017) defines competence as strategies of effective adaptation. It is in the individual’s ability to achieve reasonable success in major developmental tasks expected, and accomplishments should take into consideration the person’s age, gender, culture, society and time. Narrowly it is defined in the context of domains of achievement such as academics, peer acceptance or athletics (Masten & Coastworth, 1998, p.206; Barova, 2017). Kiswardy (2012) explains that resilience is an interactive and accumulative process of developing a variety of skills, abilities, knowledge and insight. These elements tend to be things a person needs for successful adaptation or to overcome adversity. These elements are expressed in the individual’s personal strengths, social and interpersonal skills and external support and resources that they can identify and exploit.

At young ages individuals often display competencies in one sphere but not in others, but as individuals mature the more important these competencies become to them, because they are essential for an individual’s healthy functioning, allowing them to handle any situation or activity, and introduce new knowledge into broader context (Barnova, 2017). Barnova defines resilience as a kind of competence that is manifested
after or in preparation of significant challenge as an attempt to adapt or develop. Kaplan (as cited in McCubbin, 2001, p.8; Barnova, 2017) explains how resilience comes about as a chance to achieve levels of development that go beyond what would have been reached without stress as a kind of posttraumatic growth. This is because children who develop well can be considered adaptive or competent but not necessarily resilient, unless they had an adversity they had overcome. Comparing these competent children who have experienced little adversity with resilient children who have had to grow up with high levels of adversity, they both show similar awareness of self-worth, self-efficacy and mental health, however, the resilient children sometime perform better (Masten, 1997; Barnova, 2017). This leads researchers to conclude that resilience can only be developed when the individual is exposed to a stressor that does not exceed manageable or tolerable intensity. It is an individual’s capacity to maintain his/her competencies when exposed to significant adversity (Barnova, 2017).

5.3.2 Significant difference in resilience among students of the same gender

The study showed that there were some differences in resiliency among the genders, and even between the same genders in different sub-counties. The first difference that was noted was that as a whole (both in the rural and urban area) the female sample group had a higher resilience average than the male sample group, with the females scoring 81.48% and the males 79.14%, showing a difference of 2.34% in resiliency between the two genders. This difference may be due to the fact that females are considered to be more communal and have stronger support systems between them as a gender, compared to the male population. Bezek (2010) quotes authors who discuss gender differences in early ages that continue into adolescence influencing the way in which individuals attain their resilience, partly because each gender uses different resources to help them cope. The male population tend to be more individualistic when
dealing with adversity, whereas females rely on social support and communal means (Sneed et al.; Bezek, 2010). Sun & Stewart (2007) discuss a study that was carried out on Australian primary school aged children. The study looked at 2492 children (1109 boys and 1163 girls) in 2004. The study was conducted to assess self-perceptions of resilience and associated protective factors, to explore the effects of age and gender on resilience, and protective factors for mental health in primary school children. The study found that when it came to the sub-scales such as communication, empathy, help-seeking and, goal and aspirations, the males scored lower than the females in all the sub-scales. The study also showed that when it came to protective factors the boys showed lower scores than the girls in all sub-scales except for ‘prosocial peers’ and ‘meaningful participation in social activities’.

When it came to the difference in resiliency between the female sample group in the rural areas, and female sample group from the urban areas, the girls in the rural areas scored higher than the urban girls by 3.1% with the rural girls scoring and average of 83.13% and the urban girls scoring 80.03%. However, when it came to the male sample groups, the urban male sample group scored higher than the rural male sample by 2.11%, with the urban boys scoring 80.38% and the rural boys scoring 78.27%. What was interesting about these findings was that the urban boys and girl scored averages that were very close, i.e. they scored about the same average in resilience. The real difference was between the rural girl and boys, who had a difference of 4.86% in their average resilience, which perhaps may be a sign of neglect of the rural boys. Mwangi, Muriithireri, Mwaniki & Wambugu (2018) discuss studies conducted in parts around the world on resilience, one of which was carried out by Sarwar, Inamullah, Khan and Anwar (2010) on urban and rural Pakistani, secondary student. The researchers of the study found that there was no difference in the level of resilience between the two. While, in yet
another study by Mallick and Kaur (2016) found that in India, urban students possessed higher levels of academic resilience than their rural counterparts. This could have something to do with the fact that other studies have shown that the type of school a student is exposed to does have an effect on their academic resilience and achievement, a trend also seen in Kisumu county. Mwangi et al. go on to quote Martin and Yeung (2017) who established that there was an effect of schools on levels of academic resilience and achievement, when a study they conducted illustrated that the girls’ boarding schools seemed to have the most favorable effects, while the boys’ boarding schools were found to have the least scores. This is consistent with the findings of the study conducted in Kisumu county of rural and urban adolescent students, since majority of the boarding schools are located in the rural regions of Kisumu county. This could also explain why the urban boys and girls had similar levels of resilience. What the study by Martin and Yeung showed was that the boys’ boarding schools did not adequately promote the development and use of academic resilience, or that the boys’ boarding schools were not well equipped to effectively utilize resilience factors at the individual and environmental level (Mwangi et al., 2017).

