

**RELATIONSHIP BETWEEN SEXTING AND SUICIDAL BEHAVIOUR
AMONG UNDERGRADUATE UNIVERSITY STUDENTS IN KIAMBU COUNTY,
KENYA**

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DECLARATION

This research project is my original work and has not been presented for the award of a degree in this or any other university.

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Supervisor:

As the university supervisor, I have given my consent for this research project to be submitted.

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DEDICATION

First, I dedicate this research project to my parents, Bibiann Njeri and Gabriel Kioni. Secondly, I dedicate this work to my beloved husband Joram Njora and my devoted children, Brianna Njeri and Ivy Clare Nduta, who stood with me throughout the entire research process.

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ABBREVIATIONS AND ACRONYMS

AAUW:	American Association of University Women
CDC:	Centre for Disease Control
FGD:	Focused Group Discussions
ICT:	Information and communication technology
MoE:	Ministry of Education
MoH:	Ministry of Health
MTG:	Multiple Goal Theory
SPSS:	Statistical Package for Social Science
SURPIN:	Suicide Research and Preventive Initiative
USA:	United State of America
WHO:	World Health Organization

OPERATIONAL DEFINITION OF TERMS

- Depressive thoughts:** This refers to an extreme, persistent feeling of sadness, worthlessness, and loss of interest due to exposure to sexting messages or images by a friend or unknown person.
- Higher Learning institution:** In this study, this refers to a university institution.
- Self-esteem:** This is how an individual values and perceives himself or herself in a given situation.
- Sexting:** In this study, this is the behaviour of sending and receiving sexually provocative material, including images, messages, gifts, and voice memos via social media with the help of a cell phone.
- Sexual behaviour:** Patterns of interaction or activities related to sexuality that may affect health, relationships, or well-being.
- Social environment:** This entails social relationships that people have within their social settings—rural and urban setups, including physical and social surroundings.
- Social media:** A platform used to pass information from one person to another through electronic media platforms, such as Facebook, Twitter, Instagram and TikTok.
- Suicidal behaviour:** This is a behaviour exhibited by an individual contemplating, wishing, and preoccupied with a suicide attempt and death. Such behaviour is usually characterized by low self-esteem, hopelessness, worthlessness, and depressive thoughts.

ABSTRACT

Across the globe, sexting is considered one of the major contributors to negative mental health among young adults, especially those in higher learning institutions. Sexting also negatively affects the psychosocial well-being of those involved, including public humiliation. Thus, this study's purpose was to evaluate the relationship between sexting and suicidal behaviour among Kenyan university students. Specifically, the study sought to determine the prevalence of various forms of sexting, establish the prevalence of suicidal behaviour, determine the association between various forms of sexting and suicidal behaviour, and establish gender, age and social environment differences in relation to sexting and suicidal behaviour among undergraduate university students. This study was informed by two theoretical approaches; these include Interpersonal-psychological theory and multiple goal theory. These two approaches explain human behaviours and related psychological problems. The study used a correlational research design. Both quantitative and qualitative methods were used to collect primary data using Focus Group discussions and a research questionnaire, which was adapted from the SBQ-R. The questionnaire was adopted in the study because it is a standard and widely validated tool for assessing suicidal behaviour. A total of 30,000 students had an equal chance to take part in the study. All ten universities located in Kiambu County were included in the study. In the 10 universities, a total of 384 students were randomly sampled from various departments, also sampled via simple random sampling. Data analysis was done through both descriptive and inferential statistics with the help of SPSS (Version 25.0) computer software program. The study only focused on undergraduate students in Kiambu County, and therefore, postgraduate students were not included. The study faced a non-response challenge given the sensitivity of the topic, but this was overcome by assuring respondents of the confidentiality of their information. The study revealed that there is a positive, strong and significant relationship between various forms of sexting and suicidal behaviour among undergraduate university students ($r=0.574$; $p=0.000$). The study found that there is a significant sex differences in relation to sexting among undergraduate university students since the p-values (0.040 and 0.037) were less than 0.05. The study found that there is no sex difference in relation to suicidal behaviour among undergraduate university students since the p-values (0.142 and 0.140) >0.05 . The research established that sexting is very prevalent among undergraduate university students, with the most common forms of sexting being sext messages, images and videos. The study also concluded that there is a positive, strong and significant relationship between various forms of sexting and suicidal behaviour among undergraduate university students. The study recommends that University management should prioritize the mental health and well-being of students by integrating comprehensive education on the risks associated with sexting into the university's orientation programs and ongoing awareness campaigns. The study also recommends that student leadership at the universities in Kenya should advocate for peer-led initiatives that encourage safe online behaviours and create a culture of respect and consent among students. The study suggests that future research use primary and secondary data to investigate the connection between sexting and suicidal behaviour among undergraduate university students.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This part covers the study's background, problem statement, objectives, purpose, research questions, hypothesis, underlying presumptions, significance and justification, scope, and limitations.

1.2 Background

Rapid societal, cultural, and interpersonal changes are now being seen because of Information Communication and Technology (ICT). The new technological advancements have influenced several cultural changes within society and how social interactions and relationships happen (Choi & Madigan, 2019). This rapid acculturation within the global communities has led to moral and cultural negative corruption among the young adults, especially the university students. Facebook, TikTok, Instagram, Snapchat and Twitter, among others, have become outlets for university students' sexual and interpersonal exploration and expression (Englander & McCoy, 2017). A morally repugnant habit that has increased in popularity with the advent of modern technology is sexting. According to Choi, (2019), sexting includes behaviours such as sharing sex images, videos and sext messages. Sexting is harmful because the information sent in private is accessible to anyone who wants to see it, which can lead to negative outcomes like suicidal thoughts, verbalization of suicidal thoughts, future suicidal thoughts and suicidal actions (Korenis & Billick, 2018).

Sexting has become a global concern especially among the university students (Nyamnjoh & Brinkman, 2019). Most university students engage in sexting due to negative influence, online access to sex tapes through media platforms. A boyfriend or girlfriend, for example, may request that the nude images be sent, or the student may send the images without asking. A student may also send a picture to grab the interest of the individual to whom they are appealed.

According to Brinkman (2019), 20% of university students have transmitted nude images and sex videos of themselves to others.

Two schools of thought have emerged in heated discussion over the dangers of teenagers' sexting habits (Doring, 2017). One school of thought sees sexting as a kind of healthy, modern sexual expression that may occur within either casual or committed love relationships (Choi, 2019). Sexting is seen as a way for marginalized communities to communicate with one another and as a means by which individuals may learn more about their own sexuality and the sexuality of others (Chong, 2017). Research has shown a high incidence of sexting across demographics, but a low prevalence of sexting harm, leading credence to the normality viewpoint (Doring, 2019). The other side of the argument views sexting as a deviant and dysfunctional conduct that either directly or indirectly exposes or engages adolescents in higher-risk activities like substance abuse, risky sexual behaviours, and other online risks like cyberbullying and sexual online solicitation by grown-ups (Klettke, 2018).

According to Bensotsch (2018), there has been an outcry of sexting in United States with over 3 million sexting messages being sent daily. This has been on higher end among young adults especially university students across the globe. According to Bunyi (2018), research from many institutions in Africa showed that sexting, which includes verbal and video abuse and continuous disparaging remarks, can also result in suicide behaviour, which is frequently committed by college students. This has been reported through various social media platforms where such improper languages and judgmental attitudes are derived due to leaking videos and nude imageries. Gathura (2017) views are also in harmony that risky sexual behaviours such as sexing have increased among the youths however, less is known about the connection among sexting and suicidal behaviour among undergraduate university students which the current study intends to establish.

Prevalence rates of sexting among university students differ depending on definitional criteria, sample size, time frame, and method of measurement (Barrense-Dias, 2017). A study by American Association of University Women, 2019, conducted in Canada, Australia, Europe, South Africa, South Korea, and the US, among the European Women found that an average of 14.8% of people send sexual content; 27.4% get it; 12.0% forward it without permission; and 8.4% receive it. Villacampa (2017) conducted research in Spain and discovered that 7.9% of 489 adolescents ages 14-18 had created material of this kind, while Gámez-Guadix (2017) showed that 13.5% of children ages 12-17 regularly send or receive sexts. Furthermore, Garmendia (2016) saw a significant rise in the receipt of sexual material, while Villacampa (2017) revealed that 8.2% of sexual photos or videos were sent to them by a third party.

Sexting is becoming a bigger issue both inside and outside of educational institutions, according to empirical research conducted in Canada, the UK, China, and the Netherlands. More than half of girls report experiencing online sexual harassment, according to a survey of 1800 students at 23 Canadian higher education institutions (Canadian Press, 2019). Sexting was found to be detrimental to their general well-being, psychosocial health, and sense of value. According to the World Health Organization (2018), more than 150 million girls and 70 million boys have experienced and still endure agonizing sexting situations, which frequently affect pupils' self-esteem. According to empirical research conducted by the American Association of campus Women (AAUW), sexting is an "unfortunate part of university culture" that negatively impacts the mental health of millions of students, particularly those attending institutions (AAUW, 2019). These incidents appear to be unpleasant but enduring aspects of college students' lives. According to statistics from the American Association of University Women (AAUW), over 80% of students report that sexting has an inverse effect on them and frequently leads to suicidal ideation (AAUW, 2019).

Svedin (2019) in his comprehensive analysis of studies in South Africa established that the prevalence of sexting among higher learning institutions students ranges from 7% to 27%. Wysock's (2021) carried out a study in Zambia and found that females had higher chances of sexting as compared to males; 60.0% of women reported sending naked images of them, compared to 45.4% of men. This was also supported by Gordon-Messer (2019), who also stated that males had higher chances of receiving sexts than females. In contrast, the authors discovered no sex differences in either the receiving or sending of sext messages.

Sexting has led to numerous mental health problems including social consequences, psychological and sexual consequences among the users in general and university students to be specific. Sexting has been linked positively to suicidal thoughts, verbalization of suicidal thoughts, future suicidal thoughts and suicidal behaviour Temple (2018). Sexting makes young people, particularly university students, feel dejected and hopeless, which may lead to isolation and even suicidal thoughts and actions. Ouystel (2019) found that the sexual minority and adolescent children in Kenya who sexts are have higher probability of having negative psychological health outcomes, including depression and suicidal behaviour.

Suicidal behaviour is a broad term that encompasses a range of self-harm-related actions and thoughts, including suicidal ideation, suicide plans or intentions, and suicide attempts. While estimates place the global rate of suicide attempt among young adults at 12%, the Suicide Research and Preventive Initiative (SURPIN) in Nigeria has found that those teenagers and youths (between the ages of 13 and 29) make up over half of the crisis calls received through its hotline, with 27.8% of those calling in being students. Only around 37.9% of the 66 suicide victims documented in 2018 used traditional methods of suicide, while roughly 62.1% passed away by ingesting poison, according to research performed by the SURPIN "Suicide Research and Preventive Initiative" at Lagos State University Hospital. However, these studies did not

show the prevalence of suicidal behaviour in relation to sexting which the current study intends to establish. Considering, wanting, and being preoccupied with one's own demise and suicide fall under the umbrella concept of suicidal behaviour. Challenges persist for physicians, researchers, and educators since there is no agreed-upon description of suicidal conduct (Bernert Hom, Robert, 2019). When conducting studies, researchers often use multiple definitions of "suicidal behaviour" (Berman, 2017). This is often cited as a drawback in suicide-related meta-analyses since it hinders the ability to have consistent definition across research.

Suicidal behaviour among UK university students was evaluated by Kabir et al. (2024). Both undergraduate and graduate students had high levels of suicidal conduct, according to the study. The study found valuable insights, like that sexual orientation was one of the risk variables for suicide among college students. Suicidal conduct was more common among students who were unmarried, male, and unemployed, as well as those who had been subjected to physical abuse, family violence, emotional abuse, neglect, and corporal punishment as children. Furthermore, female students were more likely to attempt suicide and older female students were more likely to seek treatment from general hospitals. However, the study did not look at the link between sexting and suicidal behaviour, a gap that this study sought to address. In a similar study, Ram, Suprakash Chaudhury, and Jagtap (2018) evaluated the prevalence of suicidal ideation among Indian university students in order to assess the impact of gender and education on suicidal ideation. According to the study, undergraduate and female students are substantially more likely than postgraduate and male students to experience severe and moderate suicidal ideation.

According to Salifu and Yidana (2024), 24.5% of undergraduate students at the University for Development Studies in Tamale, Ghana, suffered from suicidal thoughts. Academic stress and victimization were identified as significant risk variables for suicidal thoughts in the study. The presence of academic stress and victimization was statistically significant in predicting suicidal

ideation. Ebohon and Osagiobare (2023) looked into the variables that can affect suicide behaviour in Nigerian university students in Edo State. The results of the study revealed, among other things, that a student's gender (male or female) or academic year (100, 200, 300, or 400) had no bearing on the prevalence rate of suicide among college students. According to a different study by Iweama et al. (2024), undergraduate students in northeastern Nigeria frequently engage in suicide behaviours, including thoughts and attempts. Of those surveyed, 34.9% reported engaging in suicidal conduct (215/616). Suicidal attempts were more common among women than among men.

Kaggwa et al. (2022) conducted a study to examine the prevalence of suicidal thoughts, suicide intentions, and suicide attempts among Ugandan university students, as well as the key factors associated with these behaviours. Their findings revealed worrying levels of suicidality within this population. Over the preceding 12 months, 31.85% of the students reported experiencing suicidal thoughts, 8.15% indicated having suicidal intentions, and 6.11% had attempted suicide. These figures highlight a significant mental health burden among young adults in academic settings. The study further identified several psychosocial risk factors, with a history of sexual abuse being strongly associated with suicide attempts. This underscores the need for targeted mental health interventions, trauma-informed support systems, and strengthened prevention strategies within university environments.

The prevalence of suicide thoughts, plans, attempts, and self-harm, as well as the psychological stresses linked to these behaviours, was investigated by Mutwiri et al. (2023) at two universities in Kenya among undergraduate students aged between 18 and 29 years. Self-harm was 5.5%, suicidal planning was 5.9%, suicidal attempts were 7.8%, and suicidal thinking was 17.1%. The incidence of all suicidal behaviours was higher among female students and those attending private universities. Anxiety, family disputes, academic difficulties, financial hardship, and a

sense of helplessness and depression were among the psychological stresses that drove developing adults to engage in suicidal behaviour. Umbrila (2020) in his study on young people in slums in Kenya, states that during the transition to maturity among young people, many psychological, physical, and mental changes occur, and survival mechanisms that help them find their footing and define themselves as individuals. Preliminary evidence suggests that sexting and suicidal thoughts are linked. For instance, in Kenya, during the first case of COVID-19 victims, the lady involved was attacked through social media platforms by unknown people sharing her nudes, which she had shared with the intention to reach specific persons (Nation Media Group, 2020). However, less is known regarding the connection between sexting and suicidal behaviour.

Musyimi, (2022) in a study at Machakos University among the university students on sexting and risky sexual behaviour, revealed that the drive to obtain popularity and approval by peers' act as a sexting incentive. Peer acceptability is a crucial component that plays a critical part in young adults' psychological development. These outcomes have the potential to instigate suicidal thoughts or actions. According to Córdova and Ramos (2018), suicidal behaviour and conduct is a nonspecific symptom that indicates a complex interplay of internal conflict and external factors such as despair, worthlessness, trouble settling interpersonal issues, failure, rejection, and difficulties within the family or the relationship. Several factors can be used to explain the correlation between sexting and suicide behaviours. For one, it's plausible that suicide behaviour and attempts are both exacerbated by sexting. Here, depressed symptoms serve as a mediator between sexting and thoughts of suicide. Second, one might speculate that sexting causes suicide behaviours and actions.

In conclusion, sexting and suicidal behaviour have a devastating effect on young adults as reported by various studies above. Youth and children in their adolescent stage, practice

different forms of sexting among themselves which later turn to be having advance effect on their way of interaction and association with their peers. Most studies above have not looked at how these various forms of sexting link with suicidal behaviour. As much as various forms of sexting are practiced among the youth, they are aided by tools such as cell-phones, computers and other communication platforms. Even though these tools and platforms help in the prevalence of sexting resulting into suicidal behaviour, little studies have been performed on them according to the above studies. Thus, the study attempted to look at the linkage between sexting and suicidal behaviour in terms of prevalence and various forms of sexting, tools used for sexting, the occurrence of sexting and suicidal behaviour, gender difference in relation to sexting and suicidal behaviour and as well as various ways to prevent sexting and suicidal behaviour among undergraduate university students in Kiambu County, Kenya.

