

Addis Ababa University

College of Behavioral and Language Studies

School of Psychology

The Link between Generalized Anxiety Disorder, Major Depressive Disorder, Post-Traumatic Stress Disorder, and Suicidal Risk among Students in Addis Ababa University

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June, 2026

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A thesis submitted to the School of Psychology in Addis Ababa University presented in partial fulfillment of the requirement for the Degree of Master of Arts in Counselling Psychology

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Declaration

I, the undersigned, declare that this thesis is my original work and has not been presented or submitted either partially or in full by any other person for a degree in any other university or higher learning institutions. All sources of materials used for the purpose of this thesis have been duly acknowledged.

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Approval Sheet

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School of Psychology

This is to certify that the thesis prepared by Saba Feyisa Fita, entitled; "*The Link between Generalized Anxiety Disorder, Major Depressive Disorder, Post-Traumatic Stress Disorder, and Suicidal Risk among Students in Addis Ababa University"* and submitted in partial fulfillment of the requirement for the degree of Master of arts in Counselling Psychology complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

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Advisor: _____ Signature _____ Date _____

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Acknowledgements

This research is a story of not quitting on life's ups and downs. It has reminded me just how connected we are and how much we rely on one another as social beings. Above all, I am deeply grateful to God for surrounding me by himself and for surrounding me with people who have encouraged and cared for me. To my family, thank you for being my safe place and courage. I would also like to say thank you to my church family. You have reminded me of faith, hope, and perseverance during times when I needed it most. I would also like to thank the School of Psychology, especially Dr. Endalkachew, for the guidance and support throughout this research. I am especially grateful to Dr. Askalemariam for believing in me, even at times when I doubted myself, and for reminding me that I am capable of achieving this. Finally, I would like to express my sincere appreciation to my advisor, Dr. Sisay Yemane. Thank you for your patience, understanding, and continuous support, not only academically but also personally. Your guidance meant a lot to me and played an important role in helping me complete this study. I couldn’t do this without all of you. THANK YOU.

Abstract

The objective of this study was to examine the relationships among post-traumatic stress disorder (PTSD), major depressive disorder (MDD), generalized anxiety disorder (GAD), general health, social support, trauma exposure, sociodemographic factors, and suicidal risk among undergraduate students at Addis Ababa University. A cross-sectional study and correlational design were conducted among 215 undergraduate students from Addis Ababa University. Data collection tools are Suicidal Behaviors Questionnaire–Revised (SBQ-R), Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI), PTSD Checklist for DSM-5 (PDS-5), and Sociodemographic questions, which included a general health measure. Descriptive statistics, correlation analyses, group comparisons, and regression analyses were employed to examine the relationships among the study variables. The findings revealed significant positive correlations between suicidal risk and MDD ($r = .635$, $p < .01$), GAD ($r = .535$, $p < .01$), and PTSD ($r = .592$, $p < .01$), indicating that greater psychological distress was associated with higher suicidal risk. Furthermore, MDD was the strongest predictor ($\beta = .635$), followed by PTSD ($\beta = .592$) and GAD ($\beta = .535$), indicating that higher levels of psychological distress are associated with increased suicide risk. Participants who reported exposure to sexual or physical assault demonstrated significantly higher levels of suicidal risk, MDD, GAD and PTSD symptoms than those exposed to other trauma types or no trauma. General health was found to be a significant predictor of suicidal risk ($\beta = .494$, $p < .001$), while father's educational status ($\beta = .232$, $p = .024$) and social support ($\beta = .147$, $p = .035$) also contributed significantly to the prediction of suicidal risk. Furthermore, social support was associated with MDD ($\beta = -.266$, $p < .001$) and GAD ($\beta = -.218$, $p = .003$), although it was not significantly related to PTSD symptoms ($p = .395$).

Keywords: Suicidal risk, Post-traumatic Stress Disorder, Major Depressive Disorder, Generalized Anxiety Disorder, general health, social support.