Graber, Pichon & Carabine (2015) highlight challenges in resilience research, stating that these challenges come about due to the non-linear nature of resilience development, the use of subjective and objective indicators of resilience, and the difficulty recording baseline and pre-trauma functioning. Graber et al. mention that what literature there exists does not distinguish well between resilience outcomes and resilience processes. Resilience is expressed differently over a lifetime because of factors such as gender, culture and age which affect the way in which resilience is expressed. In the early years of childhood and adolescence, resilience is greatly based on family processes and the development of effective coping skills, while in adulthood the
resilience may be differentially affected by entrenched patterns of coping, physiological stress responses and other social relationships. Adversities from the past also help harden the individual against later traumas because the individual is forced to develop resources, relationships and effective coping skills.

Shean (2015) illustrates how the increase in exposure to risk for children, the more likely the child was to experience a psychiatric disorder. No risk or one risk exposure led to a 1% chance of experiencing a psychiatric disorder, and as the number of exposures increased, say to four or more times, the chances of experiencing a psychiatric disorder increased up to 21% (Rutter, 1979; Shean, 2015). What these numbers tell us is that increased exposure to risk factors creates cumulative effect that put children at risk of poor mental health later in life. However, in other studies such as the Isle of Wight study, twins whose mothers were affected with schizophrenia showed varied chances of experiencing a psychiatric disorder based on the relationship they had with their parent. Rutter found that when a twin had a parental affection and a good relationship with either parent, they had a 25% chance of experiencing a psychiatric disorder while those who lacked a relationship with either of their parents, had a 75% chance of experiencing a psychiatric disorder (Rutter, 1979; Shean, 2015). This relationship with parents is a recurring theme that influences children’s outcomes in resilience research. Rutter also discovered in a study conducted on orphans, that orphaned children who had institutional deprivation suffered greater impact on long-term well-being than the early privation of nutrition (Shean; 2015).

Ungar (2018), mentions the broad understanding of resilience and its systems as ‘the capacity for a system to anticipate, adapt and reorganize itself when faced with adversity so as to promote and sustain its proper functioning. Environmental scientists theorize resilience as a complex process that acknowledges interactions within and
between systems that seek to create regimes of behavior that accommodate anxiety invoking elements in their environments. Ecological resilience describes resilience as the magnitude of disturbance a system can absorb before an alternate system state. It assures the system has a variety of alternate equilibria and looks at the capacity of a system to maintain its essential structure and function, even if this means doing this by reorganizing itself, when confronted with adversity or shocks. These understandings in ecological resilience is creating a growing interest in social-ecological systems of resilience among ecologists, to account for the inclusion of human-made stressors on ecological systems, and how those systems adapt to the needs of the people who interact with them.

This study which was conducted on adolescent students in Kisumu county showed that there were differences in levels of resilience between members of the same gender in the different sub-counties, that is the urban and rural sub-counties, which may be due to different learning environments. However, the fact that the rural boys scored the lowest on their resilience questionnaires could be a sign that the rural boys perhaps lack challenges in their lives that force them to develop a sense of resilience in anticipation and preparation for what is to come, or, it could be a sign that the rural boys are in environments that do not cultivate resilience.

5.3.3 Correlation between these levels of resilience and suicide ideation

There was a weak correlation between resilience and suicide at the end of the study’s data analysis. This is because there were some students with high resiliency scores who also scored high on their suicide ideation questionnaires. This finding does resonate with the literature, which states that in many cases the parents of suicidal children were not aware of their children’s suicidal behavior (Suicide prevention coalition of Warren and Clinton Counties, 2010, p. 5). This is due to the fact that sometimes a parent feels they have given their child everything, and hence cannot understand why
their child would entertain suicide. But, as the data has shown, the most common factor among the students in this study, who scored high on their suicide ideation questionnaire, was a lack of peer support. The researcher also noticed that all the students in some of the schools scored 0%, with a few scoring 2% on the suicide ideation questionnaires, while the students in other schools scored very high on their suicide ideation questionnaires. This also resonated with the literature which states that school environments can have an effect on students’ suicide ideation. Benbenishty et al. (2017) discusses how different learning environments had different levels of suicide ideation, ranging between 4% and 67% regardless of individual factors.

Suicide is a common occurrence in young adults, it is one of the leading threats to life among adolescents and young adults according to literature which say, “One of the most serious difficulties facing many adolescents is the issue of suicidality. “Suicide rates have risen dramatically in several industrialized countries in the past decade” (Everall, Altrows and Paulson, 2006, p.461). Mclean, Maxwell, Platt, Harris and Jepson (2008), say that the manner in which various risk and protective factors at individual and psychological levels may impact in different ways on different individuals and communities at different times, and this is something that must be taken into consideration when trying to understand which factors promote resiliency and vulnerability among suicidal individuals.

Suicide is complex because risk factors can change with circumstance. What may be considered a risk or a protective factor for one person may not be the same for another in similar circumstances (Mclean et al., 2008). Adolescents experience events in their lives and sometimes the psychosocial problems they face, both natural ones and adverse conditions can be seen as events that they cannot overcome. These events are viewed as threatening and even unsolvable, this leads some adolescents and young people to think
suicide is their only solution or way out (Sanchez-Teruel, 2010; Teruel & Auxiliadora, 2014). Everal et al. conducted a study to look into resilience in suicidal female adolescents, and what they found was that for individuals who overcame suicidality, results suggested that resilience is a dynamic process involving reciprocal interactions between people and their environment. When the individual is able to take advantage of the internal and external resources and grab opportunities that come their way, people are able to shape their environments and circumstances so that they were able to heal.