1.3 Statement of the problem

There is a high prevalence of suicidal behaviour among university students (Kabir et al., 2024; Salifu and Yidana, 2024; Mutwiri, et al., 2023). This has led to lasting emotional, mental, and physical health impacts, as well as economic consequences. A suicidal attempt causes the victim to feel ashamed and cut off from their loved ones because their effort to take their life was unsuccessful. Research has demonstrated that individuals who have lost a loved one to suicide are susceptible to depression, PTSD, protracted bereavement, and suicidal thoughts and actions.

Suicide is not a one-off event; it emanates from suicidal behaviour. It has been linked positively to suicidal thoughts, verbalization of suicidal thoughts, future suicidal thoughts and suicidal behaviour, according to Temple (2018). Sexting, defined as the act of sending sexually suggestive messages or images via mobile devices or the Internet, has become a prevalent practice among youth (Gassó, Klettke, Agustina & Montiel, 2019). Sexting is one of the factors associated with suicidal behaviours. Sexting makes young people, especially college students, feel forlorn and depressed, which can result in loneliness, suicidal thoughts and actions.

Studies globally, regionally and locally on the relationship between sexting and suicidal behaviour have come up with varied findings. According to certain studies, sexting and suicidal thoughts and actions are related (Temple, 2018; Ouystel, 2019). Other researchers have shown there is no relationship (Salifu & Yidana, 2024). Most of those that showed there is a relationship were done in Western countries (the United Kingdom, Israel, Canada, Britain, China and the Netherlands), which have a different cultural background and cannot be generalized to the Kenyan Context. Based on this discrepancy on the current literature, this study focused on the relationship between various forms of sexting (sexually provocative messages, sex videos, sexual sext messages) and suicidal behaviour (suicidal thoughts/wishes, suicidal attempts, verbalization of suicidal thoughts, future suicidal thoughts) among undergraduate university students in Kiambu County and also establish gender, age and social environmental difference in relation to sexting and suicidal behaviour.

1.4 Study Purpose

The study established the relationship between sexting and suicidal behaviour among undergraduate university students in Kenya.

1.5 Objectives of the study

- i. To determine the prevalence of various forms of sexting among undergraduate university students.
- ii. To establish the prevalence of suicidal behaviour among the undergraduate university students
- iii. To determine the association between various forms of sexting and suicidal behaviour among undergraduate university students.
- iv. To establish gender, age and social environment differences in relation to sexting and suicidal behaviour among undergraduate university students.

1.6. Research hypothesis

- i. **H₁**: There is a statistically significant relationship between various forms of sexting and suicidal behaviour among undergraduate university students
- ii. **H₂**: There is statistically significant gender, age and social environmental differences in relation to sexting and suicidal behaviour among undergraduate university students.

1.7 Study Assumptions

- i. There is high prevalence of sexting and suicidal behaviour among the students of higher levels of learning.
- ii. There is an important relationship among sexting and suicidal behaviour between undergraduate university students.

1.8 Justification and significance of the Study

The rate of suicidal behaviour among young adults has been in the increase universally. Suicidal behaviour has been identified as the second prominent worldwide cause of demise for individuals between 15 and 29 years old (Temple, 2018). Further, Temple (2018) indicated that due to the growing sub-population of young adults consists of university students. Suicidal behaviours are significant public social and health problems, and these behaviours have significantly increased worldwide in recent decades (Ouystel, 2019). However, there are still gaps in understanding the various forms, prevalence, and gender differences of sexting, particularly among the young adult population (Bentosche, 2018). There are a number of major caveats to research, and the prevalence claims tend to be uneven. Therefore, the current study focused on addressing this gap by establishing the prevalence, various forms of sexting and the correlation between sexting and suicidal behaviour among university students.

The research findings are expected to show the prevalence, different forms of sexting, ways to prevent sexting and ultimately the correlation between sexting and suicidal behaviour among university students. The study findings might help to create awareness among professionals on

issues relating to sexting and suicidal behaviour in Kenya. Counseling psychologists, social workers, and psychiatrists would be able to identify the elements that lead to university students engaging in suicidal behaviour and sexting. The study may also benefit policymakers, university administrators, and the public at large in understanding how to address the effects of sexting in the university environment. The findings may further guide policymakers, university administrators, and the broader public in addressing the consequences of sexting within university environments. Importantly, the results can help university counselling services enhance their effectiveness. With evidence on the risk factors, behavioural patterns, and psychological vulnerabilities linked to sexting and suicidal behaviours, counsellors can design more targeted interventions, strengthen early identification and referral systems, and tailor psychoeducation programmes to address emerging risks.

1.9 Scope of the Study

This study focused exclusively on undergraduate students enrolled in universities located within Kiambu County. To further refine the scope, ten universities from the county were purposively selected for inclusion. The investigation was limited to examining the relationship between sexting and suicidal behaviour among undergraduate students, without extending to postgraduate students or institutions outside the study area. The study employed a correlational research design, which enabled the researcher to analyze and determine the nature and strength of the association between the independent variable (sexting) and the dependent variable (suicidal behaviour).

1.10 Limitations and Delimitations of the Study

The topic under investigation entailed sexting and suicidal behaviour, which are sensitive in nature and many participants were not willing to disclose information to the researcher due to trust issues. This was solved by ensuring strict adherence to research ethics and the assurance of confidentiality of the information provided by the participants in the study. At the same time,

the researcher did not take the personal details of the respondents, such as their names and did not record the information using an audio or video recorder. The researcher required a high level of privacy to allow for free discussion to elicit more information.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section provides an overview of studies on the relationship between university students' attempts at suicide and sexting. It is classified into the following sections; theoretical framework, forms of sexting, prevalence of suicidal behaviour, relationship between sexting and suicidal behaviour, gender and sexting, summary of literature and conceptual structure.

2.2 Theoretical Framework

The study used two theories, including the Interpersonal-Psychological Theory of Suicidal Behaviours and the Multiple Goals Theory. These are discussed in the following sections.

2.2.1 The Interpersonal-Psychological Theory of Suicidal Behaviours

This model was propagated by Thomas Joiner in 2005 at Florida State University in the United States of America. The theory posits that the ability to be involved in suicidal behaviours is distinct from the yearning to engage in such behaviours. People commit suicide, it is assumed, because they have the means to do so and choose to do so. Two of the three basic components in this theory are directly connected to suicidal behaviour that is prevented: a sense of not belonging and a sense of being overburdened. The theory also provides a statement of the links between these constructs in the form of four hypotheses, which specify a causal route for the development of the desire for suicide and the competence to participate in significant suicidal activity. Below is a figure describing how the various constructs interact, resulting in suicidal behaviour.

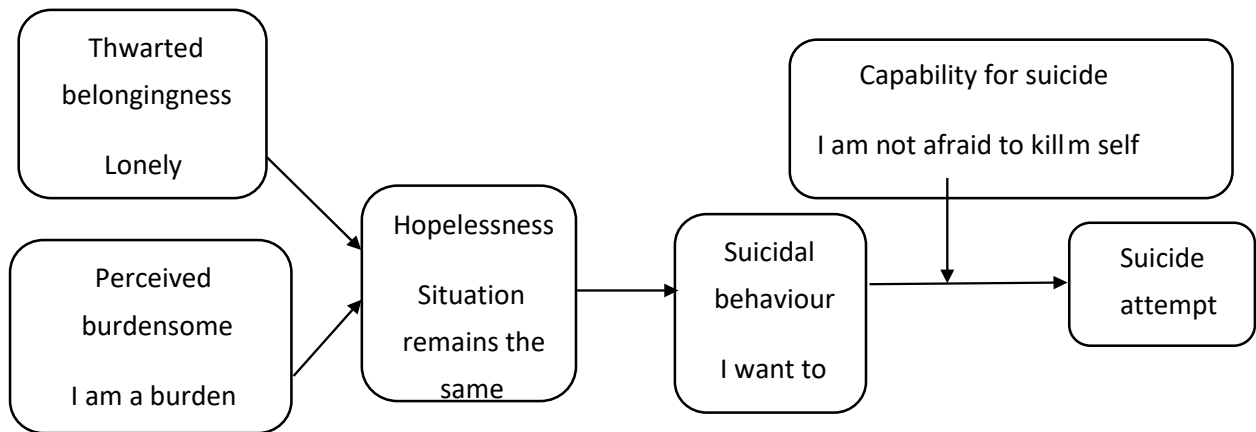


Figure 2.1: Constructs Interact Resulting in Suicidal behaviour

According to the Interpersonal Theory, thwarted belonging is not a fixed personality feature but rather a state of mind that is affected by both external and internal variables. Factors such as a person's real social surroundings such as the size of his or her social network; Activated interpersonal schemas (Hawley, 2008), such as the propensity to see other people's actions as signals of rejection; Downey (1996), and present feelings, such as thoughts of depression; According to the notion, an individual's sense of belonging changes and evolves throughout time. Consequently, of both external and internal social factors such as sexting which may later cause indicative or rejection by the peers or the society at large resulting into suicidal thoughts, verbalization of suicidal thoughts, future suicidal thoughts thus suicidal behaviour.

The theory highlights young people's beliefs, based on societal norms and practices, that they are disposable members of society. Pathogenic cultural views toward young people on their social behaviours, such as sexting have been implicated as a cause of suicide behaviour. This in return leads to social isolation, hopelessness and perceived burdensome to members of the society and the family leading to suicidal behaviour. Young people's suicidal behaviour was shown to be connected with the theory's view that they are disposable in society. Even though this theory explains the suicidal behaviour which might lead to suicide attempt or complete suicide; it is limited because it does not include sexting which is a key contributing factor in

suicidal behaviour and therefore the need to explain sexting, various forms of sexting, its prevalence and the effect of sexting among the undergraduate university students using Multiple Goal Theory.

2.2.2 Multiple Goals Theories

The Multiple Goals Theories (MGTs) are relevant to this study because they complement the Interpersonal-Psychological Theory of Suicidal Behaviours, which explains why suicidal desire and capability develop, but does not adequately address how communication behaviours such as sexting contribute to these psychological states. MGT fills this gap by offering a communication-based framework that explains the multiple, simultaneous goals individuals pursue during interpersonal exchanges, such as identity expression, relational maintenance, intimacy, or social approval. Caughlin (2010) propagated these sets of theories, popularizing these ideas by arguing that the theories are the dominant for understanding the process of message creation in human interaction. The five pillars of this approach are "clarity," "challenge," "commitment," "feedback," and "task complexity." Research examining these effects of sexting on undergraduate university students' interpersonal and communicative lives may make use of these theories. The Multiples Goals Theories has macro perspective of communication thus the ability to explain the complexities of the current situation of sexting problem among the undergraduate university students. As a result, these ideas provide light on the circumstances of sexting and the ways in which it might affect the social lives of university students. This theoretical stance may be used to classify a wide range of other theories. Multiple theories, including the identity implications theory (Wilson, Aleman, & Leatham, 1998), the theory of message designs logics (O'Keefe, 1988), the goals-plan-action model (Dillard, 2008), and politeness theory (Brown & Levinson, 1978), have been characterized as MGT by Wilson and Feng (2007).

Further, the theoretical perspective outlines the various goals in communication networks which include: instrumental; to imply the core reason for social interaction; identity which states what a person is concerned with and finally relational to show the desirable outcome of the communication (Caughlin, 2010). This perspective may therefore help to explain different media platforms on which sexting takes place that is Facebook, WhatsApp, Twitter, YouTube, Instagram etc., what motivate people to engage in sexting and further explain its prevalence especially among the university students. In summary, Multiple Goals Theories are essential when examining messages in various contexts of sexting. Therefore, these theories informed the study by helping the researcher understand the context of messaging about sexting and how they affect the people involved in the process of sexting.

Numerous goals theories can be applied to a variety of research objectives, including understanding how people evaluate communication in interpersonal relationships, determining what is appropriate and inappropriate to say in particular contexts, and explaining why people say particular things in particular contexts. Scott and Caughlin (2014) describe how "a multiple goals theoretical perspective offers a useful means of conceptualizing and evaluating what counts as better or worse communication" by emphasizing how well people attend to the many pertinent goals. Consequently, by adopting this viewpoint, we may evaluate how individuals focus on various objectives throughout their sexting encounters, how focusing on particular objectives promotes more or less desirable communication, and how this communication connects to particular relationship outcomes (Dodaj & Sesar, 2020). In this context, individuals may have multiple goals with sexting interactions that can facilitate desirable communication and other intended outcomes. Goals can include intimacy, connection, attraction, playfulness, behaviour engagement, and conversational reciprocation.

MGT was useful for the first and second objectives, which examine the nature and prevalence of sexting and suicidal behaviour, by showing how students' communication goals shape their engagement in sexting and the contexts in which it occurs. In addition, MGT is useful to the fourth objective as it clarifies how communication goals differ across gender, age, and social environments, which helps shape variations in sexting behaviour. In summary, this theory enriches the study by providing a communication-oriented perspective that complements the psychological emphasis of the first theory. By so doing, the theory allows for a more comprehensive understanding of how sexting behaviours develop and how they may contribute to suicidal outcomes among university students.

2.3 Review of Related Literature

This section presents a review of the literature concerning the research objectives. The literature is reviewed from the global, regional and local contexts.

2.3.1 Prevalence and Various Forms of Sexting

According to Kopel (2019) the term sexting was first used in 2005 and the term sex and sexting were combined in 2009. On the other hand, Ouystel (2019) states that sharing of erotic content e.g., pictures, video tapes through the internet and smartphones is a common description, the scientific community has not yet settled on a single meaning for the word sexting. As a result, it has been variously defined with some emphasizing the sharing of simply images and others encompassing the distribution of any sexual material. Kopel (2018), include compulsion as a part of the sexting actions, while other scholars believe sexting to be entirely consensual; other descriptions comprise sending sext messages as part of the sexting behaviour, though others do not. There is no universally accepted definition of sexting since the current literature on the topic uses different demographic samples such as teens vs. adults and different items to quantify sexting.

Sexting has garnered increasing amounts of attention from both the general public and the empirical literature. According to Benotsch, (2018), the documented incidence of sexting varies from 1.3% to 60% therefore it is difficult to get an accurate image of its frequency among university students. This study tried to show the prevalence among university students in Africa, particularly Kenya, which is still unknown, even if this is a general prevalence level worldwide.

Sexting has attracted the attention of many groups throughout the world, according to a research conducted in Spain and published in 2009 among teenagers, much before the widespread use of smartphones among young people today (Lenhart, 2019). All of the research participants were between the ages of 12 and 17, and the findings indicated that 15% had received and 4% had provided nude or seminude photos. This study was carried out in one of the European countries thus might not give the real reflection of other parts of the world especially the sub-Saharan Africa. At the same time, the study was carried out among the adolescents while the current study attempted to look at the prevalence of sexting among the undergraduate university students whose age's ranges between 18 and 27 years of age, this age group is highly involved in sexting and almost all of them have access to smart phones and internet. At the same time, these studies were carried out in the Western Europe which is a different area as opposed to the current study which was taking place in Sub-Saharan Africa.

With just 2.5% of mostly older teenagers sending and 7.1% receiving sexts, Mitchel (2012) found that the incidence of sexting among participants aged 10–17 was low in Western Europe. Although this research found a low frequency among teenagers, data on the prevalence among university students is still lacking. A broad age range, a clear definition of sexting, and a nationally representative sample are just a few of the study's many strengths. The uses of telephones to perform interviews and surveys the presence of parents are only two of the

potential methodological flaws that may have led to an underreporting of sexting in Mitchel's research. These methodologies used could not allow the respondents to feel comfortable and reveal more information hence the underreporting of the sexting behaviours among the young adult. Therefore, the current study utilized focused group discussion and self-constructed questionnaires were adapted based on SBQ-R means of collecting data; which the researcher has to carry out on a face to-face basis thereby enhancing confidentiality, flexibility, openness and probing to reveal more information.

According to research conducted by Steiner & Cyders (2013) among secondary school adolescents in Western Europe, sexting is a common practice, but one that is only engaged in sometimes or seldom. Some students on campus may freely confess to sexting, while others may not feel comfortable talking about their own sexting habits for fear of negative consequences. However, the above studies did not separate their findings on the basis of gender and how sexting relate to suicidal behaviour, a subject the current study is trying to find out. As a result, there is a need to conduct a study based on the gender of university students in order to understand how sexting and suicidal behaviour affect each group. At the same time this enabled the researcher to understand other factors such as prevalence and forms of sexting on different gender.