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List of Abbreviations

BAI	Beck Anxiety Inventory
BDI	Beck Depression Inventory
DSM-5	Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition
GAD	Generalized Anxiety Disorder
HIC	High-Income Countries
MDD	Major Depressive Disorder
PDS-5	Posttraumatic Diagnostic Scale for DSM-5
PTSD	Post-Traumatic Stress Disorder
SBQ-R	Suicidal Behaviors Questionnaire-Revised
WHO	World Health Organization
WMH	World Mental Health Survey

Chapter 1: Introduction

1.1 Background

Suicide is a serious issue of public health that has numerous and interconnected psychological, social, and financial effects on society. On an annual basis, over 720,000 individuals die due to suicide (World Health Organization, 2025). In 2021, low- and middle-income nations accounted for over seventy-three percent of all suicides worldwide (World Health Organization, 2025). For every suicidal death, an estimated 20 suicide attempts occur (World Health Organization, 2024). The United States Institution of National Institute on Mental Health defines suicide as "death caused by self-directed injurious behavior with intent to die as a result of the behavior'' (National Institute on Mental Health, 2021). On the other hand, a suicide attempt is a self-directed, possibly harmful behavior to cause death to oneself. Suicidal ideation is thinking about, considering, or plotting suicide (National Institute on Mental Health, 2021).

Individuals who commit suicide have a variety of reasons. When attempting to explain suicidal behavior, it is necessary to examine health, mental health, stressful life events, and social and cultural influences (World Health Organization, 2024). A prominent theoretical framework to understand suicide is the biopsychosocial approach. The model suggests that suicidal behaviour can arise from socio-economical, environmental, and biological factors. Several factors interact to increase suicidal risk. Vulnerability to suicide risk increases through society-level and individual-level factors (hereditary, substance misuse, behavioural dysregulation, personal and family history of psychopathology) (Turecki et al., 2019). This interaction causes dysregulated mood, hopelessness, and entrapment, which are linked to suicidal risk (Turecki et al., 2019).

Suicidal ideation is associated with mental health disorders. A psychiatric disease is estimated to be connected with 80% to 90% of those who engage in suicidal behavior in high-income countries (HIC)and low- and middle-income countries (Knipe et al., 2019). A study conducted in Ethiopia confirmed that from patients visiting for medical care at a health center and the general population in the community, suicidal behavior was double in patients compared with the general population (Belete et al., 2021). For instance, anxiety and depressive disorders are related to suicidal ideation and suicide attempts (World Health Organization, 2017). Furthermore, according to a cross-national analysis of the World Health Organization's (WHO) World Mental Health Surveys, post-

traumatic stress disorder (PTSD) is considered a strong predictor of suicide attempts in low-income countries (Nock et al., 2009).

Suicidal ideation and attempts are one of the major symptoms of depression. A major depressive episode is characterised by low mood or a loss of interest or enjoyment in almost all activities for at least two weeks, alterations in appetite, sleep, and psychomotor activity, low energy, feelings of guilt or worthlessness, trouble focusing, thinking, or making decisions, and recurrent thoughts of death, suicidal ideation, or suicide attempts are all additional symptoms that must be present (American Psychiatric Association, 2022). A diagnosis of major depressive disorder (MDD) is associated with significant symptoms and serves as a predictive factor for suicidal ideation and attempt (Ribeiro et al., 2018). A study conducted in Ethiopia in relation to suicide and mental illnesses confirms that the lifetime prevalence of suicide attempts was 26.5% for patients with major depression (Shibre et al., 2014).

Depressive disorders are usually comorbid with anxiety disorders, and vice versa. A study with a population of individuals with mental health issues found out that, in the same year, 51% of patients with major depressive disorder (MDD) had an anxiety disorder diagnosed compared to 11.8% of those without MDD (Olfson et al., 2017). Excessive worry and anxiety about certain situations or activities are the primary features of anxiety disorders. The person finds it difficult to control their anxiety and prevent anxious thoughts from getting in the way of their capacity to concentrate on the tasks at hand (Rowa et al., 2017).

On the other hand, generalized anxiety disorder (GAD) is characterized by excessive worry that considerably impairs psychosocial functioning and persists for at least six months. Anxiety is often associated with physical symptoms such as sleep deprivation, agitation, stiff muscles, gastrointestinal problems, and recurring headaches (American Psychiatric Association, 2022). The recurrent development of suicidal ideation was predicted by anxiety interfering with daily activities (Grant et al., 2023). de Beurs, ten Have, Cuijpers, and de Graaf (2019) found that lifetime mental disorders significantly predict first onset and recurrent suicidal ideation, with GAD and MDD found to be significant predictors.

