PREDICTORS AND SUICIDE IDEATION AMONG UNIVERSITY STUDENTS IN NAIROBI COUNTY-KENYA

OJI MICHAEL OBINNA

REG. NO. 1039273

A THESIS SUBMITTED TO THE FACULTY OF ARTS AND SOCIAL SCIENCES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE MASTER OF ARTS DEGREE IN COUNSELING PSYCHOLOGY AT THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

NAIROBI – KENYA

MAY, 2022

DECLARATION

Declaration by the Student

I hereby declare that this thesis is my original work and has never been submitted to any campus or college for any academic purposes.

Name: Oji Michael Obinna

Admission No: 1039273

Signature: ..... Date: 01/05/2022

Declaration by the Supervisor(s)

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

DR. ZACHARIAH ONDIEKI MOKUA

Lecturer, Kisii University,

Department of Psychology, Kisii University.

Signature:..... Date: 07/05/2022

DR. MARIA NTARANGWE

Lecturer, Catholic University of Eastern Africa, (CUEA)

Department of Psychology

Faculty of Arts and Social Sciences

Signature:..... Date: 09/05/2022

THE CATHOLIC UNIVERSITY OF EASTERN AFRICA
FACULTY OF ARTS & SOCIAL SCIENCES
06 JUN 2022
DEPT. OF COUNSELLING PSYCHOLOGY
P.O. Box 62157 - 00200, NAIROBI.

DEDICATION

This work is dedicated to the Eucharistic Jesus for the Youth Apostolate of Nigerian Pallottine Missionary (Society of the Catholic Apostolate {SAC} Heart of Jesus Province) and the Unity in Diversity Family, unto the infinite glory of God, the sanctification of my soul and that of my neighbours and for the eradication of sin. Amen

ACKNOWLEDGEMENTS

It is with a deep sense of appreciation and humility that I sincerely acknowledge the immense contributions of many people who in one way or another made this work a possible reality. I am privileged to be sent by my provincial superior, Rev. Fr. Pater Helmuth Scharler SAC to do my Masters in Counselling Psychology at the Catholic University of Eastern Africa (CUEA), Nairobi-Kenya. I am grateful to him and to the entire Pallottine confreres especially in Nigeria.

In the same way with utmost humility and reverential sentiments, I express my deep sense of gratitude and appreciation to my esteemed Guide and Supervisor: Dr. Zachariah Ondieki and George Ouko (University Head Counsellor) who diligently scrutinized and constructively critiqued this work. I am privileged to be given attention by an untiring and ever willing HOD, Dr. Steven Asatsa, who provided the much-needed impetus for this work. His approachable dispositions, academic pieces of advice urged me on; even at the verge of despondency, he provided me with materials and people that were of immense benefits to me for the success of this work.

My immeasurable gratitude goes to my sister Dr. Elizabeth Ifeoma Anierobi of the Department of Educational Foundations (Educational Psychology Unit), Nnamdi Azikiwe University, Awka and Sr. Victorine Nyang'or (IBVM) who would not give up in journeying with me until my work is completed. I am also indebted to the entire family of Unity in Diversity who helped me to keep the fire of carrying out this study burning. Special thanks goes to my M.A. Psychological Research cohort and friends, you were all wonderful peers who understood my struggles and were able to journey with me all this while to accomplish this work, thus, making it through graduate school; I am proud of you all. I would be failing in my duty, if I will not fail to express my sincere thanks towards all the organizations and institutions which permitted me to carry out my study with their students.

Above all, To God be the Glory forever and ever Amen.

ABSTRACT

Suicide ideation is a public health concern which is perceived as a vital precursor to suicide attempts and actualization. In Kenya, the rate at which the number of deaths by suicide is growing among the young adults in the universities is worrying. Majority of these cases involve university students in Nairobi County. The main purpose of this study is to assess the relationship between three predictor variables (Self-Esteem, Academic Stress, Social Anxiety) and suicide ideation among university students in Nairobi County. The specific objectives were; to determine the relationship between Self-Esteem and suicide ideation among university students, to establish the relationship between Academic Stress and suicide ideation, to determine the relationship between Social Anxiety and suicide ideation and to suggest interventions and coping strategies on suicide Ideation among these students. A quantitative research method was adopted using a correlational research design. The study was guided by two theories; The Interpersonal Theory of Suicide Behaviour and Integrated motivational-volitional model of suicidal behaviour (IMV). The target population was 128,984 students. The sample size was 398 respondents arrived at using Yamane's formula. Multi-stage sampling procedure was applied in selecting 5 universities from which the sample size of the students was derived. In the first stage, stratified sampling was used to select 1 public university, 2 private universities managed by religious congregation and 2 private universities not managed by religious congregation. Finally, simple random sampling technique was used in selecting students from each of these universities. Questionnaires were used to collect the data. Using Statistical Package for Social Sciences (SPSS version 25), descriptive statistics was applied and data were presented in tabular form. Pearson's product moment correlation was used to establish the relationships between these predictors and suicide ideation among university students in Nairobi County. The results were; there is a moderate negative correlation between self-esteem and suicide ideation, a moderate positive correlation between academic stress and suicide ideation and a weak but almost moderate positive correlation between social anxiety and suicide ideation. The study concluded that there is a relationship between these predictors and suicide ideation. The study recommended some ways of coping with suicide thoughts. Therefore, this study is hoped to be of significant to; ministry of education, policy makers, university administrators, psychologists and university students by providing more knowledge on suicide and relationship between suicide and the three predictors (self-esteem, academic stress and social anxiety).

TABLE OF CONTENTS

DECLARATION i

DEDICATION ii

ACKNOWLEDGEMENTS iii

ABSTRACT iv

TABLE OF CONTENTS v

LIST OF FIGURES x

LIST OF TABLES xi

ABBREVIATIONS AND ACRONYMS xii

OPERATIONAL DEFINITION OF KEY TERMS xiii

CHAPTER ONE 1

INTRODUCTION 1

1.1 Introduction 1

1.2 Background to the Study 1

1.3 Statement of the Problem 11

1.4 Objectives of the Study 12

1.5 Research Questions of the study 13

1.6 Theoretical Framework. 13

1.7 Significance/Justification of the Study 14

1.8 Scope and Delimitation of the Study 16

CHAPTER TWO 17

LITERATURE REVIEW 17

2.1 Introduction 17

2.2 Theoretical Framework 17

2.2.1 The Interpersonal Theory of Suicide Behaviour 17

2.2.1.1 Strength of the Interpersonal Theory of Suicide Behaviour 19

2.2.1.2 The weakness of the Interpersonal Theory of Suicide Behaviour 20

2.2.1.2.3 Application of the Theory to the study 21

2.2.2 The Integrated Motivational-Volitional Model of Suicidal Behaviour (IMV) 21

2.2.2.1 The Strength of the Integrated Motivational-Volitional Model of Suicidal Behaviour (IMV) 22

2.2.2.2 The Weakness of the Integrated Motivational-Volitional Model of Suicidal Behaviour (IMV) 25

2.2.2.3 Application of this Theory to the Study 26

2.3 Review of Empirical Studies 26

2.3.1 Self-esteem and Suicide Ideation among University Students 26

2.3.2 Academic Stress and Suicide Ideation among University Students 31

2.3.3 Social Anxiety and Suicide Ideation among University Students 40

2.4 Coping Strategies on Suicide Ideation 45

2.5 Research Gaps 49

2.6 Conceptual Framework 50

2.7 Summary and Conclusion 53

CHAPTER THREE 54

RESEARCH METHODOLOGY 54

3.1 Introduction 54

3.2 Research Designs 54

3.3 Location of the Study Area 55

3.4 Study Population 55

3.5 Sampling Procedure and Sample Size 56

3.6 Data Collection Instruments 58

3.7 Data Quality Control 60

3.7.1 Validity of the Research Instruments 60

3.7.2 Reliability of the Research Instruments 60
3.8 Data Collection Procedures 62
3.9 Data Analysis and Presentation 63
3.10 Ethical Considerations 63
3.11 Chapter Summary and Conclusion 65
CHAPTER FOUR 66
DATA ANALYSIS, PRESENTATION AND INTERPRETATION 66
4.1 Introduction 66
4.2 Response Rate 66
4.3 Demographic Analysis 66
4.3.1 Age of the Participants 66
4.3.2 Gender of the Participants 67
4.3.3 Year of Study 68
4.4 Demographic Differences 69
4.4.1 Differences in gender and Suicide Ideation Crosstabulation 69
4.4.2 Differences in Year of Study (class) and Suicide Ideation 73
4.5 The relationship between self-esteem and suicide ideation among university students in Nairobi County 76
4.6 The relationship between academic stress and suicide ideation among university students in Nairobi County 78
4.7 The relationship between social anxiety and suicide ideation among university students in Nairobi County 80
4.8 Suggested Interventions and Coping Strategies on Suicide Ideation Among University Students in Nairobi 82
4.9 Summary of the Finding 84

CHAPTER FIVE **86**

SUMMARY, CONCLUSION AND RECOMMENDATIONS **86**

5.1 Introduction 86

5.2 Summary of the Key findings 86

5.2.1 Relationship Between Self-Esteem and Suicide Ideation Among University Students in Nairobi County 87

5.2.2 Relationship Between Academic Stress and Suicide Ideation Among University Students in Nairobi County 88

5.2.3 Relationship Between Social Anxiety and Suicide Ideation Among University Students in Nairobi County 88

5.2.4 Interventions and Coping Strategies on Suicide Ideation among University Students in Nairobi County 89

5.3 Conclusion 89

5.4 Recommendations 90

Recommendations for Further Research 91

REFERENCES **93**

APPENDICES **102**

Appendix I: Consent Letter for Participants 102

Appendix II: Questionnaire for Students 103

Appendix III: Research Budget 109

Appendix IV: Research Time Schedule 110

Appendix V: Map of the Research Area 111

Appendix VI: Permission Letters for Use of Questionnaires 112

Appendix VII: Introduction Letter from CUEA 117

Appendix VIII: Permission Letter from Daystar University 118

Appendix IX: Research Permission From NACOSTI 119

Appendix X: Authorization letter from the Ministry of Education.....121

Appendix XI: Research Authorization from the County Commissioner 122

Appendix XII: Research Permission Letter from CUEA.....123

Appendix XIII: Permission Letter from UoN 124

Appendix XIV: Permission Letter from Riara University 125

Appendix XV: Permission Letter from Africa International University.....126

Appendix XVI: Approval Letter 127

Appendix XVII: Plagiarism Declaration.....128

LIST OF FIGURES

Figure 1: The Sketch of the IMV Model 24

Figure 2: The relationship between Academic Stress and Suicide Ideation 35

Figure 3: Conceptual Framework 51

LIST OF TABLES

Table 1: Age in years of the students' participants ..... .67

Table 2: Gender of the Students Participants ..... .68

Table 3: Year of Study of the Students Participants 69

Table 4a: Differences in gender and Suicide Ideation Cross tabulation ..... .70

Table 4b: ANOVA test table on the differences in suicide ideation with respect to gender . 70

Table 4c: Independent T test table 72

Table 5a: Differences in Year of Study 73

Table 5b: Difference in suicide ideation by year of study 74

Table 6a: Age in years and suicide ideation 75

Table 6b: ANOVA of Age in years and suicide ideation ..... .75

Table 7: The relationship between self-esteem and suicide ideation among university students in Nairobi County 76

Table 8: Relationship between academic stress and suicide ideation among university students in Nairobi county 78

Table 9: The relationship between social anxiety and suicide ideation among university students in Nairobi County… ..... .81

ABBREVIATIONS AND ACRONYMS

ANOVA: Analysis of Variance

BA: Behavioural Activation

CDCP: Central for Disease Control and Development

CDI: Child Depression Inventory

CUEA: Catholic University of Eastern Africa

KNBS: Kenya National Bureau of Statistic

NACOSTI: National Commission for Science. Technology and Innovation

NCPD: National Council for Population and Development

UNHR: United Nations Human Rights

WHO: World Health Organization

OPERATIONAL DEFINITION OF KEY TERMS

Academic Stress: As used in the study, it is an overwhelming pressure both external and internal which a university student experiences daily during the period of academic program. It is also an experience in which a university student feels overburdened by the demands of time and energy to achieve specific academic goals.

Self-Esteem: In this study, the term refers to the worth which a university student has about him or herself, which has great impact in his or her daily lives experiences regardless of the circumstances and situations surrounding him or her.

Social Anxiety: As used in the study, it is the fear or inability of university students to relate, adjust or comfortably interacts with others due to feelings of being negatively judged and evaluated.

Suicide Ideation: As used in this study; the term refers to the thought a university student has of ending his/her life or thinking about suicide and his/her mind is preoccupied with suicidal thoughts as a solution to his/her challenges.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

Suicidal ideation is the early process of suicide which often happens before the completion of suicide and may be considered a cause for attempted and completed suicide. To avoid suicide, it is crucial to consider the possible risk factor of suicidal ideation in the initial phases of suicide (Lu Lu, et al., 2020). This chapter includes the background to the study, the statement of the problem, the purpose of the study, research objectives, research questions, hypotheses, theoretical framework, significance/justification of the study, and the scope and delimitation of the study. Thus, the current study, “Predictors of Suicide Ideation Among University Students in Nairobi County", tend to identify the relationship between suicide ideation and its predictors, namely, self-esteem, academic stress and social anxiety. This is because these three factors contribute more to any student's experience. Moreover, understanding the relationship among these variables will enable students to manage their academic life appropriately.

1.2 Background to the Study

Suicide can be seen as a global psychological pandemic that poses public well-being challenges. The World Health Organization [WHO] (2018) hypothesises that there are indications that in any death of each adult who dies of suicide, more than 20 other people may be attempting suicide. Thus, WHO (2018) estimated that over 800 000 people commit suicide every year. This implies that an individual commits suicide every 40 seconds, making suicide the second leading cause of death among young adults ranging from 15 to 29 years old globally.

Suicidal ideation is a severe mental disorder affecting university students significantly. Data from the WHO indicate that suicide was, in 2018, the second leading cause of death in the population between 15 and 29 years old, an age group commonly found in the university population (WHO, 2017a). In Brazil, students had a high prevalence of suicidal ideation at 18.8 per cent, ranging from 3.9 per cent to 49.1 per cent. Suicidal ideation was evaluated from 31 prevalence rates obtained in 19 studies ranging from 3.9 per cent to 49.1 per cent. The 29,526 university students assessed in the studies had a prevalence of suicidal ideation of 18.8 per cent (De Paula et al., 2020).

In 2012, the prevalence of active suicide ideation among the undergraduates for past 12 years in the United States was 6.6 per cent to 7.5 per cent, for both the undergraduates and graduates is 7.1 per cent to 7.7 per cent, while 9.0 per cent for those not enrolled in high institution fully but were within the age range of 18 – 22. The prevalence of suicide plans was 2.2 per cent to 2.3 per cent for undergraduates, 2.3 per cent for both undergraduates and graduates, and 3.1 per cent for not enrolled fully. For suicide attempts, undergraduates were 1.1 per cent to 1.2 per cent; undergraduates together with graduates is 0.6 per cent to 1.2 per cent; while those not enrolled fully were 2.2 per cent. Furthermore, the prevalence of suicide death from 2004 to 2009 is 7.0 students from the general population of 12.1; 10.9 male students from 20.5 males. And 3.1 of females from the general population of 3.7 females (Suicide Prevention Resource Center, 2014).

In the United States, one can say that suicide remains a significant problem among young adults. For instance, it was recorded that 25 per cent of all people ranging from 18 to 24 are college students, and the rest are non-college students. According to Wallack (2007), non-college students die more of suicide than a college students. Similarly, it was estimated that the suicide rate among undergraduate college students was half of the same age bracket as non-

college students (Wallack, 2007). On the other hand, he indicated that in the population of 3971 young adults, 1100 who completed suicide in 2001 were enrolled in college, thus, making suicide the second leading cause of death for college students without counting the accidental injury.

In India, Suicidal ideation is more severe in undergraduate students with 5.73 per cent than in post-graduate students and research scholars with 1.07 per cent. Moreover, the prevalence is higher in females at 5.32 per cent than in males with 1.48 per cent of students. The dimension wise prevalence rate of suicidal ideation reveals that in dimension one, Planning to kill oneself, the suicidal ideation is more in undergraduates with 4.50 per cent than post-graduate students and research scholars with 0.88 per cent. Moreover, the prevalence is higher in females, 4.50 per cent, than in males with 0.88 per cent of students. In dimension two, that is, using killing oneself to affiliate oneself with others, the suicidal ideation is more in undergraduates with 3.83 per cent than post-graduates and research scholars with 0.67 per cent. Furthermore, the prevalence is more in females 3.33 per cent, than in males, with 1.17 per cent of students. In dimension three, Nerve to kill oneself, the suicidal ideation is more in undergraduates with 5 per cent than post-graduates and research scholars with 0.75 per cent. Also, the prevalence is more in females 5 per cent, than in males, with 0.75 per cent of students. In dimension four, that is, Pessimistic attitude towards own life, the suicidal ideation is more in undergraduates with 9.57 per cent than post-graduates and research scholars with 2 per cent. Additionally, the prevalence is higher in females, 8.43 per cent, than in males, with 3.14 per cent of students (Chaudhury, 2018).

Suicide is a distressing issue that disturbs the general public. It does not only affect the immediate family but has a devastating impact on the unborn generation, friends and community at large. It accounts for about 30,000 deaths in the USA and more than 5,000 deaths

annually in South Africa, and the prevalence of suicide in our society is on the increase (Masango, 2008). **S**uicide has a stigma that makes it difficult for an individual who has active suicide ideation to seek help (WHO, 2018), especially in Africa. For instance, it is an abomination in the researcher's culture of I*g*bo extraction in Nigeria for one to commit suicide. Oduku (2018), in his article termed "Suicide in African Cultures – The Igbo People in Nigeria", was a bit detailed in writing about the Igbo culture and suicidal acts. In this culture, there is a concept known as **"**Nso ani**"** in Igbo culture, which is a kind of religious offence that is abhorred by all. According to Oduku (2018), this **"**Nso ani**"** is a grave crime concerning Igbo culture, which is abhorrent to anyone. However, it is also a grave sin against mother earth, so every Igbo person will spit out in disgust whenever such sin is mentioned.

Suicide is, therefore, one of the most severe sins that carry a significant implication that even the land on which the act is performed is considered contaminated and could be cleansed by harsh ritual. The tree on which suicide is committed is cut down, and most times, a grave is dug directly under the body so that the body falls within the tomb when the rope is cut. If the suicide were committed in objects such as a house or a yam barn, the things would be set on fire, or the water would be declared unusable. If it were in a dug well, the well would be destroyed. In this way, such an act puts a serious stigma on the family and its members. So, with this tradition, it is rare to see an Igbo person committing suicide or sharing their suicide ideation with anyone (Oduku, 2018)

Thus, with this mindset of his cultural background on suicide, the researcher hardly anticipated that an African could easily commit suicide. However, the researcher's discovery that suicide exists in Kenya punctured and contradicted his belief in suicide in Africa and aroused his interest in investigating its predictors. This was confirmed in the UN health agency's suicide data on Kenya from August 2018, which estimates the rate at which suicide

increase in Kenya, as discussed below. This discovery has ignited the interest of this study to determine the predictors of suicide ideation among the youths in Kenya.

Again, Crude estimates suggest over 34,000 suicides per year in Africa, with an overall incidence rate of 3.2 per 100,000 population (Becky, 2014). Although in West Africa, amid all these cultural and religious seemingly suicidal hindrances, in 2019, it became daily news on every social media how young adults in Nigeria commit suicide. Nigeria is currently rising in Africa with a high suicide rate and is ranked 15th in the world (Obinna, 2019); nevertheless, Nigeria has the seventh-highest rate of suicide. Africa Check investigated a similar report in 2018, which shows that Nigeria had 15 suicides in a year per 100,000 individuals. WHO data reveals that in 2016, Nigeria had an age-standardised suicide rate of 17.3 per 100,000 individuals, making it seventh on the continent (Joel, 2019). The researcher had always thought that suicide is usually western until he stumbled across all the above reports. This motivated him to look into the predictors of suicide ideation among young adults in school. For instance, in March 2017 alone, over five different cases of either completed suicide or attempted suicide were reported in the newspapers (Ouma, 2018). Within the context of university students, challenges often manifest in the forms of conflicts with girlfriend/boyfriends, self-destructive peer acceptance, bullying and victimisation, disappointment with school results and failure in studies, high demands at school during examination periods, among others; which pose much stress to students to the extent that the thought of suicide is often considered (Babatunde, 2020).

Similarly, in Ghana, suicide cases threaten the pre-university/university administration. The Ghana census report statistics (Ghana Statistical Service, GSS, 2013) indicate that more than 30 per cent of confirmed deaths classified under injury, crime, murder or suicide deaths occurred among young people among the pre-university and university students. Existing evidence suggests that youth suicide is becoming an everyday reality (Owusu-Ansah et al.,

2020). Another study was conducted to determine the lifetime and current prevalence of suicidal ideation or attempts and identify the associated risks and protective factors among university students in Ghana. The following prevalence rates of suicidal behaviours were found: ideations 15.2 per cent, attempted 6.3 per cent, death wishes 24.3 per cent and suicidal plans 6.8 per cent. Psychological distress was a risk factor for suicidal ideation and suicidal attempts, and subjective well-being was protective of a suicide attempt. At the same time, self-esteem was defensive of suicidal ideation (Kwaku Oppong Asante, 2017).

The first study assessing suicidal ideation and suicidal risk among University students in Ethiopia has it that one in five students reported suicidal ideation in the 12 months preceding the survey, which is almost two times higher than the existing literature analysing suicidal ideation during the same period other non-African student populations. Thus, the prevalence of suicidal ideation in the total sample was 19.9 per cent; hence, the majority for females (21.5 per cent) was not significantly different to that for males (19 per cent; $p = 0.72$). The study also found that lack of social support was a significant risk factor for suicidal ideation. Those students with no or low social support were two times at high risk of suicidal thoughts than those with high social support. This may be through social support, increasing a feeling of belonging and thus reducing the risk of suicidal thoughts. Conversely, students who feel lonely may have thoughts of suicide. Again, the study showed that suicidal ideation was associated with financial distress (Dachew et al., 2018).

Regarding suicide ideation in the kingdom of Morocco Global School Health Survey (GSHS), the prevalence was 15 per cent in subjects aged 13 to 15 years, almost identical to the national majority of 15.7 per cent reported by the 2010 Morocco GSHS (WHO, 2010). On the contrary, the overall prevalence of suicide ideation among Moroccan school students was among the lowest compared to other African countries (Benin, Ghana, Kenya, Zambia).

Concerning suicide attempts, it was demonstrated that the lifetime prevalence of these attempts among Moroccan school students is 10.5 per cent. Nevertheless, the self-reported lifetime prevalence of suicide attempts in the present study is 10.5 per cent (Btissame Zarrouq, 2015).

The UN health agency estimated that out of 100,000 people in 2016, there were 3.2 cases of suicide. According to the UN, if Kenya's official population of 45.4 million people that year were estimated, the result would be 1,453 suicides (Shiundu, 2019). For the rate of suicide mortality per 100,000 population, the Central African Republic data from 2000 to 2016 is provided for that indicator. During this period, the average value of the Central African Republic was 8.58 suicides per 100,000 people, with a minimum of 7.7 suicides per 100,000 in 2016 and a maximum of 9.5 suicides per 100,000 in 2010. The most recent figure from 2016 is 7.7 suicides per 100,000 individuals. For reference, based on 181 countries, the world average in 2016 in 9.33 suicides per 100,000 people. (The Global Economy.com, 2020). The findings showed variation in suicidal ideation prevalence across these African nations. Zambia had the highest suicide ideation prevalence (31.9 per cent) among all students, followed by Kenya (27.9 per cent), Botswana (23.1 per cent), Uganda (19.6 per cent) and Tanzania (11.2 per cent). The most frequently associated association of suicidal ideation among students across these sub-Saharan countries was suffering and feeling lonely. Sadness was substantially related to suicidal ideation in Kenya, Tanzania, and Uganda. In Kenya, Tanzania, and Uganda, sadness among boys and girls has remained strongly associated. In some nations or gender groups, all risk factors were predictors of suicidal ideation, except for having no close friends (Palmier, 2011).

In Kenya, Jenkins et al. (2015) discussed the prevalence of suicide ideation. Their results indicated that a quarter of the sampling that is 24.1 per cent, had thought that life was not worth living at some point in their lives, while a fifth had experienced death wishes at some

stage. About 7.9 per cent reported suicidal thoughts, and 1.9 per cent had made actual suicide attempts at some point in their lives. It can be seen that the prevalence of suicidal thoughts was 0.7 per cent, 4.2 per cent, 3.7 per cent and 7.9 per cent for last week, last year, at some other time, and lifetime respectively, while the prevalence of suicidal attempts was 0.5 per cent, 1.2 per cent, 0.7 and 1.9 per cent respectively.

Although not every suicide ideation ends in suicide actualisation, this does not mean that one should take suicide thought for granted. Consequently, negligence to suicide ideation may cause serious harm to human life. This is why it is essential to pay close attention to this precursor of suicide actualisation known as suicide ideation, without which prevention may be unyielding.