Kokkinos and Krommida (2022) investigated sexting among 3,171 Greek college students in regard to various relationship kinds, including friends, romantic partners, and strangers. In addition to providing demographic and relationship status data, participants filled out an anonymous online survey that evaluated sexting within the previous 12 months. Participants frequently engaged in the practice of exchanging sext messages via mobile devices and the Messenger app. Males and non-heterosexuals were more likely to engage in sexting. Participants who were 25 years of age or older were more likely to sext strangers than those

who were 18 to 24. Exchanging sexts was more common among romantic couples than among strangers. One methodological flaw in the study was the use of online surveys. It is also contextually incompatible with the current study because the study was conducted in Europe.

Boer et al. (2021) sought to better understand the elements involved in dissemination by examining the prevalence of (non-consensual) sext-sharing among Dutch adolescents and the characteristics of individuals who engage in it. The characteristics that people most strongly linked with sext-sharing were being male, between the ages of 12 and 14, using social media frequently, seeing online porn, having sex, and being the target of sext-sharing. According to the findings, sext-sharing is less common among older teens and is associated with adolescents' levels of sexual curiosity and online activity. The method of data analysis adopted in the study was logistic regression hence showing a methodological gap. The study further focused generally on adolescents without specifying those in universities hence showing a contextual gap.

Madigan et al. (2018) looked at the prevalence of various types of sexting behaviour, broken down by sexting method, age, sex, and region in a meta-analytic synthesis of studies. Between January 1990 and June 2016, electronic searches in MEDLINE, PsycINFO, EMBASE, and Web of Science yielded 1147 records without duplicates. Included were studies with participants under the age of 18 who reported a high frequency of sexting explicit photographs, videos, or texts. A total of 39 studies with 110–380 individuals were included in the meta-analysis. Prevalence rates have been increasing in recent years and as young people age, with the mean prevalence of sending and receiving sexts being 14.8% and 27.4%, respectively. The percentages of people who sent a sext without permission and those who received one without permission were 12.0% and 8.4%, respectively. The fact that the study did not specify the targeted group and the use of met analysis presented a gap.

Commeey et al. (2024) carried out a study titled "A Scoping Review of Prevalence, Risk Factors, and Impact of Sexting Among College Students in Africa." Four major electronic databases—PubMed, PsycINFO, Central, and JSTOR—were searched for records. ProQuest, Google, and Google Scholar were used for additional searches. Eleven articles in all satisfied the eligibility requirements and were reviewed. The review's findings were categorized under four primary headings: sexting type, prevalence, sexting predictors, and sexting outcomes. Sending and receiving sexually explicit sexts and images, as well as sharing explicit films and images on social media, were the primary forms of sexting. General sexting prevalence percentages varied from 9.9% to 74.4%. There was a methodological gap in the systematic review that was used as the approach.

The incidence of sexting and related factors among Ghanaian undergraduate students were evaluated by Manu, Anaba, and Ahiataku (2023). 652 University of Ghana undergraduate students participated in a cross-sectional survey. Sexting prevalence was 35% for two-way sexting, 69% for receiving, and 48% for sending. Participants between the ages of 20 and 24 were less likely than those between the ages of 17 and 19 to submit sexually suggestive images (AOR = 0.58; 95% CI: 0.35–0.95). Compared to men, women were 52% less likely to transmit sexually suggestive images (AOR = 0.47; 95% CI: 0.32–0.70). Additionally, compared to first-year (Level 100) students, second-year (Level 200) students were less likely to transmit sexually suggestive images (AOR = 0.48; 95% CI: 0.25–0.94). The investigation was conducted in Ghana, which created a contextual gap.

Bilinga (2021) looked at how media exposure shapes the dissemination of sexuality information among university students at Dar es Salaam University. Although the study did not focus exclusively on sexting, its findings showed that students had frequent access and engaged with different forms of digital sexual content through social media, mobile phones and online

communication platforms. The study found that many students shared sexual information, images, and messages regularly through media channels. The findings suggested that technology and, more so, social media were used by university students for sexual interactions. Although the study was relevant to this study, there was a conceptual gap since the study by Bilinga focused on the role of social media in sharing sexual information as opposed to the preference for various forms of sexting.

Mukonyo, Kabue, and Mugo (2020) looked at the use of sexting among students at Machakos University in Machakos County, Kenya, and found the dangerous sexual behaviours linked to sexting. A descriptive cross-sectional study approach was used in the investigation. 347 Machakos University students between the ages of 18 and 24 made up the target sample. Purposive sampling was utilized for qualitative data and the study region, while convenience sampling was employed for quantitative data. In-depth interviews and questionnaires given by the interviewer were employed to gather qualitative data. The qualitative data was analyzed using thematic analysis, which was then cross-checked with quantitative results. Sexting-related factors were identified using the chi square test, and the odds ratio was used to assess the relationship between sexting and risky sexual activity. It was discovered that 57% of students engaged in sexting, which is the exchanging of sexually suggestive images or photos, with 48% of them being two-way sexters. Sexting was more common among male respondents than female respondents (67% vs. 33%, respectively). Sexting was found to be substantially correlated with gender. A methodological flaw was introduced by the use of convenience sampling and a cross-sectional study design.

2.3.2 Prevalence of suicidal behaviour

Suicidal behaviour, according to O'Connor and Nock (2014), is defined as thoughts and actions associated with a person purposefully ending their own life. Included in these thoughts are the more specific outcomes of suicide ideation, which is when someone considers purposefully ending their own life; suicide plan, which is when someone devises a specific plan to do so; and suicide attempt, which is when someone engages in potentially harmful behaviour with the intention of dying as a result of the behaviour.

Suicidal behaviours and thoughts are more prevalent among young adults, with a frequency ranging between 19.8% to 24.0% (Nock, Borges, & Bromet, 2018). Only 3.1% to 8.8% of people attempted suicide in their lifetimes. This aligned with the results of similar international research (Richardson, 2019). The World Health Organization (WHO) approximates about 800,000 personalities a year has suicide thoughts due to various circumstances; sexting is one of these concerns. This is comparable to one person succumbing to depression every 40 seconds, or age-adjusted suicide rate of 11.5% per 100,000. Additionally, the global rate has climbed by 60% in the previous 50 years (Beautrais, 2018). Among young people, depression that leads to suicide attempts is the second highest cause of mortality (8.64 percent) (WHO, 2016). Suicidal behaviour is on the rise across the globe, and it's not just one act, but a process with many different causes. There is always suicidal conduct as induced by particular human behaviour and environmental concerns when a person makes the choice to commit suicide.

Pompili (2018) found that one in four individuals have known someone who has considered suicide, while on the other hand the study further indicated that for every suicide there are six or more persons who survived death of a treasured family member to suicide. Suicide is one of the primary causes of death in the area of mental health, besides the survivors themselves. The emotional wounds left by a suicide victim takes longer to heal than those left by any other cause

of death. After a suicide attempt fails, the grieving process may culminate in further suicide attempts (Pompili M, 2018).

Studies by Coentre and Gois (2018) in Austria, Turkey, Pakistan, and China indicated that the suicide attempts among the adolescents were 11.3% and 0.3%; 12% and 2.1%; 35.6% and 4.8%, and 8.2% and 4.3% respectively. These studies were carried out on a general population without specifying which group of population under investigation. It is therefore difficult to associate its findings to a particular population in the society. The current study was based on a given study population which is undergraduate university students. However, the incidence of suicidal thoughts and actions rises dramatically between the ages of 12 and 17 (Ono, 2019). Adolescents who experience suicidal behaviour are around 12 times more likely to have attempted suicide by the time they are 30 years old (Bergeret et al., 2016), and nearly half of college students who experience suicidal behaviour attempt suicide (Nock, 2018). Nevertheless, the study concentrated on the prevalence of suicidal thoughts and behaviours among adolescents aged 12 to 17.

Srivastava et al. (2023) examined the relationship between suicidal (ideation, planning, and attempt) and non-suicidal self-harm behaviour and digital sexual violence (threat to post or nonconsensual publishing of sexually explicit information). Higher odds of reporting suicidal ideation (odds ratio [OR] = 1.88), suicide plan (OR = 2.12), suicide attempt (OR = 3.56), and self-harm (OR = 1.96) were linked to the risk of uploading sexually explicit media without permission. On the other hand, uploading sexually explicit content without consent was linked to increased chances of reporting suicidal thoughts (OR = 1.82), as well as suicide attempts (OR = 2.20). The use of multivariate logistic regression made the study to have a methodological gap. Moreover, the study did not specify the university students, hence making it too present a contextual gap.

Chang et al. (2021) investigated whether cyberbullying victimization and online sexual exposure are linked to suicidal thoughts in Hong Kong teenagers, as well as if these relationships are influenced by sexual orientation and gender. Online sexual exposure was classified into two categories: online sexual dating and online sexual discussion. The relationship between being a victim of cyberbullying and suicidal thoughts varied significantly by gender, with the correlation being higher for girls. Depending on sexual orientation, there were different correlations between online sexual discourse and suicidal thoughts as well as between being the victim of cyberbullying and suicidal thoughts. There is a conceptual gap in the study because it only examined suicidal thoughts, which is one facet of suicide conduct. Additionally, there is a methodological gap in the study due to the way the data was collected and analyzed.

Maurya, Muhammad, and Thakkar (2023) sought to determine whether suicidal thoughts and a variety of risky sexual behaviours were related among Indian adolescents who were not married. The link between unmarried adolescents' risky sexual behaviours and suicidal thoughts was estimated using random effect regression analysis. In wave 2, 2.19% of teenage boys reported having suicide thoughts, up from 1.35% in wave 1. The percentage among teenage girls rose from 2.92% in wave 1 to 5.05% in wave 2. While the estimates for teenage girls only climbed from 0.26% at wave 1 to 0.78% at wave 2, the percentage of teenage guys who had more than one sexual partner jumped from 3.26% at wave 1 to 8.71% in wave 2. Suicidal thoughts were more common among adolescents who reported watching pornography, had multiple sexual partners, were sexually active, and were exposed to early sexual debut. Suicidal thoughts are probably more likely to occur in teenage boys and girls who engage in risky sexual behaviours. A contextual gap and a methodological gap are presented by the study's focus on unmarried teens and the application of random effects regression analysis.

In Eswatini, Quarshie et al. (2022) calculated the 12-month prevalence and found a few correlates of suicide behaviours in teenagers enrolled in school. Of the 2,513 analytical samples, 17.0% (95% CI: 15.4–18.4%) reported suicidal ideation, 21.0% (95% CI: 19.3–22.6%) had a suicide plan, and 15.5% (95% CI: 14.1–16.9%) made an attempt at suicide during the previous 12 months. The approach used for data collection and analysis creates a methodological gap in the study.

Medrano, Lopez Rosales, and Gámez-Guadix (2018) examined the connections between sexting, depression, suicidal thoughts, and cybervictimization, both directly and indirectly. The findings demonstrated a relationship between cyberbullying and sexting, which was linked to depressive symptoms. Additionally, there was a substantial correlation between suicide ideation and sexting, cybervictimization, and depression symptoms. The study also focused on just one aspect of suicidal behaviour hence did not fully investigate suicidal behaviour as other aspects were left out hence a conceptual gap is evident. The use of structural equation modelling also leads to a methodological gap.

Research conducted by Palmier (2019) using a descriptive research design found significant variation in the prevalence of suicidal behaviour among high scholars in Zambia, Kenya, Botswana, Uganda, and Tanzania. Among all pupils, 31.9% of those living in Zambia reported suicide thoughts, followed by 23.1% in Botswana, 27.9% in Kenya, 11.2% in Tanzania, and 19.6% in Uganda. The fact that Kenyan high school students have the second highest rate of suicide conduct in all of sub-Saharan Africa suggests that more research into this issue at the university level is warranted. However, at the same time, these studies only considered secondary school students and not the university students. Because of this, the current study attempted to investigate whether or not suicide thoughts and actions are common among undergraduate university students. Concurrently, the present research used a correlational study

design since it shows the direction and the strength of the relationship between sexting and suicide thoughts or actions among undergraduate university students.

In Uganda, Nsereko, Musisi, Nakigudde, and Holtzman (2014) conducted a study examining the prevalence, types, and distribution of psychosocial problems among university students. Of the psychosocial issues under study, suicidal behaviour was the most notable. The study also found that a significant number of students experienced suicidal thoughts as others attempted suicide. The findings of the study indicated that suicidal thoughts among students was moderate, where some students had gone from mild to more severe forms such as planning or attempting suicide. Some of the contributors of suicidal behaviours highlighted in the study included academic struggles, financial issues, emotional distress and interpersonal differences. The study provided important to this study showing that university students are vulnerable to suicidal behaviours. However, the study focused on numerous psychosocial problems with suicidal behaviour being one of the components.

Mugambi, Munene, and Mogute (2020) aimed to ascertain the prevalence of suicidal behaviour, ascertain the prevalence of SB among adolescents suffering from DD and/or PTSD, and establish a correlation between the prevalence of SB and the sociodemographic attributes of adolescents residing in Nairobi's informal settlements. The study involved 1,040 high school students from Nairobi, Kenya. The findings showed that among the 1,040 teenagers from Nairobi's informal settlements, there was a 21.5% overall prevalence of SB, 17.0% PTSD comorbid with SB, 16.6% DD with SB, and 15.0% DD with PTSD and SB. Compared to male respondents, the prevalence was substantially greater among female respondents. There was a contextual gap because the study only looked at teenagers in Nairobi who had either post-traumatic stress disorder (PTSD) or depression disorder (DD).

2.3.3 Relationship between various forms of sexting and suicidal behaviour

According to the Kenya Ministry of Health Report (2021), why these young kids believed suicide to be their only option is difficult to comprehend. A person of any age would be devastated by the sense of personal violation they had experienced. During adolescence, when emotions of any type are raw, powerful, and near to the surface, such a violation is extremely intolerable. Teenagers' feelings of embarrassment and shame can quickly turn into pessimism and despair. It is not surprising that some children concluded that suicide is the only way out. However, this report is based on teenagers who are currently on adolescent's stage of development as opposed to the current study which concentrates on the undergraduate university students who are young adult in the society.

Considering the gradual increase in the number of suicidal cases among the young adult in relation to sexting; many policy makers have found it difficult to come up with a solution related to sexting problem due to lack of enough information needed. However, many scholars have not considered investigating how sexting relate to suicidal behaviour. At the same time there are several differences found in the literature leading to variances in views about sexting and suicidal behaviour among the young adults especially the university students. On how to measure the impact of sexting, methodologies used to study its relationship with suicidal behaviour. As a result of such gap, this research tried to fill the gap of knowledge on methodology, information on sexting in relation to prevalence and its relationship with suicidal behaviour among the university students.

Even though it's becoming more evident that many teenage boys and girls sext, studies comparing the two sexes have shown mixed results. Female teenagers have higher chances of sending sexts as compared to their male colleagues, according to a research by Dake (2017) among university students in Paris, although no sex differences in sexting have been observed

in a study by Temple (2019). Adolescent males may be more prone than girls to send and receive sexts, according to some data. Although, the two studies concentrated on the adolescent boys and girls to examine their participation in sexting. The current study looked at the level of sexting among the young adults especially the university students and how sexting relate to suicidal behaviour on different gender in higher learning institutions.

There seems to be minimal differences between both sexes in institutions of higher learning regarding general sexting behaviours, as discovered by Winkelman (2014) in his study in Western Europe. On the other hand, Henson and Fisher (2014) in their study in USA found that males have higher chances of receiving sext messages while women are more likely to send them. Dir (2013) found that single people and women are more likely to have unfavorable views and expectations regarding sexting. This is in line with research by Perkins (2013), who discovered that men respond far more positively than females when they get unwanted sext messages. According to Perkins (2013), sexting males are also more likely to have antagonistic or unfavorable views towards females. Jewell (2013) asserts that men are more likely to perceive women as sex objects and men as sex centered, which may imply that women feel compelled to communicate sexually explicit information to men. Temple-Smith (2011) supported this widely held assumption by finding a link between sexting and sexual assault against women. Because of this connection, young females have higher probabilities of sending sexually erotic sexts or pictures, which can be used in revenge porn, online dating violence, cyberbullying, and even intimidation. This can, lead to feelings of suicidal thoughts, verbalization of suicidal thoughts and even suicidal behaviour. As a result of gendered nature of sexting, there is a need to conduct research to understand the relationship between sexting and suicidal behaviour among undergraduate university students based on their gender.

According to Klettke's (2019) analysis of the literature, there are substantial connections between suicidal conduct, dissemination of sexual material without authorization, legal implications, and bad mental health outcomes. Sexting is also strongly associated to online victimization conducts including cyberbullying, violence in online dating, and revenge porn, as shown by the study. This study was majorly based on secondary information obtained from various published sources which may not be easily established. The current study, therefore, used primary data collected among the university students to understand the relationship between sexting and suicidal behaviour among them. Further, the study emphasizes on the relationship between sexting with other factors thus an opportunity for a study to find out the association involving sexting and suicidal behaviour among the students of higher learning.