Post-traumatic stress disorder (PTSD) used to be under anxiety disorders before DSM-5. In DSM-5, PTSD appears in trauma and stress-related disorders. This is due to the fact that studies have

shown that PTSD involves a variety of emotions outside of the fear/anxiety continuum, such as guilt, shame, and anger (Friedman et al., 2011). The diagnosis of PTSD is based on exposure to a traumatic event that satisfies criteria and symptoms from any of four symptom clusters: intrusion, avoidance, negative changes in mood and cognition, and modification in arousal and reactivity. The sixth criterion is the length of symptoms, and the seventh is functionality. The eighth criterion says that impacts should not be caused by substance abuse or co-occurring medical conditions (American Psychiatric Association, 2022). According to findings from a South African study, students who have both posttraumatic stress disorder (PTSD) and signs of depression appear to be at a higher risk for suicide ideation than others (Bantjes et al., 2016).

PTSD and MDD are highly comorbid; a study conducted by Rytwinski, Scur, Feeny, and Youngstrom (2013) revealed that the 52% of people with PTSD had co-occurring MDD and PTSD. The co-occurrence of MDD and PTSD also has an overlap of symptoms, such as insomnia, showing less interest in day-to-day activities, and poor concentration (Angelakis & Nixon, 2015). A study conducted on the relationship of PTSD, GAD, and MDD reported these factors are strongly associated with and predict suicidal ideation (Bantjes et al., 2016).

Beyond the comorbidity between PTSD, MDD, and GAD, the nature of the traumatic experience itself may influence the development and severity of psychological distress. Trauma exposure encompasses a wide range of experiences, and different trauma types may have different psychological consequences. Evidence from the World Mental Health Surveys indicates that exposure to traumatic events is common, however, the risk of developing PTSD and related psychological difficulties varies across trauma categories. Interpersonal traumas, particularly sexual violence and physical assault, account for a disproportionate share of PTSD burden compared with many other forms of trauma (Kessler et al., 2017). Furthermore, PTSD rarely occurs in isolation and is frequently accompanied by depressive and anxiety symptoms, which may further increase vulnerability to suicidal behavior (Koenen et al., 2017). These findings highlight the importance of examining trauma types when investigating PTSD, MDD, GAD, and suicidal risk among university students.

In addition to trauma-related and psychological factors, broader health and social conditions may influence suicidal risk. Research has shown that major physical health conditions are associated with an increased risk of suicide even after controlling for mental disorders and substance use

(Ahmedani et al., 2017). Similarly, social support has been identified as a protective factor for mental health, with stronger support networks associated with lower levels of depression and psychological distress among both the general population and university students (Gariépy et al., 2016; Hefner, & Eisenberg, 2009). Moreover, socio-demographic and family-related factors such as gender, family history of suicide, family psychiatric history, parental education, and substance use have been identified as factors associated with suicidal behavior and mental health outcomes (Turecki et al., 2019). Thus, understanding suicidal risk among university students requires consideration of psychological disorders together with the broader health and social contexts in which they occur.

Therefore, the current research aims to explore if PTSD, MDD, and GAD have an association with suicidal risk (ideation and attempt) in college students. Furthermore, this study aims to explore the suicidal risk and the links between PTSD, MDD, and GAD.

1.2 Statement of the Problem

Mental disorders make up a significant share of the disease burden in young people worldwide. In 2019, 293 million, which is 1 of 10 people aged 5 to 24 years, globally live with a diagnosable mental disorder aged 5-24 had at least one mental condition. (Kieling et al. 2024). Mental health disorders have a high correlation and predictive factor for suicide (Bantjes et al., 2016). According to Solmi et al. (2022), the peak and median ages of onset for any mental condition were 14.5 and 18 years, respectively, and the ages at onset between males and females were mainly equivalent.

As undergraduate students are in the late adolescent and young adulthood stage, college students are highly susceptible and vulnerable to suicide and other mental disorders. Since many students are leaving where they live to attend a post-secondary institution, the transition itself can be a cause of stress, anxiety, and depression. Having a college degree has come to be considered as the key to success. College years are a period of increased vulnerability to a variety of mental health difficulties. Common psychiatric problems emerge throughout this stage of development. An increase in MDD, GAD, and suicidality has been documented among U.S. college students (Liu, Stevens, Wong, Yasui, & Chen, 2019).