According to Teruel & Auxiliadora (2014), suicide risk for individuals is low at early ages of childhood but begins to manifest in the late teens and the risk continues until the individual enters their mid-twenties, both in males and females. Furthermore, research and data shows that girls and female adolescents are more likely than boys and male adolescents to ‘attempt’ suicide, however, among the individuals who do attempt suicide, it is the male population who are more likely to incur serious bodily injury or succeed in their attempt and cause death, compared to the females. This could be one of the reasons why the study conducted in Kisumu county showed a low negative correlation between resilience and suicide, because even though the females scored higher than the males when it came to resilience, they are also more likely to attempt suicide.

Teruel and Auxiliadora continue to explain that the role of risk factors in suicidal behavior has been extensively explored by research, but that when it comes to the protective factors that promote resilience to suicide, there is very little literature out there that can shed light on this. Some studies have found that different groups of variables, either accumulatively or in interaction with each other, promote the protection of teenagers and young people from the ideation, attempt or completion of suicide and even cushioning the effect of the risk variables. However, the effects of the protective factors were found to vary depending on factors such as population and context. Several concepts
make up a profile that could be said to be beneficial in interventions to amplify the protective effect and minimize the impact of risk variables (Teruel & Auxiliadora, 2014).

According to Everal et al. (2006), what research had shown is that, the resources referred to as resilience factors are tied to larger multidimensional processes and need to be understood within the context of that process. When trying to avoid suicide, resilience focuses on four major domains, these include social processes, emotional process, cognitive processes and purposeful and goal directed action. What research has found is that these domains are inextricably linked to one another and positive steps taken in one domain typically meant that one would see changes across several others and boosted resilience processes. What most research seems to agree with is that social support seems to be central to healing, because what the participants to such studies who showed signs of healing, was that they all relied on the support of at least one caring individual, a friend, a romantic partner, a parent, a teacher or a counselor.

Rossetti, Tosone, Stratta, Collazzoni, Santarelli, Gwadagni, Rosi & Rossi (2017), say depression in one of the leading causes of suicidal ideation in the world, although other factors could play a meaningful role. These other factors include events such as humiliation, which, has been receiving growing attention in the past decade. Rossetti et al. describe humiliation or devaluation in a social context, where a person is unable to respond effectively to a given situation because of power asymmetry between the humiliator and humiliatee. Humiliation is not the same as shame and anger in that humiliation is perceived as undeserved while the latter involves feelings of powerlessness. Assessing for what factors can be considered protective is something that is critical. In recent years there has been a growing interest in resilience to suicidality which can be understood as a psychological construct. This construct can be broken down into perception of one’s ability to overcome difficulties using personal, family, or social
reserves to help buffer the individual from suicide in presence of risk factors or stressors. Rossetti et al. go on to state that in a particular study, higher levels of resilience were found in non-suicidal people. This however is not what the study on Kisumu adolescents found, which was that some of the highly resilient student also presented with suicidal ideation. Rossetti et al. states that two variables in particular, social resources and family cohesion were found to be involved in different patterns of between group correlations and were impaired by suicidality, stress adversity, humiliation and depression. Alternatively, fewer social resources and less family cohesion may render people more vulnerable to suicidal intensions. These two variables are some of the sub-scales in which students with high resilience who had suicidal ideation, scored low in.

5.3.4 Correlation between resilience and acts of violence

There was a weak correlation between resilience and violence meaning some of the students who scored high on their resiliency questionnaire also scored high on their violence response questionnaires. Ungar (2001), states that resilience among youth can sometimes be expressed as deviant behavior, which explains why this study has found a weak correlation between resilience and violence risk. Ungar goes on to explain that, this deviant behavior is common place in situations where the youth fail to attain their self-esteem in socially acceptable setting.

The study also showed that the average violence response for the students’ violence predisposition, was about the same between the two genders with the male sample group scoring higher by 0.46%. Ungar (2001) explains that because problem teens (or teens with a problem) feel vulnerable, they may choose to enhance their health status through the personal and social empowerment associated with deviant behavior. Such as, substance abuse, early sexual activity, spending time in the streets, negative peer
association, use of weapons, criminal behavior and even attempted suicide. Ungar explains that these behaviors of delinquency and disorder are these teenagers’ way of coping, by means of using these acts as pathways to health for high-risk marginalized youth. This is information that has been proven in past studies. That is why this study looked to see what kind of relationship resilience and violence response among adolescents in Kisumu county was. To see if those students who reported high levels of resourcefulness i.e. resilience, would respond as violent or as non-violent. Ungar (2001) goes on to quote a study by Simon, Dent and Sussman (1997) which examined the predictors of in-school weapon carrying among 504 students from seven Southern California high schools. What this study found was that students were only carrying guns to school because they felt vulnerable to attack, so they brought weapons as a form of self-defense and personal protection. This was because vulnerable youth experienced carrying a weapon as a way to bolster their sense of self-worth, which allowed them to ‘show-off’ and to feel powerful.