University students in the US have been shown to engage in both cyberbullying and sexting, according to research conducted by Korenis & Billick (2017). Unlike Korenis and Billick's research, this one focuses only on the link between sexting and suicide attempts. Cyber victimization has been connected to escalating rates of depression, social anxiety, and poor wellbeing in teenagers, as shown by research conducted by Frankel (2018). It has been demonstrated that victims of cyberbullying and cybercrime have much greater rates of social anxiety and despair. These findings suggest that victimization via sexting may be linked to an increased risk of reporting depression and anxious symptoms. In a similar study in United Kingdom among the young adult in college, Madigan (2017), showed that sexting rates are higher among those who use the internet often and inappropriately, and that depressed symptoms are more prevalent among those who spend more time online. The research did note a connection between cyberbullying and sexting, but it did not investigate whether university students who sext are more likely to have suicidal behaviours. Recently, numerous reports of adolescents both sexes, committed suicide after their private nude images sent to a lover were publicly made online. (MoH, 2021) in a few instances, the boyfriend or girlfriend's purposeful

retaliation following a traumatic breakup led to more widespread dissemination. In other words, it was just one example of the teen society's pervasive meanness.

Alonso and Romero (2020) examined the longitudinal data from 624 teenagers who were assessed twice (T1 and T2) over a one-year period. The adolescents were given questionnaires measuring sexting, five factor model (FFM) personality traits, and potential psychosocial repercussions of sexting. The findings showed that sexting (T2) is associated with strong extraversion and low agreeableness and conscientiousness (T1). Additionally, the study allows us to identify whether specific personality traits (T1) are associated with the sexting behaviour that is shown in T2. Regression models, however, indicate that extraversion predicts increases in sexting between T1 and T2. A high degree of T1 participation predicts a decline in victimization and a decline in positive emotions between T1 and T2, according to the outcomes of sexting. Thus, this study demonstrates that personality predicts sexting changes during adolescence, and sexting appears to be linked to pertinent psychosocial outcomes during this developmental stage. The study focused on the connection between suicide attempts, sadness, anxiety, and sexting. However, the study had a conceptual gap because it did not fully examine suicide conduct.

Dodaj, Sesar, and Cvitkovic (2019) looked into the incidence of sexting among boys and girls. A sample of 711 teenagers between the ages of 14 and 19 participated in the study. According to the study's findings, sending sexually explicit content is the most common form of sexting, while uploading sexually explicit stuff is the least common. Sexting was shown to be more common among boys than among girls. Additionally, students who engage in sexting are more likely to consider suicide and suicidal ideation. Because high school pupils were the study's primary focus, it demonstrated a contextual gap.

Milton et al. (2019) evaluated the prevalence, perspectives, and predictors of sexting, web-based dangers, and safety in two representative national samples of young Australians. Both the 2012 and 2014 Young and Well National Surveys employed computer-assisted telephone interviewing with random digit dialing. Representative and random samples of 1,400 youths between the ages of 16 and 25 were among the participants. whereas sending sexts did not change considerably between 2012 and 2014, receiving and two-way sexting both grew significantly, whereas not sexting decreased significantly. Furthermore, it was discovered that sending and receiving sexts was linked to mental health and well-being items (suicidal thoughts and acts), as well as demographics (male, second language, and relationship status). However, because university students were not specifically mentioned in the study, the context is different from the current study. Additionally, the study presented a methodological gap due to the utilization of interviews for data gathering.

Frankel et al. (2018) looked into the connections between suicidal thoughts, depression, cybervictimization, and sexting, both directly and indirectly. 303 Mexican university students (mean age = 19.73, SD = 1.73) who answered a questionnaire on the pertinent criteria made up the sample. To assess the correlations between the variables, structural equation modeling was employed. The results showed that sexting was associated with cyberbullying, which in turn was associated with symptoms of depression. Additionally, there was a significant correlation between suicidal thoughts and sexting, cybervictimization, and depressive symptoms. A conceptual gap resulted from the study's exclusive focus on suicidal ideation as the only element of suicidal behaviour.

Faraj (2023) looked into how Koya University students' suicidal thoughts varied by gender. The study included 209 students in total, 104 of whom were female and 105 of whom were male. To address the research issues, a suicidal ideation measure was used. The findings

showed that there was a statistically significant difference in the prevalence of suicidal ideation between male and female students, with a higher prevalence among female students. There is a conceptual gap because the study only looked at suicidal ideation. Another methodological flaw was the sampling strategy used.

Mussap, Clancy, and Klettke (2023) investigated the attitudes and views of cisgender and transgender individuals regarding non-consensual sexting and cyberbullying. Research of cyberbullying and sexting victimization experiences, perpetration practices, and positive attitudes/beliefs was completed by 638 ciswomen, 722 cismen, and 146 transgender and gender variant people between the ages of 18 and 66 ($M = 23.27$, $SD = 3.66$). Significant gender disparities in cyber and sexting victimization and perpetration were found using MANCOVAs. Compared to cismen, ciswomen reported committing cyberbullying 8% less frequently, engaging in non-consensual sexting 17% less frequently, and being victimized by non-consensual sexting 77% more frequently. The study's focus on transgender adults created a contextual gap. Additionally, there is a methodological gap in the analysis due to the use of MANCOVA.

Rasheduzzaman et al. (2022) investigated the prevalence and risk factors for suicide behaviours among university students from Bangladesh. Between October and November 2019, a cross-sectional survey was conducted with 1844 university students using a convenience sample approach. A family history of mental illness, stressful life events from the last year, perceived health-related questions, sociodemographic data, and suicidal behaviours (i.e., SI, SP, and SA) were all part of the data gathering process. Chi-square tests and binary logistic regressions were employed to examine the data. The lifetime intent, suicide attempt, and suicidal ideation rates for the previous 12 months were 13.4%, 6.0%, and 4.4%, respectively. Compared to men, women reported suicide behaviour at significantly greater rates (20.6% vs. 10.2% SI; 9% vs.

4.6% SP; and 6.4% vs. 3.6% SA). Among other things, being female was a risk factor for suicide ideation, being female was a risk factor for suicidal attempts, and being female was linked to suicidal planning. However, the study was conducted in Bangladesh and used a cross-sectional research methodology.

Sesar, Dodaj, and Kordić (2019) investigated the connection between emotional intelligence and sexting. In all, 440 University of Mostar students, ranging in age from 18 to 25, participated in this study. The participants filled out the Emotional Skills and Competence Questionnaire and the Scale of Sexting Behaviour. According to the study's findings, 10.23% of students publicly promoted sexually suggestive or provocative content, while 23.64% of students had engaged in both sending and receiving such content. Compared to young women, young men engaged in sexting more frequently and performed worse when it came to identifying, comprehending, and controlling their emotions. According to the data analysis, people who scored lower on the emotional competence scale were more likely to send, receive, or publish sexually suggestive or provocative content. Receiving and sending sexually explicit content was statistically significantly predicted by sex and emotional control and regulation skills. There is a conceptual gap because the study concentrated on emotional competency rather than suicidal behaviour.

Springston (2017) investigated the relationship between sexting reasons and involvement and gender, gender role attitudes, and self-perceptions of masculinity and femininity. Early in the spring 2016 academic semester, 222 Butler students were given a self-administered questionnaire using a cross-sectional methodology. The frequency of sending sext messages did not differ by gender, but the study's findings indicated a strong correlation between sexting pressures and gender. When it comes to sexual conduct, women are more likely to feel confined by social conventions, whereas men have greater flexibility. Furthermore, sexting has been

included into sexual interactions, as seen by the higher acceptance of the technology among individuals who hold egalitarian views on gender roles. The study presents a methodological gap due to the cross-sectional methodology.

Yisa and Orji (2024) looked at 700 Nigerian social media users' sexting prevalence, trends, and effects on mental health. Descriptive, regression, and structural equation model (SEM) approaches were used in the investigation. According to the study, 58% of participants used sexting, which is a significant number considering Nigeria's cultural conservatism. Furthermore, over 41% acknowledged sending or receiving forward-sexed photographs or texts without the victims' authorization, which raises the possibility of cyberbullying and the mental health issues that may follow. The study also discovered that sexting and depression were strongly positively correlated, but that the consequences of sexting on depression varied by gender, with males who sexting having higher levels of depression than women. The study's emphasis on social media usage creates a contextual vacuum. Furthermore, the employment of a structural equation model for data analysis presents a methodological flaw.

Shirima et al. (2023) investigated the prevalence and predictors of suicidal attempts among secondary school adolescents in the Kilimanjaro Region of Tanzania. The study found several behavioural and psychosocial risk factors that increased vulnerability to suicidal behaviour. These included substance use, experiences of emotional distress, interpersonal conflicts, being exposed to violence and risky sexual behaviours. The findings showed that adolescents who engaged in high-risk behaviours or encountered stressful interpersonal situations were more likely to attempt suicide. This finding showed that some behaviour patterns and exposure to certain events shape suicide risk. The study offered insights to this study on the association between suicidal thoughts and other factors. However, the study focused on secondary school students, which is a different demographic to the one in this study.

In Kenya, Stephen, Nyagah, Kaithuru, and Vincent (2017) looked at the impact of cell phone sexting on adolescents' sexual behaviour in Nairobi County. The study found that sexting was relatively common among adolescents and was significantly associated with risky sexual behaviours, including early sexual engagement, having multiple sexual partners, and engaging in unprotected sex. The study concluded that sexting facilitates sexual experimentation and risky decision-making among adolescents. Although the study by Stephen et al. did not assess suicidal behaviour, it, however, found that sexting has a link to negative behavioural outcomes, leaving a conceptual gap that this study sought to address.

2.3.4 Gender, Age and Social Environment Differences in Relation to Sexting and Suicidal Behaviour Among Undergraduate University Students

Wright and Wachs (2024) looked into how adolescent demographic factors affected the long-term relationships between sexual risk behaviours, mental health and various forms of sexting. In this study, eleven hundred and thirteen teens from six American high schools (ages 14–17; Mage = 16.36; SD age = .81; 50% female) took part. Teens in the ninth grade completed surveys on sexting practices, mental health, and sexual risk behaviours; tenth graders also completed surveys on same subjects. Both coerced and non-consensual sexting were positively connected with sexual risk behaviours and all mental health traits. Girls, youth with disabilities, members of sexual minorities, and members of ethnic minorities were more likely to have depressive symptoms in conjunction with non-consensual sexting. Similar patterns were observed in non-suicidal self-harm, coerced sexting, and subjective health concerns. For girls, teenagers with impairments, members of ethnic minorities, and those who identified as sexual minorities, the associations between coerced sexting and sexual risk behaviours were greater. In this study, the moderating variable of gender was examined. A contextual gap resulted from the study's additional focus on high school students.

Matud (2024) aimed to ascertain the part that gender plays in sexting behaviour and its connection to psychological health and falling prey to intimate relationship abuse at any age. 6719 men and women from the broader Spanish population made up the sample for this cross-sectional study. They were evaluated using six questionnaires that measured psychological discomfort, psychological well-being, life satisfaction, self-esteem, sexting behaviour, and being abused in an intimate relationship. The results showed that men were more likely than women to sext at every stage of life studied, but among teenagers, the differences were not statistically significant. Because the study's focus was on the general people, there is a contextual gap.

The factors impacting undergraduate students' sexting behaviour at the University of Ilorin in Nigeria were examined by Kelani et al. (2020). In order to find out what makes undergraduate students more likely to engage in sexting, the study used a survey approach. A total of 385 undergraduate students from the University of Ilorin were chosen using the stratified sampling technique. The t-test and Analysis of Variance (ANOVA) were utilized for hypothesis testing, and frequency counts were employed to examine the demographic information. According to the theory of planned behaviour (TPB), the study discovered that the social phenomena of sexting is influenced by a number of characteristics, including the college students' age, gender, and sexual orientation. There is a methodological gap in the study because of the sampling and analysis techniques used.

A review of the scientific literature was done by Gassó et al. (2019) to investigate the relationship between mental health and sexting as a potentially harmful habit and its connection to online victimization. According to the study, the adolescents' ages also have a significant impact. When compared to consensual sexting practices, in which older students have not been coerced (experimental sexting), mental health symptoms appear to be more closely linked to aggravated sexting as adolescents age. Therefore, it may be likely that compulsion,

victimization, and age act as mediators in the association between sexting and symptoms of anxiety, sadness, and poor mental health. There is a methodological gap in the study because of the utilization of the literature review.

In Cape Town, South Africa, Schloms-Madlener (2013) examined the frequency and features of sexting among a sample of adults and teenagers. The study's design was cross-sectional and primarily quantitative. To enable more thorough research on the problem of gendered sexting, a tiny qualitative component was added. To gather data, a sexting survey for adults and adolescents was created. Three distinct hypotheses were tested using chi-square analysis. The study's results indicated that sexting is variable in prevalence, at least among the highly selected group of adults and teenagers in Cape Town, and that sexting trends appear to be somewhat correlated with age, gender, and actual sexual behaviour. The study presents a methodological gap because it uses chi-square and a cross-sectional design.

The nature, causes, and effects of sexting behaviour are among the often-researched aspects of sexting that Dodaj et al. (2024) conceptually review. The agreement was crucial for almost every trait that was looked at in sexting studies. The study highlighted the significance of social and cultural values as contextual variables for youth sexting engagement. Laws, religious beliefs, and social and cultural norms are important cultural and social determinants of sexuality attitudes. These elements might also play a part in describing sexting as a sexual behaviour. There is a methodological gap in this study because of the way the data was collected.

The study conducted by Kaggwa et al. in 2022 examined the prevalence and contributing factors of suicidal ideation, suicide intents, and suicide attempts among university students in Uganda. In southwest Uganda, 540 undergraduate students (363 men, mean age 23.3 years) took part in a cross-sectional survey. Suicidal ideation was evaluated using items from the General Health Questionnaire (GHQ-28), while suicide attempts and plans were evaluated using additional

specially designed questions. The study also looked at why the suicide plan was not carried out. The factors linked to various types of suicidal behaviours were identified using three independent regression models. Any type of suicide behaviour was more likely to occur in people with a long-term physical medical condition. The inability to pay for college tuition was linked to suicidal thoughts. Having a history of sexual abuse and struggling to pay for college tuition were linked to suicide attempts. However, because chi square and cross-sectional design were used for data analysis, the study had a methodological flaw.

Through a qualitative study of online narratives, Gitonga and Muthoni (2024) investigated the experiences of suicidal thoughts among Kenyan youth. The sample consisted of 15 young people, ages 17 to 26, who shared their tales on online platforms. By using Interpretative Phenomenological Analysis (IPA), the study sheds light on the intricate relationships between identity conflicts, mental health issues, and social pressures that lead to suicide thoughts. The influence of cultural norms, stigma around mental health, loneliness, and identity crises are among the major themes found. This study only looked at suicidal ideation, which creates a conceptual vacuum. Furthermore, the study used a different approach than the one used in this one.

Mukonyo, Kabue, and Mugo (2020) looked into the dangerous sexual behaviours linked to sexting as well as the practice of sexting among students at Machakos University in Machakos County, Kenya. A descriptive cross-sectional study approach was used in the investigation. 347 Machakos University students between the ages of 18 and 24 made up the target sample. Purposive sampling was utilized for qualitative data and the study region, while convenience sampling was employed for quantitative data. The qualitative data was collected through in-depth interviews and questionnaires given by the interviewer. The qualitative data was analyzed using thematic analysis, which was then cross-checked with quantitative results. Sexting-related

factors were identified using the chi square test, and the odds ratio was used to assess the relationship between sexting and risky sexual activity. Sexting was substantially correlated with age. However, this study's technique was different from the one that was suggested for the current investigation.

2.4 Summary of Literature Review

This study used both Interpersonal psychological theory of suicidal behaviours and multiple goal theories. The Interpersonal Psychological theory of suicidal behaviours was used to explain how the suicidal behaviour manifests and affects the individuals view of life on the basis of the outcome of a given social behaviour. On the other hand, Multiple Goal Theories assisted in outlining the various perspectives of sexting on the basis of its various forms, prevalence and the medium through which it is passed from one person to the other. According to most literature reviewed, there are limited studies on the connection involving sexting and suicidal behaviour. The literature further revealed that most studies were carried out among adolescents as opposed to university students, which was the focus of the current study. It is not clear from the literature on the different forms of sexting and their prevalence across the globe. Therefore, allowing carrying out a study to understand the prevalence and various forms of sexting among undergraduate university students. The prevalence of suicidal behaviour has been revealed among secondary students and primary pupils in European countries. In contrast to the current study, which aims to determine the prevalence of suicidal behaviour in relation to sexting among undergraduate students, this prevalence is based on other factors that cause suicidal ideation. Further, the literature reviewed does not show the prevalence of sexting and suicidal behaviour based on gender differences. The studies conducted on the gender, age and social environments differences in relation to sexting and suicidal behaviour show that gender, age and social environments play a role in the relationship between the two concepts. More male and older adolescents are shown to have the highest prevalence of sexting and suicidal

behaviour. More so, social environments such as culture, education level, religion, laws and social norms are some of the identified social environment determinants. Hence, the present study attempted to explain the prevalence of sexting and suicidal behaviour based on gender differences.