Ngugi estimated that 311 Kenyans commit suicide every year; 240 men & 77 women. He added that there were up to 58 per cent cases of death by suicide in the last decade. (Ngugi, 2020). According to Standard Digital Video SDV, there is a high increase in the rate of suicide cases here in Kenya. Suicide cases have been on the rise here in Kenya, with the number of registered suicides rising by 58 per cent to reach 421 between 2008 and 2017. The study further indicates that more men than women are likely to commit suicide; among the 421 cases of suicide in 2017, 330 involved males. Again, the statistical rate of suicide within the universities is so worrisome that universities have been reluctant to share the statistics. However, there is a claim that over twenty documented cases of students have committed suicide. For instance, a Bachelor of Education student at one of the Universities in Nairobi tells the story of his late friend who allegedly committed suicide in August 2018 because of love gone sour (Owiti, 2019).

However, there is a high rate of attempted suicide cases among young people in Kenya (Ngugi, 2020). WHO data in Kenya reports that 1408 individuals commit suicide annually,

meaning four individuals die every day, higher than the Kenya National Statistics Bureau estimated for 2018. Due to possible under-reporting or misreporting of such deaths, official statistics on suicide in Kenya may be challenging to obtain, partly because there are punishments for suicide attempts in Kenyan law and higher levels of stigmatisation (Wekesah, 2019). Wanyoike (2015) conducted a study on suicide among university students in Kenya in which he specifically addressed the causes, implications and interventions. In that study, one of the concerns he took cognisance of was how the universities deal with the issues concerning suicide, such as suicide ideation, a suicide plan, suicide attempt, and suicide act among the university students. This is because his finding demonstrates that the rate at which suicide cases in Kenya are increasing is alarming, especially among university students (Kabugi, 2019).

Ouma (2018) presented cases whereby the Education stakeholders expressed concern about the rate at which the number of deaths by suicide was growing among the young adults in the universities in Kenya. However, the majority of these cases involve university students in Nairobi County. According to him, these suicide cases took place between the year 2017 to 2018. It involved a fourth-year student expected to graduate in May/June 2018 and a second-year law student who had a few days before reporting back to the university. A University student who died at a police station in Nairobi, and a final year student who committed suicide at the home of his older sister in Kasarani, Nairobi, a few days before he was expected to sit for his semester-end exams. Another student left a suicide note clarifying that suicide was due to exam stress and fee issues; a student from a university in Nairobi who had a degree in engineering set himself on fire in Siaya County. A 24-year-old fourth-year student at the university committed suicide at his parents' house. Another student committed suicide in Shauri Moyo in June 2017, two weeks after he was sent home for tuition fees. Again, a second-year student, 22 years, was discovered hanging in his family home. The statistics given above are in line with the findings of an overview of the causes of suicide and preventive strategies in

Kenyan universities conducted by Kabugi (2019), that students in universities in Kenya, especially those in Nairobi, are at a higher risk of committing suicide and that the rate of suicide increase among them is alarming.

According to the university managers, the reported number of university students who are victims of suicidality may be small compared with the university population. However, the trend is worrisome because about 12 university students' corpses have been recovered from the suicide scene since January 2018 (Wanzala, 2018). The danger is that if 12 corpses of suicidal victims were recovered, and WHO (2018) asserts that there are indications that in any death of each adult who dies of suicide, there may be more than 20 other people who are attempting suicide. Going by what Wanzala (2018) and WHO (2018) revealed about this phenomenon, it is a probability that approximately (12 x 20) 240 students attempt suicide per year. According to Dugas et al. (2012), one can imagine the number of university students who are nurturing suicide Ideation, that is, thoughts about self-destruction, seeing reasons not to live, wishing to die or finding it easy to die and making specific plans to terminate one's own life.

Being the second leading cause of death among young adults globally, researchers and psychologists ought to pay much attention to the matters of suicide to preserve the future because these young adults are not only "the leaders of tomorrow" but also the future itself. So, if there must be tomorrow, the researcher thought it wise to look into predictors of suicide ideation and provide the help that can enable these young adults to stand up to the challenges of reality. There are many predictors of suicide ideation, but the researcher chose to identify the relationship between these three predictors: self-esteem, academic stress, social anxiety, and suicide ideation.

Several studies that have been done in Kenya have considered part of the predictors and suicide ideation that are of interest to the current research. However, none of these studies has

assessed the three predictors concurrently concerning suicide. The current study thus aims at contributing to knowledge that would minimise this gap. This is to say that the current research considers examining self-esteem, academic stress, and social anxiety as predictors of suicide ideation which other researchers seem to lose sight of. Despite the many studies and their proffered solutions, the problem of suicide persists, hence, the need for the current study. Therefore, this study aims to determine how self-esteem, academic stress, and social anxiety predict suicide ideation among university students in Nairobi County.

1.3 Statement of the Problem

The phenomenon of suicide ideation seemed to be very rampant in Kenyan universities. The researcher, coming from a different culture where suicide is an abomination, and anyone who commits suicide is treated with rejection and rituals are made as a way of cleansing the land, was triggered to investigate the relationship between the three predictors (self-esteem, academic stress and social anxiety) and suicide ideation.

Education stakeholders have expressed concern about how the number of deaths by suicide is growing among young adults in the universities in Kenya (Ouma, 2018). The majority of these cases involve university students in Nairobi County, Kenya. Deaths resulting from suicide have adverse effects on the parents, family, relatives and friends because the suicide death of a university student is a loss of life and the hope for the future of the deceased. This means the families of the dead tend to carry an extra burden to deal with the loss resulting from the deceased's wish to die. Suicide behaviour may be contagious because one or more people in society may consider suicide a choice since they have seen others who have committed suicide.

Though many factors have been underpinned as the causes of suicide ideation, such as the end of a relationship, sexual and domestic violence, rejection and mental illness, seemingly,

the available solutions to suicide prevention like legal punishment for suicide attempts, psychotherapy and rehabilitation are not adequate. There also seems to be a paucity of research exploring the predictors of suicide ideation with a significant focus on self-esteem, academic stress, and social anxiety in Nairobi County, which could have been one way to gain self-knowledge on suicide watch.

From the literature reviewed by the researcher, most studies are interested in specific variables such as depression, anxiety, and psychological distress as predictors of suicide ideation. However, none has considered the three predictors concurrently of suicide ideation, which the current study has taken up. Furthermore, this study is guided by two theories; The Interpersonal Theory of Suicide Behaviour and the Integrated Motivational-Volitional Model of Suicidal Behaviour (IVM) which acknowledges the individual's predisposition to suicide ideation. In this case, the findings of this study may provide remedies for these interpersonal issues. Thus, these gaps of inadequate exploration of these predictors of suicide behaviour among universities students in Nairobi created a research interest for the researcher to investigate the contribution of self-esteem, social anxiety and academic stress to suicide ideation among university students in Nairobi County-Kenya.

1.4 Objectives of the Study

The study will address the following research objectives;

i. To determine the relationship between self-esteem and suicide ideation among university students in Nairobi County

ii. To establish the relationship between academic stress and suicide ideation among university students in Nairobi County

iii. To determine the relationship between social anxiety and suicide ideation among university students in Nairobi County

iv. To suggest interventions and coping strategies on suicide Ideation among university students in Nairobi County

1.5 Research Questions of the study

i. What is the relationship between self-esteem and suicide ideation among university students in Nairobi County?
ii. What is the relationship between academic stress and suicide ideation among university students in Nairobi County?
iii. What is the relationship between social anxiety and suicide ideation among university students in Nairobi County?
iv. What interventions and coping strategies can be adopted in addressing suicide Ideation among university students in Nairobi County?

1.6 Theoretical Framework.

Two theories were applied in the study. The theories are Joiner's Inter-Personal theory and O'Connor et al.'s Integrated Motivational-Volitional Model of Suicide Behaviour.

The primary theory adopted by this research work is the interpersonal theory of suicidal behaviour (IPT) propounded by Thomas Joiner (2007). This theory proposes that an individual will not die by suicide unless they have both the desire to die by suicide and the ability to do so. The theory asserts that when people hold two specific psychological states in their minds simultaneously, and when they do so for long enough, they develop the desire for death. The two psychological states are perceived burdensomeness and a sense of low belongingness or social alienation. This theory is related to this study as it explains the underlining factors that trigger suicide ideation. It discloses that frustrations and pressures from internal (punctured self-esteem) and external (social anxiety and academic stress) stimuli can make one feel too burdened and trigger suicidal thoughts, which can lead to suicide actualisation if not checked.

The integrated motivational-volitional model of suicidal behaviour (IVM) was propounded by O'Connor et al. (2011). IVM is a tripartite model that proposes that suicidal behaviour results from a complex interplay of factors, the proximal predictor of one's intention to engage in suicidal behaviour. Meaning, in turn, is determined by feelings of entrapment where suicidal behaviour is seen as the salient solution to life circumstances. Deception/humiliation appraisals, which are frequently connected with chronic or acute stressors, can cause emotions of being trapped. Stage-specific moderators (that is, factors that assist or impede movement between stages) govern the transitions from defeat/humiliation to entrapment, suicidal ideation/intent, and ideation/intent to suicidal behaviour. In addition, background factors (for example, deprivation, vulnerabilities) and life events (for example, a relationship breakdown) that occur during the pre-motivational period (that is, before the emergence of ideation formation) offer the larger biosocial backdrop for suicide.

1.7 Significance/Justification of the Study

This study aimed to create more awareness of suicide (covert and overt) behaviour among the young adults in Africa, especially university students, about self-esteem, academic stress, and social anxiety. This awareness is not just a mere acknowledgement of the reality of suicide cases but that awareness that can make one come to terms with the fact that anybody can be a victim of suicidality out of ignorance of how it manifests from the outset, known as suicide ideation, even though not every suicide ideation gets to the suicide actualisation. However, suppose suicide ideation, especially the active one, is not handled correctly. In that case, it can proceed to a suicide plan, move to a suicide attempt, and finally to suicide actualisation/death.

In the general population and even amongst the young adults, and university students, suicidal ideation remains the strong predictor of suicide. And so, there is a severe need to learn

how to identify this precursor of suicidal act/suicide ideation to enhance prevention efforts. This is because the studies by psychological autopsy show that suicide death often results in the first attempt. Moreover, several other research has identified so many different factors that are related to suicide behaviour (behaviour in this sense, is not only the overt act like suicide attempt/death but covert behaviour, which include suicide thought/ideation because it is also an act of mind) among the young adults (Kwaku et al., 2017), because the number of the university students committing suicide every year is on the rise. Therefore, there is a need for additional and more comprehensive education for university students on suicide awareness, prediction, and intervention.

This research tends to provide necessary information to the administration of universities in Kenya on what the students should know about suicide. It is hoped that this information would help both the administration and students to acquire the knowledge of being sensitive to the actions of one another to use the knowledge gained in detecting and helping students at risk of suicide behaviour.

Since the study is interested in the predictors of suicide ideation, namely; Self-esteem, Academic stress and Social anxiety, it may also benefit the counselling psychologists. This study's finding may be significant to these professionals by giving them more enlightenment on these predictors of suicide ideation. Consequently, this may make them more equipped in handling their clients.

This study may be significant to the Ministry of Education in Kenya and its policymakers. The findings of this study may help evaluate the content of each unit taught in the universities. In this way, the suggestion of this study will enhance students' self-esteem and regulate the entire academic program/activities of each school to avoid unnecessary academic stress. Subsequently, the research may be of significance not only to the ministry of education

and policymakers but also to the universities and students as this research would aim at eliciting information that will give suggestions to students on how to build their self-esteem to enable them to respond appropriately to academic stress and social anxiety.

1.8 Scope and Delimitation of the Study

The study focuses only on how self-esteem, academic stress and social anxiety correlate with suicide ideation among university students. The researcher is aware that there are other predictors of suicide ideation, such as depression or mental health but will not consider them in this study. However, the researcher deems it primary to establish the effect of self-esteem, academic stress and social anxiety on university students and how they relate to suicide ideation since anxiety, stress and low self-esteem, if not managed well, could lead to depression as the primary cause of suicide ideation.

This study will select the respondents from students of universities in Nairobi County in Kenya. It will give private, technical, and public universities room to give every university an equal chance of being selected. The researcher chose to carry out this study in Nairobi County since he had read many cases of attempted suicide among university students whose bodies were found at the suicide scene. In addition, Nairobi County has more universities than any other county in Kenya (Marto, 2011).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, literature related to the variables under study was reviewed and presented with the inclusion of the findings of other studies that are closely related to this study. Thus, describing the model in which the study is grounded, indicating the principles of the theory, its application to this study, and the strengths and weaknesses of the approach. The studies were analysed clearly while also identifying the gaps in knowledge that the current study attempted to fill. The most available works of literature are found in journals, textbooks, internet works, seminar papers and unpublished projects reports, most of which have a foreign background.

2.2 Theoretical Framework

The theories that underpin the current study are presented in this section. These are the Interpersonal Theory of Suicide Behaviour and the Integrated Motivational-Volitional Model of Suicidal Behaviour (IMV). The key concepts were examined and contextualised.

2.2.1 The Interpersonal Theory of Suicide Behaviour

The first theory adopted by this research work is the interpersonal theory of suicidal behaviour (IPT) propounded by Thomas Joiner (2007). This theory proposes that an individual will not die by suicide unless they have both the desire to die by suicide and the ability to do so. The theory asserts that when people hold two specific psychological states in their minds simultaneously, and when they do so for long enough, they develop the desire for death. The two psychological states are perceived burdensomeness and a sense of thwarted belongingness or social alienation.

The theory's central premise is that suicide ideation is experienced by an individual when there is a high increase in an individual's perception and feeling of burdensomeness, i.e. 'being a burden to others and that of thwarted belongingness, i.e. 'not belonging'. In this way, suicide ideation is translated into a suicide attempt; there is a reduced fear of death and increased pain tolerance (De Beurs et al., 2019).

The perceived burden is the belief that others or society are burdened by oneself. Unemployment, medical or health problems and imprisonment are some of the examples of situations in which a person may feel that they are overly dependent and, therefore, becomes a burden to others. Hence, perceived dependence and burdensomeness could assume that giving up on death is good enough to justify more than remaining alive (Joiner, 2007).

Ayodele Olamide et al. (2019) opined that this theory might be used to clarify suicidal ideation, which is predicted by the existence of perceived burdensomeness and thwarted belongingness among young adults. The moment a young adult starts to feel and believe that they are all alone with their problem and so, thinking that cutting off their life is better than surviving because of cumulative issues or negative encounters combined with a lack of a quality social support system or a lack of quality of support from friends and family, it is probable that the individual will act on this idea. Examples are students with dysfunctional, infrequent relationships, academic failure or difficulties, and economic problems. The perceived strain can also come on these students as academic pressure.

Additionally, they submit that thwarted belongingness correlates with the rate of occurrence of suicidal ideation among young adults because, at this point, belongingness is a necessary need, and when the conditions are not satisfactorily met, thwarted belongingness will surface as alienation by asserting the feeling of isolation or that of having miserable social experiences. In general, or at stressful times, the lack of mutually loving, constructive and

supportive social relationships creates the feeling of social isolation. For undergraduates, peer associations play a significant role, such as offering social support, facilitating and assisting them in coping with stressful circumstances, and providing avenues for participating in social activities that are protective factors against suicidal ideation. However, the lack of peer relationships or rejection may make students vulnerable to suicidal ideation. Suicide potential is primarily acquired by prolonged exposure to unpleasant or fearful experiences; this repeated exposure gives way to greater pain tolerance and a feeling of fearlessness in the face of death. The acquired coping strategy distinguishes between people who want suicide and individuals who attempt it.

Belongingness is believed to be a basic need, a feeling recognised by others, essential for the psychological health and wellbeing of a person (Baumeister et al., 1995). High levels of social functionality, a construct of belongingness, have been identified to reduce the risk of suicide. More precisely, getting married, having kids, and having more friends were fingered as being associated with a reduced risk of suicidal activity (Hoyer et al., 1993). Besides, it has been shown that "pulling together" (e.g. gathering for sporting events, celebrations) with others has a preventive effect. Hence, it is perceived that the social connection that comes from being a devotee of a sports team increases one's sense of belongingness (Joiner et al., 2007). Social isolation, conversely, is commonly discussed by those who end up dying of suicide before actual death (Trout, 1980).

2.2.1.1 Strength of the Interpersonal Theory of Suicide Behaviour

This theory explains the underlining factors that trigger suicide ideation. It discloses frustrations and pressures from internal stimuli such as punctured self-esteem in which one feels like a problem to people around one's life. According to Van Orden et al. (2010), this feeling involves self-hate and liability; that is to say, one's death is better than one's life. When

this feeling is stable, an individual, without knowing it, will be gradually alienating himself from friends, family, or other valued social circles.

Further, this alienation involves loneliness, feeling disconnected from others, and reciprocal care. Again, it discloses that frustrations and pressures from external stimuli such as social anxiety and academic stress can make one feel that lack of mutual respect, that is, feeling that no one cares or can support and so, triggers suicidal thoughts, which, if not checked can result to suicide actualisation. Although it is speculated that idle suicidal thoughts and ideation would be triggered by experiencing either perceived burdensomeness or thwarted belonging alone, it is their interaction coupled with the view that they are stable and unchanging, a sign of hopelessness that will trigger active suicidal desire (Jennifer Ma. et al., 2015).

2.2.1.2 The weakness of the Interpersonal Theory of Suicide Behaviour

However, perceived burdensomeness and thwarted belongingness might exist to a certain degree in many people from time to time, depending on their actual state of affairs. The requirement concerning suicide must then be that each must be present to a specific (high) degree over a particular period and coinciding with the other over some unspecified period and to a certain unknown degree. This is somewhat unspecific, which makes it impossible to test the theory.

The Perceived burdensomeness and thwarted belongingness certainly may significantly contribute to several people's suicidality. However, because perceived burdensomeness might require a feeling of being integrated with others, it is difficult to see how these two components can be present simultaneously in the same person to such a high degree as must be required to constitute a suicidal desire. If one thinks no one cares about oneself, how can one perceive oneself as a burden (to whom)? (Heidi et al., 2019).

If it is all about perceptions (of some feelings regarding burdensomeness and belongingness), the theory should perhaps be seen as intra-personal rather than interpersonal. Hence, the "Intrapersonal Theory of Suicide" would be a more appropriate tag that will portray that the theory completely disregards context and sees suicidality as a strictly internal phenomenon. However, an intra-personal approach based on feelings and perceptions has to consider a specific individual's context (and ones' interactions with the surroundings) to claim any explanatory value.

2.2.1.2.3 Application of the Theory to the study

This theory is relevant to this study as it explains the underlining factors that trigger suicide ideation. It discloses that frustrations and pressures from internal (punctured self-esteem) and external (social anxiety and academic stress) stimuli can make one feel too burdened and trigger suicidal thoughts, resulting in suicide actualisation if not checked. The current study will benefit from the concept of this theory in establishing what relationship exists among the three predictor variables; self-esteem, academic stress, social anxiety and suicide ideation.

2.2.2 The Integrated Motivational-Volitional Model of Suicidal Behaviour (IMV)

The integrated motivational-volitional model of suicidal behaviour (IMV) was propounded by O'Connor et al. (2011). IMV is a tripartite model that proposes that suicidal behaviour results from a complex interplay of factors, the proximal predictor of one's intention to engage in suicidal behaviour. The purpose, in turn, is determined by feelings of entrapment where suicidal behaviour is seen as the salient solution to life circumstances. Defeat/humiliation appraisals trigger these feelings of being trapped, often associated with chronic or acute stressors. The transitions from the defeat/humiliation stage to entrapment, from entrapment to suicidal ideation/intent, and ideation/intent to suicidal behaviour are

determined by stage-specific moderators (factors that facilitate/obstruct movement between stages). Also, background factors (deprivation, vulnerabilities) and life events (relationship crisis), which comprise the pre-motivational phase (before the commencement of ideation formation), provide the broader biosocial context for suicide.

In explaining the IMV model, De Beurs et al. (2019) simplifies the three-phase factors of the IMV model. The pre-motivational phase factors assess background factors (perfectionism), environmental factors and triggering events. Factors considered within the motivational phase are defeat, entrapment, (lack of) social support, etc. Thus, these model factors illustrate how suicidal thoughts occur in some individuals. However, volitional phase factors control the transition from suicidal thinking (ideation/intent) to suicidal behaviour; they embody exposure to suicide, fearlessness concerning death and impulsivity. So, the main driver of suicide ideation within the IMV model is conceptualised as entrapment.

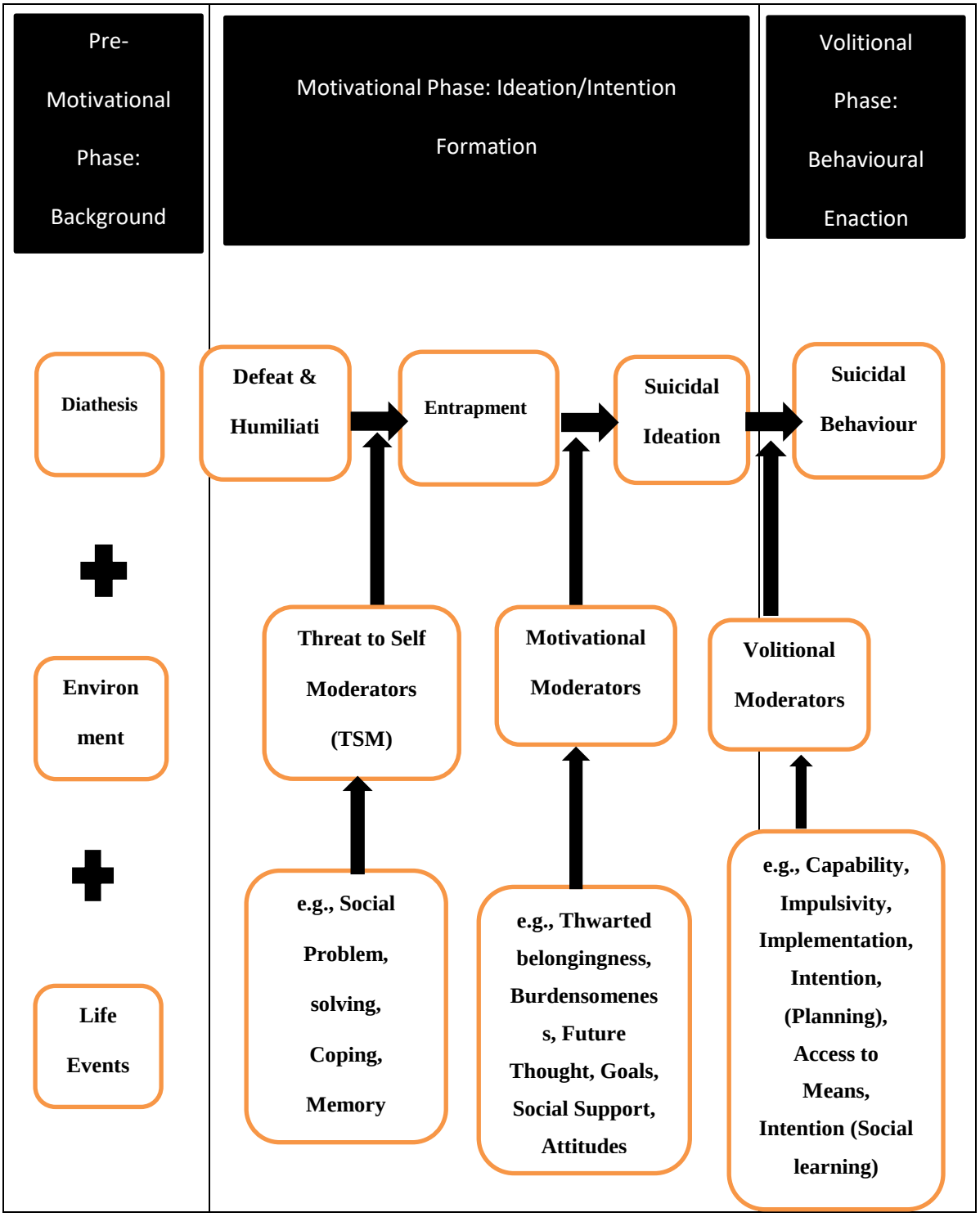
2.2.2.1 The Strength of the Integrated Motivational-Volitional Model of Suicidal Behaviour (IMV)

The theory is associated with this study by pointing out the relationship between the internal factors such as intention, which can be powered by self-esteem and external factors such as stressors like academic demand and social anxiety in the actualisation of suicide. This indicates that an individual with low self-esteem can easily nurture suicide intention. The transition from this intention to the completion of suicide can be facilitated by frequent exposure to factors that enable the change, such as fearlessness about death, painful situations, impulsivity etc.

The Table below illustrates precisely how the IMV model is partitioned into three separate phases to explain the development of suicidal ideation and the transition to suicidal behaviour: Agreeably, according to Alexandra Pitman (2018); A pre-motivational period in

which factors of biopsychosocial vulnerability and triggering events (including deprivation in early life, poverty, and traits such as socially prescribed perfectionism) form the basis for the emergence of suicidal thoughts; A motivational phase is the determinant of how and why suicidal ideation will emerge; and A volitional stage is that which is responsible for the transition from suicidal ideation to suicide actualisation. Moreover, the belief that failure and entrapment are the main drivers of suicidal ideation is a core concept of the theory and thus fundamental to the motivational (and middle) stage.

Below is the diagrammatic explanation of the Integrated Motivational-Volitional Model of Suicidal Behaviour (IMV).