Wairimu (2013) speaks of how deviant behavior is considered abnormal or antisocial if it is uncommon, is seen to be outside the norm or does not conform to what society expects. This is because statistically speaking, human behavior rests on the idea that differences in human behavior tend to fall within a normal distribution curve (Nwankwo, 2006; Wairimu, 2013), so that when an individual’s actions are seen to fall outside this curve, then their behavior is said to be abnormal. When a behavior does not allow a person to function effectively with others as a member of society, when the person’s actions do not permit them to meet their own needs, or if the behavior has a negative effect on the well-being of others, this behavior is then considered not acceptable or antisocial.
If this is how we describe normal behavior, violent or destructive behavior can then be considered normal, if it is behavior that fits within a normal distribution curve of a group of people, and if it serves to promote the survival of the group. And yes, people who are resilient can show signs of deviance, but that deviance may not always include violent behavior. Can we describe a person who shoots up a school, or burns down a school as resilient? Even though we can describe someone who steals to feed themselves and survive as resilient. Yet these are both acts of deviance. With that being said, Huang & Mossige (2015) explain that analysis have shown that resilience as a trait increases the potential to reduce psychological problems as the level of adversity increases.

This is perhaps why the correlation between resilience and violence share a low negative correlation, because resilience can be said to reduce psychological problems with adversity, helping to regulate the way in which an individual may respond to a stressor, yet those people who express themselves in deviant ways can also be said to be resilient if their end goal is survival. Wairimu (2013) quotes Sifuna (1980) who states that many of the youth in the city of Nairobi, Kenya, who are from poor families, and in some cases even from the middle and upper class families, are drawn into lifestyles of risky behaviors such as substance abuse, gang membership, aggressive and violent actions against others, stealing and other criminal activities, even early pregnancies. These behaviors are exacerbated by the fact of unemployment rates which force these youths into groups which can sometimes develop into gangs as a means of economic survival. There is also the fact that substance abuse can be a source of relief, however, they also almost inevitably lead to criminal behavior since trafficking is controlled by gangs.

According to Ungar and Perry (2012), life is full of transition, and can itself be described as transitional. Waking from sleep, moving from place to place, engaging new and familiar people, satisfying hunger, quenching thirst, learning new concepts and even
mastering a new motor skill are all part of the thousands of transitions that people experience every day. Moving from one state and transitioning into another e.g. from being unable to do something to learning how to do it, requires a complex array of interconnected physiological systems and neural networks to monitor processes and act on the inner and outer environments. It involves a system referred to as the ‘stress-response’ system which collectively influences every part of our bodies and brains, and can at any time and situation change the way we think, feel, behave, digest food, pump blood, mobilize white blood cells, release insulin and hundreds of other body and brain-mediated functions. Ungar and Perry explain that our thoughts, behaviors and emotions are all influenced by the activity of our stress-response systems. It is in the individual’s best interest to ensure that systems are flexible and well regulated so that there can be a parallel flexibility and regulation in our thoughts, feelings and behaviors, so as to enable the person to adapt and cope when facing novelty, transitions, stress and distress. Because when these systems are dysregulated, the person is at risk of being easily overwhelmed by the minor challenges of everyday life. Studies done to compare levels of resilience and tendencies for violence are hard to come by, so there is no data to compare this study to, only those that speak on resilience in individuals who have been exposed to violence. This study however has shown that for those Kisumu adolescents in high school, resilience and violent tendencies share a low negative correlation.

5.4 Conclusions

5.4.1 Levels of resilience among students in their first two years of high-school

As a whole, the students that showed signs of risk to themselves even with high resiliency scores, reported a lack of peer support. There were also those individual students who scored low on other sub-sections of their resiliency tests i.e. sub-sections that reported the students’ sense of belonging in the community. This means there is a
need for holistic approaches to mental health that help these students develop a well-balanced sense of resilience.

One of the things this study reviled that creates a need for concern, is that in 17% of the population, there are levels of resilience that can be compared to those found in refugee adolescents, psychiatric and out-patient individuals, general anxiety and posttraumatic disorder people from studies done using the Conner-Davidson resilience scale. This reviles that 17% of the population are at risk of mental health disorders, and even suicide or other self-harm. This may have something to do with the clashes in the region during election period in the last decade, and other domestic problems. The researcher noted that most schools had school counselors on staff, which is why the number of at risk students has stayed below 20%. However, the fact that there are some students showing levels of resilience similar to individuals with mental health problems, means there is opportunity for improvements to the school environment. This comes from the fact that other studies have shown that school environments have been shown to increase and reduce chances of suicide among students, despite other individual factors. Perhaps eventually levels of resilience for those within school environments will show 100% of students with moderate to high levels of resilience.

This study also showed that when it came to levels of resilience among adolescent students in Kisumu County, the female population has higher levels of resilience than the male population on average, which is something other studies have found. However, this study showed that the rural boys had the lowest levels of resilience. This led the researcher to think that perhaps there is a neglect of the rural boys. Research has reviled that females tend to show higher levels of resilience than the male population due to their social support systems, while males tend to be more individualistic. The urban male population however may be at an advantage due to the social institutions the urban
environment provides, something the rural boys may not have access to, leaving them at a disadvantage. This study has shown that there is a need for more attention for the rural male population.

5.4.2 Significant differences in resilience among students of the same gender

When speaking of the levels of resilience among same sex students from different sub-counties i.e. the urban and the rural, the study showed that there were some differences between the two types of sub-counties. However, within the age group of this study, the students have all developed a sense of resilience at an average rate that can also be said to be similar regardless of whether they are in the rural or urban areas.