2.5 Conceptual Framework

The figure below shows the relationship between the research variables. The link between the two primary variables in this study—the independent and dependent variables, respectively—is depicted in Fig. 1 below. Here the independent variable is sexting while the dependent variable is suicidal behaviour. The two variables are being influenced by the intervening variables including age, gender, and social environment of the university students. Sexting has several forms which include; videos, text messages, and sexual images by which it appears in an individual; these forms are spread across using various platforms or technological assistance, and social environments on the basis of the age and sex of the person involved. As a result, suicidal thoughts, verbalization of suicidal thoughts, suicidal attempts, and future suicidal thoughts sets in leading to suicidal behaviour as a consequence of sexting hence the relationship between sexting and suicidal behaviour.

Independent Variable

Dependent Variable

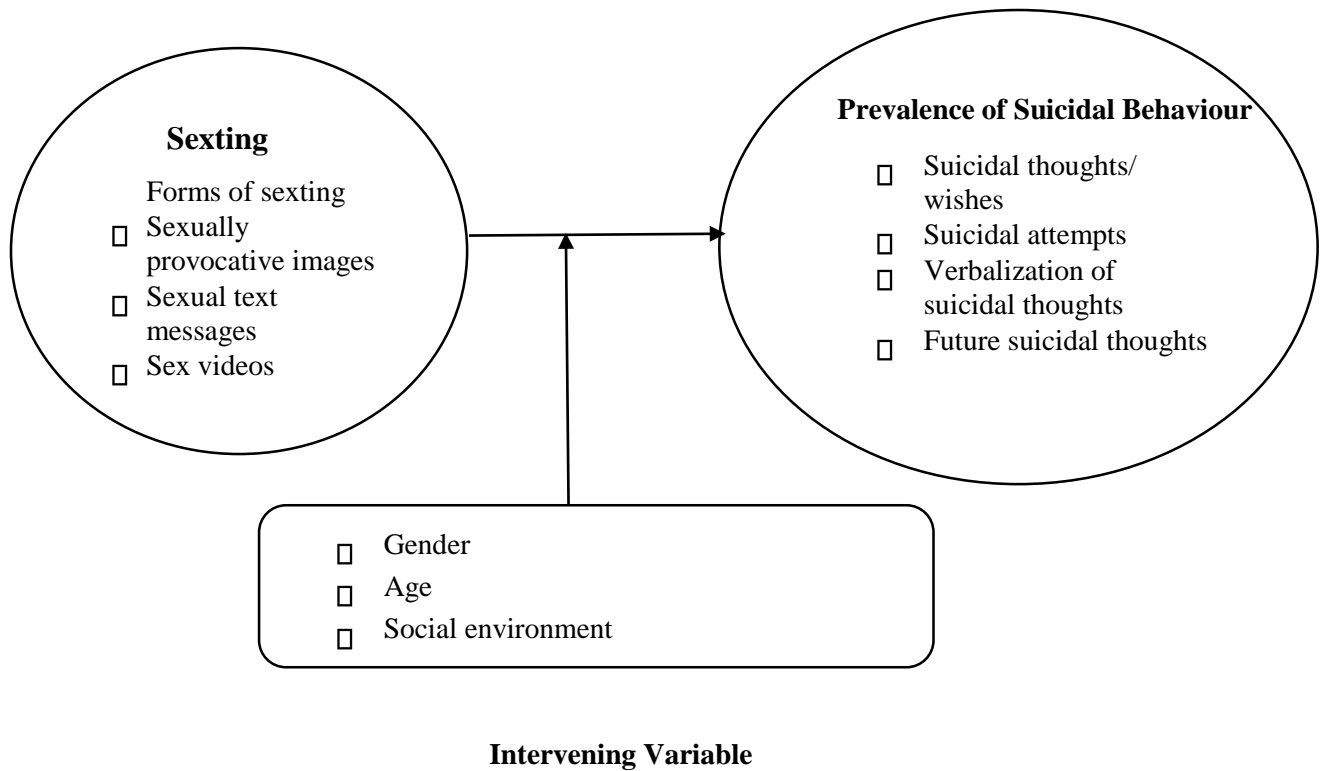


Figure 2.2: Conceptual Framework

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The following subsections are presented in this section: study site, target population, research design, sampling strategies, research tools, research instruments, data processing and presentation, and, finally, ethical considerations.

3.2 Research Design

This study employed a correlational research design to examine whether a relationship exists between sexting and suicidal behaviours among undergraduate university students. This research design was selected for the study because it allowed the researcher to explore both the presence and nature of the association between the variables without manipulating them. According to Bloomfield & Fisher (2019), a correlational design is appropriate when the goal is to determine how variables relate to one another as they naturally occur, without the researcher influencing or controlling them. Also, the study was able to quantify the direction and strength of the relationship between different forms of sexting and suicidal thoughts through this approach. The approach provided a systematic and ethical way to understand how these behaviours interact within the natural setting of university students.

3.3 Study Variables

The independent variable in the current study was sexting, which is conceptualized as forms of sexting, the images used as sexting, messages and videos related to sexting. The dependent variable was suicidal behaviour, which was conceptualized as suicidal thoughts/ wishes, suicidal attempts, verbalization of suicidal thoughts and future suicidal thoughts. The intervening variable included age, gender and social environment. These intervening variables were controlled by selecting students across the years. For the social environment, the study involved both students living in urban and rural settings of Kiambu County.

3.4 Location of the Study

Both public and private universities in Kenya's Kiambu County served as the study's sites. Kenya's central region is home to Kiambu County, which shares a southern border with Nairobi City County. The county is 40% rural and 60% urban due to its closeness to the capital city of Kenya which is growing northwards. Kiambu County has a total of ten universities. They include: St Paul's University, Presbyterian University of East Africa, Jomo Kenyatta University of Agriculture & Technology, Greta University, UMMA University, Mount Kenya University, Zetech University, University of Nairobi, Kikuyu campus and Kenyatta University, Ruiru campus. These high numbers of universities attract students from different parts of the country if not across the globe. The county was purposively chosen because of its cosmopolitan nature, which brings about cultural diversity, hence the understanding of sexting and suicidal thoughts through the lens of cultural background. At the same time, Kiambu County has both rural and urban settlements, hence the ability to obtain divergent opinions concerning sexting and suicidal behaviour. The urban aspect enabled the researcher to understand the level of prevalence of sexting and suicidal behaviour among students living within the urban parts and those residing in rural settlements. In addition, the site's location improved knowledge of the prevalence of suicidal behaviour and sexting among college students based on their residential region.

Kiambu County has been selected due to its location. Kiambu County is strategically situated near Nairobi City County which hosts most of the universities but it is easy to navigate in terms of resources than Nairobi City County. Due to the limited resources available to conduct the research, basing the research in Kiambu County would be viable as opposed to the high cost that would be required to navigate through the universities located in Nairobi County.

3.5 Target Population

Students attending ten universities within Kiambu County made up the study's primary demographic. These universities included the University of Nairobi (Kabete Campus), University of Nairobi (Kikuyu Campus), JKUAT (Main Campus), St. Paul's University (Limuru Campus), Presbyterian University (Kikuyu Campus), Greta University (Thika Campus), Mount Kenya University, Zetech University (Ruiru Campus), Kiriri Women's University and Zetech University (Mang'u Campus). The university students were used in this study because of their access to smartphones and being prone to the use of various platforms of social media platforms where sexting is considered to take place. At the same time, cases of suicide have been gradually increasing among university students due to sexting (MoH, 2019). The study focused on both genders to obtain the diverse views on the link between sexting and suicidal behaviour. According to the Ministry of Education report, on students' population (2021) a total of 30,000 students are registered in the universities within Kiambu County.

3.6 The Sampling Technique and Sample

3.6.1 Sampling Techniques

All ten universities located in Kiambu County were included in the study. To sample out the departments that would be included in the study, the researcher applied a simple random sampling technique to ensure that each department had an equal chance of being selected and in order to ensure there was no bias when selecting the departments. To further improve the sample representation and guarantee that there was no bias in the selection of responders, participants were chosen at random from each of the departments that were chosen.

3.6.2 Sample Size

The sample size for this research was on basis of students from all universities and was calculated using the method given by Fisher (1995):

$$n = \frac{z^2 pq}{d^2}$$

Where:

n = the desired sample size, z = the standard normal deviation, set at 1.96, which corresponds to 95% confidence, d = Acceptance range of error, p = participating rate in the Universities in Kiambu County, =50% non-participating rate in Universities in Kiambu County = 50%

When Population >10,000 students,

$$n = \frac{1.96^2 \times 0.5 \times 0.5}{0.05^2}$$

A total of 384 participants from the participating universities were chosen. According to Mugenda (2003), 10% of the study population is enough to act as a representation of the whole population.

The stratified proportionate sampling formula was employed to determine the sample across the universities proportionally. The formula is as follows:

$$n_i = \frac{N_i}{N} \times n$$

Where:

n_i =sample size per university

N_i =population size per university

n =total population of the 10 universities

N =total sample size of the 10 universities

Table 3.1 presents the sample size distribution calculated using this formula. The students were randomly selected from their respective universities.

Table 3.1: Sample Size of Departments and Number of Students Selected.

Name of the university	No of students per university	No. of Departments	No of students per selected university
University of Nairobi (Kabete Campus)	4,525	10	58
University of Nairobi (Kikuyu Campus)	4,766	5	61
JKUAT (Main Campus)	3,437	6	44
St. Paul's University (Limuru Campus)	2,186	4	28
Presbyterian University (Kikuyu Campus)	1,718	3	22
Gretsa University (Thika Campus)	2,190	4	28
Mount Kenya University	4,608	5	59
Zetech University (Ruiru Campus)	2,194	4	28
Kiriri Women's University	2,189	4	28
Zetech University (Mang'u Campus)	2,187	4	28
Total	30,000	49	384

3.7 Research instruments

Instruments used to collect data are described in this section. The study adopted an SBQ-R questionnaire and employed focus group discussions to collect data. These instruments are discussed in detail in the following sub-sections.

3.7.1 Research Questionnaire Based on Sexting and Suicidal Behaviour

This research primarily used a semi-structured questionnaire to obtain data from participants on sexting and suicidal behaviour among undergraduate university students. Questionnaires were used in collecting quantitative and qualitative data. The questionnaire addresses all research objectives. The questionnaire was split into three sub-units. The respondent's biographical information was gathered in Section A, the prevalence of sexting was gathered in Section B, and the prevalence of suicidal conduct was gathered in Section C.

3.7.2 Focus Group Discussions

A total of two FGDs (Focus Group Discussions) were held. The first group, JKUAT University, comprised 10 participants, 4 males and 6 females. The second group, Zetech University, comprised 8 participants, 4 males and 4 females. These were selected in order to have a

representative for public universities and a representative for private universities. The participants for the FGD were selected through a first stratified sampling where the population was categorized based on gender. The convenience sampling technique was then used to select participants from each stratum. Two focus group discussions were used since the researcher determined that no new information was being obtained from the participants hence considered two FGDs to be adequate.

Two research assistants were involved in the data collection process in FGDs. The two research assistants who were trained in psychology and qualitative research methodologies assisted in each focus group. One of the two research assistants served as the moderator, and the other, who had received timely training from the researcher, took notes. The researcher selected research assistants who had background knowledge in counselling psychology and who have basic knowledge of research and data collection methodologies. The research assistants were trained by the researcher on data collection. In this, they were instructed on how to approach the respondents, how to administer the research instrument, how to collect the required information, how to take notes and verify relevant information. They also received training on data collection ethics and policies. The research assistants also received written guidelines from the researcher on how to collect data. During the discussions, the researcher used an electronic device to record the discussion with the permission from the participants to capture what may have been missed by the note taker. The purpose of group discussion was to assist in the triangulation of information obtained from the questionnaire.

3.8 Piloting Study

Chuka University in Embu County was chosen at random to aid in the tools' validation and dependability. The Embu County was chosen since it is far away from Kiambu County, but with both rural and urban characteristics similar to the area under study; this helped the

researcher avoid subjectivity in the study due to interactions with the respondents. The 10% of the targeted sample was collected to act as a representation of the whole population, which is equal to 39 students. This was in line with Mugenda (2003) who stated that 10% of the population is enough to represent a whole. This pilot sample was sufficient because the primary purpose of the piloting process was to assess the reliability, clarity, and consistency of the research instruments. Piloting helped the researcher to assess the suitability of the questionnaire by examining the relevance of the items, their alignment with the study objectives and the likelihood of margin error. The pilot study helped to enhance both the validity and reliability of the instrument, as ambiguous and unclear phrases were identified and refined accordingly. This also gave the researcher an opportunity to assess inferential and descriptive statistics, which were used in the main study.

3.8.1 Validity of Instruments

According to the literature evaluation, the research instruments were deemed legitimate if they addressed the study objectives and matched the study variables. The researcher ensured content validity of the tools by reviewing the items to ensure that they address all variable under investigation. The results of the finding from the pilot study helped to make corrections, modify, reframe the questions as well as pull out the irreverent items from the tool.

3.8.2 Reliability of Instruments

Reliability is defined by Mugenda (2013) as the degree of consistency and dependability of a concept's measure. A research tool is deemed dependable if it consistently produces results; for social science investigations, a dependability level of 0.7 is advised. In order to improve the dependability of the equipment, the researcher carried out a pilot study at Chuka institutions in Embu County. For the pilot study's reliability test, the researchers gathered data. Individuals who participated in the pilot study were given the questionnaire and answered every question.

The reliability test was performed by calculating the Cronbach's alpha for each of the study's variables using the data that was entered into SPSS. A Cronbach's alpha of 0.7 or higher was considered sufficient to suggest the reliability of the questionnaires.

The voice recording was used to during the Focus Group Discussions to ensure the researcher capture the exact words from the participants. This helped the researcher to capture any other information which was obtained during data transcription. The study instruments' internal consistency was examined using Cronbach's Alpha of 0.7 and above. The formulae below were used;

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

Where:

N= Number of participants

C⁻ is the average inter-item covariance among the items

V⁻ equals the average variance.

Computations for α of Sexting

$$(351 * 0.232) / (25.599 + (351-1) * 0.232) = 0.76247 \text{ (Approximately 0.762)}$$

Computations for α of Suicidal behaviour

$$(351 * 0.135) / (16.171 + (351-1) * 0.135) = 0.74715 \text{ (Approximately 0.747)}$$

Table 3.2: Reliability Analysis

Variable	Cronbach's Alpha
Sexting (α_1)	0.762
Suicidal behaviour (α_2)	0.747
Aggregate $((\alpha_1 + \alpha_2)/2)$	0.756

From the findings in Table 3.2, the questionnaire was deemed to be reliable since the aggregate Cronbach's Alpha was 0.756. This implies that the questionnaire needed minimal amendments before the data collection process. Additionally, the study adopted the SBQ-R questionnaire, a

standard and widely validated tool for assessing suicidal behaviour, which further enhanced the overall reliability and credibility of the research instrument.

3.9 Data Collection Technique

Before participating in the pilot study, approval was sought from Kenyatta University Graduate School and the Research and Ethics Review. A research permit was also sought from the National Commission for Science, Technology and Innovation (NACOSTI). The researcher also sought approval from all 10 universities to collect data. All the research assistants received training in administering questionnaires. On designated days, copies of the instruments were produced and given out to the students for self-administration. Before the respondents completed the surveys and took part in focus group talks, the researcher explained the purpose of the study, assured them of their anonymity, and answered any concerns they had about it. After that, the researcher gave them informed consent papers to sign. It took from 15 to 45 minutes to administer the surveys, which were self-administered within the university grounds while being watched over by study assistants. Before the data collection exercise, two research assistant's undergraduate students with the knowledge of research methods were trained on data collection tools, administration and the scoring method. The research assistants hence helped in administering the questionnaires.