Rory C O'Connor, (2011) The Integrated Motivational-Volitional Model of Suicidal Behaviour (IVM). University of Stirling, UK

Figure 1: The Sketch of the IMV Model

2.2.2.2 The Weakness of the Integrated Motivational-Volitional Model of Suicidal Behaviour (IMV)

The factors that lead to Integrated Motivational Volition are not specified or adequately explained, and an apparent reason why they can bring about suicidal behaviours is not brought to light. Talking about the complexity of the pathways to suicide, in its current form, the model does not answer whether or not particular combinations of variables from the model's three phases result in higher risk paths for suicidal behaviour. Identifying such a "risk path" could be crucial in developing more personalised models or sub-types, which could help create more targeted approaches for specific groups.

The theory has issues with overgeneralisation about the sequential progression from suicidal thought to suicidal actualisation. However, some individuals actualise suicide without the sequential movement; they only conceive it and actualise it without the feeling of defeat, humiliation, and entrapment. Moreover, the temperament of an individual play a more significant role in the actualisation of suicide. Melancholy may follow the sequential movement, but sanguine may not since such a character can do such a thing to attract attention.

Seemingly, the theory focuses on those experiencing difficulties and sees suicide as the most favourable solution to their problems. Consequently, those people at that moment of suicide ideation are no longer in their right senses, thinking irrationally. Until they are helped, they will end up actualising their thought. However, can the theory ascertain that it is only those who are facing difficulties such as entrapment and humiliation who commit suicide? Does it mean that one cannot in one's right mind commit suicide?

2.2.2.3 Application of this Theory to the Study

The theory is also associated with this study by pointing out the relationship between the internal factors such as intention, which can be powered by self-esteem and external factors such as stressors like academic demand and social anxiety in the actualisation of suicide. This indicates that an individual with low self-esteem can easily nurture suicide intention. The transition from this intention to the completion of suicide can be facilitated by frequent exposure to factors that enable the growth, such as fearlessness about death, painful situation and impulsivity.

2.3 Review of Empirical Studies

Studies have been done on suicide ideation globally with different objectives. This section discusses a review of empirical studies done about the current research. The aim of the study mainly guides the review, and the knowledge gap will be identified at the end of the review.

2.3.1 Self-esteem and Suicide Ideation among University Students

Al-Shawashereh (2015) from the Department of Counselling Psychology, Faculty of Education, Yarmouk University, Irbid- Jordan, conducted research to identify the relationship between self-esteem and suicide ideation. The analysis was purely quantitative in that the Pearson **r** correlation coefficient was calculated between suicidal ideation and the total level of students' self-esteem. The population consisted of 9000 of all first-year college students at Yarmouk University enrolled on the first semester of the year (2013). The sample selected from students enrolled in courses required for all first-year college students in the university from all different colleges and departments consists of 302 students with whom the data is analysed. The researcher developed the suicidal ideation questionnaire (SIQ), which the researcher developed, was a self-report survey consisting of 36 designed to assess university students'

preoccupation with thoughts of suicide. The Rosenberg Self-Esteem Scale was used to determine the participants' self-esteem. Pearson r correlation coefficient was applied to analyse the correlation coefficient between suicidal ideation and the total level of student's self-esteem

The results showed a significant positive relationship between suicidal ideation and students' level of self-esteem. Hence, the correlation is significant at the 0.01 level. Similar to this study, the current student seeks to identify the relationship between self-esteem and suicide ideation in Nairobi County, Kenya, as one of the objectives. This study found out that the higher the level of self-esteem, the more likely students experience suicidal ideation. The logical explanation for this positive relationship may be due to students' high level of self-esteem, where they may perceive themselves as embarrassed or ashamed due to the failure to meet their goals in life. Another explanation may be based on students' concerns regarding facing others, so they turn to suicidal ideation as a way out.

The above research based its study on the first-year students in their first semester. These students may not have come to terms with the university experiences, and so they do not necessarily stand a chance to represent university students. Again, the result depends on what the students gave as their true feeling and evaluation, which the researcher cannot ascertain. However, the current study will allow all university students to have equal chances by randomly selecting participants in the research. This will help have a general view of students' experience without limiting it to a particular level.

Concerning depression, Jaeku et al. (2013) carried out a study to identify factors affecting depression in college students and the correlation of depression with self-esteem and academic stress and to identify differences among student self-esteem, academic anxiety, and Several characteristics and the relationship of these variables to depression. The study was done in April 2011 with 852 students in health-related majors (medicine, nursing science, and dental

hygiene) at a medical college in Korea. A self-rating survey contains I0 items from the Rosenberg Self-esteem Scale and 20 items from the Self-rating Depression Scale. And 22 items on academic stress were used. Data were analysed using descriptive statistics and t-tests, and one-way ANOVA. And logistic regression. It was established that medical students' scores for self-esteem were significantly higher than dental hygiene students, but for academic stress scores, the result was the opposite. Logistic regression showed that self-esteem and academic stress, among others, significantly affected depression. Suicide ideation is one of the symptoms of depression, so looking at this study will help the current researcher establish how self-esteem is related to depression and, thus, can bring about suicidal thoughts.

Another study was done in Ghana by Owusu-Ansah et al. (2020) on suicide among university students: prevalence, risks and protective factors show that psychological distress and low self-esteem are predictors of suicidal ideation. Whereas psychological distress predicted suicide attempts, subjective wellbeing attenuated it. In the study, cross-sectional design was used as it aimed to establish a possible relationship among various variables. One thousand three students were purposively selected to participate in the study. Out of about 40,000 students, the sample size was determined a priori using GPower software version 3.1 with a power value of 0.80, a significant level of 0.10, and a minimum effect size of 0.10; the minimum sample size was calculated to be 448. Thus, a sample size of 1003 was found to be adequate. Suicide-related items; Lifetime suicidal attempt, for instance, was measured by asking 'have you personally attempted to end your life?' to which the participants answered 'yes' or 'no'. The current suicidal attempt was elicited by asking, 'If yes, how many times has this happened in the last 12months?' Lifetime suicidal ideation was measured by asking participants 'Have you ever thought about ending your own life? Lifetime death wishes were measured by asking participants, 'Is there a time in your life when you wished you were dead?' A lifetime suicide plan was measured by asking participants, 'Have you ever had a clear plan

for killing yourself'. Regarding Self-esteem, participants' self-esteem was measured with the Rosenberg Self-Esteem Scale (RSE). The Statistical Package for Social Sciences (SPSS) version 24.00 analysed the data. Descriptive statistics were used to describe the nature of the data through the generation of frequencies and percentages. Pearson's correlation analysis was used to test the relationships among the study variables. As the outcome's variables were categorical (i.e. suicide ideation and attempts), logistic regression analyses were conducted to determine the predictors of suicidal ideations and attempts. The results from the logistic regression analyses are presented as odds ratio (OR) and 95 per cent confidence interval (CI). All statistical tests were performed using a two-tailed examination, and a p-value of 0.05 or less was considered statistically significant. Thus, the result indicates that psychological distress increased the likelihood of having suicidal ideations (AOR = 1.07; CI 1.04, 1.09). Positive self-esteem is a buffer against suicidal ideation (AOR = 1.05; CI 0.90, 0.99).

This is informative on the relationship between self-esteem and suicide behaviour. However, the sampling method is purposive, which opens the door for biasness in choosing research participants. This is because it does not give all university students equal chances to participate in the research as the current study would. Again, the geographical area in which the analysis is done is not Nairobi, Kenya, as the present study is.

In 2019 Odoch Denish carried out similar research among late adolescents at Our lady of Africa SS (Namilyango) in Mukono-Uganda, on Stress, Self-esteem, and Suicidal Ideation Among late adolescents. The aim was to examine the relationship between stress, self-esteem and suicidal ideation among late adolescents in Our Lady of Africa S.S Namilyango in Mukono district. So, a correlational design was used to explore the extents to which self-esteem and suicide ideation co-vary, that is, where changes in one variable are reflected in a difference in the other. The study population consisted of 100 "A" level students (male and female), with a

sample of 80 students obtained from the people using a random sampling technique. Self-administered questionnaires were designed in which self-esteem (11 items) and suicide ideation (13 items) are some of the variables measured in the study. These variables were measured on a five-point Likert scale where 1=Strongly agree, 2= Agree, 3= Not sure, 4= Disagree, and 5= Strongly disagree.

The reliability of the questionnaire is established by carrying out a pilot study in Mukono using a Cronbach coefficient, the researcher correlated the findings and the accepted reliability of the questionnaire was established to be 0.9 which is satisfactory (Amin, 2005). The validity of the questionnaire was computed using the content validity index. The questionnaire was constructed within the study's objectives. The research experts edited it to make an independent judgment of the items by rating them on the scale as; very relevant, relevant, somehow pertinent and not relevant. The ratings were used to compute the content validity index.

The obtained ratio was used to ascertain if the items measure the parameters they ought to measure. But in the analysis, the result shows that there is a significant positive relationship between self-esteem and suicidal ideation where ($r=.346$, $p=.002<0.01$) at the level of significance of (0.01); hence there is a significant relationship between self-esteem and suicidal ideation since the p-value is less in magnitude than 0.01 value of the level significance.

The study above did not tell us the reason for the total number of 100 "A" level students, the reason for choosing a hundred students as the study population. Again, the sampling considered only the "A" level students of Our lady of Africa Secondary School Namilyango, which seems to be an exam class. Naturally, an exam carries stress. So, whenever students are in exam class, there is a tendency to increase stress more than other students. So, using such a class may not be adequate to represent the entire students. On the other hand, the current study

will focus on university students, focusing on their self-esteem and academic stress, specifically social anxiety.

Aomo et al. (2018) investigated the relationship between students' self-esteem and indulgence in behaviour problems in Kenya. The Theory of Planned behaviour by Ajzen and the Person-Centred Theory by Carl Rogers was employed to guide the study. A concurrent triangulation design was adopted. The Self-Esteem Scale and indulgence in behavioural problems questionnaire were used to collect data for the analysis. An interview schedule was used to collect data from the students. A sample size of 378 students from the total population of 11479 students was drawn from girls, mixed and boys' schools where boys to be used in the study will be 60 percent which is (270), and girls 40 percent (155). Quantitative data was analysed using inferential statistics such as the Pearson product-moment correlation coefficient, while qualitative data was analysed using the thematic framework. The findings indicated a plausible negative ($r = -.564$) correlation between students' self-esteem and indulging in behaviour problems. Thus, a student with a high level of self-esteem was associated with a low level of excess in behaviour problems.

This does not investigate a direct relation between self-esteem and suicide ideation as the current study will do. However, suicide behaviour is one of the behaviour problems anyone can indulge in. The present research focuses on the university students in Nairobi, looking at self-esteem, academic stress and social anxiety about suicide ideation, not in the high school.

2.3.2 Academic Stress and Suicide Ideation among University Students

The vulnerability of university students to academic stress has also been associated with significant emotional and psychological issues, a known precursor to suicide. For sure students, the search for identity, which is a naturally stressful demand on young people, maybe frightening and predispose them to suicidal thoughts. Weak or over-achieved academic

performance may function as a precursor to stress, subsequent depression, and suicidality. This pressure can lead them to increase the lethality of their suicidal intent through academic focus (Wilbum et al., 2005).

Predictors of Suicide Ideation and Suicide Attitudes as a Moderator by Kristine Brown (2011), done in Toledo, United States, examines four variables as predictors of suicide ideation in a college sample. One of the variables is perceived stress. Students' suicide attitudes were also investigated to determine how they moderate the relationships between perceived stress and suicide ideation. This study included 565 university students (386 women, 179 men) enrolled in undergraduate psychology courses. Perceived Stress Scale (PSS) was used. This is a 14-item global measure of perceived stress designed to assess the degree to which situations in one's life are viewed as being stressful. The Internal consistency of this tool was estimated to range from .78 to .87 while the alpha coefficient was .78, suggesting a high level of internal consistency. Adult Suicide Ideation Questionnaire (ASIQ) with a 25-item self-report measure of suicide ideation and behaviour in adults was used to rate the Participants' frequency of suicidal thoughts or behaviour during the past month. The ASIQ has high internal consistency reliabilities for the adult community sample, college student sample, and psychiatric sample with Cronbach's alpha coefficients of .96, .96, and .97, respectively. The alpha coefficient obtained for the ASIQ in this study is .99, suggesting a high level of internal consistency. Correlational analyses and stepwise, hierarchical multiple regressions revealed that perceived stress significantly predicts suicide ideation. However, the relationship between perceived stress and suicide ideation was moderated by suicide attitudes. Therefore, this finding will agree with the current study because students may perceive academic work as stressful and so start contemplating suicide as an option. Although, it does not consider academic stress specifically, which the current study focuses on, as one of the major predictors of suicide

ideation. Furthermore, the geographical location under which the study is done and the cultural background is different from the current study; hence, it may affect the perception of stress.

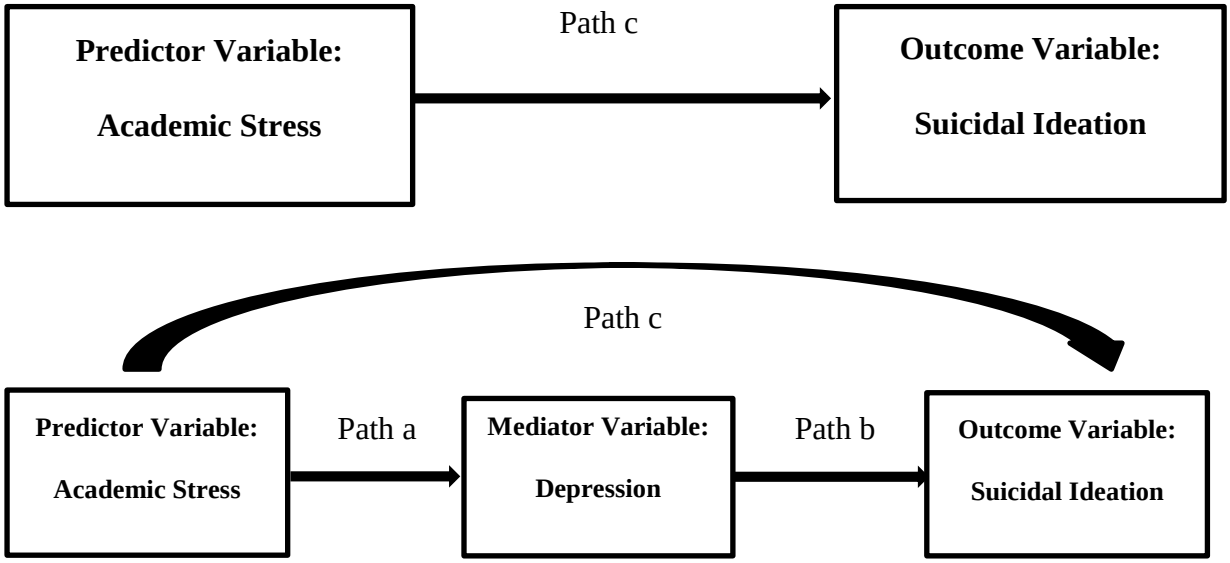
Sheetal & Srivastava (2020) carried out their research on the Correlational Study of Academic Stress and Suicidal Ideation among Students done in India. Therefore, the Purposive sampling technique was used to investigate the correlation between academic stress and suicide ideation. A sample size of 200 participants was selected from the Allen Institute of Kota (Rajasthan). One hundred respondents were Indian Institute of Technology (IIT) aspirant students, and another 100 were National Eligibility cum Entrance Test (NEET) aspirant students. The Academic Stress Scale and the Suicidal Ideation Scale were used to test the participants' academic stress and suicide ideation. The result of the analysis indicated that the obtained value of r (0.259) is significant at the 0.01 level, implying a significant correlation between academic stress and suicidal ideation among university students.

The above study used students who have been studying in Kota for at least two years, both those living inside and outside the school hostel. These students are aspirants of both IIT and NEET. Suicide ideation in this condition will be on the expectation of meriting admission into IIT or NEET, which may be mounting pressure on the aspirants. The total population was unknown, and the use of purposive sampling does not give room to every aspirant student to participate in the study, and it is sometimes open to selection bias and error, even if one tries to eliminate selection bias to the best of one's ability, it can be difficult to defend the choices for participants. However, the current study will give an equal chance for the entire students to participate, and this will bring out a general experience of students under academic pressure.

A study was carried out by Fathi-Ashtiani et al. (2007) on the relationship between self-concept, self-esteem, anxiety, depression and academic achievement in adolescents. The study was to survey some adolescents' personality characteristics and their associations with

academic achievement. For the sample size, 1,314 randomly allocated students of Tehran's high schools were assessed by Beck self-concept inventory, Coopersmith self-esteem inventory, Spielberger State-Trait anxiety inventory, and Beck depression inventory. The results indicated that self-concept was positively correlated with self-esteem with a significant level of ($p<0.01$), and these two have positive impacts on augmenting academic achievement. Moreover, the increase in self-concept and self-esteem are related to the decrease in anxiety. In addition, a significant negative relationship was established between self-concept, self-esteem and depression, and depression contributed to a decrease in academic achievement. Although this study is different from the current study, there is information on how one issue leads to another. Seemingly, in the current study, low self-esteem and depression can decrease academic achievement leading to academic stress and suicidal thoughts.

Ang & Huan (2006) carried out research among secondary school students in Singapore on the Relationship between Academic Stress and Suicidal Ideation. They tested for depression as a Mediator Using Multiple Regression. A total of 1,108 adolescents (596 males, 508 females, and 4 who did not specify gender) from a secondary school in Singapore participated in the study. A convenience sample was used in selecting the participants. Academic Expectations Stress Inventory (AESI), Children's Depression Inventory—Short Form (CDI-Short) and Suicidal Ideation Questionnaire—Junior High School Version (SIQ-JR) were used.



Ang R. & Huan, S., (2006). Relationship between Academic Stress and Suicidal Ideation: Testing for Depression as a Mediator.

Figure 2: The relationship between Academic Stress and Suicide Ideation

From their finding, according to the above demonstration table, Adolescents' self-report of academic stress was significantly correlated with both adolescent depression and suicidal ideation in the expected direction. However, academic stress was positively correlated with both adolescent depression ($r = 0.25$, $P < 0.01$, Cohen's $d = 0.52$), and suicidal ideation ($r = 0.22$, $P < 0.01$, Cohen's $d = 0.45$). they first established that the predictor (academic stress) was related to the outcome variable (suicidal ideation). Academic stress was significantly associated with suicidal ideation ($B = 0.44$, $b = 0.22$, $P < 0.001$). therefore, this research simply demonstrated that there is a significant relationship between academic stress and suicide ideation.

The study is similar to the current study by looking at the relationship between students' academic stress and suicide ideation. They only defer in the level of their student participants, as the former used secondary school students. In contrast, the latter study uses university students. Again, the above study concentrated on depression as a mediator between academic stress and Suicide Ideation. In contrast, the current study is interested in self-esteem, academic

stress and social anxiety about suicide ideation. The use of convenience sampling brings about the inability to generalise the survey results to the whole population. Therefore, the current study will use a random sampling procedure to give an equal chance to the entire population.

On the contrary, Babatunde (2020), in his research on Suicidal Ideation among Undergraduates in Nigeria: The Predictive Role of Personality Traits and Academic Stress, concluded that academic stress is not a predictor of suicide ideation among university students. Two hundred three undergraduate students of a particular university participated in the study. They were sampled from Five Faculties and five departments through a Multi-Stage Sampling Technique and a Simple Random Sampling Technique. The ages of the participants ranged from 18-29 years, with a mean age of 22.53 per cent and a standard deviation of 2.33 per cent. Student Academic Stress Scale (SASS) and Suicidal Ideation Attribute Scale (SIDAS) were distributed and analysed after getting them back. Thus, the result from the regression analysis showed that Suicidal Ideation was not significantly predicted by academic stress, $F(1,196) = -.457$, $P < .05$. and so, his hypothesis, which stated that academic stress could predict Suicidal Ideation, was rejected.

The study looked at the Suicidal Ideation among Undergraduates in Nigeria; the researcher used a few students from only one institution to represent the entire students from all the universities in Nigeria. The question arising from this is, can one university represent the entire universities in a country? The current student will make use of 20 per cent of the entire universities in the county, which according to Mugenda and Mugenda (2012), is acceptable as a representative sample. The age range of the above study is limited to 18 to 28 years, while the current study will give room for any university student beyond 28 years. Furthermore, Babatunde was interested in only two variables: academic stress and suicide

ideation. The current study will consider four variables, namely, self-esteem, academic stress, social anxiety and suicide ideation.

In agreement with Babatunde above, Ngondi (2016), in her research, examined the relationship between Kenya Certificate of Secondary Education (KCSE) examination scores and symptoms of anxiety, depression, and suicide ideation among adolescents in Nairobi, Kenya. The study asserts that academic grade may not trigger suicidal thought since it is present in both those with high grades and low grades. That conclusion was based on the Pearson correlation performed between suicide ideation and KCSE score. The result obtained was $r = -0.07$, with 0.491 as the significance level. Thus, indicating that academic grade is not a determinant for suicide ideation. For this researcher, it is an academic expectation that has a relationship with suicide ideation since the correlation between grade expected and grade scored revealed that 49 per cent of the participants did not get the grade they expected, and so it triggers feelings of hopelessness regarding the further opportunities; resulting in ideas of ending one's life. Data was collected using The Centre for Epidemiological Studies Depression Scale, Beck's Anxiety Inventory, and the Columbia Suicide Severity Scale (Screener version). The researcher's questions target the participants' attitudes towards this examination. This was done with a targeted population was 519,607, from which convenient sampling was used to select 100 students ranging from 16 to 19 years.

This is important information for the current study as it seeks to establish the relationship between academic stress and suicide ideation. Moreover, the unmet expectation may be considered part of academic stress. However, as the above study used convenient sampling in selecting the participants, focused on high school students and specified not on academic stress, the current study will use random sampling in selecting participants who are

the students of universities in Nairobi and also focus on academic stress specifically which is one of the variables being studied.

Wanyoike (2015) was interested in the causes, implications and interventions of suicide among university students in Kenya. The study was made up of qualitative and quantitative methods of data collection and analysis. The random sampling technique was adopted in selecting 50 university students from 6 Universities and 40 mental health practitioners. A 60-item questionnaire and 12 structured interview schedules were used to gather data regarding students' views on the topic of suicide. Thematic analysis was used to analyse the data collected.

The first section of the analysed data discussed the causes of suicide. According to the respondents, one of the main causes of suicide amongst university students is Social Pressure, which composes the high cost of education, academic performance, etc. The researcher maintained that the main aim of attending a university is to achieve an academic degree or diploma, or other qualifications. This pressure to perform has been noted as one of the main stressors experienced by a university student. When students are pressured because their performance is not accepted as good enough, students tend to find different manners to deal with the pressure. This could lead individuals to face hopelessness which affected 30 per cent of the students, population as identified by the respondents.

Thus, academic stress would be the main cause of suicide ideation from the above finding. Nevertheless, the study has not indicated the quantitative data analysis procedure; the researcher only specified the thematic analysis used in the study. The thematic analysis approach does not capture the 'whole' due to its phrase-based nature, which may make the researcher spend more time explaining the analysis.

An Overview of the Causes of Suicide and Preventive Strategies in Kenyan Universities by Kabugi (2020) is similar to the study of Wanyoike (2015). Kabuki asserted that academic pressure is a contributing factor to suicide ideation. So, in analysing the youth as a group at a higher risk of suicide, he insisted on the importance of students performing academically for university qualification as a core purpose for university education which includes the attainment of a diploma or degree or any other form of certifications. And as a social burden on them, the pressure to perform has been noted as one of the main stressors experienced by university students. Hence, whenever a student's performance is not accepted as good enough, they tend to find different means to overcome the academic burden. Among the many ways, students in universities deal with academic pressure is to engage in suicidal tendencies. Conclusively, academically excellent students can become highly stressed when there is a change in their performance. They then end up overworking themselves, and due to low self-esteem, they end up emphasising their performance and thus cannot handle the burden of failure. This leads to depression and indulgence in risky behaviours such as substance abuse; when the burden becomes too heavy to bear, students are likely to entertain suicidal thoughts. This is why many universities are losing students to suicide across the globe. This overview is adopted, even though it is not an empirical study, but it inspects different empirical studies which are relevant to the current study.

From the different empirical studies discussed above, different results have been established about the correlation between academic stress and suicide ideation. Some established a positive correlation while others a negative correlation. It will be the concern of this current study to find out the correlation between this predictor and suicide ideation among university students in Nairobi County.

2.3.3 Social Anxiety and Suicide Ideation among University Students

Social anxiety can be associated with increased suicidality. The Interpersonal-Psychological Suicide Theory suggests that if individuals feel both a sense of being a burden to others and a greater sense of isolation from others, they are vulnerable to wanting to die by suicide. Socially anxious people may be particularly vulnerable to these interpersonal factors since social anxiety is strongly connected to the thought of suicide through having both the sense of being a burden to others and isolation from others (Buckner et al., 2018).