There are studies conducted on the mental health of university students (Li, Zhao, Chen, Peng, & Lu, 2022; Bantjes et al., 2016); however, in the Ethiopian context, limited research has examined

the combined influence of trauma exposure, PTSD, MDD, GAD, general health, social support, and suicidal risk among university students. Existing studies have primarily focused on MDD, GAD, or suicidal behavior separately, but limited evidence exists regarding how these factors interact and contribute to suicidal risk within this population. GAD and MDD are common mental disorders among university students (Li, Zhao, Chen, Peng, & Lu, 2022), and they are strongly associated with suicide (World Health Organization, 2017). Exploring and understanding this phenomenon in the Ethiopian context will serve a preventive role against suicide by contributing to the existing knowledge base.

1.3 Research Objectives

General Objective

- To examine how PTSD, MDD, GAD, trauma exposure, and sociodemographic characteristics relate to and influence suicidal risk among university students.

Specific Objectives

- To examine the association between suicidal risk, GAD, MDD, and PTSD among university students.
- To examine the impact of trauma types (e.g., child abuse, sexual assault, physical assault) on PTSD, GAD, MDD, and suicide risk among university students.
- To examine if sociodemographic factors (gender, parental education, family history of suicide, social support, and substance use) predict suicidal behavior among university students.
- To examine if general health predicts suicidal risk among university students.

1.4 Significance of the Study

This study contributes to the existing literature by addressing gaps in research concerning the relationships among trauma exposure, PTSD, MDD, GAD, general health, sociodemographic factors, and suicidal risk among university students. Although suicide represents a significant public health concern globally, empirical evidence regarding the combined influence of these

factors among university students remains limited. The findings provide context-specific evidence that contributes to a better understanding of suicidal risk within Ethiopian higher education institutions.

The study offers valuable information for mental health professionals, including psychologists, counselors, and psychiatrists, by identifying factors associated with suicidal risk among university students. Understanding the role of trauma exposure, psychological distress, general health, and social factors supports the identification of vulnerable students and informs the development of prevention and intervention strategies.

The findings also have important practical implications for universities, policymakers, and student support services involved in promoting student well-being. The study identifies factors associated with suicidal risk that can inform mental health awareness initiatives, psychosocial support programs, and student mental health services within higher education settings.

1.5 Scope of the Study

This study was conducted among undergraduate students at Addis Ababa University. It included both male and female undergraduate students enrolled during the study period. The study focused on examining the relationships among suicidal risk, Post-Traumatic Stress Disorder (PTSD), Major Depressive Disorder (MDD), Generalized Anxiety Disorder (GAD), trauma exposure, general health, and selected sociodemographic and factors.

1.6 Operational Definition

General Health: is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

Generalized Anxiety Disorder (GAD): the level of anxiety symptoms that participants experience, using Beck Anxiety Inventory (BAI). High scores correspond to more intense anxiety symptoms

Major Depressive Disorder (MDD): the intensity of depressive symptoms that participants report, using Beck Depression Inventory (BDI). Higher scores reflect higher degrees of depressive symptoms.

Post-Traumatic Stress Disorder (PTSD): the intensity of PTSD symptoms following trauma exposure, according to the PTSD assessment scale Posttraumatic Diagnostic Scale for DSM-5 (PDS-5). Higher scores relate to more severe levels of PTSD symptoms.

Suicide: is defined as death caused by self-directed injurious behavior with intent to die as a result of the behavior.

Suicide Attempt: is a self-directed, potentially injurious behavior with intent to die as a result of the behavior. A suicide attempt might not result in death or injury.

Suicidal Ideation: refers to thinking about, considering, or planning suicide.

Social Support: an exchange of resources between two individuals perceived by the provider or the recipient to be intended to enhance the well- being of the recipient.