3.10 Data Analysis and Presentation

The researcher first cross-checked the questionnaires to ensure they were properly filled out, after which the data were coded. Later, the data was entered into the Excel sheet for analysis. The data was then analyzed quantitatively with the help of SPSS Version 25.0. For objectives 1 and 2 where the prevalence of sexting and suicidal behaviour is required, the researcher used descriptive analysis, where frequencies of occurrences and percentages were used to help show

the extent to which sexting and suicidal behaviour are prevalent among undergraduate university students.

Determining the connection between suicidal conduct and sexting was the third objective. Correlation was utilized to show the linear relationship between sexting and suicidal behaviour.

This is because Pearson's correlation is useful in prediction for future behaviour of the young adults when it comes to sexting and suicidal behaviours. T-test was used to analyze the fourth objective of gender differences. This was used to show the relationship and the strength of the variables. The T-test is a fundamental tool for hypothesis testing when comparing means and it helped the researcher to conclude the significance of observed differences between different sexes when it comes to sexting and suicidal behaviour among the university students. The qualitative data was analyzed on a thematic basis; thus allowing for triangulation of the study findings and further ensure consistency and reliability of the study.

Data collected from FGDs were analyzed thematically, where the researcher identified recurring patterns, coded meaningful segments of the discussions, grouped similar codes into broader themes, and interpreted these themes to explain the knowledge and perspectives of participants relevant to the study.

3.11 Ethical Considerations

Israel and Hay (2006) argue that the aim of research ethics is to safeguard the respondents' rights and the study integrity. The following measures were taken to improve the study's ethical standards. Before beginning the study, the researcher submitted a proposal to the Graduate School Committee at Kenyatta University; after which the proposal was considered by Kenyatta University Ethical Review Committee (KUERC) for the approval and provision of letter for data collection. The letter from KUERC was used to obtain authorization letter from Kenyan National Commission for Science, Technology, and Innovation (NACOSTI) to

conduct primary research. The researcher also contacted the Director of Education in Kiambu County to request permission to conduct the study. The proper institutional approval for data gathering was secured.

The recruitment of study participants was entirely voluntary, and before any data was collected, each participant had to sign a consent form. At any time during the study, the respondent was free to stop participating without facing any consequences. All respondents were prohibited from writing or indicating their personal information in the questionnaire in order to preserve their privacy. All the participants were assigned a code to further protect their identity. The researcher did not share the information gathered from the respondents. The findings were only used for the research purpose. The participants in the study did not have a direct benefit, however, they might benefit from the policy recommendations made from the study. Further, the study respected the diversity nature of the community (students) who took part in the study. This was done through considering people from different backgrounds, tribe and sexuality. The study had no risk since it's a survey it's not an experimental thus there is no physical risk involved however, those participants who experienced emotional and psychological effects, counseling was offered within the institutions and referrals made for further counseling.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, AND DISCUSSIONS

4.1 Introduction

This chapter presents the findings and discussions of the study based on the four objectives. The findings and discussions aim to ascertain the connection between suicidal behaviour and sexting among undergraduate university students in Kiambu County, Kenya. Specifically, the study sought:

- i. To establish the prevalence and various forms of sexting among the undergraduate university students,
- ii. To determine the prevalence of suicidal behaviour in relation to sexting among the undergraduate university students,
- iii. To establish the relationship between different forms of sexting and suicidal behaviour among undergraduate university students,
- iv. To find out gender, age and social environment differences in relation to sexting and suicidal behaviour among undergraduate university students.

The findings are also discussed in relation to the existing literature on sexting and suicidal behaviour. Hence, the chapter highlights response rate, biographic information, descriptive statistics and inferential statistics.

4.2 Response Rate

The researchers distributed the questionnaires to students attending ten of Kiambu County's universities. Table 4.1 shows the outcome.

Table 4.1: Response Rate

Response rate	Frequency	Percent
Response	351	91.4
Non-Response	33	8.6
Total	384	100

As per the findings in Table 4.1, the researcher distributed 384 questionnaires out of which only 351 were filled and returned. This gave a response rate of 91.4% which was adequate for

conducting research analysis. This concurs with Mugenda (2003) who noted that the response rate that exceeds 70% is adequate for conducting statistical analysis.

4.3 Biographic Information

The study collected data on various biographic information such as sex, age bracket, current place of residence, current year of study, marital status and which media platform they use most.

4.3.1 Gender of the Students

The findings on students' gender are highlighted in Table 4.2.

Table 4.2: Gender of the Students

Gender	Frequency	Percent
Male	157	44.7
Female	193	55
Transgender	1	0.3
Total	351	100

From the findings in Table 4.2, the respondents indicated that their gender was female as shown by 55%, male as shown by 44.7% and Transgender, as shown by 0.3%. This implies that the data on sexting and suicidal behaviour was collected across all the students despite their gender. The findings concur with Ilie and Rose (2016), who argued that female enrollment in tertiary education has surpassed that of males in many regions, particularly in high-income countries.

4.3.2 Age of Respondents

Figure 4.1 shows age distribution of respondents.

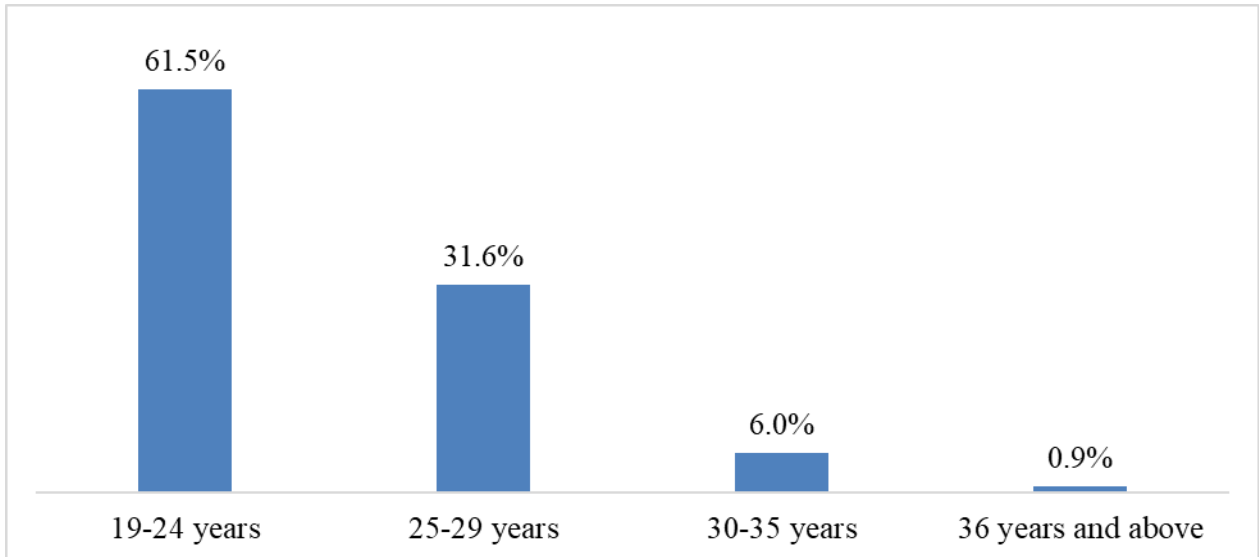


Figure 4.2: Age Distribution of the Respondents

According to the results in Figure 4.1, 61.5% of the participants reported being between the ages of 19 and 24, 31.6% reported being between the ages of 25 and 29, 6% reported being between the ages of 30 and 35, and 0.9% reported being older than 36. This suggests that data was gathered from students of different age groups, making it reliable for determining the connection between sexting and suicidal behaviour among Kenyan undergraduate students. This concurs with Nixon, Trickey and Brooks-Pollock (2021), who argued that university students in the study ranged in age from 18 to 25, covering the late adolescence phase (18-21 years) and the early adulthood phase (22-25 years). Boschetto and Warnick (2024) argued that students complete secondary education around the age of 17 and 18 before transitioning into university. However, Cline (2013) noted that some students take gap years by engaging in pre-university programs, which makes their entry age slightly higher than 18 years.

4.3.3 Current Place of Residence of Respondents

The findings on the current place of residence of respondents are highlighted in Table 4.3.

Table 4.3: Respondents' Current Place of Residence

Respondent's place of residence	Frequency	Percent
Rural	75	21.4
Urban	276	78.6
Total	351	100

From the results in Table 4.3, 78.6% of the respondents indicated urban as their current place of residence, while 21.4% specified that their current place of residence was rural. This implies that most students are residing in urban areas because most of the universities are situated in towns, connected to the internet and they must reside in those towns to easily access them

4.3.4 Current Year of Study of Respondents

The respondents were asked to indicate their current year of study. The findings are highlighted in Figure 4.2.

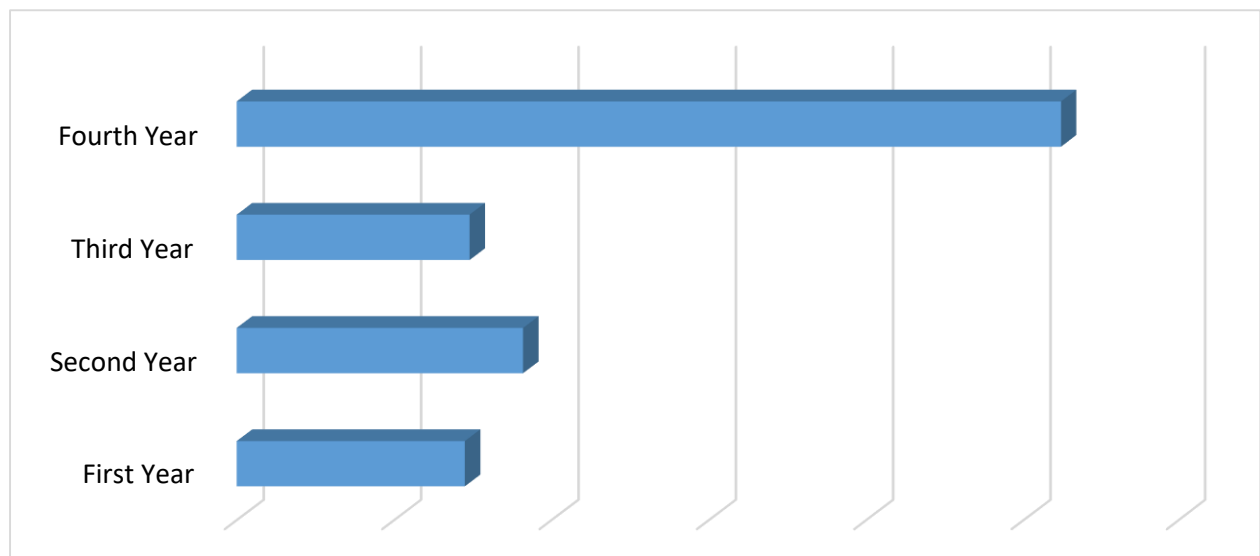


Figure 4.3: Respondents' Current Year of Study

As per the findings in Figure 4.2, the respondents indicated that their current year of study was fourth year as shown by 52.4%, second year as shown by 18.2%, third year as shown by 14.8% and first year as shown by 14.5%. This implies that data was collected from all the students irrespective of their years of study.

4.3.5 Marital Status of Respondents

Table 4.4 shows the outcome of the marital status of respondents.

Table 4.4: Marital Status of Respondents

Marital status	Frequency	Percent
Single	302	86
Married	43	12.3
Widow/widower	1	0.3
Separated/Divorced	5	1.4
Total	351	100

Findings indicated that 86% of participants were single, married as shown by 12.3%, widow/widower as shown by 0.3% and separated/divorced as shown by 1.4%. This implies that sexting was done by everyone regardless of their marital status. Drouin *et al.* (2013) noted that sexting is prevalent among both committed and casual partners, indicating that the behaviour transcends relationship boundaries.

4.3.6 Frequently Used Media Platform by Respondents

The findings on the frequently used media platforms by respondents are shown in Table 4.5.

Table 4.5: Mostly Used Media Platforms by Respondents

Frequently used media platforms	Frequency	Percent
Twitter	15	4.3
WhatsApp	234	66.7
Telegram	13	3.7
TikTok	24	6.8
Snap Chat	6	1.7
Facebook	25	7.1
Text Message	10	2.8
Instagram	24	6.8
Total	351	100

As per the findings in Table 4.5, the media platforms that were mostly used by respondents included WhatsApp (66.7%), Facebook (7.1%), TikTok (6.8%), Instagram (6.8%), Twitter (4.3%), Telegram (3.7%), Text Message (2.8%) and Snapchat (1.7%). This implies that students commonly use WhatsApp for sexting. The findings agree with Chua, Phang, Tan, Tang and Yap (2023) who argued that students use various social media platforms such as WhatsApp, Snapchat, Instagram, and TikTok for sexting due to their interactive features, ease of media sharing and perceived privacy. Rastogi and Hendler (2017) noted that WhatsApp is commonly used for sexting as it provides end-to-end encryption, ensuring that messages and media shared remain private between the sender and recipient. WhatsApp is widely accessible and commonly used among students, making it an ideal platform for personal and intimate communication.

4.4 Prevalence and Various Forms of Sexting

The study sought to determine the prevalence and various forms of sexting among undergraduate university students. The respondents were asked to indicate their agreement with various questions regarding sexting. The findings are shown in Table 4.6.

Table 4.6: Questions Regarding Sexting

Questions	Disagree	Neutral	Agree	Mean
Are you informed about sexting?	4.2%	7.4%	88.3%	4.214
Have you ever sent or received a sext in the past year?	21.4%	4.0%	74.7%	3.644
Do you use social media platforms to pass sexts?	19.9%	11.1%	68.9%	3.627
Have you ever seen a leaked sext?	22.2%	9.1%	68.6%	3.821
Have you ever been a victim of a leaked sext?	56.5%	10.8%	32.8%	2.613
Prevalence Composite Score				66.7%

From the findings in Table 4.6, most of the respondents agreed that they are informed about sexting (88.3%; Mean=4.214), that they have ever sent or received sext in the past one year

(74.7%; Mean=3.644), that they use social media platform to pass sext (68.9%; Mean=3.627) and that they have ever seen a leaked sext (68.6%; Mean=3.821). However, the respondents disagreed that they have ever been a victim of a leaked sext (56.5%; Mean=2.613). The composite score of 66.7% implies that sexting is very prevalent among the undergraduate university students. This is largely driven by increased access to smartphones, social media and private messaging platforms. The behaviour is often linked to romantic relationships, sexual exploration and peer influence with many students perceiving it as a normalized aspect of modern dating culture. Despite its prevalence, sexting carries potential risks, including privacy breaches, emotional distress, and reputational damage, especially when explicit content is shared without consent. However, the study established that there was a lower rate of leaks affecting the students which facilitated a perceived sense of security despite widespread engagement in sexting activities. The findings agree with Samimi and Alderson (2014) who argued that Sexting is highly prevalent among undergraduate university students, driven by factors such as increased smartphone access, social media influence, peer pressure, and the exploration of romantic and sexual relationships in a digitally connected environment. On contrary, the findings disagree with Van Ouytsel, Lu, Ponnet, Walrave and Temple (2019) who noted that that a significant number of students engaging in sexting experienced breaches of privacy where their explicit messages, images and videos were leaked potentially leading to emotional distress, reputational damage, and increased vulnerability to cyberbullying or exploitation. The findings also disagreed with Commey, Amoadu and Hagan (2024) whose study established that sexting was not very prevalent among college students and linked this cultural norms, personal values, fear of privacy breaches and lack of interest in engaging in digital sexual communication.

Further, the participants were asked to indicate opinions on various questions in regard to sexting among undergraduate students. The respondents indicated that they have ever sent or

received sext from different people including romantic partner, friends and classmates. In addition, most of the respondents also indicated that they receive and sent sext at least once every day. The above finding indicates that undergraduate university students frequently engage in sexting with different people daily. The participants also noted that there are various forms of sexting among undergraduate students. These include sending and receiving sexts through messages, images and videos. The findings imply that sexting is done through various forms, including text messages, images and videos. The results concur with Ouystel (2019), who states that sharing of erotic content like pictures, videotapes, through the internet and smartphones is a common description; the scientific community has not yet settled on a single meaning for the word sexting. The findings also concur with Lenhart (2019), who showed that 4% had sent and 15% had received nude or seminude photographs. The findings are in line with Mitchel (2012), who noted that with just 2.5% of mostly older teenagers sending and 7.1% receiving sexts, the incidence of sexting among participants aged 10–17 was low in Western Europe. On the contrary, the findings disagree with Dobson (2017) who argued that sexting is not just an isolated digital activity but is often linked to offline sexual behaviours including increased likelihood of engaging in sexual activity, multiple partners and risky sexual behaviour. In addition, Drouin, Vogel, Surbey and Stills (2013) also noted that sexting is not just about sending and receiving explicit messages and media but also includes behaviours such as online flirting, sexualized conversations and emotional exchanges that contribute to intimacy and relationship development.