In their research on the Social Anxiety and Suicidal Ideation: Test of the Utility of the Interpersonal-Psychological Theory of Suicide, Buckner et al. (2018) concluded that Social anxiety is related to greater suicidality, even after controlling for depression and other psychopathology. The research was carried out in a large state university in the southern United States. Participants completed computerised self-report measures using a secure, online data collection website (surveymonkey.com). The final sample of 780 was predominately female (80.5 percent), and the racial/ethnic composition was 11.3 percent non-Hispanic African American, 0.1 percent Hispanic African American, 4.7 per cent Asian American, 74.9 percent Non-Hispanic Caucasian, 3.6 percent Hispanic Caucasian, 0.4 percent non-Hispanic Native American, 0.1 percent Hispanic Native American, 2.8 percent multiracial, and 2.1 percent "other". The mean age was 19.9 (SD=2.0). Regarding suicidality, 40.0 per cent endorsed lifetime Suicide Ideation, 27.8 per cent endorsed past-year Suicide Ideation, 11.4 per cent endorsed past-two-week Suicide Ideation, and 3.2 per cent endorsed a lifetime suicide attempt. The Social Interaction Anxiety Scale (SIAS) was used to assess social anxiety. The SIAS contains 20 items scored from 0 (not at all characteristic or true of me) to 4 (extremely characteristic or true of me). The SIAS has shown adequate specificity for social anxiety relative to other forms of anxiety. The internal consistency of the SIAS was excellent in the current sample (α=.94).

After controlling for covariates (age, gender, depression, cannabis problems, alcohol problems), the researcher performs a chi-square to test the null hypothesis. Their finding was that social anxiety was significantly related to Suicide Ideation, $\beta=.224$, $p < .001$. Thus, findings from the study have important clinical implications. Given that social anxiety was robustly related to Suicide Ideation after controlling for age, depression, and substance problems, universities may consider identifying students with higher social anxiety for prevention interventions geared toward decreasing suicide risk among undergraduates.

The study is relevant to the current study because both studies assess the relationship between social anxiety and suicide ideation among university students. However, the current study will be interested in the correlation between the two variables. In computing correlation, the researcher will be able to get both the significance and direction of the relationship between the mentioned variables, unlike the former study that performed a chi-square which only gives the evidence that a relationship exists but does not give the significance of the relationship.

According to Gallagher et al. (2014), their research done in a psychiatric inpatient facility in the north-eastern United States indicated that social anxiety symptoms, as measured during a baseline assessment, prospectively predicted suicidal ideation at 18 months post-baseline, even after controlling for baseline depression symptoms, several psychiatric diagnoses, and suicidal ideation.

Participants were 144 adolescents (72 per cent female) between the ages of 12 and 15 years (M=13.51, SD=0.81) at baseline. The Suicidal Ideation Questionnaire (SIQ; Reynolds 1985) measured adolescents' suicidal ideation at baseline and at the 18-month follow-up time point. The Social Anxiety Scale for Adolescents (SASA) was administered at baseline to assess participants' social anxiety symptoms. Independent-samples t-tests examined the relationship between baseline social anxiety disorder and suicidal ideation. Individuals with a social anxiety

disorder diagnosis endorsed higher levels of baseline suicidal ideation, $t(140) = -2.49$, $p<0.05$), as well as higher levels of suicidal ideation at 18 months post-baseline $t(16.71) = -2.55$, $p<0.05$).

In as much as this study assesses the relationship between social anxiety and suicide ideation, the study participants are minors who are psychiatric inpatients in the US. Social anxiety in psychiatric inpatients can be more severe than in university students. The current study targets university students; unlike the current study that has considered a definite sample, the above study intended to use the whole population of 246. However, it ended up with a default sample of 144 participants due to others being discharged from the psychiatric ward.

In another work by Brooks R. et al. (2021), Anxiety sensitivity (AS), the fear of anxiety-related sensations, is associated with increased risk for suicide and related behaviour. Thus, investigations on AS have centred primarily on non-Hispanic White men and women and with limited attention to clinically relevant underlying factors. The study examined the indirect effect of AS on suicide ideation and elevated suicide risk through mindfulness in a sample of 307 Black adults (79.2% female; 20.8% male; $M_{age} = 22.4$, $SD = 5.6$). Participants completed an online questionnaire battery that included measures of AS, mindfulness, suicide ideation, and elevated suicide risk. After controlling for age and gender, results indicated that AS was directly and indirectly associated with suicide ideation and elevated suicide risk via lower levels of mindfulness.

Even though the study was carried out on non-Hispanic men and women and not on students of higher education, the study's finding is crucial to the current research as the latter study seeks to identify the relationship between social anxiety and suicide ideation. Again, even though These findings provide preliminary insight into novel risk and protective factors that

influence suicide ideation and elevated suicide risk among Black Americans, the current study would like to see how their finding relates to university students in Nairobi.

Sareen et al. carried out a study in Netherland on Anxiety Disorders and Risk for Suicidal Ideation and Suicide Attempts to examine whether anxiety disorders are risk factors for suicidal ideation and suicide attempts in a large population-based longitudinal study. First, a sample was drawn from 90 Dutch municipalities stratified by urbanicity and a sufficient distribution over the 12 provinces of the Netherland. Post office records were used to draw a sample of private households (addresses). One respondent in each household was selected randomly, according to whose birthday was most recent, on the condition that he or she was between 18 and 64 years of age and sufficiently fluent in Dutch. Of the 7076 participants at baseline, 4796 respondents had valid information at all three assessments. The Composite International Diagnostic Interview was used to assess DSM III-R mental disorders. Lifetime diagnoses of anxiety disorders (social phobia, simple phobia, generalised anxiety disorder, panic disorder, agoraphobia, and obsessive-compulsive disorder) were assessed at baseline. Multiple logistic regression analyses examined whether anxiety disorders were associated with suicidal ideation and attempts at baseline (n=7076) and whether anxiety disorders were risk factors for subsequent onset of suicidal ideation and attempts (n=4796). Results prove that after adjusting for sociodemographic factors and all other mental disorders assessed in the survey, the baseline presence of any anxiety disorder was significantly associated with suicidal ideation and suicide attempts in both the cross-sectional analysis and longitudinal analysis.

The study examined whether anxiety disorders are risk factors for suicidal ideation and suicide attempts in a large population-based longitudinal study, which is different from the objective of the current study, which is interested not in broad anxiety but specifically in social anxiety correlating with suicide ideation. Moreover, the participants were selected from

households instead of university students that will be of interest to the current study. However, the finding of the former study is of significance to the current one since the conclusion was that any kind of anxiety disorder had a significant relationship with suicide ideation. Therefore, the information will inform the current study as it seeks to establish a relationship between the two variables, that is, social anxiety and suicide ideation.

Palmier (2011) compared the prevalence and correlation of suicidal ideation among youths in sub-Saharan African countries. A two-stage cluster sample design was used. The first stage selected schools with probability proportional to enrolment size, and the second stage randomly selected classes. All students in the selected classes were eligible to participate in the survey. A sample of 13,536 participants was selected from Botswana, Kenya, Tanzania, Uganda and Zambia. The age of the participants ranged from 13 to 16. Questionnaires were used in the study to collect data. Logistic regression analyses were computed to determine the associations between 13 risk factors (hunger, current alcohol use, problem drinking, bullying victimisation, loneliness, sadness, worrying, no friends, missed school, illicit drug use, physical fights, physical attacks, and early sexual initiation), and suicidal ideation for all students and between boys and girls.

The survey results showed that Current alcohol use, problem drinking, being bullied and worrying, which are closely related to social anxiety, were significantly associated with suicidal ideation across all five countries. All risk factors, except for having no close friends, were predictors of suicidal ideation in certain countries or gender groups. This study is informative, although it does not focus on the relationship between social anxiety and suicide ideation as the current study seek to find out. Furthermore, the of participants is below the current study's target.

2.4 Coping Strategies on Suicide Ideation

Suicide ideation and suicidal attempt share common risk factors such as hopelessness, social isolation, anxiety, depression, impulsivity, and substance abuse (Achyut et al., 2019). This calls for the creation of proper awareness of the negative effects associated with suicide to guard young adults against suicide ideation. Thus, providing certain coping strategies to enable them to manage what they perceive as unbearable situations is the concern of this study.

Khurana & Romer (2020) carried out a National Longitudinal Study on Modelling the Distinct Pathways of Influence of Coping Strategies on Youth Suicidal Ideation. The duration of the study was one year. One of the aims of the mentioned study was to see which coping strategies (if any) predicted reductions in youth suicidal ideation. The study was done at the University of Pennsylvania North America, with 1239 participants from the National Annenberg Survey of Youth (NASY) ranging from 14 to 24 years of age. The sample size which completed the survey was 710. The study made use of interviews and online surveys. The study employed multiple imputations to generate five-panel data sets with 1239 cases each. Suicide Ideation and Symptoms of Depression (hopelessness and sadness) in the past 12 months were assessed at baseline (T1) and follow-up (T2) using Youth Risk Behaviour Survey (YRBS). Coping responses to stress were measured using six items adapted from the Response to Stress Questionnaire (RSQ; Social stress version; Connor-Smith et al., 2000). The result indicated that Coping responses and their effects on suicidal ideation, except distraction, the use of all coping strategies (at baseline) significantly predicted change in suicidal ideation over the one-year follow-up.

The above study was not focused on the university student as the current study does. The geographical location of the study is not Africa, so there may be a cultural difference in the worldview of this different study area about suicide ideation. However, the study has some

similarities to the current one because it focuses on suicide ideation among young adults. The information from the above research may inform the current study on identifying coping strategies for suicide ideation among university students.

Similarly, Alexander et al. (2009), on coping with thoughts of suicide: techniques used by consumers of mental health services, examined how people who had attempted suicide and those with depression and major mental issues coped with suicidal thoughts. The sampling size of 198 participants from 14 regional consumer-run Hope Dialogues in New York State wrote up to five strategies they use to deal with suicidal thoughts. Conventional qualitative research techniques were used to develop categories for data analysis. The grounded theory provides a repetitive process in which multiple analysts examine qualitative data to identify coding categories. A Wilcoxon test of ranks was performed to determine whether the rank distribution differed by respondents' gender, age, racial-ethnic groups, and depression diagnosis. Wilcoxon test of ranked sums: $z=-2.620$, $p<.01$. Results show that the first responses included spirituality, talking to someone, positive thinking, using the mental health system, considering the consequences of suicide to family and friends, using peer support, and doing something pleasurable. Although a majority reported that more formal therapeutic supports were available, only 12% indicated that they considered the mental health system a frontline strategy. Alexander's study on suicide ideation coping strategy seems not recent work. However, its information is helpful to the current study as it may help identify coping strategies for students who may be experiencing suicide ideation. However, the former study focused on the population from four regions in New York. It may not specifically identify suicide ideation strategies regarding self-esteem, academic stress and social anxiety, which is the interest of the current researcher.

Another study by Mamman et al. (2019) on suicidal ideation and coping strategies among engineering students in India investigated the extent of suicidal ideation and its relationship with various coping strategies adopted by engineering students. The study's sample size consisted of 72 male and 84 female engineering students in and around Kerala selected through the convenience sampling method. Data was collected through a questionnaire and were analysed using descriptive statistics, spearman's rank-order correlation and Mann Whitney U Test. The result showed that engineering students have an average level of suicidal ideation, which is alarming. Various maladaptive coping strategies like self-blame, behavioural disengagement, substance use and denial are positively correlated with suicidal ideation, and adaptive coping strategy venting is negatively correlated.

The current research identifies that the sampling procedure used was a convenience sampling method. Thus, it did not give equal chances to all students, unlike the current study that will apply a simple random sampling method. Nevertheless, most students can easily adopt the findings of the mentioned study of maladaptive coping strategies without considering their lasting consequences. Moreover, these maladaptive coping strategies will help the current researcher identify and suggest adaptive coping strategies.

Rothmann and Pienaar (2005) researched Coping, Stress and Suicide Ideation in the South African Police Service in the Eastern Cape. One of the study aims is to determine the relationship between coping and suicide ideation among police members. The study population was 307 respondents, consisting of uniformed police members in the Eastern Cape Province of South Africa. Stratified random sampling was used to select race and gender from the large stations. A cross-sectional survey design was used to reach the research objective. Descriptive statistics were used to analyse the data, and Pearson product-moment correlation coefficients

were used to specify the relationships between the variables. The results showed that passive coping strategies are related to suicide ideation (Statistically significant correlation: $p \leq 0.05$).

The above study sought the relationship between coping, stress and suicide ideation among police members in an African setting. What causes stress and suicide ideation among police members may not be similar to the cause of suicide ideation among students since these are different occupations in life with different experiences. Their coping method may also not be the same due to the nature of their occupations. However, the result of the above study is informative to the current study as it reveals the correlation of passive coping strategies (among which is social anxiety) to suicide ideation.

Chesire et al. (2018) looked at depression coping strategies among university medical students in Kenya to establish depression coping strategies and mental health services (Counselling and medical) among Kenyan university medical students. Stratified random sampling was used to get 312 students from two public universities who were proportionately recruited with a further subsample of 20 students proportionately and randomly selected from the main sample to take part in the qualitative phase of the study. This mixed-method research study, adopting a descriptive cross-sectional survey design, used Biographical Form and a Structured Interview Schedule for data collection. Descriptive statistics were used to analyse lifetime prevalence, use of counselling and medical services. Descriptive and qualitative analyses were used to examine depression coping strategies. Results revealed that a minority of the medical students reported using counselling (8.9%) and medical (40.8%) services to manage depression. The majority reported seeking help from their peers (90%) and using alcohol (80%) and sports (50%).

This study by Chesire et al. was interested in coping with depression among university medical students in Kenya, which is not the focus of the current study. However, the

information from the mentioned study is useful to the current study since suicide ideation is one of the symptoms of depression. So, coping with depression may be one of the ways of avoiding suicide ideation which may result from depression. Again, the result shows that most students seek help from peers who may not give them the best way forward to cope with what they consider depressing. Nevertheless, the findings of these researchers may be of help to the current study in suggesting better ways of taking advantage of this peer influence in conveying better-coping strategies.

2.5 Research Gaps

Concerning the review of related literature, there are many studies done on the area of suicide and suicide ideation among university students around the globe. However, the studies carried out have their limitations. For instance, most studies, such as Al-Shawashereh (2015) and Odoch (2019), concentrated on the relationship between self-esteem and suicide ideation in Irbid- Jordan and Uganda. However, none is carried out in the context of Kenya. Similarly, there is no tangible and specific empirical study on the relationship between academic stress and suicide ideation in Kenya other than Kabugi's (2020) overview and Wanyoike's (2015) study. Thus, none of these scopes of coverage was extended to Nairobi county. Again, the researcher has not come across any of the studies done in Kenya that explored the relationship between the three predictors and suicide ideation, which concerns the current study.

Different conclusions about the relationship between academic stress and suicidal thoughts have been drawn from the many empirical investigations listed above from the literature reviewed. Some revealed a positive association, while others found a negative one. This research aims to determine whether there is a correlation between the predictors; self-esteem, social anxiety, academic stress, and suicidal ideation among university students in Nairobi County.

It can also be noted that, although there are few studies done in Kenya on students' suicidality, none has ever specified the prediction of suicide ideation among university students in Nairobi, putting into consideration self-esteem, academic stress and social anxiety as the three predictor variables. The current researcher considers the need to address these gaps. This study, therefore, will be carried out to determine the relationship between the predictors (self-esteem, academic stress and social anxiety) and suicide ideation among university students in Nairobi County.

2.6 Conceptual Framework

As conceptualised by the study, the dependent variable, in this case, is Suicide Ideation (which has the following indicators; withdrawal, excessive sadness, hopelessness and so on) among the university students in Nairobi county, while the independent variables are the three predictors (self-esteem, academic stress and social anxiety). The researcher considered that when students are stressed due to academic matters such as performance or achieving acceptable grades and completing the amount of work involved, the students may consider suicide if they cannot cope. Likewise, low self-esteem was considered another possible factor that could instigate suicide ideation. Since university students are most likely establishing their social life, those who have social anxiety issues may seek suicide ideation as a coping strategy.

Moreover, the study has conceptualised that certain intervening variables may affect the relationship between the predictors and the suicide ideation among university students. Irrespective of students having academic stress, esteem issues and social anxiety, other factors involved within the different individuals will cause each to respond differently. Some students may still not have any of the three predictors yet be suicidal or vice versa.

These intervening variables include students' attitudes, family state of living, peer influence, religious beliefs and counselling. Thus, the relationship between the variables is presented in Figure 1.3.

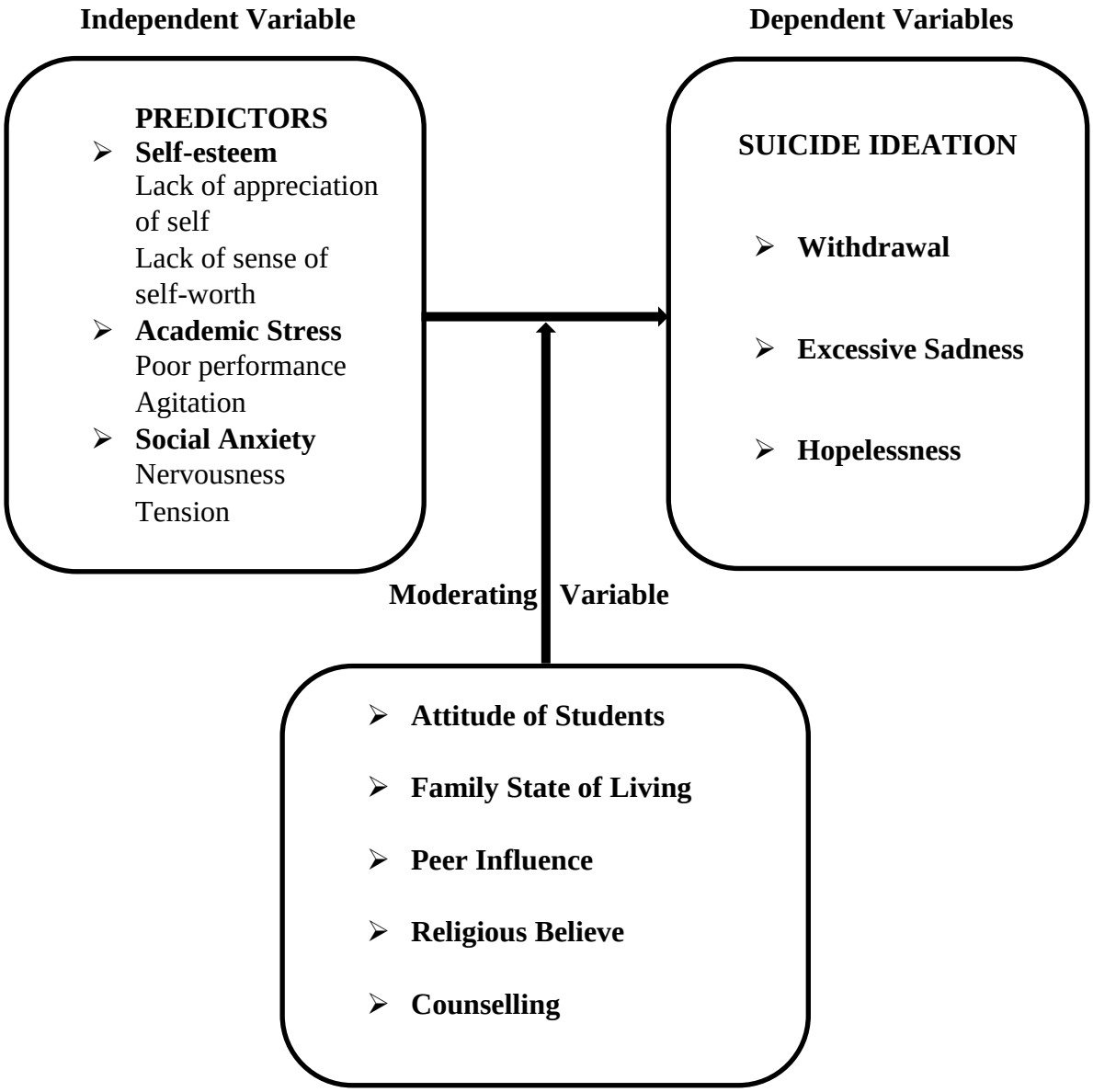


Figure 3: Conceptual Framework

Oji, (2021)

As conceptualised in Figure 3, the Predictor variables correlate with suicide ideation. These predictors have a great impact on the life of an individual; for instance, Self-esteem,

according to Sharma et al. (2013), is said to be a set of beliefs that a person brings with him or herself which indicates the extent to which a person believes himself/herself capable.

Self-esteem is a major key to success in life. Developing a positive self-concept or healthy self-esteem is extremely important for good adjustment in society. Sheetal et al. (2020) described academic stress as the force to perform well in examinations, horror from punishment and spirited examinations experienced by students, and so, asserting that teachers and parents also burden the students with a lot of pressure of getting good grades. Thus, academic stress is one of the significant barriers to students' academic performance, and it may adversely affect their emotional, physical, and psychological health. As March (2020) puts it, social anxiety is a mental health issue that involves a dread of social situations, including performing or speaking in front of others for fear of being negatively judged. People with Social Anxiety have an irrational fear of being watched, judged, embarrassed or humiliated. The anxiety and discomfort become so extreme that it interferes with daily functioning.

Now, one can understand that individuals with suicide ideation may have been experiencing a crisis in any of the predictors. This claim is evidenced in the works of the following;

Yao et al. (2014) assert that individuals with high self-esteem are more prone to violent behaviour and overanxiety. Both high and low self-esteem is associated with the risk of suicide ideation. Ashraf et al. (2018) provided clearer and more transparent support to the framework. Their findings significantly substantiated and projected that reasons for suicidal ideation in Pakistani society mainly delved deep into academic stress and trait-specific features such as anger and impulsivity. Valentiner et al. (2002) state that many psychosocial risk factors for adolescent suicidality have been identified, with research showing that social anxiety symptoms are concurrently related to suicidal ideation in teenagers.

According to Gallagher et al. (2014), their research indicated that social anxiety symptoms increased loneliness as measured during a baseline assessment. Thus, social anxiety has been associated with lower social acceptance and friendship intimacy. Reading in-between lines, one can see the indicators of suicide ideation in the above claims. Hence, this will enable the individual to identify one with suicidal thoughts and intervein before it goes out of hand.

2.7 Summary and Conclusion

Research on suicide ideation in Africa is scarce due to various reasons such as; lack of accurate statistics on suicidal behaviour, lack of research infrastructure and funds, limited death registers, and a lack of expertise in suicide research, among others (Schlebusch et al., 2009). The present research attempts to add to the relatively scarce information on students' suicidality in Africa and Kenya by finding out the relation between self-esteem, academic stress, social anxiety and suicide ideation among university students.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, the research design was presented, and it covered the location of the study. It also described the target population, the sample size, sampling procedures, research instruments, validity and reliability of the tools, data collection techniques, data analysis procedures and ethical considerations.

3.2 Research Designs

The study employed a quantitative correlation research design. The design was considered suitable for this study because it enabled the researcher to obtain responses to determine the relationship between the predictor variables (self-esteem, academic stress and social anxiety) and the criterion variable (suicide ideation). Furthermore, the researcher was able to generalise the findings to the entire university population in Nairobi, and the use of quantitative design better achieved this generalisation. The plan was also considered more appropriate for this study because of its objective nature. It enabled the researcher to objectively determine the relationship between the three predictor variables and suicide ideation. Correlational research design, thus, determines the extent of the connection (positive, negative or zero correlation) between two or more variables (Nworgu, 2015). Leedy & Ormrod (2010), quoted in Creswell (2008), noted that the correlational approach forms a relationship between two or more variables in the same population.

3.3 Location of the Study Area

The study was carried out in Nairobi, the capital and the largest city in Kenya. The population of Nairobi County, according to the 2019 census, was 4,397,073, and the County covers an area of 696 km^2 (269 sq mi) (KNBS, 2019). This County borders Kiambu, Machakos and Kajiado Counties.

The researcher settled for Nairobi County because it constitutes almost half of the universities in Kenya, as indicated by Nyagah (2019). Karanga (2012) notes that suicide is mostly tolled among university students in Kenya, especially in Nairobi. Therefore, responding to suicidal risk can be very intimidating in cases where one lacks the necessary information. So, to prevent it from occurring, authorities and students themselves require a clear understanding of the nature of suicide, including suicide risk factors, which a number of them have been described by Karanga (2012). Also, Ouma (2018) reported the concern on the rate at which the number of deaths by suicide has been growing among the young adults in the universities, especially in Nairobi County, since 2017. The city of Nairobi has 25 universities (Nyagah, 2019).

3.4 Study Population

The study population was a group of people the research intends to reach out to (Vonk, 2017). This study targets 128,984 undergraduate students enrolled in 25 universities (public and private) in Nairobi. This information was obtained from the Kenya National Bureau of Statistics (2018), cited by (Nyagah, 2019). Nairobi County has 25 chartered universities, public universities are 6 in number, and private universities are 19 in number; out of which are eight universities sponsored by the religious congregation and 11 are not sponsored by the religious congregation (Nyagah, 2019).

University students were chosen for this study because of the maturity accorded to them and seemingly greater expectations required of them from parents and relatives. More so because of pressures associated with meeting up with academic goals as university students. Tensions arising from those expectations might make undergraduate students vulnerable to low self-esteem, academic stress, social anxiety and suicide ideation. According to Toero et al. (2007), cited by Odoch (2019), there is a strong link between the greater expectation to excel in school and suicidal behaviours among university students in their study, which is why the number of suicide cases in a year usually peaked during examination periods where adolescents experienced a high level of stress in school.

3.5 Sampling Procedure and Sample Size

The study's sample size comprised 398 students drawn from the population of the study, which was 128,984. Yamane's (1967) formula for sample size determination was used in the study. Thus, Yamane's formula is:

$$n = \frac{N}{1+N\,(e)2}$$

where

N = Target population

n = Sample formula

e = Interval level

Therefore, $n = \frac{128{,}984}{1+128{,}984\ (0.05)2}$ = 398.75 this was truncated to 398.