Studies in different parts of the world have shown that there is no correlation between levels of resilience and whether an individual is from the rural or urban setting. And this may have to more to do with school environments. This study has however shown, that in Kisumu County, the rural girls show the greatest levels of resilience, greater than their female counterparts from the urban regions. The rural girls scored a higher average than the urban girls, which, may be a sign of better social support among rural girls than there is among urban girls. As for the male population, there are a number of reasons why the urban boys scored higher than the rural boys in their resilience results. One which involves findings from a previous study which found that boys’ boarding schools provided the worst environments when it came to building resilience. Majority of the boys’ boarding schools were in the rural regions. And the second reason may have to do with social institutions (clubs, places for festive communal gatherings etc.), that urban boys may have access to that the rural boys do not. Perhaps there is a need to develop social institutions in the rural regions that adolescent boys can be a part of, to help build social support systems.
5.4.3 Correlation between the levels of resilience and suicide ideation among high-school students

This study shows that there are many students in high-schools in Kisumu County who are dealing with suicide ideation, but because of the overall high levels of resilience, the students seem to be coping. However, there is still the issue of the state of mental health among high-school students. Youth are meant to feel safe and secure as they develop, and should not have to be dealing with thoughts of suicide. The data has shown that there is something the youth are being deprived of which is affecting their mental health.

Suicide is a complex thing, and considering that risk vs protective factors can differ depending on time, place and person, it is no wonder this study has shown that there is a weak negative correlation between suicide and resilience among the adolescents in Kisumu county. This begs the questions, ‘What protects people who are at risk of suicide if not resilience?’ ‘What is it that has kept people going in the past when they were faced with unpredictability and uncertainty?’

There have been surveys carried out in other parts of the world, one of the regions being Australia, which have shown that farmers’ suicide rates went up during the drought season, because the climate change affected the crop (Bourque & Willox, 2014). Since resilience and suicide ideation/ risk share a low negative correlation, then perhaps the protective factor that matters most for suicide prevention lies in social processes, family cohesion, emotional process, cognitive processes and purposeful, goal directed action as has been mention in the literature. Speaking to specific elements of resilience, rather than resilience as a whole which comprises of other elements. The literature also mentions that the two greatest risks for suicide are depression and humiliation. These are elements that adolescents are facing that put them at risk of suicide. However, better social support
systems, cognitive abilities and family relationships are where the best protective elements from suicide lie. This means that resilience can be said to be a protective factor against suicide, but only because of the specific parts that make up resilience, which are important protective factors against suicide.

5.4.4 Correlation between resilience and violence response

The study also showed that there was a weak negative correlation between resilience and violence. When it came to violence among the form one and two students in Kisumu County, the majority of them responded as being against violence. There were however a few students who scored as students who would be pro-violence, nevertheless, even these students had low pro-violence scores. This is a good sign that shows most of Kisumu County high-school students don’t endorse violence.

Again, a majority of the students were against violence and only a handful of students out of the sample responded as unpredictable and violent. On average the students scored -56.17% against violence (where negative scores show an aversion to violence and positive scores showing a tendency, proneness, or endorsement for violence). However, because of the weak negative correlation between resilience and violence, this means that in some of the results, the students scored high on their resilience but also showed less of an aversion to violence than those who scored lower than them on their resiliency questionnaires. Violent and other criminal behavior have been shown to be sparked by feelings of vulnerability, and so the violent behavior can be said to be a way for the individual to gain a sense of power or control. Perhaps it is this feeling of vulnerability combined with the individual’s sense of resilience that make the person more likely to be violent. However, the individual’s proneness to violence may have more to do with violence witnessed at home or in other environments (e.g. bullying). The matter of fact may be that violence responses are influenced by other factors with
resilience influencing endorsement for violence very slightly. Unfortunately, not enough to say it is a major factor for regulating chances for violence. Resilience could be said to have an effect on violence via stress-response-systems (SRS). If resilience has a strong relationship with the stress-response-system (that affects thoughts, feelings and behavior), by having a buffering effect on the stress-response-system, it could in turn create more of an aversion to violence. So that, if the individual had a high-level of resilience, but had a poor stress-response-system (because of no relationship between SRS and resilience), violence was still likely. Meaning the stress-response-system is more important for violent proneness management than resilience is.

5.5 Recommendations

The study recommends mentorship programs by schools (these can be in school or out of school programs) that will allow those students who do not have access to the proper support systems, to have someone in their lives who can help give them a sense of direction. These mentorship programs can also be designed in a manner that helps improve those sub-sections of resilience that each student may be lacking in, e.g. lack of peer support or sense of belonging. The mentors can also be examples for developing proper stress-response-systems so that the adolescents learn how to cope without being violent. The study also recommends that more thought goes into learning environments. This is because healthy learning environments can drastically reduce suicide and perhaps even violence among students, despite their home and personal shortcomings.