In support of the above findings, one of the focus group discussion members said;

The most common sites for sexting are Telegram, Twitter, Instagram, WhatsApp, TikTok and Facebook. In addition, sexting is increasingly prevalent among undergraduate students, with varying forms such as sending sexually explicit texts, images, or videos. The rise in smartphone usage and access to social media platforms

has contributed significantly to this trend, with students often engaging in consensual, non-consensual, and coerced sexting (Source: Focus Group Member 1).

4.5 Prevalence of Suicidal Behaviour in Relation to Sexting

The study aimed to determine the prevalence of suicidal behaviour in relation to sexting among undergraduate university students. The respondents were asked to specify their agreement with various questions regarding suicidal behaviour in relation to sexting among undergraduate university students. The findings are shown in Table 4.7.

Table 4.7: Questions on Suicidal Behaviour in Relation to Sexting

Questions	Disagree	Neutral	Agree	Mean
In the past one year, have you thought about or attempted to kill yourself after sending or receiving a sext?	59.9%	12.8%	27.4%	2.447
How often have you thought about killing yourself in the past year after sending or receiving a sext?	61.8%	14.5%	23.6%	2.336
Have you ever told someone you were going to kill yourself or that you might do so after sexting in the last 12 months?	63.5%	12.5%	23.9%	2.313
How likely is it that you will send or receive sext and then try suicide at some point?	64.6%	19.4%	16.0%	2.165
Prevalence Composite Score				22.7%

From the findings, most respondents disagreed that in the past one year, they have thought about or attempted to kill themselves after sending or receiving a sext (59.9%) while 27.4% of the respondents agreed. In addition, 61.8% of the respondents disagreed that they often have thought about killing themselves in the past year after sending or receiving a sext but 23.6% agreed. Further, 63.5% of the respondents disagreed that in the past one year, they have told someone that they were going to commit suicide or that they might do it after sexting, while 23.9% agreed. Finally, 64.6% of the respondents disagreed that it is likely that they will attempt suicide someday after sending or receiving sext while 16% agreed. According to the Paykel Suicide Scale (PSS), The composite score of 22.7% implies that there is a moderate prevalence of suicidal behaviour in relation to sexting among university students. The finding suggests a

notable association between sexting and suicidal behaviour with a notable proportion of students reporting thoughts or attempts of suicide in the past year after sexting. The results are consistent with Medrano, Lopez Rosales and Gámez-Guadix (2018) who argued that a considerable number of university students who engage in sexting also exhibit suicidal behaviour linked to factors such as cyberbullying, blackmail, psychological distress and societal stigma. In addition, the findings agree with Srivastava, Rusow, Schrager, Stephenson and Goldbach (2023) who noted that engaging in sexting increased the risk of cybervictimization, leading to depression and suicidal thoughts among sexual minority adolescents. However, the findings disagree with Gassó, Klettke, Agustina and Montiel (2019), who argued that sexting, while often associated with risky behaviours, does not directly contribute to suicidal behaviour and established that there are other underlying factors, such as mental health issues, peer pressure and pre-existing emotional distress, which play a more significant role in influencing suicidal tendencies.

In support of the above findings, one of the focus group discussion members said;

Honestly, sexting has become so common among students, and the pressure that comes with it is overwhelming. I've seen friends who, after their private photos were leaked, became so depressed that they started talking about ending their lives. It's like once that happens, the shame and anxiety just consume you (Source: FGD member 2).

4.6 Relationship Between Different Forms of Sexting and Suicidal Behaviour

The study further sought to establish the relationship among different forms of sexting and suicidal behaviour among undergraduate university students. The study tested hypothesis that states, “*there is statistically significant relationship between various forms of sexting and suicidal behaviour among undergraduate university students*”. The study used Likert scale questions to compute the score for both forms of sexting (questions 1, 2, 10, 13 and 14) and suicidal behaviour (questions 15, 16, 17 and 18). The study conducted a correlation analysis to test the hypothesis. A two-tailed Pearson correlation was used because the objective was to test

for the presence of any significant relationship, whether positive or negative, between forms of sexting and suicidal behaviour, without assuming the direction beforehand. The findings are shown in Table 4.8.

Table 4.8: Correlations for Testing Hypothesis One

		Forms of Sexting	Suicidal behaviour
Forms of Sexting	Pearson Correlation	1	.574**
	Sig. (2-tailed)		.000
N		351	351
Suicidal behaviour	Pearson Correlation	.574**	1
	Sig. (2-tailed)	.000	
N		351	351

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

The study found a positive, strong, and substantial correlation between different types of sexting and suicidal behaviour among undergraduate university students ($r=0.574$; $p=0.000$), as indicated by the results in Table 4.8. The alternative hypothesis was accepted since the p-value (0.000) was less than 0.01. Thus, the study concluded that among Kenyan undergraduate university students, there is a substantial correlation between different types of sexting and suicidal behaviour. The findings support those of Frankel et al. (2018), who argued that cyberbullying was associated with suicidal thoughts and depressive symptoms, and that sexting was associated with these experiences. They also concluded that suicidal thoughts were significantly correlated with sexting, cybervictimization, and depressive symptoms. In addition, the outcome is consistent with Klettke's (2019), who argued that sexting is also strongly associated to online victimization conduct, including cyberbullying, violence in online dating, and revenge porn. The results concur with Madigan (2017) who showed that sexting rates are higher among those who often use the internet and have depressed symptoms are more prevalent among those who spend more time online. However, the findings disagreed with Lee, Moak and Walker (2016) who concluded that sexting alone does not significantly predict

suicidal behaviour as other co-occurring factors such as cyberbullying and mental health issues play a more substantial role.

4.7 Age, Social environment and Gender Differences in Relation to Sexting and Suicidal Behaviour

Regarding the descriptive statistics, the results revealed that the sex of the students was female (55%), male (44.7%) and Transgender (0.3%). In addition, the ages of students were 19-24 years (61.5%), 25-29 years (31.6%), 30-35 years (6%), and above 36 years (0.9%). Regarding the social environment, students indicated to single (86%), married (12.3%), widow/widower (0.3%) and separated/divorced (1.4%). The aggregate mean for sexting was 3.584 and that of suicidal behaviour was 2.315.

The study intended to assess age, social environment and gender differences in relation to sexting and suicidal behaviour among undergraduate university students. To establish this, the study tested the hypothesis that states, “*there is statistically significant age, social environment and gender difference in relation to sexting and suicidal behaviour among undergraduate university students*”. The means for both sexting and suicidal behaviour were calculated based on Likert scale questions as covered in sections 4.4 and 4.5. The study conducted a T-test to test the hypothesis. The study used a two-tailed t-test because it did not predict the direction of the differences, as the aim was to test whether differences existed in either direction. The findings are shown in Table 4.9.

Table 4.9: T-Test for Hypothesis Two

		t-test for Equality of Means						
		t	df	Sig. (2tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
Age								
Sexting	Equal variances assumed	-.212	349	.833	-.03563	.16833	-.36670	.29545
	Equal variances not assumed	.212	26.495	.834	-.03563	.16823	-.38112	.30987
Suicidal behaviour	Equal variances assumed	.918	349	.359	-.22037	.23998	-.69237	.25162
	Equal variances not assumed	1.342	31.915	.189	-.22037	.16416	-.55480	.11405
Social environment								
Sexting	Equal variances assumed	-4.696	343	.000	-.59171	.12600	-.83954	-.34389
	Equal variances not assumed	-5.917	66.607	.000	-.59171	.10000	-.79133	-.39210
Suicidal behaviour	Equal variances assumed	-5.279	343	.000	-.94167	.17837	-1.29251	-.59083
	Equal variances not assumed	-6.094	61.013	.000	-.94167	.15452	-1.25065	-.63269
Gender								
Sexting	Equal variances assumed	2.060	348	.040	.17535	.08512	.00793	.34278
	Equal variances not assumed	2.099	348	.037	.17535	.08355	.01102	.33968
Suicidal behaviour	Equal variances assumed	1.471	348	.142	.17926	.12184	-.06037	.41889
	Equal variances not assumed	1.478	348	.140	.17926	.12131	-.05936	.41788

The study concluded that there were no appreciable differences in sexting and suicidal behaviour amongst undergraduate university students of various ages based on the results shown in Table 4.9. The significance values were higher than 0.05, which explains this. However, the study found that undergraduate university students from various social backgrounds differ significantly in their suicidal and sexting behaviours. This suggests that among undergraduate university students, the social environment plays a major role in determining suicidal behaviour and sexting. The results support the claims made by Ojeda,

Casas, and Elipe (2019) that students in committed relationships had reduced levels of anxiety and depression, which are frequently connected to sexting activities. The results, however, contradict Dir (2012), who maintained that personal psychological traits like impulsivity and self-worth, rather than social and contextual circumstances, are the main causes of sexting and suicidal conduct.

Further, the study established that there is a significant sex differences in relation to sexting among undergraduate university students since the p-values (0.040 and 0.037) were less than 0.05. Thus, the alternate hypothesis was accepted. On the other hand, the study established that there is no gender difference in relation to suicidal behaviour among undergraduate university students since the p-values (0.142 and 0.140) were greater than 0.05. The study rejected the alternative hypothesis. The findings agree with Dake (2017), who established that female teenagers have higher chances of sending sexts as compared to their male counterparts among university students in Paris. The findings also agree with Henson and Fisher (2014), who noted that males have higher chances of receiving sext messages while women are more likely to send them in the USA. On the contrary, the findings disagree with Temple-Smith (2011), who noted that young females have higher probabilities of sending sexually erotic texts or pictures, which can be used in revenge porn, online dating violence, cyberbullying, and even intimidation, leading to feelings of suicidal thoughts, verbalization of suicidal thoughts and even suicidal behaviour.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The study intended to establish the relationship between sexting and suicidal behaviour among undergraduate university students in Kenya. Hence, this chapter highlights the summary of the key findings, conclusions and finally recommendations. The conclusions and recommendations are deduced from the findings.

5.2 Summary

This section provides a summary of both the descriptive and inferential findings based on the study objectives.

5.2.1 Prevalence of Various Forms of Sexting

The study sought to determine the prevalence and various forms of sexting among undergraduate university students. The study found that the prevalence of sexting among undergraduate university students was 66.7%. This is largely driven by increased access to smartphones, social media and private messaging platforms. The behaviour is often linked to romantic relationships, sexual exploration and peer influence, with many students perceiving it as a normalized aspect of modern dating culture. The study found that sexting is very prevalent among undergraduate university students. Most students are informed about sexting (88.3%), have ever sent or received sexts in the past year (74.7%) and use social media platforms to pass sexts (68.9%). The study also found that students have ever seen a leaked sext (68.6%), but most students have not been victims of a leaked sext (56.5%). The study established that 53.3% of the students engaged in sexting with more than 1 person and that boyfriends usually request sexts first. The study also found that students receive and sent sext at least once every day. The study established that sexting is done through various forms, including text messages, images and videos.

5.2.2 Prevalence of Suicidal Behaviour in Relation to Sexting

The study further sought to find out the prevalence of suicidal behaviour in relation to sexting among undergraduate university students. The study found that there is a low to moderate prevalence of suicidal behaviour in relation to sexting among university students at 22.7%. The study established that some students thought about and attempted to kill themselves after sending or receiving a sext (59.9%) and often had thought about killing themselves in the past year after sending or receiving a sext (23.6%). The survey study also found that some students had confessed to someone that they were going to kill themselves or that they might do so after sending or receiving sext messages, and that they are likely to try suicide at some point. A notable proportion (61%) of students had suicidal thoughts or attempts in the year following sexting. The composite score of 22.7% implies that there is a low to moderate prevalence of suicidal behaviour in relation to sexting among university students.

5.2.3 Relationship between Forms of Sexting and Suicidal Behaviour

The study further sought to establish the connection between different forms of sexting and suicidal behaviour among undergraduate university students. According to the study, there is a significant, positive correlation between suicidal behaviour and different types of sexting among undergraduate university students ($r=0.574$; $p=0.000$). This association may be explained by several psychological and social factors, such as the risks of cyberbullying, blackmail, emotional distress, and feelings of shame or regret that can result from sexting. In addition, individuals who engage in risky sexting behaviours may already experience underlying mental health struggles, exacerbating feelings of hopelessness or despair.

5.2.4 Age, Social environment and Gender Differences in Relation to Sexting and Suicidal Behaviour

The research aimed to find out age, social environment and gender differences in relation to sexting and suicidal behaviour among undergraduate university students. The study established

that there was no significant difference in relation to sexting and suicidal behaviour among undergraduate university students of different ages. The study showed that there is significant difference in sexting and suicidal behaviour among undergraduate university students of different social environments. This suggests that among undergraduate university students, the social environment plays a major role in determining suicidal behaviour and sexting. Because the p-values (0.040 and 0.037) were less than 0.05, the study concluded that there are significant sex differences in undergraduate university students' attitudes against sexting. Since the p-values (0.142 and 0.140) were higher than 0.05, the study concluded that there is no sex difference in relation to suicide behaviour among undergraduate university students.

5.3 Conclusion of the study

The study concluded that sexting is very prevalent among undergraduate university students with most common forms of sexting being text messages, images and videos. Students are informed about sexting and actively engage in it primarily through social media platforms. There is a lower incidence of personal victimization from leaked sexts, indicating a possible disconnect between participation in sexting and the experience of its negative consequences.

The study also concluded a significant, positive correlation between suicidal conduct among undergraduate university students and different types of sexting. This could be attributed to the fact that a notable proportion of respondents reporting thoughts or attempts of suicide in the past year after sexting. Sexting can lead to suicidal behaviour if the students involved experiences severe emotional distress, such as shame, cyberbullying, or social isolation, as a result of the images, messages and videos being shared or exposed without their consent.

The study finally concluded that there was a significant sex differences in relation to sexting among undergraduate university students but there was no sex difference in relation to suicidal behaviour among undergraduate university students. In addition, the study concluded that there

is a significant difference in sexting and suicidal behaviour among undergraduate university students of different social environments. The social environment is a significant determinant of sexting and suicidal behaviour among undergraduate university students.

5.4 Recommendation of the Study

5.4.1 Recommendations for Policy Makers and Other Stakeholders

Since the study established a moderate prevalence of suicidal behaviour, it recommends that University management should prioritize the mental health and well-being of students by integrating comprehensive education on the risks associated with sexting into the university's orientation programs and ongoing awareness campaigns. This education should focus on the potential legal, social, and psychological consequences of sexting, including its link to suicidal behaviour.

Since the study concluded that sexting is very prevalent among undergraduate university students, there is also a need for university management to establish clear, confidential channels for students to report sexting incidents and seek help if they feel vulnerable. The universities should strengthen their mental health services by employing more counselors trained in handling issues related to digital harassment and cyberbullying, ensuring that students have access to timely and appropriate support.

Since the study concluded a significant correlation between suicidal behaviour and different types of sexting, it recommends that student leadership at the universities in Kenya should advocate for peer-led initiatives that encourage safe online behaviours and create a culture of respect and consent among students. Leaders should work to destigmatize seeking help for mental health issues, particularly those arising from digital harassment like sexting. They should collaborate with university management to organize workshops and forums where students can openly discuss the dangers of sexting and learn coping mechanisms.

The report also suggests that national policies that address the relationship between university students' digital behaviour, mental health, and suicide prevention should be developed and put into effect by the Ministry of Education. This includes mandating the integration of digital literacy and mental health education into the university curriculum, with a specific focus on the dangers of sexting and its psychological impacts.

The findings showed that sexting is very prevalent and hence the study also recommends that there is a need to raise awareness and educate students by conducting awareness campaigns and educational workshops that inform students about the potential risks of sexting, including its connection to suicidal behaviour. These programs should emphasize digital citizenship, consent, and safe online practices, while also destigmatizing seeking help for mental health concerns.

The report also suggests that Kenyan colleges create and disseminate explicit regulations regarding sexting, cyberbullying, and harassment, and make sure that students understand the consequences and resources accessible to them. There is also need to create a supportive campus environment where students feel safe to discuss their struggles without stigma as it is crucial. This can be achieved by training different faculties and staff to recognize signs of distress, fostering open dialogues about mental health, and providing resources for stress management and emotional resilience.

5.4.2 Suggestion for further research

The study suggests that future researchers look into the connection between sexting and suicide behaviour among undergraduate university students in other Kenyan counties, as it was restricted to ten universities in Kiambu County. This is because the situation in regards to sexting and suicidal behaviour might not give a real reflection of other parts of the Counties in Kenya, as it is in Kiambu County.