A multi-stage sampling procedure was then applied. In the first stage, out of the 25 universities in Nairobi, stratified sampling was used in selecting five universities. The strata included 6 public universities, 8 private universities sponsored by religious congregations and 11 private universities not supported by a religious congregation. So, 20 per cent of each stratum was considered, following Mugenda and Mugenda (2012), who argue that this percentage is an adequate representative sample. Therefore, the piece was composed of 1 public university, 2 private universities sponsored by the religious congregation and 2 private universities not supported by a religious congregation, giving five universities.

The current research focused on public and private universities because both kinds of universities are managed differently regarding how students should conduct themselves on the campus. There are probably variations in values upheld by the different universities. Finally, a simple random sampling technique was also used in selecting students from each of the five universities chosen for the study. This simple random sampling gave equal opportunity to each student in the five universities to participate, thus, reducing biases. The sample size of 398 students was calculated using Yamane's formula. The researcher selected 79 students from each private university and 82 from the public university from this sample size. The researcher used the nearest number divisible by 5, 395, which gave 79 students per university. The extra 3 students were allocated to the public university to provide a better representation since there is one public university and four private universities. This then led to a sample of 79 students from each private university and 82 students from the public universities, which gave rise to a sample size of 398.

Mugenda and Mugenda (2013) opined that a sample is a smaller group or sub-group obtained from the accessible population. This subgroup is carefully selected to represent the

whole population with relevant characteristics. This implies that a sample is a small proportion of a population selected for observation and analysis.

3.6 Data Collection Instruments

Data for this study were collected using 4 sets of questionnaires. The first questionnaire, titled Suicide Ideation Questionnaire (SIQ), is a 6-item standardised instrument adopted from the Columbia-Suicide Severity Rating Scale (C-SSRS) 2008. It is a measure used to identify and assess individuals at risk for suicide. Questions were phrased for use in an interview format but can be completed as a self-report measure if necessary. The CSSRS measures four constructs: the severity of ideation, the intensity of imagination, behaviour and lethality. It includes "stem questions," which, if endorsed, prompt additional follow-up questions to obtain more information. However, it was adapted to 6 items scale to measure suicide ideation. Items 1 and 2 measure mild suicide ideation, items 3 and 4 measure moderate suicide ideation and items 5 and 6 measure severe suicide ideation. SINCE THE RECENT VISITS, the C-SSRS intensity subscale was examined at two assessment intervals. The internal consistency of the intensity subscale was high, with a Cronbach's alpha of 0.937 since the recent visits. (see Appendix 1, pg. 66).

The second questionnaire, "Self-Esteem Questionnaire (SEQ)" is a standardised 10-item questionnaire adapted from Rosenberg Self-Esteem Scale (Rosenberg, 1965). The questionnaire is a self-report measure of self-esteem structured on a 4-point Likert response scale of strongly agree, agree, disagree and strongly disagree with assigned weights of 1,2,3 and 4, respectively. Scoring involved a method of combined ratings. Low self-esteem responses are "disagree" or "strongly disagree" on items 1, 3, 4, 7, 10, and "strongly agree" or "agree" on items 2, 5, 6, 8, 9. Two or three out of three correct responses to items 3, 7, and 9 are scored as one item. One or two out of two correct answers for items 4 and 5 are considered a single item;

items 1,8 and 10 are scored as individual items and combined correct responses (one or two out of two) to items 2 and 6 are considered to be a single item. The scale can also be scored by totalling the individual 4-point items after reverse-scoring the negatively worded items. (see Appendix 1, pg. 67).

The third instrument, tagged Academic Stress Questionnaire (ASQ), is a standardised questionnaire adopted from the Depression, Anxiety and Stress Scale – 21 (DASS 21) Lovibond, S.H. & Lovibond, P.F. (1995). This was adapted to 7 item scale to measure academic stress. It is sensitive to levels of chronic non-specific arousal. It assesses difficulty relaxing, nervous arousal, and being easily upset/agitated, irritable/over-reactive and impatient. Scores for academic stress are calculated by summing the scores for the relevant items. (see Appendix 1, pg. 68).

The fourth instrument, the tagged Social Anxiety Questionnaire (SAQ), is adopted from Social Interaction Anxiety Scale (SIAS). It is a 20 item self-report scale designed to measure social interaction anxiety, defined as "distress when meeting and talking with other people" (Mattick and Clarke, 1998). The questionnaire was structured on a 5-point Likert response scale of (0) No at all characteristics (1) Slightly characteristics (2) Moderately characteristics (3) Very characteristics (4) Extremely characteristics; to elicit information on social anxiety. The maximum score for a participant in SIAS is 80 points you can score (4x20). A score of 43 or more indicates traditional social anxiety (generalised irrational fears across numerous social situations with avoidance and impairment). A 34 to 42 shows what is sometimes called social phobia (specific situations of irrational social fears with avoidance and impairment) (see Appendix 1, pg. 69).

3.7 Data Quality Control

In this study, it was necessary to ascertain the validity and reliability of the instruments used in collecting data. This was to ensure that the research instruments for this current study are reliable. Thus, the approach used in testing the validity and reliability of the tools is discussed below.

3.7.1 Validity of the Research Instruments

As a standardised and validated instrument, the researcher adopted the Suicide Ideation Scale from Columbia-Suicide Severity Rating Scale (C-SSRS), 2008.

The Self-Esteem Scale was adapted by the researcher from Rosenberg, M. (1979), the Academic Stress Scale adopted from Depression, Anxiety and Stress Scale (DASS 21) of Lovibond, S.H. & Lovibond, P.F. (1995), and Social Anxiety Scale Adopted from Social Interaction Anxiety Scale (SIAS) of Mattick, R. P., & Clarke, J. C. (1998) are also validated instruments.

Even though these are standardised tools whose validity had been satisfied, the researcher did perform a pilot study with two groups of 10 students, each from different universities, by simple random selection. The questionnaires were administered to these students, and the responses were relevant to the study and were related to each other. The necessary adjustments appropriate to the culture and environment of the current population were made before finally using the questionnaires for the actual data collection. These students were not involved in the existing data collection. (see attached Appendix 1, pgs. 65-70).

3.7.2 Reliability of the Research Instruments

According to Mugenda and Mugenda (2013), reliability is the ability of a research instrument to consistently measure characteristics of interest over time. It is the degree to which

a research instrument yields consistent results or data after repeated trials. If a researcher administers a test to a subject twice and gets the same score on the second administration as the first test, then the instrument is reliable. The current researcher administered the same test to the same 20 participants within two weeks, and the participants gave at least 18 out of the 20 participants gave similar answers as in their first take of the questionnaire. This gave 90%, which translated to 0.9, and it is in line with the accepted reliability according to Cronbach's α reliability coefficient, which considers $0.86 \leq r \leq 0.99$ as reliable. Furthermore, the researcher ran Cronbach's alpha using SPSS, which gave 0.894, indicating very high reliability considering the level accepted for reliability, from 0.6 and above. The questionnaire was therefore regarded as reliable.

The Columbia-Suicide Severity Rating Scale (C-SSRS) was created to be the prospective counterpart to the Columbia Classification Algorithm for Suicide Assessment (C-CASA) classification system. The C-CASA was developed as a retrospective method for evaluating adverse events in clinical trials and was found to possess overall reliability of 0.89. The Rosenburg Self-Esteem Scale demonstrates a Guttman scale coefficient of reproducibility of 0.92, indicating excellent internal consistency. According to this research, Test-retest reliability over two weeks reveals correlations of 0.85 and 0.88, indicating excellent stability.

The Depression, Anxiety and Stress Scale (DASS-21)'s test-retest and split-half reliability coefficient scores were 0.99 and 0.96, respectively. These results demonstrate that the DASS is a valid and reliable instrument. The Social Interaction Anxiety scales have good psychometric properties as attested by satisfactory reliability indices: internal consistency, determined by Cronbach's α, ranged from 0.88 to 0.93 for the SIAS and 0.89 to 0.94 for the Social Phobia Scale (SPS). Test-retest reliability was $r = 0.92$ for the SIAS and ranged from 0.91 to 0.93 for the SPS (for 4- and 12-week intervals, resp.).

3.8 Data Collection Procedures

Before collecting data, the researcher obtained an introductory letter from the university to secure ethical approval from the local institutional review board and a research permit from the office of the National Commission for Science and Technology and Innovation (NACOSTI). With the inclusion of the introductory letter from the university and ethical approval from the local institutional review board, this permission was used to obtain permission from Nairobi County Commissioner's office. The researcher used the letter of identification from the university, ethical approval from the local institutional review board, NACOSTI and the County commissioner's office to obtain another permit from the Nairobi county director's office in the ministry of education.

Afterwards, the researcher then proceeded to the respective schools to collect data. The data were collected with the aid of research assistants. Six research assistants were briefed and acquainted with the purpose of the study. They were further taught about the status of the respondents for the study, how to build a good rapport with both the school administrations and the students, obtain permission from school authorities, and administer and collect back the questionnaires from the students. The research assistants were requested to strictly adhere to the instructions given to them by the researcher. The respondents were informed about the purpose of the study and sought their consent before administering the questionnaires to them. Moreover, the researcher followed up on the activities to ensure that the questionnaires were filled appropriately and collected.

3.9 Data Analysis and Presentation

The data collected were systematically organised and cleaned by checking whether all the questionnaires had been filled adequately for analysis. Afterwards, the data were coded and entered into the computer using the Statistical Package for Social Science (SPSS 25).

Descriptive analyses such as frequency and percentage were used to present quantitative data in the form of Tables on research questions. Again, the inferential analysis helped test the relationship between the three predictor variables (self-esteem, academic stress and social anxiety) and suicide ideation among the university students in Nairobi County. Accordingly, for the inferential analysis, Pearson's product-moment correlation was performed to establish the relationships between the predictors (self-esteem, academic stress and social anxiety) and suicide ideation among university students in Nairobi County.

3.10 Ethical Considerations

This research was conducted within the proper ethical parameters. The respondents' interests were protected, and they were not coerced to respond to the study. This was achieved in the manner whereby the researcher asked for permission to collect the data from the respondents. They were given the free will of whether or not to participate in the research. They were also informed of the purpose of the study and that the information would be treated with the utmost confidentiality. The part of confidentiality was made possible because the researcher asked all the willing participants not to write their names and that of the school in the questionnaires; in this way, anonymity was ensured.

Before responding to questionnaires, the researcher ensured that the study's objective was thoroughly communicated to the respondents. All the respondents had given their informed consent by signing a consent letter. Because suicide is a sensitive topic that may elicit strong emotions and memories in the participants, the researcher took extra precautions to provide psychological debriefing after data collection. This was accomplished by employing two qualified counsellors to accompany the researcher during the data collecting period and provide debriefing sessions during or after data collection to assist participants in maintaining a healthy psychological equilibrium. All recorded research data and completed questionnaires were kept in safe custody by the researcher pending the approval of the thesis by the university. At that point, they will be destroyed.

Considering plagiarism as one of the ethical issues, the researcher only reported what was found in the field. Any of the secondary information used in this work was duly quoted. Therefore, whatever is in the findings of this work is the researcher's direct information from the participants.

As part of the ethical considerations, the researcher sought all the necessary permits to enable him to collect data. This permission did include the introductory letter from the university, ethical approval from the local institutional review board and a research permit from the office of the National Commission for Science and Technology and Innovation (NACOSTI). Others include access from the office of the County Commission and that of the Ministry of Education, which enabled the research to be permitted by the universities to carry out the research in the respective institutions.

Having completed the study, the researcher ensured that each participating university was issued with at least a copy of the research paper to supply them with the necessary information useful in addressing issues on self-esteem, academic stress, social anxiety and suicide ideation among the students. This is one of the ways to appreciate both the institutions and all the participants for their support and cooperation during the data collection period.

3.11 Chapter Summary and Conclusion

This is pure quantitative research interested in determining whether or not there is a relationship between these three predictor variables: self-esteem, academic stress, social anxiety, and suicide ideation. The study used a sample of 398 respondents, which was derived from the targeted population of university students in Nairobi using Yamane's formula. Hence, the study adapted questionnaires from suicide ideation, self-esteem, academic stress and social anxiety to collect data analysed using SPSS-25 to determine the relationship among the variables mentioned above and thus, provide the coping strategy to deal with suicidal issues.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter includes an analysis, presentation and interpretation of the findings on the predictors of suicide ideation among university students in Nairobi County. The chapter is divided into five sections which include; the response rate, demographic analysis, demographic differences, the findings of the objectives and the summary of the findings

4.2 Response Rate

In this study, 398 questionnaires were distributed to the respondents in the five respective universities. Among the distributed questionnaires, 33 were either incomplete or returned empty. Hence, these 33 questionnaires were not included in the analysis. Therefore, the returned questionnaires were 365. Thus, the rate of the returned questionnaires was 91.71% of the expected sample.

4.3 Demographic Analysis

The demographic data considered in this study were; age, gender and year of study. This has been discussed in this section.

4.3.1 Age of the Participants

The participants aged between 17 to 20 years were 48, 13.2% of the participants. Those aged between 21 to 24 years were the majority since they were 175 and represented 47.9% of the participants. Those aged between 25 to 28 years were 67 making 18.4% of the sample, while those above 28 years were 75 giving a percentage of 20.5 of the model. Table one below indicates the response rate in terms of age categories.

Table 1

Age of the students' participants

	Frequency	Percent
17-20 years	48	13.2
21-24 years	175	47.9
25-28years	67	18.4
Above 28years	75	20.5
Total	365	100.0

4.3.2 Gender of the Participants

Among the respondents, female students constituted the majority of those who responded to the questionnaires, accounting for 65.5 % of the sample, followed by males, who comprised 34.2 %. The research had also included other gender as part of the categories. However, for those included in this analysis, this category was 0%, but among the incomplete questionnaires, one participant had indicated gender as others. Table 2 below indicates the information on the gender of the participants.

Table 2

Gender of the Students Participants

	Frequency	Percent
Male	125	34.2
Female	240	65.8
Total	365	100.0

4.3.3 Year of Study

The participants were taken from across the university years of study. The distribution was as follows; year 1 was 21 participants making a percentage of 5.8, year 2 were 63 participants giving a percentage of 17.3, then year 3 were 97 participants, which is 26.6%. In contrast, in year four students were 95 respondents, 26.0%. And finally, others were 89participants, which is 24.4% of the sample size. Table 3 below shows the information on the year of study of the students' participants.

Table 3

Year of Study of the Students Participants

	Frequency	Percent
Year 1	21	5.8
Year 2	63	17.3
Year 3	97	26.6
Year 4	95	26.0
Others	89	24.4
Total	365	100.0

4.4 Demographic Differences

4.4.1 Differences in gender and Suicide Ideation Crosstabulation

The students were asked to indicate their gender. In analysing the responses, the mean of the male students is 11.18, which reveals that male students are more suicidal than female students, which has a mean of 10.95. This is in line with Taylor (2018), who found a high risk of severe suicide ideation among male students compared to female students.

Table 4a

Differences in gender and Suicide Ideation Crosstabulation

	Mean	N	Std. Deviation	% of Total Sum
Male	11.18	125	1.521	34.7%
Female	10.95	240	1.695	65.3%
Total	11.03	365	1.639	100.0%

The researcher went further to perform the ANOVA test. The degree of freedom was found to be 1, and the F value was 1.739. However, the significant level was 0.188, which is greater than 0.05. Thus, the difference in suicide ideation concerning gender was insignificant, as illustrated in Table 4b below.

Table 4b

ANOVA test Table on the differences in suicide ideation with respect to gender

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	4.662	1	4.662	1.739	.188
Within Groups	973.064	364	2.681		
Total	977.726	365			

With the independent t-test, under equal variance assumed, the results were t (1.303), df (363) and p (0.193). With these results, p (0.193) > α (0.05); thus, this research fails to reject

the null hypothesis that there is no significant difference in suicide ideation concerning gender and concludes that suicide ideation is not subject to gender. This finding is in line with the findings of Kristine Brown (2011) in her study, Predictors of Suicide Ideation and the Moderating Effects of Suicide Attitudes. In the analyses, she compared the means between males and females for each study variable (depression, hopelessness, and perceived stress as predictors of suicide ideation). The result revealed no significant gender differences among the variables examined in the study.

Another supporting study is Yuhui Wan et al. (2019) on the Effects of Self-Esteem on the Association between Negative Life Events and Suicidal Ideation in Adolescents. They aimed to examine gender differences in the association of suicide ideation with negative life events in adolescents and to assess the effects of self-esteem on the association and their gender variations. After using Multivariate-adjusted logistic regression to calculate the odds ratio (OR) of having suicide ideation about negative life events, increased risk of suicide ideation was significantly associated with negative life events (adjusted OR 2.19, 95%CI 1.94–2.47), showing no gender differences (in females 2.38, 2.02–2.80, in males 1.96, 1.64–2.36, respectively). Table 4c below gives us the independent t-test results;

Table 4c

Independent t test Table

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Suicide ideation	Equal variances assumed	3.573	.060	1.319	363	.188	.238	.181	-.117	.593
	Equal variances not assumed			1.365	276.290	.174	.238	.175	-.105	.582

However, the finding is contrary to Mugambi et al. (2020), who indicated that focusing on gender, a higher prevalence of females in comparison to males was observed in suicide behaviour. The prevalence of suicide behaviour in females was 25.4% (n=136) and that of males at 17.5% (n=88). Therefore, there was a statistically significant difference in the gender presentation of suicide behaviour at $p<0.01$. Therefore, the study indicates that female adolescents are more vulnerable to the development and expression of suicide behaviour than males.

The findings may have been due to the age difference and probably the study method. Therefore, it may be to conduct a similar study with a similar age group to ascertain the result concerning gender. A qualitative approach may be more appropriate as it may give in-depth information from the participants regarding gender and suicide ideation.

4.4.2 Differences in Year of Study (class) and Suicide Ideation

There is a mean difference in suicide ideation concerning the year of study. However, the difference is minimal, with the highest score being the 4th year students scoring 11.11 while the least are those in year one with the mean of 10.81. this gives a range of 0.30, translating to 30% of the sample. So, this is shown in table 5 below.

Table 5a

Differences in Year of Study

Suicide ideation

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean Lower Bound	95% Confidence Interval for Mean Upper Bound	Minimum	Maximum
Year 1	21	10.81	1.750	.382	10.01	11.61	7	12
Year 2	63	10.89	1.647	.208	10.47	11.30	6	12
Year 3	97	11.09	1.568	.159	10.78	11.41	6	12
Year 4	95	11.11	1.447	.149	10.81	11.40	7	12
Others	89	11.03	1.849	.196	10.64	11.42	6	12
Total	365	11.03	1.630	.085	10.86	11.20	6	12

The researcher went on to do an ANOVA test, finding that the degree of freedom was 4 and the F value was 0.323. However, the significant level was 0.863, larger than 0.05,

indicating that the differences in suicide ideation by year of study were insignificant, as seen in table 5b below.

Table 5b

Difference in suicide ideation by year of study

ANOVA

Suicide ideation

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	3.197	4	.799	.299	.879
Within Groups	963.472	361	2.676		
Total	966.668	365			

4.4.3 Differences in Age in years and Suicide Ideation

In the case differences in suicide ideation concerning the age of the participants, those students above 28 years of age scored the highest in suicide ideation mean of 11.52. These were followed by those between the age of 25 to 28 years who had a mean of 11.21, than those aged 21 to 24 years with a mean of 10.91, while the least were those aged between 17 and 20 years who scored a mean of 10.44. The difference in mean between the lowest and the highest was 1.08, which seemed to be minimal. However, on conducting the ANOVA, the results were; Df (3), F (5.106) and a significant level of 0.002 were established. They were that 0.002 < 0.05, the variance analysis indicates a significant difference between age and suicide ideation. Tables 6a and 6b below show this analysis.

Table 6a

Age in years and suicide ideation

Suicide ideation

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean Lower Bound	Upper Bound	Minimum	Maximum
17-20 years	48	10.44	2.010	.290	9.85	11.02	6	12
21-24 years	175	10.91	1.653	.125	10.67	11.16	6	12
25-28years	67	11.21	1.503	.184	10.84	11.58	6	12
Above 28years	75	11.52	1.234	.143	11.24	11.80	7	12
Total	365	11.03	1.630	.085	10.86	11.20	6	12

Table 6b

ANOVA of Age in years and suicide ideation

Suicide ideation

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	39.347	3	13.116	5.106	.002
Within Groups	927.321	364	2.569		
Total	966.668	365			

4.5 The relationship between self-esteem and suicide ideation among university students in Nairobi County

The researcher conducted a correlation between self-esteem and suicide ideation. The findings are shown in table 7 below.

Table 7

Relationship between self-esteem and suicide ideation among university students in Nairobi County

		Suicide ideation	Self-Esteem
Suicide ideation	Pearson Correlation	1	-.470**
	Sig. (2-tailed)		
Self Esteem	Pearson Correlation	-.470**	1
	Sig. (2-tailed)	.000	
	N	365	

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

In comparing self-esteem with suicide ideation, r = -0.470 indicates a moderate negative correlation, which means that the higher the self-esteem of the university students, the lower the suicide ideation. The p (0.000) < α (0.01) hence, the relationship is significant. Therefore, it will be important to work on ways of improving the self-esteem of university students to mitigate suicide ideation at this level.

This finding concurs with the researchers Owusu-Ansah et al. (2020) on suicide among university students: prevalence, risks and protective factors. They showed that low self-esteem is a predictor of suicidal ideation. Thus, their result indicates that positive self-esteem is a buffer

against suicidal ideation (AOR = 1.05; CI 0.90, 0.99). Another supporting finding is that of Dat Tan Nguyen et al. (2019), who researched the Low Self-Esteem and Its association with anxiety, depression, and suicidal ideation in Vietnamese Secondary School Students. A multivariate logistic regression model entered univariate independent predictors of low self-esteem with $p < 0.10$. The backward Wald method was applied to study their influence on the presence of low self-esteem. The results of univariate logistics indicate that low self-esteem contributed significantly to suicide among adolescents. So, students with low self-esteem were significantly more likely to have considered or attempted suicide.

Other previous studies also support the findings. For instance, a study conducted by Asghari et al. (2013) among university students wanted to find out how students' inability to cope with social anxiety might make them develop suicidal ideas. Just like in this study, their findings revealed that with lower self-esteem, the victims find it hard to cope and, at the same time, develop suicidal ideation.

The findings above agree with the interpersonal theory of suicide behaviour by Joiner (2007). He argues that two psychological states must be involved for an individual to commit suicide. These states are; perceived burdensomeness and thwarted belongingness. In this case, the person with low self-esteem is more prone to these perceptions and thus positively correlates with suicide ideation.

However, Al-Shawashereh (2014) disagrees with the current finding. In his research study on Suicidal Ideation about Self-Esteem among University Students, his findings revealed a significant positive relationship ($\alpha \leq .05$) between suicidal ideation and the self-esteem level among students, and so students with high self-esteem obtained the highest suicidal ideation scores. Agreeably, Odoch (2019) showed that there is a significant positive relationship between self-esteem and suicidal ideation where ($r=.346$, $p=.002<0.01$) at the level of

significance of (0.01); hence there is a significant relationship between self-esteem and suicidal ideation since the p-value is less in magnitude than 0.01 value of the level significance.

4.6 The relationship between academic stress and suicide ideation among university students in Nairobi County

The second objective of the study was to establish the relationship between academic stress and suicide ideation. and the results were as shown in the table 8 below.

Table 8

Relationship between academic stress and suicide ideation among university students in Nairobi County

		Suicide ideation	Academic stress
Suicide ideation	Pearson Correlation	1	.416**
	Sig. (2-tailed)		
Academic stress	Pearson Correlation	.416**	1
	Sig. (2-tailed)	.000	
	N	365	

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

The researcher first determined the mean score of various indicators of self-esteem by Rosenberg, thus coming up with comparable data representing suicide ideation as a variable. The researcher also calculated the mean score of the data summing up academic stress. As per the data, the mean scores were; suicide ideation (mean = 1.8384, std. deviation = 0.2716) and

academic stress (mean = 2.0183, std. deviation = 0.4430) Pearson's correlation was then used to determine the relationship between suicide ideation and academic stress.

The results reveal a moderate positive correlation of ($r = 0.416$) between suicide ideation and academic stress. This means that the higher the level of academic stress among students, the higher the thought of committing suicide. The data was considered statistically significant following the significant value of $p\ (0.000) < \alpha\ (0.01)$, meaning that the correlation is highly significant and not just a result of a function of random sampling error.

These findings, just like in the previous objective, are supported by Dat Tan Nguyen et al. (2019), among other researchers vividly discussed in the second chapter, who researched the general academic stress, self-esteem and their association with anxiety, depression, and suicidal ideation in Vietnamese Secondary School Students.

Ang & Huan (2014) also supported this finding in their research on the relationship between academic stress and suicidal ideation: Testing for depression as a mediator using multiple regression. Their finding indicated that academic stress was positively correlated with suicidal ideation at ($r = 0.22$, $P < 0.01$, Cohen's $d = 0.45$).