Chapter 2: Literature Review

2.1 Overview

In the Literature Review chapter, empirical and theoretical studies related to suicidal risk, major depressive disorder (MDD), generalized anxiety disorder (GAD), and post-traumatic stress disorder (PTSD) are discussed. The chapter begins by explaining suicide and related concepts such as suicidal ideation, suicide attempts, and suicidal behavior. It then examines the major risk factors associated with suicidal risk, including biological risk factors, social and environmental factors, psychological risk factors.

In this literature review the association between suicidal risk, GAD, MDD, and PTSD, the impact of trauma types (sexual assault, physical assault) on PTSD, GAD, MDD, sociodemographic factors (gender, parental education, family history of suicide, social support, and substance use), general health and suicidal risk are reviewed.

2.2 Suicide

Suicide fatalities are still common globally, even if the global suicide rate has decreased by one-third. (Turecki et al., 2019). According to Bilsen (2018), Suicide attempts or non-fatal suicidal behavior is considered to be 10–20 times more common than actual suicide, according to Suicide is defined by the National Institute on Mental Health as death followed by self-motivated, harmful behaviour with the intention of dying as a result of the behaviour. An attempt at suicide is a self-directed, potentially injurious action to cause death to oneself. Suicidal ideation is thinking about, considering, or plotting suicide (National Institute on Mental Health, 2021).

The words "suicidal ideation" and "suicidal thoughts" are interchangeable. Suicidal ideation is separated into active and passive thoughts. "Active" means planning and plotting to commit suicide, and "passive" means just a desire to be dead. The word "suicide attempt" describes self-directed and harmful behavior with the intention of dying. The definition suicide is defined by the self-motivated, harmful behaviour with the intention of dying as a result of the behaviour. ‘Suicidal behaviors’’ include both attempted and completed suicide (Liu, Bettis, & Burke, 2020). According to Bilsen's (2018) estimates, there are about three self-reported suicide attempts for every 1,000 people worldwide each year. 2.5% of people attempt suicide at least once in their lifetime.

One of the main issues that public mental health must address with efficient preventative approaches is youth suicide. Suicide is the second most common cause of death for youth in the United States between the ages of 15 and 24 (Talking to Teens: Suicide Prevention, 2018).

Mental health conditions are linked to suicidal thoughts. In high-income countries (HIC), 80% to 90% of people who commit suicide are thought to have a mental illness; in low-income and middle-income nations, these connections are less well researched. (Knipe et al., 2019). Major depressive disorder (MDD), bipolar disorder, substance use disorders, and schizophrenia are the most prevalent psychiatric diagnoses among those who commit suicide (Arsenault-Lapierre et al., 2004). While suicide is not a necessary consequence of any mental illness, some characteristics of each illness are linked to suicide, such as certain demographics and the patient's awareness of their condition in the case of schizophrenia (Hor, & Taylor, 2010). Suicidal behavior may be influenced by the co-occurrence of depressed symptoms and other variables that impede behavioral control. Furthermore, a cross-national study has shown a high correlation between the transition from suicidal ideation to a suicide attempt and diseases marked by anxiety and poor impulse control (Nock et al., 2009).

2.2.1 Risk Factors for Suicide

A thorough understanding of the various sorts of factors that may contribute to suicide risk is provided by the biopsychosocial model for suicide risk. Any or all of the distal, developmental, and proximal elements may be influenced by sociological, demographic, economic, and environmental factors. In addition to individual factors like genetics, family history, one's own past of abuse, behavioural issues, ups and downs on mood change, and hopelessness, substance misuse, psychopathology, and societal variables can combine to raise susceptibility to suicide. These factors are then linked to suicidal ideation, comorbid psychiatric illness, social, and environmental factors (Turecki et al., 2019). Biological (including genetics), psychological (like specific personality traits), clinical (like co-occurring mental illness), social, and environmental factors all contribute to the complex development of suicide risk (Turecki et al., 2019). The biological, social, environmental, and psychological risk factors for suicide are explained in depth below.

In this study the Biopsychosocial model is adopted as a theoretical framework. This is because in the model instead of a linear cause-and-effect medical approach, psychiatric problems arise from a

complex circular model with multiple causes and consequences. The Biopsychosocial Model systematically explains the complex relationships between the three primary dimensions, biological, psychological, and social, in the onset, course, and outcomes of mental diseases. This allowed for a full conceptualisation of mental illnesses. In order to understand patients' suffering, respond to it effectively, and make them feel understood, clinicians must simultaneously treat the physiological, psychological, and social elements of the illness (Anand, 2024).