Further, the study was limited to primary data collection tools (questionnaires and focus group discussions). Hence, the study recommends that future studies should seek to establish the nexus between sexting and suicidal behaviour among undergraduate university students using both primary and secondary data. This would help with data triangulation and provide a comprehensive examination of the sexting and suicidal behaviour. Future studies should also employ a descriptive research design which focuses on systematic description of characteristics, behaviours and phenomena in detail, which offers a more comprehensive view of the subject.

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APPENDICES

Appendix I: Consent Form

TITLE OF STUDY

LINK BETWEEN SEXTING AND SUICIDAL BEHAVIOUR AMONG UNDERGRADUATE UNIVERSITY STUDENTS IN KIAMBU COUNTY, KENYA

PURPOSE AND OBJECTIVE OF THE RESEARCH STUDY

You are being requested to take part in this research study. Before you decide to participate in this study, it is of essence that you comprehend the aim of this research and what it entails. *(Please read the following guidelines carefully. Please inquire from the researcher in case any question or clarity)*

STUDY APPROACH

The study will not involve any experimental procedure

For the focused group discussions, the researcher will ask the participants to allow for recording for any information missed during note taking. The recorded information shall be discarded once the researcher has obtained the required information. This is voluntary and will only be taken under the informed consent of the participant.

RISKS

This study does not involve any danger

You may decline to answer any or all questions and you may discontinue your involvement at any time you choose.

BENEFITS

There will be no direct benefit gained from participating in this study.

CONFIDENTIALITY

Your responses and comments to this research study will be anonymous. Please do not write any identifying details on your questionnaire. Every effort will be made by the researcher to preserve your confidentiality.

Participant data will be kept confidential except in cases where the researcher is legally obligated to report specific incidents. These incidents include, but may not be limited to, incidents of abuse and suicide risk.

CONTACT DETAILS

If you have any questions at any time about this study, or you experience adverse effects as the result of participating in this study, you may contact the researcher whose contact information is provided below.

VOLUNTARY PARTICIPATION

Your participation in this study is not mandatory. If you decide to take part in this study, you will be asked to sign a consent form. You are still free to withdraw at any time and without giving a reason.

CONSENT

I have read and I acknowledge the information provided and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost.

Participant’s signature.....Date.....

Researcher’s signature  Date 3rd April 2024

PRINCIPAL INVESTIGATOR

Name: Magdaline Nyokabi Kioni

Phone: 0724 447 447

Email: kionimaggy@gmail.com

Appendix II: Questionnaire

INSTRUCTIONS

Tick appropriate code.

SECTION A: BIO-DATA

The following section will ask about your bio-data information. Please tick the option that accurately applies you.

1. Sex Male [] Female [] Transgender []

Others (specify).....

2. What is your age bracket?

1) 19-24 2) 25-29 3) 30-35 4) 36 and above

3. What is your current place of residence? Rural [] Urban []

4. What is your current year of study?

First Year [] Second Year [] Third Year [] Fourth Year []

5. What is your marital status?

Single [] Married [] Widow/widower [] Separated/Divorced []

6. What media platform do you use most?

Twitter [] WhatsApp [] Telegram [] TikTok [] Snap Chat [] Facebook []

Text Message [] Instagram []

Others (Please specify)

Please read through the following sections B and C (Likert Scale). Please indicate by marking the most appropriate code that describes your situation. Note: There is no wrong answer. Make sure you have not omitted any item. You are free to seek further clarification.

Section B: Prevalence of Various Forms of Sexting

	Question Statement	Choices	Code
	SECTION B: This section will seek information about sexting.		
1.	Are you informed about sexting?	Strongly agree Agree	1 2

		Neither agree nor disagree Disagree Strongly disagree	3 4 5
2.	Have you ever sent or received a sext in the past one year?	Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree	1 2 3 4 5
3.	To whom have you ever Sent or received a sext?	Boyfriend Girlfriend Sex partner Someone I just met Someone I only know online Other [Please specify]	1 2 3 4 5 6
4.	How many people have you engaged sexting with?	1 person 2 persons 3 persons 4 persons More than 4 persons	1 2 3 4 5

5.	How many times do you send sext per day?	Once Twice Thrice Severally None	1 2 3 4 5
6.	In what form have you ever received sexts?	Text message Images Videos Others [Please specify]	1 2 3 4
7.	How many times do you receive a sext per day?	Once Twice Thrice Severally None	1 2 3 4 5
8.	In what form do you send sexts?	Text message Images Videos Others [Please specify]	1 2 3 4
9.	What device do you use to sext?	Smart phone	1

		Laptop Tablets Other [please specify]	2 3 4
10.	Do you use social media platform to pass sext?	Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree	1 2 3 4 5

11.	If yes which social media, do you prefer?	Facebook	1
		Twitter	2
		What Sapp	3
		YouTube	4
		Other [Please specify]	5
		
12.	Who usually requests for the sext first?	Boyfriend	1
		Girlfriend	2
		Sex partner	3
		Friend	4
		Classmate	5
		Other	6

13.	Have you ever seen a leaked sext?	Strongly agree	1
		Agree	2
		Neither agree nor disagree	3
		Disagree	4
		Strongly disagree	5
14.	Have you ever been a victim of a leaked sext?	Strongly agree	1
		Agree	2
		Neither agree nor disagree	3
		Disagree	4
		Strongly disagree	5

Section C: Prevalence of Suicidal Behaviour

This section will seek information about your feelings when you send or receive a sext in the past one year.

15.	In the past one year, have you thought about or attempted to kill yourself after sending or receiving a sext?	Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree	1 2 3 4 5
16.	How often have you thought about killing yourself in the past year after sending or receiving a sext?	Strongly agree Agree Neither agree nor disagree	1 2 3
		Disagree Strongly disagree	4 5
17.	In the past one year, have you told someone that you were going to commit suicide or that you might do it after sexting?	Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree	1 2 3 4 5
18.	How likely is it that you will attempt suicide someday after sending or receiving sext?	Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree	1 2 3 4 5

Appendix III: Focused Group Discussion Guide on students' Experiences with Sexting and suicidal ideation

1. Are there instances where sexting can result in suicidal behaviour?
2. What are some of the various forms sexting?
3. What motivate undergraduate university students to sext?
4. What are the experiences one has after sending or receiving sexts?
5. How do you send or receive sext?
6. What measures that may be taken by the university students to control sexting?

Appendix IV: Letter of Approval from KU



KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke

Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 810901 Ext. 4150

Internal Memo

FROM: Executive Dean, Graduate School

DATE: 1st February, 2024

TO: Magdaline Kioni
C/o Psychology Dept.

REF: C50/CE/27372/2018

SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL

This is to inform you that Graduate School Board at its meeting of 17th January, 2024 approved your Research Project Proposal for the M.A Degree Entitled, "Relationship between Sexting and Suicidal Behaviour among Undergraduate University Students in Kiambu County, Kenya."

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed supervision tracking and progress report forms per semester. The forms are available at the university's website under Graduate School webpage downloads.

Also, please ensure that you publish article(s) from your project before submitting it to Graduate School for examination as per the Commission for University Education and Kenyatta University guidelines.

Thank you.


ELIJAH MUTUA
FOR: EXECUTIVE DEAN, GRADUATE SCHOOL

c.c. Chairman, Psychology Department.

Supervisors:

1. Dr. Esther Gachara
C/o Department of Psychology
Kenyatta University

EM/mo

Appendix V: Letter of Authorizations from KU



KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke

Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 8710901 Ext. 57530

Our Ref: C50/CE/27372/2018

DATE: 1st February, 2024

Director General,
National Commission for Science, Technology
and Innovation
P.O. Box 30623-00100
NAIROBI

Dear Sir/Madam,


RE: RESEARCH AUTHORIZATION FOR MAGDALINE KIONI – REG. NO. C50/CE/27372/2018

I write to introduce Magdaline Kioni who is a Postgraduate Student of this University. The student is registered for M.A degree programme in the Department of Psychology.

Magdaline intends to conduct research for a M.A Project Proposal entitled, “Relationship between Sexting and Suicidal Behaviour among Undergraduate University Students in Kiambu County, Kenya.”


Any assistance given will be highly appreciated.


Yours faithfully,


PROF. ELISHIBA KIMANI
EXECUTIVE DEAN, GRADUATE SCHOOL

EM/mo

Appendix VI: Research Permit from NACOSTI






NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION.

Ref No: 713446 **Date of Issue: 19/April/2024**


RESEARCH LICENSE




This is to Certify that Ms. MAGDALINE NYOKABI KIONI of Kenyatta University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Kiambu on the topic: RELATIONSHIP BETWEEN SEXTING AND SUICIDAL BEHAVIOUR AMONG UNDERGRADUATE UNIVERSITY STUDENTS IN KIAMBU COUNTY, KENYA for the period ending : 19/April/2025.

License No: NACOSTI/P/24/34848

Applicant Identification Number 713446

Director General

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Verification QR Code



NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

See overleaf for conditions

Appendix VII: KUERC Approval



**KENYATTA UNIVERSITY
CENTRE FOR RESEARCH ETHICS AND SAFETY**

Fax: 8711242/8711575
Email: chairman.kuerc@ku.ac.ke
Nairobi, 00100

P. O. Box 43844,

Tel: 8710901/12

Website: www.ku.ac.ke
Our Ref: **KU/ERC/APPROVAL/VOL.1**

Date: 3rd April, 2024

Magdaline Nyokabi Kioni
P.O Box 43844, 00100
Nairobi.

Dear Magdaline,

APPLICATION NUMBER: PKU/2894/I1218: "RELATIONSHIP BETWEEN SEXTING AND SUICIDAL BEHAVIOR AMONG UNDERGRADUATE UNIVERSITY STUDENTS IN KIAMBU COUNTY, KENYA."

This is to inform you that **KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE** has reviewed and approved your above research proposal. Your application approval number is **PKU/2894/I1218**. The approval period is **3rd /4/2024 to 3rd / 4/2025**.


This approval is subject to compliance with the following requirements;

- i. Only approved documents including (informed consents, study instruments, MTA) will be used
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by **KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE**
- iii. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to **KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE** within 72 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to **KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE** within 72 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.

Appendix VIII: Letters of Authorization from Target Universities

ST. PAUL'S UNIVERSITY

Private Bag 00217 LIMURU, KENYA
Email: dvcaa@spu.ac.ke
Website: www.spu.ac.ke



Tel Office: + 254(0) 20-2020505/10
Mobile: + 254(0) 728 -669000
(0) 736 - 424440

OFFICE OF THE DEPUTY VICE CHANCELLOR - ACADEMICS

29th May 2024

Magdaline Kioni
Reg No C50/CE/27372/2018
Kenyatta University

Dear Magdaline,

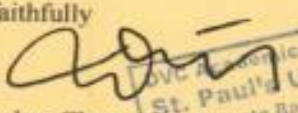
RE: PERMISSION TO COLLECT DATA AT ST. PAUL'S UNIVERSITY

This is to acknowledge receipt of your letter dated 28th May 2024, requesting for permission to collect data at St. Paul's University for your research study titled "Relationship between sexting and Suicidal Behaviour among Undergraduate Students in Kiambu County Kenya."


I have noted that you have already obtained the necessary approvals and clearance. The permission is therefore granted, but kindly note that the collected data must be used unanimous and for academic purposes only. You are requested to get in touch with the Dean of Students, who will be your liaison person. Further you are requested to share your findings with the university upon the conclusion of the study.

We wish you all the best in your studies.

Yours faithfully



Prof. Diphus Chemot
Ag. Deputy Vice Chancellor Academic Affairs



cc: Dean of Students



UNIVERSITY OF NAIROBI
OFFICE OF DEPUTY VICE-CHANCELLOR
(RESEARCH, INNOVATION AND ENTERPRISE)

P.O. Box 30197-00100, G.P.O.
Nairobi, Kenya
Website: <https://uonresearch.uonbi.ac.ke>

Telephone: 020 491 3164
Email: dvcrie@uonbi.ac.ke

Our Ref: UON/CA/RIE/3/5/Vol.XXX

June 11, 2024

Magdaline Nyokabi Kioni
Kenyatta University
P.O Box 43844 - 00111
NAIROBI
Email: kionimaggy@gmail.com

Dear Ms. Kioni

PERMISSION TO COLLECT DATA

I refer to your request to conduct research at the University of Nairobi, for your project entitled: *"Relationship between Sexting and Suicidal Behaviour among Undergraduate University Students in Kiambu County, Kenya"*. I write to inform you that your request has been approved.

You are however required to share the findings of your study with the University of Nairobi by depositing a copy of your findings with the Director Library & Information Services on completion of your study.

Yours sincerely,

mjhutchinson
PROF. M. JESANG HUTCHINSON
DEPUTY VICE-CHANCELLOR
(RESEARCH, INNOVATION AND ENTERPRISE)
AND
PROFESSOR OF HORTICULTURE

Copy to: Director, Library and Information Services

SKB/eg



GRETSA UNIVERSITY-THIKA

Quality Education for the Real World

Tel: +254 020 2308997/8, 020 2612420/1
Cell: +254 0712 959 293, 0711 949 006

P.O. Box 3-01000 Thika, Kenya
Website: www.gretsauniversity.ac.ke
Email: info@gretsauniversity.ac.ke

DIRECTORATE OF RESEARCH, PUBLICATIONS AND INNOVATIONS

Our Ref: DRPI/2024/051

Date: 3/06/2024

Dear Magdaline Nyokabi Kioni

RE: DATA COLLECTION AT GRETSA UNIVERSITY

On behalf of the Research Committee, I am pleased to inform you that your request to conduct research at Gretsa University on the topic, "*Relationship between sexting and suicidal behaviour among undergraduate university students in Kiambu County Kenya,*" has been approved. Before you begin your data collection, please ensure that a copy of your data collection instruments is deposited with the Directorate of Research, Publications, and Innovations, located in Library Building, Room 9. We strongly encourage you to share your research findings at our Annual Research Conference, as they will contribute significantly to our collective understanding and ongoing academic discourse. Please note that this authorization is valid for a period of **two months** from the date of this letter.

Sincerely,

Mugambi Frankline
Assistant Director, Research, Publications and Innovations
Cell No. +254714282601



Presbyterian University of East Africa

P.O. Box 387-00902, Kikuyu, Kenya

Tel: [0723799904](tel:0723799904)/0769500702/0733552223/0739552223(Kikuyu)

SCHOOL OF POST GRADUATE STUDIES

Email: pueapostgraduate@gmail.com

3rd June 2024

MAGDALINE NYOKABI KIONI

C50/CE/27372/2018

Dear **MAGDALINE**,

RE: PERMISSION TO CONDUCT RESEARCH AT THE PRESBYTERIAN UNIVERSITY OF EAST AFRICA (PUEA)

Receive Christian greetings.

This is to inform you that your request to conduct research on the topic: **RELATIONSHIP BETWEEN SEXTING AND SUICIDAL BEHAVIOUR AMONG UNDERGRADUATE UNIVERSITY STUDENTS IN KIAMBU COUNTY, KENYA**, has been granted.

You are therefore authorized to collect data from the targeted participants at the Presbyterian University of East Africa. You are expected to strictly observe the normal ethical cautions and discretions while conducting the research.

I wish you well with your studies and look forward to you sharing your findings with the Deputy Director, Research of the Presbyterian University of East Africa.

Thank you.

Yours sincerely,

Dr. Kaberia Limukii

DEPUTY DIRECTOR OF RESEARCH, DEVELOPMENT AND POSTGRADUATE STUDIES



**JOMO KENYATTA UNIVERSITY
OF
AGRICULTURE AND TECHNOLOGY**

P.O. Box 62000-00200 Kenya, Tel: +254-067-5870001-4, +254-67-53-52711, Fax: 067-5352197
Office of the Registrar (Administration)

JKU/ACA/3E

DATE: 25TH JUNE, 2024

Ms. Magdaline Nyokabi Kioni
P.O. Box 71-10303
WANG'URU
Email: kionimaggy@gmail.com
Tel 0724 447 447

Dear Kioni,

RE: PERMISSION TO COLLECT DATA

Reference is made to your letter dated 27th May, 2024, in which you sought permission to collect data for your M.A Project Proposal entitled "*Relationship between sexting and suicidal Behaviour among Undergraduate Students in Kiambu County*".

Approval has been granted for you to collect data on the understanding that all data collected will be for academic purpose only and will be kept confidential throughout the project and after completion of the project. This is on condition that the University Library will receive a copy of your final project/thesis for future reference.

Yours Sincerely,

DR ROSE M. GITHU, PhD.,
Ag. REGISTRAR (ADMINISTRATION)

RG/jms

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