Similarly, Ngondi (2016) dealt with grade expectation which in this case be compared to academic stress. She examined the relationship between Kenya Certificate of Secondary Education (KCSE) examination scores and symptoms of anxiety, depression, and suicide ideation among adolescents in Nairobi, Kenya. The result obtained was $r = -0.07$, with 0.491 as the significance level. Thus, indicating that academic grade is not a determinant of suicide ideation. The researcher concluded that it is rather the academic expectation that has a relationship with suicide ideation since the correlation between grade expected and grade scored revealed that 49 per cent of the participants did not get the grade they expected, and so

it triggers feelings of hopelessness regarding the further opportunities; resulting in ideas of ending one's life. This conclusion agrees with the current study as this conflict between the grade expected and the grade achieved is what amounts to academic stress.

Mohammadinia et al. (2012) conducted a research where they wanted to determine some of the reasons and factors that lead to suicidal ideation among medical students. One of the key findings was the intensity of work leads to stress which makes the students develop ideas of committing suicide. This is a form of stress that medical students experience academically as they are subjected to pressure and school work. These findings, among others, perfectly support the findings of this study as seen above that, indeed, there is a positive correlation between academic stress and suicidal ideation among university students in Nairobi County.

Furthermore, the Integrated Motivational-Volitional model (IMV) of suicidal behaviour by O'Connor et al. (2011) supports that suicide behaviour results from a complex interplay of factors. Such factors include defeat/humiliation leading to a sense of entrapment, leading to suicide ideation and finally, suicide actualisation. When the student experiences the academic stress, a sense of defeat or humiliation easily comes in, thus the entrapments where the individual may be frustrated with the expected work that he/she perceives to be overwhelming, yet, they still need to achieve appropriate grades for the next level of study. This frustration, defeat/humiliation, entrapments and suicide ideation may come in.

4.7 The relationship between social anxiety and suicide ideation among university students in Nairobi County

This study sought to determine the relationship between social anxiety and suicide ideation among university students in Nairobi. The results were as shown in the table 9 below.

Table 9

The relationship between social anxiety and suicide ideation among university students in Nairobi County

		Social anxiety	suicide ideation
Social anxiety	Pearson Correlation	1	.354**
	Sig. (2-tailed)		
Suicide ideation	Pearson Correlation	.354**	1
	Sig. (2-tailed)	.000	
	N	365	

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

Like the previous objectives, the researcher first identified the mean score of various factors/indicators of social anxiety used during data collection, thus coming up with a comparable set of data as a single variable. As per the data, the mean scores were; suicide ideation (mean = 1.9237, std. deviation = 0.2716). Pearson's correlation was then used to determine the relationship between suicide ideation and social anxiety

The results revealed a low but almost moderate positive correlation between social anxiety ad suicide ideation r (0.354). This means that the higher the social anxiety among students, the higher the chances of them having thoughts and ideas about committing suicide. The data was considered statistically significant following the significant value of p (0.000) < α (0.01), meaning that the correlation is highly significant and not just a result of a function of random sampling error.

These findings are supported by various studies conducted previously. For instance, Wilcox et al. (2010), in their research where they were trying to determine the key factors leading to suicide ideation, indicated that social anxiety is one of the key factors that make students feel insufficient and not worthy, thus starting to think of self-destruction strategies. In their research on the Social Anxiety and Suicidal Ideation: Test of the Utility of the Interpersonal-Psychological Theory of Suicide, Buckner et al. (2018) concluded that Social anxiety is related to greater suicidality, even after controlling for depression and other psychopathology. Their finding was that social anxiety was significantly related to Suicide Ideation, $\beta=.224$, $p < .001$.

Multiple previous studies sport this finding. For instance, Dat Tan Nguyen et al. (2019), who researched the Low Self-Esteem and Its association with anxiety, depression, and suicidal ideation in Vietnamese Secondary School Students, revealed that anxiety is among the top factors leading to suicidal ideation among the secondary students. Owusu-Ansah et al., (2020) on suicide among university students: prevalence, risks and protective factors. They showed that low self-esteem and social anxiety predict suicidal ideation.

4.8 Suggested Interventions and Coping Strategies on Suicide Ideation Among University Students in Nairobi

The last objective of the study was to come up with some the strategies that students can use to cope with suicidal ideation. The following are some of the coping strategies that the researcher came up with after the analysis of the data;

i. The university needs to consider establishing support groups such as peer counselling. Where such groups already exist, they should ensure proper peer counsellors' training and provide proper facilities where students can feel safe

to go and seek help in these groups. These groups should be well organised and have a counsellor lecturer in charge of the group and to whom cases that need referral can be directed. This suggestion supports the findings of Alexander et al. (2009) as seen in the second chapter, spirituality, talking to someone, positive thinking, using the mental health system, considering consequences of suicide to family and friends, using peer support, and doing something pleasurable helped the victims of suicide as well as those who had suicidal ideation to cope well with the situation. These peer counsellors should be empowered to carry out their duties among other students, which can be achieved by having weekly supervision of their counselling activities.

ii. Advocating for counselling within the universities; Even though some universities have already established counselling departments, several students are either ignorant of it or underrate the help they can obtain. Therefore, counsellors need to find ways of advocating for the use of counselling services. Students should be constantly encouraged to seek counselling intervention whenever they feel overwhelmed by any situation, particularly in self-esteem, academic stress and social anxiety cases. Achyut et al. (2019) advocate for certain coping strategies that help individuals manage the situations they perceive as unbearable. Promoting counselling services within the universities would be one of the ways of helping the students cope with these situations.

iii. Psychoeducation; It will be helpful to expand the orientation process in the universities to include topics that will be useful for students coping with university life. This would include study methods, coping with academic stress, and handling social anxiety and self-esteem issues. In the Kenyan system of education, a student is closely monitored and helped or even pushed to achieve

academically by teachers both in primary and high schools due to the exam-oriented nature of the system. In most cases, this results in academic culture shock when the student joins universities where suddenly there is no one following, and one has to be self-driven to perform. With this background, the Psychoeducation suggested here would be of great help in enabling students to cope with the university academic stress and consequently manage their social anxiety and esteem issues.

iv. Involvement in the university social activities; Social activities such as sports, clubs, religious fellowship groups, participation in the universities' social contexts, etc. Activities like these would help build self-esteem and reduce their social anxiety and academic stress, consequently reducing the rate of suicide ideation. This accords with Chesire et al. (2018), who, in their research, wanted to identify the coping strategies among Kenyan university medical students. Results of their research revealed that the majority of the medical students reported using counselling and medical services to manage depression. Others also reported seeking help from their peers and using co-curricular activities such as sports to distract them and help them cope.

4.9 Summary of the Finding

After the analysis, this study has several findings. Looking at the gender differences, male students have a mean suicidal tendency of 11.18, which is higher than female students, who have a mean suicidal tendency of 10.95 which is following Taylor (2018), Lee et al. (2019) and Nyang'or et al., (2021) who showed male students are more likely than female students to have severe suicidal ideation.

In terms of age, the research had an interesting finding as suicide ideation among university students seemed to increase with age. It was noted that those above 28 had the highest mean, followed by 25 - 28 years, and the least affected were those aged 17-20 years. The ANOVA result indicated a significant relationship. This agrees with Lee et al. (2019) that the older adolescents were more prone to suicide ideation than the younger ones.

Considering the years of study, those in year 4 registered the highest mean of 11.11; however, the differences between the years were minimal. The range between the highest and lowest mean was 0.30. Those in year 1 had 10.81, year 2 students had a mean of 10.89, followed by those in the 'others' category who had 11.03 and those in year 3 registered a mean of 11.09.

With the three predictors examined in this study, it was found that self-esteem negatively correlated with suicide ideation. The other two predictors, academic stress and social anxiety, had a positive correlation with suicide ideation. These agreed with the scholarly works of; Owusu-Ansah et al. (2020), Dat Tan Nguyen et al. (2019), Ang & Huan (2014), Ngondi (2016), Wilcox et al. (2010) and Buckner et al. (2018). Furthermore, as intervening measures to mitigate suicide ideation among university students, the study has some suggestions. These include establishing support groups, advocating for counselling services within the universities, Psychoeducation and participation in social activities in the universities.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the whole work and has highlighted the critical points of the study and summarised the general findings of the Predictors and Suicide Ideation among university students in Nairobi County-Kenya according to objectives. It has also given conclusions and recommendations. The chapter also captures recommendations for further studies and aligns with the objectives.

5.2 Summary of the Key findings

The study set out to create more awareness of the rising issue of suicide behaviour among university students in Nairobi, especially regarding self-esteem, academic stress and social anxiety. The study population was 128,984 university students, from which a sample size of 398 was drawn. Multi-stage sampling procedures were applied to select one public university, two private universities sponsored by the religious congregation and two private universities not sponsored by a religious congregation, giving five universities.

The study intended to determine the relationship between suicide ideation and its probable predictors; self-esteem, academic stress and social anxiety. **The study established that self-esteem had a negative correlation with suicide ideation, while academic stress and social anxiety positively correlated with suicide ideation. These findings were in agreement with several researchers.** The study also sought to suggest the interventions and coping strategies that can be adopted in addressing suicide Ideation among university students in Nairobi County. The suggestions were establishing support groups such as peer counselling,

advocating for counselling within the universities, psychoeducation, and involvement in the university social activities.

A quantitative correlation research design was applied. For data collection, a questionnaire was administered to the participants. Descriptive analyses such as frequency and percentage were used to present quantitative data in the form of tables. Furthermore, Pearson's product-moment correlation was performed to determine the correlation between the three predictors and suicide ideation. ANOVA and Independent T-test was also performed to determine the significance of gender difference regarding suicide ideation. Both confirmed no statistically significant relationship between gender and suicide ideation.

The following section summarises the findings according to the study objectives. After collecting data from the targeted audience and analysing it as presented in the previous chapter, the study came up with results that could assist in answering the research questions towards meeting the study objectives. In this section, the researcher breaks down the findings in terms of the study objectives and summarises the findings.

5.2.1 Relationship Between Self-Esteem and Suicide Ideation Among University Students in Nairobi County

Following the data collected and the results obtained from the analysis in the previous chapter, the researcher found a moderate negative correlation of $r = -0.470$ between self-esteem and suicide ideation among university students in Nairobi County. This means that when the students develop low self-esteem, there is a higher chance of them getting ideas about committing suicide. As a result, it will be necessary to pay more attention to measures to improve the self-esteem of university students to reduce suicidal ideation at this level.

Reflecting on the theories used in the study, for instance, the interpersonal theory of suicidal behaviour (IPT) propounded by Thomas Joiner (2007) states that a person will not die

by suicide unless he or she has both the desire to die by suicide and the ability to do so and this is caused by a state of the person having the sense of being a burden to others or unworthy, this particular finding is supported by the theory in that low self-esteem results to these students developing a feeling of unworthiness or low belonging thus suicidal ideation.

5.2.2 Relationship Between Academic Stress and Suicide Ideation Among University Students in Nairobi County

The study also intended to determine the relationship between academic stress and suicide ideation among university students in Nairobi County. According to the results obtained, the researcher found that Suicide ideation (mean = 1.8384, standard deviation = 0.2716) and academic stress (mean = 2.0183, standard deviation = 0.4430) were the two mean scores according to the data. Therefore, there was a positive correlation between academic stress and suicide ideation among university students in Nairobi County. This means that when the students are subjected to a high level of academic stress, they tend to get frustrated, and the thoughts of suicide cross their minds. Hence, it is necessary for the university management to take cognizant of the workload regarding the number of units taught in schools and the manner of giving lectures.

5.2.3 Relationship Between Social Anxiety and Suicide Ideation Among University Students in Nairobi County

The study also sought to determine the relationship between social anxiety and suicidal ideation among university students in Nairobi County. As seen in the previous chapter, the researcher found out that there is a positive correlation between social anxiety and suicide ideation among university students. More anxious students socially tend to frequently have suicidal thoughts than confident students with higher self-esteem.

Thomas Joiner (2007), as he deduced the interpersonal theory of suicidal behaviour (IPT), adopted by this study, stated that some of the key factors that drive an individual towards

wishing to die are the existence of perceived burdensomeness and thwarted belongingness. According to the theory, a perceived sense of thwarted belongingness is caused by low self-esteem and social anxiety. The theory thus supports the findings of this study in that the more the students are socially anxious and develop a sense of thwarted belongingness, the more the students become vulnerable to suicide by developing suicidal ideation.

5.2.4 Interventions and Coping Strategies on Suicide Ideation among University Students in Nairobi County

The last objective of the study was to come up with some the strategies that students can use to cope with suicidal ideation. The study, in this objective, used secondary resources to obtain data and information that would help meet the study objective. The findings included; the creation of proper awareness of the negative effects associated with suicide to guard the young adults against suicide ideation.

Secondly, spirituality, such as engaging in spiritual direction, was considered another useful strategy in coping positively with suicide ideation. Another useful aspect was talking to someone that the student trusted. The researcher suggested that the victims seek counselling sessions or simply talk to friends or relatives. Encouraging positive thinking was another intervention strategy that the researcher suggested. The researcher also suggested that the students be enlightened to consider the consequences of suicide to family and friends. Other strategies were using peer support groups and victims engaging in positive activities that they find enjoyable.

5.3 Conclusion

The main aim of this study was to determine the factors that lead to suicidal ideation among university students in Nairobi County. The researcher was motivated to carry out this study following the recent trends in the number of suicide cases. In Kenya, for instance, a concern has been expressed about the rate at which the number of deaths by suicide is growing

among the young adults in the universities, and the majority of these cases involve university students in Nairobi County.

The specific purpose of this study was to assess the relationship between three predictor variables (Self-Esteem, Academic Stress, Social Anxiety) and suicide ideation among university students in Nairobi County, Kenya and come up with possible coping strategies that the victims can adopt for self-betterment. A quantitative research method was adopted using a correlational research design. Two theories then guided the study; The Interpersonal Theory of Suicide Behaviour by Joiner (2007) and the Integrated motivational-volitional model of suicidal behaviour (IMV) by O' Connor (2011).

The researcher used questionnaires to collect the data and then analysed the data using Statistical Package for Social Sciences (SPSS-25). Pearson's product-moment correlation was done to establish the relationships between these predictors and suicide ideation among university students in Nairobi County. Results were presented in tables, and the findings were well described. From the entire research process, the study successfully met its goals and objectives, as presented in this chapter. It is thus just to conclude that, indeed, self-esteem, academic stress, and social anxiety directly impact suicide ideation and, in turn, result in the rampant number of suicide cases reported today among university students in Nairobi County. The study also provided some of the mitigations and coping strategies that can be adopted to reduce these students' cases.

5.4 Recommendations

Following the main objectives and findings of the study, the researcher would like to recommend the following;

- Institutions of learning consider setting up functioning counselling departments where students can feel free to go and interact with the counsellors about various challenges they are facing.
- University make awareness about suicide and various ways with which students can cope, thus, reducing the chances of suicidal ideation and the increasing numbers of suicide reported
- Institutions of higher learning promote co-curricular activities like sports and talent promotion, which can help students be positively engaged in academic issues and social life.
- Enhance cordial interaction between Lecturers and students to promote better teaching and learning methods that will reduce the amount of academic stress leading to suicidal ideation among students.

Recommendations for Further Research

The limitations in the current study call for some other studies to be carried out in the future that can help bridge the gaps. These recommendations include;

- A study to determine the cause and effects of the students' choice of answers, especially about self-esteem and social anxiety. That is, trying to find out why the participants mostly had a perception of self-unworthiness and burdensomeness instead of self-confidence influencing their moral competence and leading to suicidal ideation.
- Investigate factors that contribute to students' perception of self-esteem and confidence, social anxiety and academic stress, such as the learning

environment, parental involvement and other supportive individuals in their self-development.

- A similar study to the current study uses a qualitative research design to find out in-depth information on the predictors of suicide ideation among university students.
- A longitudinal study on cause and effect of suicide ideation among university students.
- An investigation on how functional the existing counselling departments in the universities are in addressing suicide ideations.
- Qualitative research investigates the usual ways students cope with academic stress and establish the best coping strategies for them according to the norms of the universities.

REFERENCES

Achyut, R. P., Bihungum B., Raja R. D., Krishna, K. A., Binaya C., & Meghnath D., (2019). Factors associated with suicidal ideation and suicidal attempts among adolescent students in Nepal: Findings from Global School-based Students Health Survey. *PLoSONE*, 14(4):e0210383. https//doi:10.1371/journal. pone.0210383

Akeem, M. (2020). Social Anxiety Disorder. *VeryWell Mind*. https://www.verywellmind.com/social-anxiety-disorder-overview-4581773

Al-Shawashereh, O. M. (2015). Suicidal Ideation in Relation to Self-Esteem among University Students. *The Islamic University Jouenal of Educational and Psychology of Sciences IUGJEPS* 23(2) (2015) a1-a15.

Alexander, M. J., Houghland, G., Ashenden, P., Knight Ed & Brown, I. (2009). Coping With Thoughts of Suicide: Techniques Used by Consumers of Mental Health Services. *Psychiatric Services, 60*(9).

Amelia, M. A., Kevin, E. O, Kimberly, M. C., Kathryn B. V., Holly C. W., & Eric D. W., (2009). Suicide ideation among college students: A multivariate analysis. *Official journal of the International Academy for Suicide Research* 13(3): 230–246. https//doi: 10.1080/13811110903044351

Ang R. P. & Huan, S. V., (2006). Relationship between Academic Stress and Suicidal Ideation: Testing for Depression as a Mediator Using Multiple Regression. *Child Psychiatry & Human Developmen* 37:133–143. doi:: 10.1007/s10578-006-0023-8

Aomo, J.A., AIoka, P.J.O., Raburu, P.A., Ogolla, P.O. (2018). Relationship between Self-Esteem and Indulgence in Behavior Problems among Secondary School Students in Kenya. *Sciendo*.

Apuke, O. D. (2017). Quantitative Research Methods A Synopsis Approach. *Arabian Journal of Business and Management Review (Kuwait Chapter)*. https//doi:10.12816/0040336

Ashraf, Fatima, Kamran & Farzana (2018). Anger, Impulsivity, Academic Stress and Suicidal Risk in suicide Ideators and Normal Cohorts. *Journal of Behavioral Sciences,* Vol. 28, No. 2. https//doi:334729839

Asghari, F., Sadeghi, A., Aslani, K., Saadat, S., & Khodayari, H. (2013). The survey of relationship between perceived stress coping strategies and suicide ideation among students at University of Guilan, Iran. International Journal of Education and Research, 1(11), 111-118.

Ayodele O. A. & Ojo M. A., (2019). *Suicide Ideation and Its Correlates among University Undergraduates in South Western Nigeria.* Osun State: Obafemi Awolowo University, Nigeria. pp 5-7

Babatunde, S. I. (2020). Suicidal Ideation among Undergraduates in Nigeria: The Predictive Role of Personality Traits and Academic Stress. *International Journal of Innovative Research & Growth,* Vol 9 Issue 2. https//doi:10.24940/ijird/2020/v9/i2/FEB20001

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*.

Becky M., Burrows, S., Heidi H., & David G., (2014). *Suicidal Behaviour Across The African Continent.* PMB Public Health.

Bilsen, J. (2018). Suicide and Youth: Risk Factors. *Frontiers in Psychiatry* 9:540. https//:doi:10.3389/fpsyt.2018.00540

Bitta, M. A., Bakolis, L., Kariuki, S. M., Nyutu, G., Mochama G., & Thornicroft G., (2018). Suicide in a rural area of coastal Kenya. *BMC Psychiatry* 18:267 https://doi.org/10.1186/s12888-018-1855-z

Brazier, Y. (2020). *What are suicidal thoughts?* Retrieved from Medical News Today [MNT],: https://www.medicalnewstoday.com/articles/193026#1

Brooks, J. R., Antoine L., Maya Z, Rheeda L. W. & Anka A.V., (2021). Anxiety sensitivity and suicide risk: Mindfulness as a psychological buffer for Black adults. *Journal of Affective Disorders*. doi:https://doi.org/10.1016/j.jad.2021.04.012

Brown, K. (2011). Predictors of Suicide Ideation and the Moderating Effects of Suicide Attitudes. *Master Dissatation for the faculty of Arts Degree in Clinical Psychology*. pp 20-28

Btissame Z., Bendaou B., Elkinany S., Rammouz I., Aalouane R., Lyoussi B., Khelafa S., Bout A., Berhili N., Hlal H., Nejjari C. & El Rhazi C., (2015). Suicidal behaviors among Moroccan school students: prevalence and association with socio-demographic characteristics and psychoactive substances use: a cross sectional study. *BioMed Central Psychiatry*. doi:DOI 10.1186/s12888-015-0680-x

Buckner, J. D., Lemke, A. W., Jeffries, E. R., & Shah, M. S., (2018). Social Anxiety and Suicidal Ideation: Test of the Utility of the Interpersonal-Psychological Theory of Suicide. *Anxiety Disord. Author manuscript* 45: 60–63. doi:10.1016/j.janxdis.2016.11.010.

Chaudhury, S. (2018). Prevalence of suicidal ideation among university students. *Pravara Medical Review*. Retrieved from https://www.researchgate.net/publication/329933009

Chesire I., J., Adeli S., M. & Mbutitia F., N. (2019). Depression Coping Strategies among University Medical Students in Kenya. *Journal of African Studies in Educational Management and Leadership, 10*(ISSN 2078-7650). Retrieved from http://www.kaeam.or.ke

Colman, A. M. (2003). *Oxford Dictionary of Psychology.* New York: Oxford University Press.

Creswell, J. W. (2014). *Research Design; Qualitative, Quantitative and Mixed Method Approach* (4th ed.). Los Angeles: SAGE Publication, Inc.

Dat Tan Nguyen, Pamela W, Christine D, Tam Thi P & Joske B. (2019). Low Self-Esteem and Its Association With Anxiety, Depression, and Suicidal Ideation in Vietnamese Secondary School Students: A Cross-Sectional Study. *Nationa Library of Medicine*. doi:10.3389/fpsyt.2019.00698

Dachew A. B., Berhanu B. B., Bewket T. T., Degefaye Z. A., & Meseret A. W. (2018). Suicidal thoughts among university students in Ethiopia. *Annals of General Psychiatry* (2018) 17:1. https://doi.org/10.1186/s12991-017-0172-0

David, E. (2019). *ABC News*. https://abcnews.go.com: https://abcnews.go.com/Health/rising-suicide-rates-college-campuses-prompt-concerns-mental/story?id=66126446

De Beurs, D., Fried, E.I.,. Wetherall, K. Cleare, S., O' Connor, D.B. Ferguson, E.,. O'Carroll, R. E., & O' Connor, R.C., (2019). Exploring the psychology of suicidal ideation: A theory driven network Analysis. *Behaviour Research and Therapy* 120 (2019) 103419. https//doi:10.17605/OSF.IO/UWG9A

Erika D., Nancy C. P., Rodriguez, D., Burrows S., Gisèle C., Michael C., & O'Loughlin, J., (2012). Early Predictors of Suicidal Ideation in Young Adults. *The Canadian Journal of Psychiatry,*, Vol 57. 2012;57(7):429–436

Fathi-Ashtiani. A., Ejei, J., Mohammad-Karim, K., & Tarkhorani, H. (2007). Relationship between Self-Concept, Self-esteem, Anxiety, Depression and Academic Achievement in Adolescents. *Journal of Applied Sciences*.

Foolproof. (2015). *When to apply qualitative and quantitative research*: https://www.foolproof.co.uk/journal/when-to-apply-qualitative-and-quantitative-research/

Groleger U, Tomori M, & Kocmur M (2003). Suicidal Ideation in Adolescence-An Indicator of Actual Risk? *The Israel journal of psychiatry and related sciences*. 40: 202. PMID: 14619679

Heidi, H., & Birthe, L. K., (2019). The emperor's new clothes? A critical look at the interpersonal theory of suicide. *Death Studies* 44:3, 168-178. https//doi:10.1080/07481187.2018.1527796

Hngugi. (2020). *UReport*. Retrieved from www.standardmedia.co.ke: https://www.standardmedia.co.ke/ureport/article/2001358525/one-person-commits-suicide-every-40-seconds

Hoyer G, & Lund E. (1993). Suicide among women related to number of children in marriage. *Archives of General Psychiatry*, .

Imran J. R, Ashok Ukabhai V., Bharat N. P., Deepak S. T., Smruti S. K., Milankumar G. S. & Nidhi N. N., (2017). Association of social anxiety disorder with depression and quality of life among medical undergraduate students. *Journal of Family Medicine and Primary Care*. doi: 10.4103/2249-4863.219992

Jaeku, K., Kyung, K.Y., Hye-Kyung, L., Kyung-hee, K., Year, H., & Keum-ho, L. (2013). Effects of Self-esteem and Academic Stress on Depression in Korean Students in Health Care Professions. *J Korean Acad Psychiatr Ment Health Nurs* Vol. 22 No. 1, 56-*64*. http://dx.doi.org/10.12934/jkpmhn.2013.22.1.56.

Jatava, D. (2010). *A Philosophy of Suicide.* Jaipur India: ABD Publishers. doi:978-81-85771-46-5

Jennifer M, Batterham P, J., Alison, L. C., & Han J., (2015). A systematic review of the predictions of the Interpersonal-Psychological Theory of Suicidal Behaviour. *National Institute for Mental Health Research, Research School of Population Health, The Australian National University, Canberra, Australia*. pp. 2

Jitender S., Brian J. C., Tracie O. A., De Graaf R., Gordon J. G. A., Ten Have M., & Murray B. S., (2005). Anxiety Disorders and Risk for Suicidal Ideation and Suicide Attempts. *American Medical Association* 62:1249-1257. Retrieved from https://jamanetwork.com/ on 04/22/2021

Joel, M. (2019). *Nigeria ranked '15th in the world' for suicide – but Lesotho tops African list*. Retrieved from African Check: https://africacheck.org/reports/nigeria-ranked-15th-in-the-world-for-suicide-but-lesotho-tops-african-list/

Joiner, T. (2007). *Why People Die by Suicide.* Harvard: Harvard University Press.