5.5.1 Suggestions for further research

Future research should examine the relationship between suicide ideations and levels of social support to help shed light on avenues of interventions for at risk individual of suicide. It would also be interesting to find out what the differences are
between resilience and stress-response-systems, as well as what makes stress-response-systems a better focus for violence problems rather than resilience.
Reference List
American Psychological Association (2017). The road to resilience. Retrieved from:


Agnew, R. (2001). Building on the foundation of general strain theory: specifying the
types of strain most likely to lend to crime and delinquency. *Journal of research
in crime and delinquency.* 38 (4).

comparative study from two southern states in the USA. *Journal of humanities
and social science.* 23(1-3) PP 52-73 e-ISSN: 2279-0837, p-ISSN: 2279-0845.

Banda, M., & Mweemba, G. (2016). The nature of deviant behaviour patterns that are
prevalent among pupils in secondary schools in Zambia: A case of central
province. *International journal of humanities social science and education.*
Retrieved from: http://dx.doi.org/10.20431/2349-0381.0310005

from: https://www.researchgate.net/publication/320490507

Benbenishty, R., Astor, R.A, & Roziner, I. (2017). Are certain schools more prone to
suicide ideation? *American Educational Research Association*


*Rochester Institute of technology.*

Bhat, A. Correlational research: Definition with examples. *QuestionPro.* Retrieved from:

https://www.questionpro.com/blog/correlational-research/


https://www.researchgate.net/publication/282816504


https://www.researchgate.net/publication/256548202

research and behaviour management. Retrieved from:


https://reliefweb.int/report/kenya/violence-kenyan-schools-spreading

Kiswardy, V. (2012). Empowering resilience within the school context. Retrieved from:
https://pdfs.semanticscholar.org/7e01/e549c4dd2709de1ee7b9c4a64790fe9c0543.pdf


https://dspace.stir.ac.uk/bitstream/1893/2206/1/Suicide%20review%5B1%5D.pdf

MedicineNet. Sequela. Retrieved from:


https://pdfs.semanticscholar.org/e0cc/131df6fb37b16af56304b744196da11dbed.pdf


ResearchGate. 56(8).


Sub County Administration. Sub-county administration. Retrieved from:
http://www.nairobi.go.ke/home/subcounty-administration/


https://doi.org/10.5751/ES-10385-230434


Appendix I
Participant Information Sheet

Resilience and Disposition for Deviant behaviour

I am a student of United States International University (USIU) conducting as part of my thesis project for my master’s degree in psychology. This study is about the relationship resilience has with suicide ideation and violent behaviour among high-school students in Kenya.

This study requires you to complete questionnaires that will take approximately 15 minutes to complete. Please respond to the questions in the order they appear, and fill in ALL the questions for the purpose of the study. However, if you feel uncomfortable answering any of the questions, you may decide to stop being part of the research study at any time without explanation. You have the right to ask that any data you have supplied to that point be withdrawn/destroyed. If you have any further questions regarding the purpose of the study or concerning the questionnaire, please feel free to ask now or as you complete the questionnaire. Please hand in the completed questionnaire to the researcher.

The results of this study will help understand more about how students in high school cope with difficulties in life and how resilience influences these coping mechanisms. There are no known risks for you in this study. The information you provide is solely for the purpose of study and will remain completely anonymous. At no point will your name be associated with any of your responses. Your confidentiality will be observed at all times.

If you have any questions/concerns regarding the study or if you wish to know about the results, please feel free to contact Simon D.M Karanja P.o Box 2956 Kisumu.
Appendix II
Consent for participants in Research

1. The school volunteers to allow the students of form one and two to participate in a research project conducted by Simon D.M. Karanja from United States International University. It understands that the project is designed to gather information about levels of resilience among the form one and two students and their corresponding levels of suicide ideation and disposition for violent behaviour.

2. The school’s participation in this project is voluntary. It understands that it nor any of the students nor teachers will be paid for their participation. It has the right to withdraw or discontinue participating in this study anytime without penalty.

3. It understands that any responses from participants will not be associated with any names in any reports from the information obtained from this research, and that their confidentiality as research participants for this study will remain secure. Further use of data will be subject to standard data use policies, which protect the anonymity of individuals and institutions.

4. It understands that suicide issues and violent ideation are delicate matters to revile and that asking the students to trust the study with this information may bring some levels of distress.

5. It understands that this research study has been reviewed and approved by the Institutional Review Board (IRB) for studies involving Human Subjects: Behavioural Science Committee at the United States International University. For research problems or questions regarding subjects, the International Review Board may be contacted.

6. It has read and understood the explanations provided to it. It has had all questions answered to its satisfaction, and will voluntarily agree to allow its form one and two students to participate in this study.

_______________________                 _______________________
           School’s Name                                    Head Teacher’s Signature

Date: ____________________________   "__________________________"

_______________________                  ________________________
       Researcher’s Name                              Researcher’s Signature
Appendix III
UNITED STATES INTERNATIONAL UNIVERSITY
ADOLESCENT ASSENT TO PARTICIPATE IN RESEARCH
Resilience and dispositions for deviant behaviour among high school students in
Kisumu County

You are asked to participate in a research study conducted by MA. Simon D.M. Karanja, from the psychology department, at the United States International University, Nairobi. You were selected as a possible participant in this study because you are an adolescent in an environment, that we believe will allow us to study the delicate topic of suicide and other deviant behaviors. Your participation in this research study is voluntary.

Why is this study being done?
This study is being done in order to understand the psychological state of adolescents in high-school, and to understand why there are cases of suicide and violence among high-school student, so that we may find ways to help the youth.