Ghaemi (2009) claims that the word "biopsychosocial" was first used in the 1950s by Roy Grinker, a neurologist who studied psychoanalysis under Sigmund Freud, to emphasise the role of biological factors in the genesis of mental symptoms. George Engel presented the Biopsychosocial Model in 1977 as a novel theoretical framework for comprehending health and illness in reaction to the reductionist and overly biological approach of the Biomedical Model of Disease. Since then, the use of the Biopsychosocial Model has expanded (Anand, 2024).

No component has a monopoly on the explanation or treatment of physical or mental health disorders; instead, biological, psychological, and social factors interact to determine their origins (Babalola et al., 2017). A linear cause-and-effect model is unable to account for the complexity of causality and the clinical manifestation of mental diseases. The final clinical manifestation, progression, and result of a mental condition are influenced by a number of interrelated factors and contributing factors in multiple dimensions, including biological, social, cultural, and psychological. A biopsychosocial approach to a mental condition seeks to consider several levels of interaction while creating a psychiatric diagnosis and treatment (Anand, 2024).

2.3 Association of MDD, GAD, PTSD with Suicidal Risk

Mental health conditions are linked to suicidal thoughts. In high-income countries (HIC), 80% to 90% of people who commit suicide are thought to have a mental illness; in low-income and middle-income nations, these connections are less well researched. (Knipe and others, 2019). Major depressive disorder (MDD), bipolar disorder, substance use disorders, and schizophrenia are the most prevalent psychiatric diagnoses among those who commit suicide (Arsenault-Lapierre et al., 2004). While suicide is not a necessary consequence of any mental illness, some characteristics of each illness are linked to suicide, such as certain demographics and the patient's awareness of their condition in the case of schizophrenia (Hor & Taylor 2010). Suicidal behavior may be influenced

by the co-occurrence of depressed symptoms and other variables that impede behavioral control. Furthermore, a cross-national study has shown a high correlation between the transition from suicidal ideation to a suicide attempt and diseases marked by anxiety and poor impulse control (Nock et al., 2009).

2.3.1 Major Depressive Disorder and Suicide

Although depression seems to be one of the best indicators of suicidal thoughts, it does not seem to differentiate between people who have tried suicide and those who have had suicidal ideation but have not made an attempt (May & Klonsky 2016). A major depressive episode is characterized by a poor mood or a loss of interest or enjoyment in almost all activities for at least two weeks. Other symptoms that an individual should exhibit include shifts in diet, sleeping habits, and psychomotor activity, low mood, feelings of emptiness or shame, difficulty concentrating, and change in rational thought, or decision-making, and repeated thoughts of death, suicidal ideation, or suicide attempts (American Psychiatric Association, 2022). Major depressive disorder (MDD) diagnoses are linked to severe symptoms and are predictive of suicide thoughts and attempts (Ribeiro et al., 2018). According to a study on suicide and mental diseases carried out in Ethiopia, patients with serious depression had a lifetime frequency of suicide attempts of 26.5% (Shibre et al., 2014).

Major depressive disorder (MDD) is linked to neurobiological changes and has a variety of clinical manifestations. Some of the most prevalent psychopathological symptoms that frequently result in suicide thoughts, attempts, and behaviors are hopelessness, anhedonia, and detachment (American Psychiatric Association, 2022). People with MDD may have a decreased quality of life because of the condition as a whole, decreased functional outcomes, social issues, and medical comorbidities. Because MDD is a complicated medical condition, no single known biological or psychosocial mechanism can adequately explain it. Instead, MDD seems to be caused by a combination of physiological, psychological, environmental, and genetic factors (American Psychiatric Association, 2022).

Approximately 185 million people worldwide suffer from major depressive disorder (Global Burden of Disease Collaborative Network, 2021). Furthermore, prejudice, higher incidence of physical comorbidities like obesity, type 2 diabetes, and cardiovascular disease, and an increased

likelihood of negative educational outcomes are all experienced by people with MDD (Wickersham et al., 2021).