Joiner, T. E., Hollar, D., & Van Orden, K. A., (2007). On Buckeyes, Gators, Super Bowl Sunday, and the Miracle on Ice: 'Pulling together' is associated with lower suicide rates. *Journal of Social and Clinical Psychology,*.

Kabugi, P. (2019). An Overview of the Causes of Suicide and Preventive Strategies in Kenyan Universities. *African Research Journal of Education and Social Science* 6(3), 2019s. http://www.arjess.org/an-overview-of-the-causes-of-suicide-and-preventive-strategies-in-kenyan-universities/

Kabugi, P. (2020). An Overview of the Causes of Suicide and Preventive Strategies in Kenyan Universities. *African Research Journal of Education and Social Sciences* 6(3), 2019. https://www.researchgate.net/publication/342500691

Karanga, K. (2012). *Teachers' Image; to Address Suicidal Tendencies Give People Hope.* 18, 42-43. .

Kenya National Bureau of Statistic. (2014). *Economic Survey.* Nairobi: Government Printer.

Kenya National Bureau of Statistic. (2019). *Kenya Population and Housing Census.* Nairobi: Government Printer.

Khurana, A. & Romer, D. (2020). Modeling the Distinct Pathways of Influence of Coping Strategies on Youth Suicidal Ideation: A National Longitudinal Study. *Prevention Science (In Press)*.

Kimeu, P., (2020). Suicide; a Developing Concern for the Nation | Winnie Okumu. *Integral Missions*. https://www.focuskenya.org/suicide-a-developing-concern-for-the-nation-winnie-okumu/

Kwaku Oppong Asante, Nuworza Kugbey, Joseph Osafo, Emmanuel Nii-Boye Quarshie & Jacob Owusu Sarfo (2017). The prevalence and correlates of suicidal behaviours (ideation, plan and attempt) among adolescents in senior high schools in Ghana. *SSM - Population Health* 3 (2017) 427–434. http://dx.doi.org/10.1016/j.ssmph.2017.05.005

Lee, S., Dwyer J., Eldho P., David C., Treleaven S. & Robert R. (2019). Differences by age and sex in adolescent suicide. *Australian and New Zealand Journal of Public Health, 43*(3). doi:10.1111/1753-6405.12877

Lovibond, S.H. & Lovibond, P.F. (1995). *Manual for the Depression Anxiety & Stress Scales.* (2nd Ed. ed.). Sydney: Psychology Foundation.

Lu Lu, L. X., Xiaorong L., Sun L., Jiajia L., Wenzhe Q., Jiao Z., Xiang J., Yali W., Yu X., Yaozu L., & An'an J., (2020). Gender difference in suicidal ideation and related factors among rural elderly: a cross-sectional study in Shandong, China. *Annals of General Psychiatry*, (2020) 19:2. https//doi:10.1186/s12991-019-0256-0

Malhotra, N. K., & Dash, S. (2011). *Marketing Research: An Applied Orientation.* New Delhi, India: Pearson.

Mamman, J. C. (2019). Suicidal Ideation and Coping Strategies among Engineering Students. *International Journal for Research in Engineering Application & Management, 05*(02 2454-9150). Retrieved from https://www.researchgate.net/publication/334163628

Marto. (2011). *List of universities in Kenya by county*. Retrieved from kenyaplex.com: https://www.kenyaplex.com/resources/2121-list-of-universities-in-kenya-by-county.aspx#google_vignette

Masango, SM., Rataemane ST & Motojesi AA. (2008). Suicide and suicide risk factors: A literature review. *Department of Psychiatry, University of Limpopo, Medunsa Campus* 50(6):25-28. https//www.safpj.co.za

Mattick, R. P., & Clarke, J. C. (1998). *Development and validation of measures of social phobia scrutiny fear and social interaction anxiety.* Behaviour Research and Therapy. https//doi:36(4), 455-470.

Michelle, G., & Mitchell J. P., (2014). Social Anxiety Symptoms and Suicidal Ideation in a Clinical Sample of Early Adolescents: Examining Loneliness and Social Support as Longitudinal Mediators. *J Abnorm Child Psychol*. DOI: 10.1007/s10802-013-9844-7

Mohammadinia N., Mohammadali R., Tayebeh S., Fatemeh D., (2013). Assessing suicidal ideation frequency in medical students. *Quarterly Journal of Nursing Management, 1*(1). Retrieved from https://ijnv.ir/browse.php?a_id=48&slc_lang=en&sid=1&printcase=1&hbnr=1&hmb=1

Morocco World News. (2019). *Morocco Has Highest Female Suicide Rate in North Africa*. https://www.moroccoworldnews.com/2019/09/282321/morocco-female-suicide-north-africa/

Mugambi P., Munene A & Mogute M., (2020). Prevalence of Suicidal Behavior among Adolescents with Depressive Disorders and Posttraumatic Stress in Informal Settlements of Nairobi, Kenya. *African Journal of Clinical Psychology, 03*(1). Retrieved from https://www.daystar.ac.ke/ajcp/downloads/articles/Priscilla.pdf

Mugenda, M., & Mugenda, G. (2013). *Research Methods: Quantitative and Qualitative Approaches.* Nairobi: ACTS.

Ndetei, K., Mutiso A.V., Mbwayo, A. M & Mathai, M. (2011). The prevalence of depression among adolescents in Nairobi public secondary schools: association with perceived maladaptive parenting behavior. *African Journal of Psychiatry* 2013, 12:13. https:// DOI: 10.1186/1744-859X-12-13

Ngondi, J. M. (2016). The Relationship Between K.C.S.E Examination Scores and Symptoms of Anxiety, Depression and Suicide Ideation Among Adolescents in Nairobi, Kenya. *A Thesis Submitted to the School of Humanities and Social Sciences in Partial Fulfillment of the Requirement for the Degree of Master of Arts in Clinical Psychology*, 34-43.

NIDA. (2018). *NIDA. corporation.* https://www.drugabuse.gov/publications/drugfacts/understanding-drug-use-addiction

Nyagah, V. W. (2019). Online Social Networking and Depressive Symptoms Among Undergraduates University Students in Nairobi County, Kenya. *Ph.D. Research Dissertation*.

Nyang'or V., Adibo J. & Moindi K., (2021). Influence of Parenting Styles on Suicidal Ideations among Secondary School Students in Westlands Sub County, Nairobi Kenya. *The International Journal of Indian Psychology, 9*(1). doi:10.25215/0901.186

Obinna, C. (2019). Suicide: Nigerian doctors acquire skills to tackle Post Traumatic Stress Disorder. *VANGUARD NEWS*. https://www.vanguardngr.com/2019/06/suicide-nigerian-doctors-acquire-skills-to-tackle-post-traumatic-stress-disorder/

O'Connor, R. C., (2011). The Integrated Motivational-Volitional Model of Suicidal Behavior. *Suicidal Behavior Research Group (SBRG),* 32(6):295–298. doi: 10.1027/0227-5910/a000120

O'Connor, R.C & Kirtley, O.J. (2011). The Integrated Motivational-Volitional (IMV) Model of Suicidal Behaviour. *Philosophical Transactions of the Royal Society B.* 373: 20170268. https://doi.org/10.1098/rstb.2017.0268

Odoch D., (2019). Stress, Self-esteem, and Suicidal Ideation Among late adolescents at Our lady of Africa SS (Namilyango) in Mukono. *A Research Dissertation* 16/U/10756/EVE. pp. 13-27

Oduku, O. (2018). *Blog at WordPress.com.* Retrieved from Suicide in African Cultures – The Igbo People of Nigeria: https://richardoduor.wordpress.com/2018/11/12/suicide-in-african-cultures-the-igbo-people-of-nigeria/

Oduku, O. (2018). *jalada mobile festival*. Retrieved from richardoduor.wordpress.com/: https://richardoduor.wordpress.com/2018/11/12/suicide-in-african-cultures-the-igbo-people-of-nigeria/

Ogula, P. A. (2005). *Research Methods.* Nairobi: CUEA Publications.

Ouma, W. (2018). Worrying trend of university students committing suicide. *Daily Nation*. https://allafrica.com/stories/201812080087.html

Owiti, S. (2019). *Gone Too Soo: The rate at which Kenya Univesity students commit suicide is on the rise/SDV UNTOLD.* Nairo: Standard Digital Video (SDV). https://www.standardmedia.co.ke/videos/view/2000170743/gone-too-soon-the-rate-at-which-kenya-university-students-commit-suicide-is-on-the-rise-sdv-untold#

Owusu-Ansah, F. E., Akua A. A., Ofosuhene B. P., Kwaku, O. A., & Osafo, J., (2020). Suicide among university students: prevalence, risks and protective factors. *Health Psychology and Behavioral Medicine*. https//doi:10.1080/21642850.2020.1766978

Palmier, J. B. (2011). Prevalence and Correlates of Suicidal Ideation Among Students in sub-Saharan Africa. *Thesis, Georgia State University GA* 30303. https://scholarworks.gsu.edu/iph_theses/183

Pandey A. R., Bista B, Dhungana R. R., Aryal K. K.,Chalise B., & Dhimal M., (2019). Factors associated with suicidal ideation and suicidal attempts among adolescent students in Nepal: Findings from Global School-based Students Health Survey. *PLoSONE* 14(4):e0210383. https://doi.org/10.1371/journal.pone.0210383

Pitman, A. (2018). Integrated Motivational Volitional Model of Suicide Behaviour. *Nationa Elf Service*. https://www.nationalelfservice.net/mental-health/suicide/integrated-motivational-volitional-model-suicidal-behaviour-wspd18/

Posner K. (n.d.). (2008). *Columbia-Suicide Severity Rating Scale (C-SSRS).* Columbia: Columbia University Medical Center; Center for Suicide Risk Assessment. http://www.cssrs.columbia.edu/clinical_practice.html

Purse, M. (2020). *What Is Suicidal Ideation? A Look at Dangerous Thought Patterns.* Retrieved from www.verywellmind.com: https://www.verywellmind.com/suicidal-ideation-380609

Rachel J., Caleb O., Ray O., Linnet O., Peter S., Michael O., James K. M., David K. & Bernhards O., (2015). Tedium vitae, death wishes, suicidal ideation and attempts in Kenya-prevalence and risk factors. *BioMed Central Public Health*, 1-3. doi:10.1186/s12889-015-2089-3

Rich, K. L. (2020). *Introduction to Ethics.* Jones & Bartlett Learning.

Rosenberg, M. (1979). *Conceiving the Self.* New York: Basic Books.

Rothmann, S. & Pienaar, J. (2005). Coping, stress and suicide ideation in the South African Police Service in the Eastern Cape. *South African Journal of Economic and Management Sciences (SAJEMS), 6*(6 (2003) No 4). doi:10.4102/sajems.v6i4.1527

Salkind, N. (2020). *@SAGE Research Method*. Retrieved from methods.sagepub.com: https://methods.sagepub.com/reference/encyc-of-research-design/n42.xml

Schlebusch, L., Burrows, S. & Vawda, N. (2009). *Suicide prevention and religious traditions on the African continent.* Oxford England: Oxford University Press.

Sharma, Preeti, Manani & Shraddha (2013). Self-Esteem and Suicideal Ideation: A Correlational Study. *MIER Journal of Educational Studies, Trends & Practices, 3*.

Sheetal Y &. Srivastava, S. K., (2020). Correlational Study of Academic Stress and Suicidal Ideation among Students. *Indian Journal of Public Health Research and Development* Vol. 11, No. 10. pp. 58-60

Shiundu, A. (2019). *Analysis: Poor data on suicide leaves Kenya groping in the dark for Ansers.* https://africacheck.org: https://africacheck.org/2019/03/29/analysis-poor-data-on-suicide-leaves-kenya-groping-in-the-dark-for-answers/

Slavin, R. E. (1991). *Synthesis of Research on cooperative Learning.* Educational Leadership: University.https://books.google.com.ng/books?isbn=0309219604

STAR, MT KENYA. (2019). Standard Media. *Five suicide deaths reported in Central Kenya every day*.

Suicide Prevention Resource Center [SPRC]. (2020). *A Comprehensive Approach to Suicide Prevention*. Suicide Prevention Resource Center : https://sprc.org/effective-prevention/comprehensive-approach

SPRC. (2014). Suicide among college and university students in the United States. *Suicide Prevention Resource Center*.

Taylor, S. D. (2006). *Culture and Customs of Zambia.* London: Greenwood Press.

Taylor, J. (2018). *Illegal Drug Use, Suicidal Ideation, and Attempted Suicide among New York Adolescents.* New York: Walden University.

The Global Economy.com. (2020). *Central African Republic: Suicides*. Retrieved from www.theglobaleconomy.com: https://www.theglobaleconomy.com/Central-African-Republic/suicides/#:~:text=The%20average%20value%20for%20the,7.7%20suicides%20per%20100%2C000%20people.

Thompson, A. H. (2010). The Suicidal Process and Self-Esteem. *The Journal of Crisis Intervention and Suicide Prevention*. doi:DOI: 10.1027/0227-5910/a000045

Trout, D. L. (1980). The role of social isolation in suicide. *Suicide and Life Threatening Behavior*.

uniRank. (2020). *World University Rankings & Reviews*: https://www.4icu.org/search/

Valentiner, D. P., Gutierrez, P. M., & Blacker, D. (2002). Anxiety measures and their relationship to adolescent suicidal ideation and behavior. *Anxiety Disorders*.

Van Orden, K. A., Witte, T. K., Cukrowicz, K. C., Braithwaite, S. R., Selby, E. A., & Joiner, T. E, (2010). The interpersonal theory of suicide. *Psychological Review*, 117(2), 575-. doi:117(2), 575-600

Vonk, J. (2017). *Sampling*. Retrieved from www.jennifervonk.com: https://www.jennifervonk.com/uploads/7/7/3/2/7732985/lecture_6_sampling.pdf

Waléria de Paula, Gustavo S. B., Elaine, L. M., Adriana L. M., (2020). Prevalence of anxiety, depression, and suicidal ideation symptoms among university students: a systematic review. *Brazilian Journal of health Review*. doi:10.34119/bjhrv3n4-119

Wallack, C. E. (2007). Factors Associated With Suicidal Ideation Among American College Students: A Re-examination of the Escape Theory of Suicide. *A Dissertation Presented to the Graduate School of the University of Floride in Partial fulfilment of the Requirement for the Degree of Doctor of Philosophy*. Florida, United States of America: University of Florida. Retrieved November 6, 2020. pp 94-100

Walther, K. G. (2015). Therapeutic Process During Exposure: Habituation Model. *J Obsessive Compuls Relat Disord. Author manuscript;, 01*(006). doi:10.1016/j.jocrd.2015

Wanyoike, B. W., (2015). Suicide Among University Students in Kenya: Causes, Implications and Interventions. *Journal of Language, Technology & Enterpreneurship in Africa*. VOL 6. NO. 1. pp. 39-50.

Wanzala, O. (2018). Worrying trend of university students committing suicide. *Daily Nation*. https://allafrica.com/stories/201812080087.html

Wekesah, F. M. (2019). *World Mental Health Day: Suicide in Kenya*. Retrieved from African Population and Health Research Center: https://aphrc.org/blogarticle/world-mental-health-day-suicide-in-kenya/

Wilbum, V. R., & Delores E. S., (2005). Stress, Self Esteem, and Suideal Ideation in Late Adolescents. *Libra Publishers, Inc.* Vol. 40, No. 157. University of Akron, San Diego.

Wilcox, H C., Amelia M. A, Kimberly M. C, Kathryn B, Pinchevsky G. M. & O'Grady, K. E., (2010). Prevalence and predictors of persistent suicide ideation, plans, and attempts during college. *National Institution of Health, 127(1-3)*(287–294). doi:10.1016/j.jad.2010.04.017.

WHO. (2000). Preventing Suicide. A Resource for General Physicians. Geneva: World Health Organization; 2000. p. 5. *A Resource for General Physicians.*

World Health Organization. (2010), *Global School-based Student Health Survey: Morocco 2010 Fact Sheet.* http://www.who.int/chp/gshs/Morocco_2010_GSHS_FS.pdf?ua=1. Accessed 23 June 2015

WHO. (2017a). *Depression and other common mental disorders: global health estimates.* Geneva, Switzerland: World Health Organization, 2017a.

World Health Organisation [WHO]. (2018). *Preventing Suicide A community engagement toolkit.* Yusuke Nakazawa, Japan: Geneva: World Health Organization; Licence: CC BY-NC-SA 3.0 IGO. http://apps.who.int/iris.

Yao, Y-S., Chang, W-W., Jin, Y-L., Chen, Y., He, L-P. & Zhang, L. (2014). Life satisfaction, coping, self-esteem and suicide ideation in Chinese adolescents: a school-based study. *Child: Care, Health and Development* 40,5,747–752. doi:10.1111/cch.12142

Yuhui W., Ruoling C., Shanshan W., Orton S., Danni W., Shichen Z., Ying S. & Fangbiao T., (2019). Effects of Self-Esteem on the Association between Negative Life Events and Suicidal Ideation in Adolescents. *International Journal of Environmental Research and Public Health, 16*(2846). doi:10.3390/ijerph16162846

APPENDICES

APPENDIX I: CONSENT LETTER FOR PARTICIPANTS

The Catholic University of Eastern Africa
P.O. Box 62157-00200
Nairobi. Kenya

Dear Respondent,

I am a postgraduate student at the Catholic University of Eastern Africa. pursuing Master's Degree in Counselling Psychology. I am carrying out a study on relationship between Self-esteem, academic stress, social anxiety and suicide ideation among university students in Nairobi County. You are kindly requested to participate in this research study by filling the attached questionnaire. The shared information will be treated with utmost confidentiality and anonymity since it is meant for research purposes only. Do not indicate your name or admission number or any form of identification in the questionnaire. You are also at liberty to stop filling this questionnaire at any point should you feel you cannot go on. In case of any overwhelming emotional disturbance while filling these questionnaires, there are two professional counsellors allocated in two rooms to assist any respondents in need. You have the freedom to accept or decline to participate in this research. Feel free to reach me with the contacts below in case of any further emotional issues that may arise following this exercise. So, if you voluntarily accept to participate in the study, kindly append your signature.

Participants Signature…… Date…….……

Researcher Signature……...……Date…….…

Thank you for your availability to participate in this study

Oji Michael Obinna
Cell Phone: 0717761122
Email: miobidan@gmail.com

APPENDIX II: QUESTIONNAIRE FOR STUDENTS

Instructions

My name is Oji Michael O. I am a post graduate student at the Catholic University of Eastern Africa. You are requested to respond to this questionnaire as honesty as possible. Your responses will be treated with confidentiality. These questionnaires consist of items aimed at the relationship between predictors variables (Self-esteem, Academic Stress and Social Anxiety) and Suicide Ideation among University students in Nairobi. Your responses will be used strictly for the purposes of this research. Do not indicate your name or admission number anywhere in this questionnaire. Feel free at any point to stop this exercise and see me or the counsellor in the counselling room should you feel the need to do so.

SECTION A: Demographic information

Please tick (√) where appropriate

1. Indicate your gender Male [ ], Female [ ], Others [ ],
2. Age in years 17-20 [ ], 21-24 [ ], 25-28 [ ], above 28 [ ]
3. Year of study Year 1 [ ], Year 2 [ ], Year 3[ ], Year 4 [ ], Others [ ]

Section B: experience of any suicide attempt or suicidal tendencies.

4) Please read carefully and indicate (√) honestly how often you engage in the following

		Past Month
1	Have you wished you were dead or wished you could go to sleep and not wake up? If yes, please describe:	Yes ☐ No ☐
2	Have you actually had any thoughts about killing yourself? If yes, please describe:	Yes ☐ No ☐
3	Have you thought about how you might do this? If yes please explain	Yes ☐ No ☐
4	Have you had any intention of acting on these thoughts of killing yourself as opposed to you have the thoughts but you definitely would not act on them? If yes, please describe:	Yes ☐ No ☐
5	Have you started to work out or worked out the details of how to kill yourself? Do you intend to carry out this plan? If yes, please describe:	Yes ☐ No ☐
6	Have you done anything, started to do anything, or prepared to do anything to end your life? *Examples*: Collected pills, obtained a gun, gave away valuables, wrote a will or suicide note, held a gun but changed your mind, cut yourself, tried to hang yourself, etc.	

Columbia-Suicide Severity Rating Scale (C-SSRS), 2008

Section C: Rosenberg Self-Esteem

5) Please record the appropriate answer for each item, depending on whether you Strongly agree, agree, disagree, or strongly disagree with it.

1 = Strongly agree

2 = Agree

3 = Disagree

4 = Strongly disagree

_____ 1. On the whole, I am satisfied with myself.

_____ 2. At times I think I am no good at all.

_____ 3. I feel that I have a number of good qualities.

_____ 4. I am able to do things as well as most other people.

_____ 5. I feel 1do not have much to be proud of.

_____ 6. I certainly feel useless at times.

_____ 7. I feel that I'm a person of worth.

_____ 8. I wish I could have more respect for myself.

_____ 9. All in all, I am inclined to think that I am a failure.

_____ 10. I take a positive attitude toward myself.

Rosenberg, M. (1979). Conceiving the Self. New York: Basic Books

Section D: Academic Stress

6) Below are the lists of number of challenges students often struggle to overcome as they go through their academic life experience. Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you within your academic years in the University. There are no right or wrong answers. Do not spend too much time on any statement. The rating scale is as follows:

0 = Did not apply to me at all

1 = Applied to me to some degree, or some of the time

2 = Applied to me to a considerable degree or a good part of time

3 = Applied to me very much or most of the time

1.	I find it hard to wind down	0	1	2	3
2.	I tend to over-react to situations	0	1	2	3
3.	I feel that I was using a lot of nervous energy	0	1	2	3
4.	I find myself getting agitated	0	1	2	3
5.	I find it difficult to relax	0	1	2	3
6.	I am intolerant of anything that kept me from getting on with what I was doing	0	1	2	3
7	I feel that I am rather touchy	0	1	2	3

Lovibond, S.H. & Lovibond, P.F. (1995). Manual for the Depression Anxiety & Stress Scales. (2nd Ed.) Sydney: Psychology Foundation.

Section: E Social Interaction Anxiety Scale (SIAS)

7) Instructions: For each item, please circle the number to indicate the degree to which you feel the statement is characteristic or true for you. The rating scale is as follows:

0 = Not at all characteristic or true of me.,

1 = Slightly characteristic or true of me.

2 = Moderately characteristic or true of me.

3 = Very characteristic or true of me.

4 = Extremely characteristic or true of me

No	CHARACTERISTIC	NOT AT ALL	SLIGHTLY	MODERATELY	VERY	EXTREMELY
1	I get nervous if I have to speak with someone in authority (teacher, boss, etc.).	0	1	2	3	4
2	I have difficulty making eye contact with others.	0	1	2	3	4
3	I become tense if I have to talk about myself or my feelings.	0	1	2	3	4
4	I find it difficult to mix comfortably with the people I work with.	0	1	2	3	4
5	I find it easy to make friends my own age.	0	1	2	3	4
6	I tense up if I meet an acquaintance in the street.	0	1	2	3	4
7	When mixing socially, I am uncomfortable.	0	1	2	3	4
8	I feel tense if I am alone with just one other person	0	1	2	3	4
9	I am at ease meeting people at parties, etc.	0	1	2	3	4
10	I have difficulty talking with other people.	0	1	2	3	4
11	I find it easy to think of things to talk about.	0	1	2	3	4
12	I worry about expressing myself in case I appear awkward.	0	1	2	3	4
13	I find it difficult to disagree with another's point of view.	0	1	2	3	4

14	I have difficulty talking to attractive persons of the opposite sex	0	1	2	3	4
15	I find myself worrying that I won't know what to say in social situations.	0	1	2	3	4
16	I am nervous mixing with people I don't know well.	0	1	2	3	4
17	I feel I'll say something embarrassing when talking	0	1	2	3	4
18	When mixing in a group, I find myself worrying I will be ignored.	0	1	2	3	4
19	I am tense mixing in a group.	0	1	2	3	4
20	I am unsure whether to greet someone I know only slightly.	0	1	2	3	4

Thanks for your participation in this research and God bless.

Mattick, R. P., & Clarke, J. C. (1998). Development and validation of measures of social phobia scrutiny fear and social interaction anxiety. Behaviour Research and Therapy, 36(4), 455-470.