What will happen if I take part in this research study?
Please talk this over with your parents before you decide whether or not to participate. We will also ask your school guardians to give permission for you to take part in this study. But even if your parents and school guardians say “yes” you can still decide not to do this.

If you volunteer to participate in this study, the researcher will ask you to do the following:

1. Each participant will be given a ‘Participant information sheet’ which they will be required to read, which will guide the participants on what is required of them.
2. You will then be given a chance to ask any questions you feel need clarification.
3. You will be handed a questionnaire which you are free to answer or not. If you decide to complete the questionnaire, honesty in answering the questions is required.

How long will I be in the research study?
Participation in the study will take a total of about 45 minutes to 1 hour.

Are there any potential risks or discomforts that I can expect from this study?
There is no physical risk to the participants in this study, however, you may feel some discomfort answering some of the questions in this study, depending on your current mental state. If you do feel discomfort during this process, you are encouraged to speak to the Investigator/Researcher after completing your questionnaire.

Are there any potential benefits if I participate?
You may benefit from the study because it will allow you to identify your state of mind when it comes to suicide and violence, hence giving you a chance to seek help.

The results of the research may help save the lives of other high-school students who are at risk of suicide and help identify the reasons for violent behavior among high-school students.

**Will information about me and my participation be kept confidential?**

Information that will identify the participants of this study will not be collected. Hence all participants will remain anonymous. Once data collected from the study has been analyzed, all documents will be destroyed immediately.

**Withdrawal of participation by the investigator**

The investigator may withdraw you from participating in this research if circumstances arise which warrant doing so. If you are having trouble answering questions, or seem disturbed/uncomfortable with the research questions, you may have to drop out, even if you would like to continue. The investigator will make the decision and let you know if it is not possible for you to continue. The decision may be made either to protect your health and safety, or because you do not understand what is required of you.

**What are my rights if I take part in this study?**

You may withdraw your assent at any time and discontinue participation without penalty or loss of benefits to which you were otherwise entitled.

You can choose whether or not you want to be in this study. If you volunteer to be in this study, you may leave the study at any time without consequences of any kind. You are not waiving any of your legal rights if you choose to be in this research study. You may refuse to answer any questions that you do not want to answer and still remain in the study.

**Who can answer questions I might have about this study?**

In the event of a research related injury/distress, please immediately contact the head researcher listed below. If you have any questions, comments or concerns about the research, you can talk to the lead researcher. Please contact - Simon D.M. Karanja, Psychology department, Tel: 0724692516, email: sdonmk@outlook.com
SIGNATURE OF STUDY PARTICIPANT

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

__________________________________________________________________________
Initials of Participant

__________________________________________________________________________
Signature of Participant                    Date

SIGNATURE OF PERSON OBTAINING ASSENT

In my judgment the participant is voluntarily and knowingly agreeing to participate in this research study.

__________________________________________________________________________
Name of Person Obtaining Assent                    Contact Number

__________________________________________________________________________
Signature of Person Obtaining Assent                    Date
Appendix IV
STUDENT QUESTIONNAIRE

Demographic Information

Section A:
For this section please tick [✓] the answer that describes you

1. Name of school ______________________

2. Participant:
   Male [ ] Female [ ]

3. Age:
   12 years [ ] 13 years [ ] 14 years [ ] 15 years [ ] 16 years [ ]

4. What form are you?
   Form one [ ] Form two [ ]

5. State whether you are in a romantic relationship with someone or single:
   Single [ ] In a relationship [ ]

6. Parents marital status:
   Married [ ] Divorced/Separated [ ] Single Parent [ ]

7. Total number of living siblings in your family ____________

<table>
<thead>
<tr>
<th>No of living siblings</th>
<th>None</th>
<th>1-2</th>
<th>3-4</th>
<th>4-5</th>
<th>Above 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Resilience Information

Section B:

This section looks to collect information on resilience from the participant. It looks to find out what resources are available to the participant and if they have access to them. It also looks to find out how the participants view themselves.

Answer the questions by circling the number that best matches your response to the question. (If you have any questions, please feel free to ask by raising your hand).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Not at all</th>
<th>A little</th>
<th>Somewhat a bit</th>
<th>Quite a bit</th>
<th>A lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I have people I look up to</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>I cooperate with people around me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Getting an education is important to me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>I know how to behave in different social situations</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>My parent(s)/caregiver(s) watch me closely</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>My parent(s)/caregiver(s) know a lot about me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>I try to finish what I start</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>Spiritual beliefs are a source of strength for me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>People think that I am fun to be with</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>I talk to my family/caregiver(s) about how I feel</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>I am able to solve problems without harming myself or others (for example by using drugs and/or being violent)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>I feel supported by my friends</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13</td>
<td>I know where to go in my community to get help</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14</td>
<td>I feel I belong at my school</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15</td>
<td>My family stands by me during difficult times</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16</td>
<td>My friends stand by me during difficult times</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17</td>
<td>I am treated fairly in my community</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
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<td>---</td>
<td>---------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>18</td>
<td>I have opportunities to show others that I am becoming an adult and can act responsibly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>I am aware of my own strengths</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>I participate in organized religious activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>I think it is important to serve my community</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>22</td>
<td>I feel safe when I am with my family/caregiver(s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>23</td>
<td>I have opportunities to develop skills that will be useful later in life (like job skills and skills to care for others)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>I enjoy my family's/caregiver’s cultural and family traditions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>I enjoy my community's traditions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>I am proud to be a citizen of KENYA</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Suicidal Ideation Information**

**Section C:**

This section looks for information about the participant’s thoughts on suicide. It looks to find out if the participant thinks about suicide and if so how often and why.