Globally, women are more than twice as likely as men to suffer from MDD, and this prevalence remains mostly constant throughout adulthood (Kuehner, 2017). Biopsychosocial factors, which is consist of biological factors like inherited traits and hormonal differences, psychological factors like differences in perception and emotions, and Social factors like societal gender role difference, may be the cause of the sex difference in prevalence (Kuehner, 2017).

Numerous phenomenological susceptibility and buffering factors for MDD are known. Behavioural, biological, and psychosocial variables are some of these determinants (World Health Organization, 2022). Resilience, or the capacity to preserve or restore mental health in the face of hardship, is enhanced by protective variables. Risk and protective factors can have time- and context-specific effects. For example, growing up in a supportive home environment is a substantial protective factor for MDD (Kidd et al., 2022), while childhood trauma (emotional and physical abuse or neglect) is a risk factor for MDD. Although extraversion trait, and self-worth reduce the risk of MDD, neuroticism, introversion, and ruminating are significant risk factors (Sahle et al., 2022).

Negative expectations for the future, a lack of general desire, and the misconceptions to specific occurrences are characteristics of major depressive disorder (MDD) (Beck et al., 1974). From a therapeutic perspective, depressed people are more likely to commit suicide since it seems like the only way out of their inner "unsolvable problems" when they feel a lack of positive aspirations for the future together with the discomfort and emotional distress that frequently accompany depression. According to Pollock and Williams (2004), there appears to be a higher correlation between hopelessness and suicide thoughts than there is between suicidality and depression severity.

Suicide attempts and/or ideation have been linked to major depressive disorder (MDD), with a suicide risk rate of approximately 15%. SI and suicidal behavior are often reported during depressive episodes (Ponsoni et al., 2018). Furthermore, research on epidemiology showed that individuals with MDD with co-occurring anxiety disorders were among the main at risk of suicidal attempt among depressed and suicidal patients (Pfeiffer et al., 2009).

2.3.2 Generalized Anxiety Disorder and Suicide

Persistent and ongoing worry is a characteristic of generalized anxiety disorder. Psychological and physical symptoms frequently accompany this anxiety. It is excessive, multidimensional (related to finances, family, health, and the future), and it is challenging to manage. The notion that symptoms of "generalized anxiety disorder" are completely nonspecific can lead to the wrong diagnosis of almost any anxious patient. Indeed, the primary and distinguishing characteristic of generalized anxiety disorder is excessive worry (American Psychiatric Association, 2022).

Excessive worry that significantly hinders psychosocial functioning and lasts for at least six months is the diagnosis of generalized anxiety disorder (GAD). Physical symptoms include insomnia, restlessness, tense muscles, gastrointestinal issues, and persistent headaches that are frequently linked to anxiety (American Psychiatric Association, 2022). According to the Global Burden of Disease research, anxiety disorders affect 301 million people worldwide, or 4.05% of the population, and their prevalence has risen by more than 50% between 1990 and 2019 (Javaid et al., 2023). Additionally, in 2020, anxiety disorders were linked to 44.5 million disability-adjusted life-years worldwide; only major depressive disorder was linked to 49.4 million disability-adjusted life-years (Santomauro et al., 2021).

Depression is a common comorbid condition with anxiety. Although persistent anhedonia, or the incapacity to feel pleasure, is a characteristic of severe depression, it is not a sign of generalized anxiety disorder. Patients with serious depression may feel hopeless, while those with generalized anxiety disorder frequently express feeling helpless. However, intentional self-harm, including suicide attempts, is more common in those with generalized anxiety disorder (Chartrand et al., 2012). This combination of MDD and generalized anxiety disorder is frequently called "anxious depression," a clinical presentation that is especially prevalent in primary care settings (Zbozinek et al., 2012).

Vulnerability to generalised anxiety disorder include, being female, low socioeconomic status, exposure to adverse childhood experiences (such as physical or sexual assault, abandonment, and parental problems with intimate partner violence, alcohol consumption, and substance use), (Moreno-Peral et al., 2014). According to recent research, there may be a link between childhood exposure to physical punishment and a higher chance of developing generalized anxiety disorder

as an adult (Afifi et al., 2012). These risk factors, however, are general and may also raise the likelihood of developing other mood and anxiety disorders.