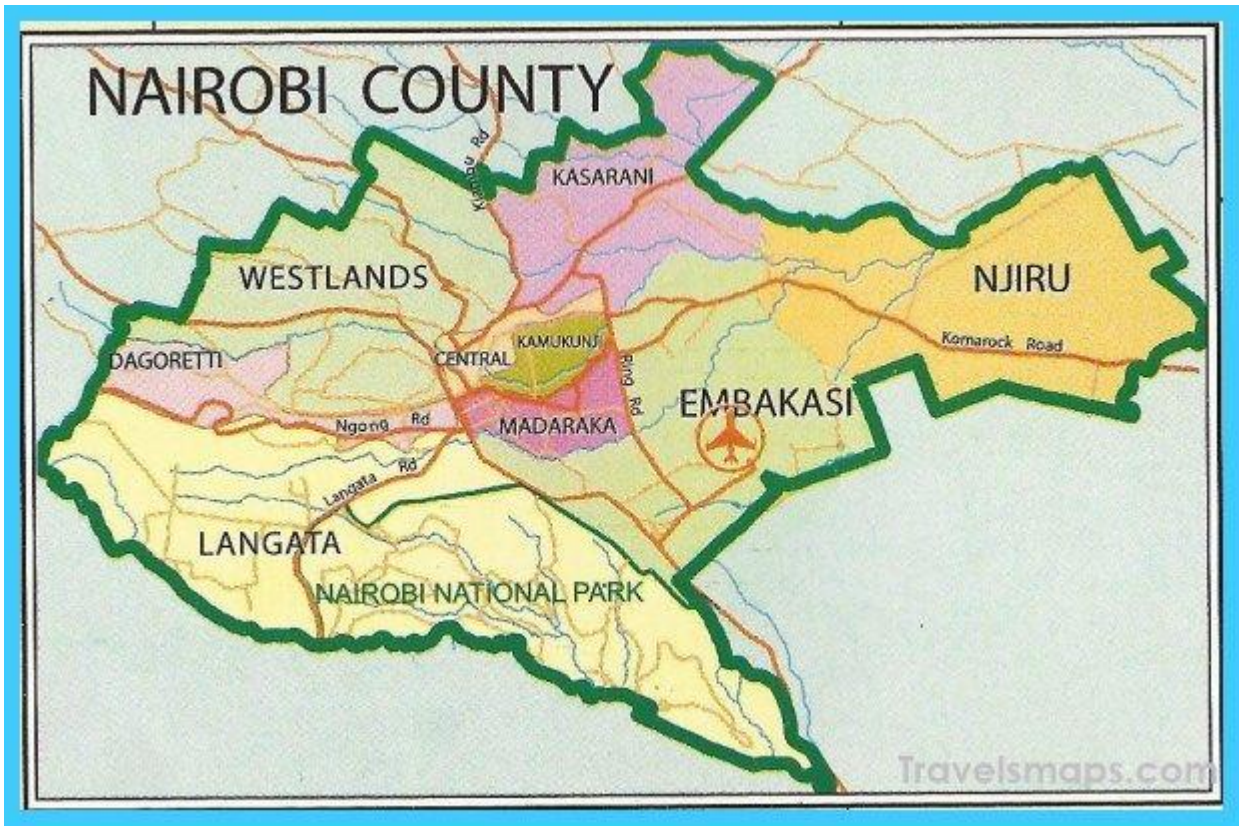
APPENDIX III: RESEARCH BUDGET

Item	**Cost in Ksh**
Stationery and printing	30,000
Research License	10,000
5 Research assistance	50,000
Data analysis (coding and Statistician expert)	100,000
Counsellor for debriefing	20,000
Final report	50,000
Miscellaneous	20,000
Total	**280,000**

APPENDIX IV: RESEARCH TIME SCHEDULE

Activity (Months)	Sept., 2020	Sept., -Oct. 2020	Jan., - March 2021	April – May 2021	May – June 2021	June – July 2021	July - August 2021	Aug – Sept. 2021	Oct - Nov 2021
Approval of Research Topic	✓								
Concept writing and Defense		✓							
Proposal writing			✓						
Proposal defence						✓			
Research license								✓	
Data collection								✓	
Data analysis								✓	
Writing and compiling final report and defence									✓
Presentation of final report									✓

APPENDIX V: MAP OF THE RESEARCH AREA



APPENDIX VI: PERMISSION LETTERS FOR USE OF QUESTIONNAIRES

Permission to use your Suicide Ideation Scale for My Research

Inbox

Miobi Dan <miobidan@gmail.com> Mar 13, 2021, 11:38 AM (10 days ago)

to kelly.posner

Good Morning Dr Posner,

I am Michael Oji, a postgraduate student of the Catholic University of Eastern Africa (CUEA) Nairobi Kenya. I humbly request for your permission to use the Suicide Ideation Scale to carry out my research which seeks to identify the relationship between social anxiety and suicide ideation among university students. This is one of the requirements for my master's program.

I will be glad if my request is given a favourable response. Thanks in anticipation.

Posner, Kelly (NYSPI) Mar 15, 2021, 6:16 PM

(8 days ago)

to me

Dan,

Thank you for your interest in using the Columbia Suicide Severity Rating Scale (C-SSRS) in your work. As you may or may not be aware, the Columbia tools are used in most countries in top-down and bottom-up applications. We work closely with local and national governmental agencies and community stakeholders of all types to customize a tool kit and optimize suicide prevention in their community. To help you**,** please find:

- the C-SSRS**.** If you require other languages let us know.
- If you are interested or require training, you can find our standard 30-minute training at https://www.dropbox.com/s/1yb4qwy2y2bm99m/CSSRS_EnglishInternational.m4v?dl=0
    - The training provides a brief introduction into the significance of suicide risk screening, scale description and its administration. The goal of the training is to increase awareness and understanding of suicide risk and provide guidance on using the scale.
- Also attached is a set of our “community cards” containing a brief version of the C-SSRS and simple guidelines for managing suicide risk. This is one of the tools we have developed for expanding suicide risk screening and suicide prevention.

Suicide is a global public health problem with 79% of suicides happening in low- and middle-income countries and our mission is to universalize prevention of suicide. In many communities around the globe, the C-SSRS has been able to overcome one of the biggest obstacles to suicide prevention – a lack of common language in thinking and speaking about suicide. Our work has been to empower all members of communities regardless of their level of education, profession, age and gender, religious or cultural background to overcome the fear in addressing suicide.

We would love to partner with you in this mission. To this end, we can provide assistance in:

- Live training and education specific to various audiences across all public health (in-person conference presentations; webinars; videoconferences)
- Policy- and protocol-writing assistance focusing on implementation and sustained use of suicide screening
- Consultation on implementation of the C-SSRS scaled to the needs of individual communities or large systems
- Research consultation (study design/methodology; program design and evaluation)
- Linguistic and psychometric validation of the scale in specific populations
- Technical, academic, publicity writing
- Media appearances

Please let us know when would be a good time for our staff to connect via telephone or videoconference to further discuss these opportunities, and best of luck to you with your work!

Best,

The Columbia Lighthouse Team

Kelly Posner Gerstenhaber, PhD
Professor, Columbia University
Founder and Director, The Columbia Lighthouse Project
Recipient, Secretary of Defense Medal for Exceptional Public Service
Columbia University/New York State Psychiatric Institute
1051 Riverside Drive, Box 78, New York, NY 10032
Mobile: +1(646)286-7439
Online: http://cssrs.columbia.edu/
Watch Our PSA Here
Columbia mobile app for Apple or Android

From: Miobi Dan <miobidan@gmail.com>
Sent: Saturday, March 13, 2021 3:38 AM
To: Posner, Kelly (NYSPI) <Kelly.Posner@nyspi.columbia.edu>
Subject: Permission to use your Suicide Ideation Scale for My Research

Permission to use Rosenberg SE Scale for my Research

Inbox

Miobi Dan <miobidan@gmail.com> Sat, Feb 27, 5:32 AM

to efloyd

Good Morning Sir/Ma

I am Michael Oji, a postgraduate student of the Catholic University of Eastern Africa (CUEA) Nairobi Kenya. I humbly request for your permission to the Rosenberg SE Scale to carry out my research which seeks to identify the relationship between self-esteem and suicide ideation among university students. This is one of the requirements for my master's program.

I will be glad if my request is given a favourable response. Thanks in anticipation.

Oji Michael O.

Beth A Floyd Mon, Mar 1, 7:49 PM

to me

Hello,

You may use the scale, you do not need permission to use it. It's free for use.

Beth
--
_____
Beth Floyd
Graduate Coordinator, Department of Sociology
University of Maryland
3834 Campus Drive
4103 Parren J. Mitchell Art-Sociology Building | College Park, MD 20742
tel 301.405.6390 | socy.umd.edu
she/her

Permission to use your questionnaire DASS 21

Inbox

Miobi Dan <miobidan@gmail.com> Thu, Feb 25, 1:23 PM

to p.lovibond

Good Afternoon Sir

I am Michael Oji, a postgraduate student of the Catholic University of Eastern Africa (CUEA) Nairobi Kenya. I humbly request for your permission to use your scale DASS 21 to carry out my research which seeks to identify the relationship between academic stress and suicide ideation among university students. This is one of the requirements for my master's program.
I wish to adapt it to suit my research on academic stress.

I will be glad if my request is given a favourable response. Thanks in anticipation.

Oji Michael O.

Peter Lovibond Sat, Feb 27, 1:55 AM

to me

Dear Michael,

You are welcome to use the DASS in your research. You can download the questionnaires (including translations in certain languages) and scoring key from the DASS website www.psy.unsw.edu.au/dass/ . Please also see the FAQ page on the website for further information.

Best regards,
Peter Lovibond

Permission to use your Social Interaction Anxiety Scale for My Research

Inbox

Miobi Dan <miobidan@gmail.com> Sat, Mar 13, 8:32 AM (10 days ago)

to R.Mattick

Good Morning Sir,

I am Michael Oji, a postgraduate student of the Catholic University of Eastern Africa (CUEA) Nairobi Kenya. I humbly request for your permission to use the Social Interaction Anxiety Scale to carry out my research which seeks to identify the relationship between social anxiety and suicide ideation among university students. This is one of the requirements for my master's program.

I will be glad if my request is given a favourable response. Thanks in anticipation.

Oji Michael O.

Richard Mattick Sat, Mar 13, 8:50 AM (10 days ago)

to me

Hi Michael

Of course you have full permission. Best wishes.

Richard P Mattick.
UNSW Australia.
+61 419409010.
Sent from iPhone.

On 13 Mar 2021, at 4:33 pm, Miobi Dan <miobidan@gmail.com> wrote:

Appendix VII: Introduction Letter from CUEA

THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

Faculty of Arts and Social Sciences

Department of Counseling Psychology

Our Ref: CUEA/DVC-ACAD/FASSc/Psychology/NACOSTI/009/September 2021

Date: 1st September 2021

TO WHOM IT MAY CONCERN.

RE: Oji Micheal Obinna **REG. NUMBER: 1039273**

I am writing to introduce to you Oji Micheal Obinna who is a final year Master's Degree student at The Catholic University of Eastern Africa, Nairobi – Kenya, and to request you to assist him to accomplish his academic research requirements.

Micheal's Master's Degree specialization is in Counseling Psychology. He has completed all course work requirements for this programme. However, every student in the programme is required to conduct research and write a report/thesis submitted during the final years of studies.

Accordingly, his research topic has been approved. He will conduct research on the following topic:

"Predictors of Suicide Ideation Among University Students in Nairobi County-Kenya".

Thanking you in advance for any assistance you give to Micheal.

Sincerely,

THE CATHOLIC UNIVERSITY OF EASTERN AFRICA FACULTY OF ARTS & SOCIAL SCIENCES 01 SEP 2021 DEPT. OF COUNSELLING PSYCHOLOGY P.O. BOX 62157 - 00200, NAIROBI.

Dr. Stephen Asatsa
HOD.COUNSELING PSYCHOLOGY.

THE CATHOLIC UNIVERSITY OF EASTERN AFRICA (CUEA) P.O. BOX 62157 00200 Nairobi – KENYA
Tel: 020-2525811-5, 8890023-4, Fax: 8891084, Email: psychology@cuea.edu, Website: www.cuea.edu
Founded in 1984 by AMECEA (Association of the Member Episcopal Conference in Eastern Africa)

Appendix VIII: Permission Letter from Daystar University

DAYSTAR UNIVERSITY
Excellence · Transformation · Servant-Leadership

Valley Road Campus
P.O. Box 44400 - 00100,
Nairobi, Kenya

Athi River Campus
P.O. Box 17, Daystar University,
90145, Athi River, Kenya

Tel: 0716 170 313/ 0748 100 759/
0724256408-9 OR
0709 972 000 (30 lines)

E-mail: admissions@daystar.ac.ke
info@daystar.ac.ke

Facebook: daystar-university-official

Twitter: daystaruni

www.daystar.ac.ke

18th October 2021

Oji Michael Obima
The Catholic University of Eastern Africa
Faculty of Arts & Social Sciences,
Department of Counselling Psychology
NAIROBI

Dear Michael,

RE: PERMISSION TO CONDUCT RESEARCH AT DAYSTARUNIVERSITY

Your request for permission to conduct your research on ***"Predictors of Suicide Ideation Among University Students in Nairobi County-Kenya"***

We have examined your research proposal and have satisfactorily established the purpose of your research. We have also looked at your research tools critically, and note that you have all relevant approvals. This includes the National council of Science, Innovation and Technology (NACOSTI) approvals.

Having done all the above, I wish to confirm that you have been granted permission to carry out the study. The permission granted is for a period of one year from the date of this letter.

We wish you all the best in your data collection and eventual completion of your thesis.

Yours sincerely,

Prof. Faith Nguru
Deputy Vice-Chancellor Academic affairs, Research and Students affairs

"...until the day dawn and the ***daystar*** *arise in your hearts"*
2 Peter 1:19 KJV

Appendix IX: Research Permission From NACOSTI

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR
SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **989827**

Date of Issue: **01/October/2021**

RESEARCH LICENSE

This is to Certify that Fr.. MICHAEL OBINNA OJI of Catholic University of Eastern Africa, has been licensed to conduct research in Nairobi on the topic: PREDICTORS OF SUICIDE IDEATION AMONG UNIVERSITY STUDENTS IN NAIROBI COUNTY-KENYA for the period ending : 01/October/2022.

License No: **NACOSTI/P/21/12902**

989827

Applicant Identification Number

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.

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is Guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014

CONDITIONS

1. The License is valid for the proposed research, location and specified period
2. The License any rights thereunder are non-transferable
3. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research
4. Excavation, filming and collection of specimens are subject to further necessary clearence from relevant Government Agencies
5. The License does not give authority to tranfer research materials
6. NACOSTI may monitor and evaluate the licensed research project
7. The Licensee shall submit one hard copy and upload a soft copy of their final report (thesis) within one year of completion of the research
8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice

National Commission for Science, Technology and Innovation
off Waiyaki Way, Upper Kabete,
P. O. Box 30623, 00100 Nairobi, KENYA
Land line: 020 4007000, 020 2241349, 020 3310571, 020 8001077
Mobile: 0713 788 787 / 0735 404 245
E-mail: dg@nacosti.go.ke / registry@nacosti.go.ke
Website: www.nacosti.go.ke

Appendix X: Authorization letter from the Ministry of Education

Republic of Kenya

MINISTRY OF EDUCATION

STATE DEPARTMENT OF EARLY LEARNING AND BASIC EDUCATION

Telegrams: "SCHOOLING", Nairobi
Telephone; Nairobi 020 2453699
Email: rcenairobi@gmail.com
cdenairobi@gmail.com

When replying please quote

REGIONAL DIRECTOR OF EDUCATION
NAIROBI REGION
NYAYO HOUSE
P.O. Box 74629 – 00200
NAIROBI

Ref: RDE/NRB/RESEARCH/1/65 Vol.1 **DATE: 1st October, 2021**

Fr. Michael Obina Oji
Catholic University of Eastern Africa

RE: RESEARCH AUTHORIZATION

We are in receipt of a letter from the National Commission for Science, Technology and Innovation regarding research authorization in Nairobi County on the topic: ***"Predictors of Suicide Ideation among University Students in Nairobi County-KENYA."***

This office has no objection and authority is hereby granted for a period, ending **1st October, 2022** as indicated in the request letter.

Kindly inform the Sub County Director of Education of the County you intend to visit.

GLADYS MALONZA
FOR: REGIONAL DIRECTOR OF EDUCATION
NAIROBI.

REGIONAL DIRECTOR OF EDUCATION NAIROBI
01 OCT 2021
MINISTRY OF EDUCATION
P. O. Box 74629, NAIROBI

Copy to: Director General/CEO
National Commission for Science, Technology and Innovation
NAIROBI.

Appendix XI: Research Authorization from the County Commissioner

Republic of Kenya

MINISTRY OF EDUCATION

STATE DEPARTMENT OF EARLY LEARNING AND BASIC EDUCATION

Telegrams: "SCHOOLING", Nairobi
Telephone; Nairobi 020 2453699
Email: rcenairobi@gmail.com
cdenairobi@gmail.com

When replying please quote

REGIONAL DIRECTOR OF EDUCATION
NAIROBI REGION
NYAYO HOUSE
P.O. Box 74629 – 00200
NAIROBI

Ref: RDE/NRB/RESEARCH/1/65 Vol.1 **DATE: 1st October, 2021**

Fr. Michael Obina Oji
Catholic University of Eastern Africa

RE: RESEARCH AUTHORIZATION

We are in receipt of a letter from the National Commission for Science, Technology and Innovation regarding research authorization in Nairobi County on the topic: ***"Predictors of Suicide Ideation among University Students in Nairobi County-KENYA."***

This office has no objection and authority is hereby granted for a period, ending **1st October, 2022** as indicated in the request letter.

Kindly inform the Sub County Director of Education of the County you intend to visit.

GLADYS MALONZA
FOR: REGIONAL DIRECTOR OF EDUCATION
NAIROBI.

REGIONAL DIRECTOR OF EDUCATION NAIROBI
01 OCT 2021
MINISTRY OF EDUCATION
P. O. Box 74629, NAIROBI

Copy to: Director General/CEO
National Commission for Science, Technology and Innovation
NAIROBI.

Appendix XII: Research Permission Letter from CUEA

THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

Office of the Deputy Vice Chancellor
ACADEMIC AFFAIRS & RESEARCH

Our Ref: DVC/AA&R/RG/esm/051/2021

5th October, 2021

Michael Obinna Oji
Student Reg. No. 1039273
Langata Campus, CUEA

Dear Michael,

RE: Permission to Conduct Research at The Catholic University of Eastern Africa (CUEA)

Greetings in the Mighty Name of our Lord and Savior Jesus Christ!

I am glad to inform you that your request to conduct research on the topic: ***"Predictors of Suicide Ideation among University students in Nairobi County, Kenya."*** has been granted. You are therefore authorized to collect data at The Catholic University of Eastern Africa. You are expected to strictly observe the normal ethical cautions and discretions while conducting the research.

I wish you well with your study and I look forward to you sharing your findings with the Directorate of Research and Innovation of the The Catholic University of Eastern Africa.

Sincere regards

THE CATHOLIC UNIVERSITY OF EASTERN AFRICA
OFFICE OF THE DEPUTY VICE CHANCELLOR, ACADEMIC AFFAIRS & RESEARCH
05 OCT 2021
P.O. Box 62157 - 00200, NAIROBI

Mrs. Prof. Rachel K. Gesami, PhD, MBS
Deputy Vice Chancellor/Academic Affairs & Research

CC *Vice Chancellor*
Directorate of Research & Innovation
Dean of Students

THE CATHOLIC UNIVERSITY OF EASTERN AFRICA (CUEA) P.O. BOX 62157 00200 Nairobi – KENYA
Tel: 020-2525811-5, 8890023-4, Fax: 8891084, Email: academics@cuea.edu Website: www.cuea.edu
Founded in 1984 by AMECEA (Association of Member Episcopal Conferences in Eastern Africa)

Appendix XIII: Permission Letter from UoN

UNIVERSITY OF NAIROBI
OFFICE OF ASSOCIATE VICE-CHANCELLOR
(Research, Innovation and Enterprise)

P.O. Box 30197-00100
Nairobi, Kenya
Website: dvcrie@uonbi.ac.ke

Fax: +254-2-2317251
Email: avcrie@uonbi.ac.ke

UON/RIE/3/5/Vol.XX/ **October 4, 2021**

Michael Obinna Oji
Catholic University of Eastern Africa
P. O. Box 62157-00200
NAIROBI
E-mail: miobidan@gmail.com

Dear Michael Oji

PERMISSION TO COLLECT DATA

I refer to your request to collect data at the University of Nairobi, for your project entitled: ***"Predictors of Suicide Ideation Among University Students in Nairobi 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,

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

Copy to: Dean of Students
Director, Library and Information Services

AAM/cmg

Appendix XIV: Permission Letter from Riara University

Deputy VC Finance & Administration Thu, Oct 14, 1:28 PM

to Isabella, me

Dear Michael,
Your request has been approved. Kindly work with Isabella, our University Counsellor copied herein . Below are her contact details.
0722306723.

Kind regards.

Isabella Osiemo <iosiemo@riarauniversity.ac.ke> Oct 14, 2021, 3:08 PM

to Deputy, me

Well noted. Regards.
--
Kind regards,

Isabella Osiemo
RU Clinic | Riara University | Nairobi | Kenya
m: +254 722 306 723 |+254 703 038 000 | **e:** iosiemo@riarauniversity.ac.ke
w: www.riarauniversity.ac.ke

Appendix XV: Permission Letter from Africa International University

Grace Gathu <Grace.Gathu@africainternational.edu> Tue, Oct 5, 3:41 PM

to me

Dear Dan,

This is to acknowledge receipt of your application to carry collect data at AIU.

Warm Regards,

Grace Gathu / DVCAA&R's Office
Africa International University
P. O. 24686 - 00502 Karen, Nairobi|
Mobile: +254 723434774
Office: +254 20 2603663/4
Email: grace.gathu@aiu.ac.ke | Web: www.aiu.ac.ke |

Appendix XVI: Approval Letter

VERDICT – APPROVAL WITH COMMENTS
Daystar University Ethics Review Board

DAYSTAR UNIVERSITY
Excellence • Transformation • Servant-Leadership

Valley Road Campus
P.O. Box 44400 - 00100,
Nairobi, Kenya

Athi River Campus
P.O. Box 17, Daystar University,
90145, Athi River, Kenya

Tel: 0716 170 313/ 0748 100 759/
0724256408-9 OR
0709 972 000 (30 lines)

E-mail: admissions@daystar.ac.ke
info@daystar.ac.ke

Facebook: daystar-university-official

Twitter: daystaruni

www.daystar.ac.ke

Our Ref: **DU-ERB/29/09/2021/000581**

Date: 29th September 2021

To: Oji Michael Obinna

Dear Oji,

RE: PREDICTORS AND SUICIDE IDEATION AMONG UNIVERSITY STUDENTS IN NAIROBI COUNTY-KENYA

Reference is made to your ERB application reference no. 230921-01 dated 23rd September 2021 in which you requested for ethical approval of your proposal by Daystar University Ethics Review Board.

We are pleased to inform you that ethical review has been done and the **verdict is to revise to the satisfaction of your Supervisors before proceeding to the next stage.** As guidance, ensure that the attached comments are addressed. Please be advised that it is an offence to proceed to collect data without addressing the concerns of Ethics Review board. Your application approval number is **DU-ERB-000581.** The approval period for the research is between ***29th September 2021 to 28th September 2022*** after which the ethical approval lapses. Should you wish to continue with the research after the lapse you will be required to apply for an extension from DU-ERB at half the review charges.

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 Daystar University Ethics Review Board.
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 Daystar University Ethics Review Board 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 Daystar University Ethics Review Board 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.
vii. Submission of a signed one page executive summary report and a closure report within 90 days upon completion of the study to Daystar University Ethics Review Board via email [duerb@daystar.ac.ke].

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) https://research-portal.nacosti.go.ke and other clearances needed.

Yours sincerely,

29th Sept 21

Sr. Prof. A. L. **Lando** PhD
Chair, Daystar University Ethics Review Board

DAYSTAR UNIVERSITY
ETHICS REVIEW BOARD
29 SEP 2021
P. O. Box 44400 – 00100,
NAIROBI

Encl. Review Report

"... until the day dawn and the

Appendix XVII: Plagiarism Declaration

The Catholic University of Eastern Africa

Consecrate them in the truth

DECLARATION OF ORIGINALITY FORM (FOR STUDENTS)

This form must be dully completed by the student and signed for all Postgraduate Theses and Dissertations submitted to the University for scanning for plagiarism.

Kindly note that this scanning will be done for the final copy submitted to the University for Examination and no further scanning will be done after this.

Name of student: Oji Michael Obinna

Reg. No: 1039273

Campus: Catholic University of Eastern Africa

Faculty: Art and Social Sciences

Department: Psy Counselling Psychology

Programme: Masters

Title of Thesis: Predictors of suicide Ideation among University students in Nairobi

Approval by supervisors for submission of thesis/Dissertation for examination

i) First supervisor ..... Sign 3/11/2021

ii) Second Supervisor ..... Sign .....

Declaration by student

1. I understand what Plagiarism is and I am aware of the University's policy in this regard.
2. I declare that this Thesis/Dissertation is my original work and is the FINAL COPY and has not been submitted elsewhere for certification or Publication. Where other peoples work or my own previous work has been used, this has been acknowledged and referenced in accordance with Catholic university of Eastern Africa requirements.

STUDENT SIGNATURE

(a) Before Scanning ..... Date 04/11/2021

(b) Upon receiving scan report ..... Date 05/11/2021

NAME LIBRARY STAFF Wycliffe Job Date 08/11/21

SIGNATURE ..... Stamp

MARIST INTERNATIONAL UNIVERSITY COLLEGE LIBRARY 08 NOV 2021 Sign: P.O. Box 24456-00502, KAREN, KENYA

CUENDVC-ACAD/LIB/05/FM04