Participants should not feel negatively about sharing their thoughts on suicide. The information collected will help the study understand the participant better.

Participants should answer by ticking either a ‘YES’ or ‘NO’ where needed and by providing additional information in writing where needed (If you have any questions, please feel free to ask by raising your hand).

27. Have you thought about committing suicide in the last 6 months?

[YES] [NO]
28. If ‘YES’ Please give possible reasons why, and rate the strength of your reason (1 being least likely to cause suicide attempt and 5 being most likely to cause suicide attempt)

<table>
<thead>
<tr>
<th>Possible reason(s)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

29. Do you think about committing suicide often?

YES  NO

30. If ‘YES’ please state how often

Daily [ ]  Weekly [ ]  Monthly [ ]

31. If/When, you think about committing suicide, do you have someone whom you can talk to?

YES  NO

32. Who is it you can talk to if/when you think about committing suicide?

A family member [ ]  A friend [ ]  A teacher [ ]  A girlfriend/boyfriend [ ]

33. Do you like your school?

YES  NO
34. If ‘NO’ please tell us why you do not like your school
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Violence Information

Section D:

This section looks for information of the participant’s disposition for violence. It looks into the kind of environment the participant is subject to, which is likely to influence the participant’s views about violence.

Participants should complete this section by circling the number that best matches with their response to each question (If you have any questions, please feel free to ask).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Not at all</th>
<th>Somewhat</th>
<th>Yes (I do)</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>Does your family provide you with everything you need?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>36</td>
<td>Do you feel like you are in control of your own life?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>37</td>
<td>Do you feel as if you are doing well in school?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>38</td>
<td>Do you think violence equals power?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>39</td>
<td>Do you think it is OK to use violence to solve</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>problems?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Have you witnessed any violence at home?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>41</td>
<td>Do you enjoy time with your family?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>42</td>
<td>Do you use any substances? (e.g. Alcohol, cigarettes, or drugs)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>43</td>
<td>Do the other students bully you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Appendix V
TEACHER’S QUESTIONNAIRE

Demographic Information

Section A

1. Name of school ________________

2. Gender
   Male [ ]  Female [ ]

3. Age group
   25-35 years [ ]  35-45 years [ ]  45-55 years [ ]  55-60 years [ ]
   Above 60 [ ]

4. Marital Status
   Married [ ]  Divorced/Separated [ ]  Single [ ]

5. Subject(s) taught
   _____________________________________________________________________
   _____________________________________________________________________
   _____

6. Other responsibilities held in the school?
   _____________________________________________________________________
   _____________________________________________________________________
   _____

7. Teaching experience in the school (years) ________________

Corroborative Information

Section B

8. What form are you providing information for?
   Form one [ ] or Form two [ ]

9. How many students are there in this class? ________________

10. Are there any students in this class that you think are at risk of suicide?

   YES  NO

11. If ‘YES’ how many students do you think are at risk of suicide? ________________
12. Please note some of the reasons you think put the student(s) at risk of suicide (If there are any at risk)
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
__________________

13. Are there any violent students in your class?

[ ] YES  [ ] NO

14. If ‘YES’ how many of them are violent? _________________

15. Please note some of the reasons you think make the student(s) violent (if there are any violent students in the class)
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
__________________
Appendix VI

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,
+221349,3310571,2219420
Fax:+254-20-318245,318249
Email: dg@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

Ref. No. NACOSTI/P/18/39253/25639 Date: 21st September, 2018

Simon Don Karanja
United States International University
P.O. Box 14634- 00800
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on “Resilience and dispositions for deviant behaviour among high school students in Kisumu County” I am pleased to inform you that you have been authorized to undertake research in Kisumu County for the period ending 20th September, 2019.

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

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a copy of the final research report to the Commission within one year of completion. The soft copy of the same should be submitted through the Online Research Information System.

GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Kisumu County.

The County Director of Education
Kisumu County.
Appendix VII

7th September, 2018

Simon D.M. Karanja
School of Humanities and Social Sciences
sdonmkk@outlook.com

Dear Mr. Karanja,

**IRB-RESEARCH APPROVAL**

The USIU-A IRB has reviewed and granted an ethical approval for the research proposal titled "Resilience and Dispositions for Deviant Behaviour among High School Students in Kisumu County."

The approval is for **twelve months** from the date of IRB. A Continuing Review application must be approved within this interval to avoid expiration of IRB approval and cessation of all research activities. A mid-term report and a final report must be provided to the IRB within the twelve months approval period. All records relating to the research (including signed consent forms) must be retained and available for audit for at least 3 years after the research has ended.

You are advised to follow the approved methodology and report to the IRB any serious, unexpected and related adverse events and potential unanticipated problems involving risks to subjects or others.

Should you or study participants have any queries regarding IRB’s consideration of this project, please contact irb@usiuc.ac.ke.

Sincerely,

Dr. Darnay Sikalieh,
Chair | IRB | USIU-Africa
dsikalieh@usiuc.ac.ke
Office 0730 116 112

CC: Research Office