Suicidal thoughts, suicide attempts, and suicide death have all been linked to GAD, according to a study. Patients with GAD were more likely than those without GAD were significantly more likely to experience suicidal thoughts (OR = 4.23, 95% CI [1.96, 9.16]) and to attempt suicide (OR = 5.24, 95% CI [2.10, 13.06]) (Sareen et al., 2005)

2.3.3 Post-traumatic Stress Disorder and Suicide

The diagnosis of PTSD is based on exposure to a traumatic event that satisfies criteria and symptoms from any of four symptom clusters: intrusion, avoidance, negative changes in mood and cognition, and modification in arousal and reactivity. The sixth criterion is the length of symptoms, and the seventh is functionality. The eighth criterion says that impacts should not be caused by substance abuse or co-occurring medical condition (American Psychiatric Association, 2022). According to findings from a South African study, students who have both posttraumatic stress disorder (PTSD) and signs of depression appear to be at a higher risk for suicide ideation than others (Bantjes et al., 2016).

According to Koenen et al. (2017), the lifetime prevalence of PTSD is 5.6% in samples chosen for high trauma exposure and 3.9% in the general population. 50% of PTSD cases worldwide have persistent symptoms, according to World Health Organization Mental Health (WMH) surveys, with the majority of respondents reporting no treatment (Koenen et al., 2017).

There is long-term evidence that PTSD is linked to higher suicide rates; those with PTSD are twice as likely to commit suicide as people without the disorder. Strong evidence suggested that women were somewhat more likely than men to have this connection. Other prior psychiatric conditions, such as a personal history of significant depressive or anxiety disorders; serious mental illness and suicide attempts; and a parental diagnosis of a severe mental disease, had no bearing on these outcomes (Fox et al., 2021). In another study, despite significant heterogeneity, there was an overall moderate correlation (RR = 2.09, 95% CI 1.11–3.94) between PTSD diagnosis and suicide death. PTSD and suicide attempts were strongly positively correlated (Akbar et al., 2023).

2.4 Impact of Trauma Types on Suicide Risk

At some point in their lives, 60–90% of people experience a stressful incident (Kessler et al., 2017). Even though most people can deal with the trauma and recover from the following emotional strain, it is still unknown why some people suffer more than others and endure mental health decline, even to the point of suicidal death (Ásgeirsdóttir et al., 2018).

Suicidal thoughts and suicide attempt rates were highly correlated with the overall number of distinct traumas reported. Suicidality was elevated through multiple traumas; the rate of suicidal ideation and suicide attempts increased by 20.1% and 38.9%, respectively, with each additional trauma (Ásgeirsdóttir et al., 2018). These are also in line with studies that indicate cumulative trauma is linked to more severe and complicated symptoms in PTSD sufferers (Briere et al., 2020). Repeated trauma exposure can increase the likelihood of suicide by creating habituation, tolerance, and fear of death (Joiner, 2005).

Studies have demonstrated a strong link between suicidality and interpersonal trauma, including childhood trauma (Afifi et al., 2016) and sexual trauma (Stein et al., 2010). Suicidality was linked to childhood or sexual trauma in both genders, but it was more noticeable in men. Studies have shown that after losing a loved one, there is an increased risk of suicide for both genders; however, it was much higher for men (Luoma & Pearson 2002). Additionally, other research has suggested that men may be more vulnerable to suicidal conduct related to natural catastrophes (Chou et al., 2003).

Comparing the families of 67 teenage suicide victims to 67 demographically matched community controls accordance with the suicide victims were more likely than the controls to have experienced physical abuse as children (Brent et al., 1994). Glowinski et al. (2001) conducted interviews with over 3000 female adolescent twins and discovered that one of the characteristics most strongly linked to a history of suicide attempts was physical abuse during childhood

Because they are typically more physically painful than other types of abuse (such as neglect or verbal abuse), childhood physical abuse and some types of childhood sexual abuse may be more strongly associated with the development of lethality. There is evidence that more extreme kinds of childhood sexual abuse, such as severe forced abuse, are linked to suicidality more than less severe forms (Stepakoff, 1998). According to Joiner's model, significant suicidal behaviour is

caused by a combination of habituation to pain and fear and a wish for death, which arises from a sense of burden on loved ones and others as well as a sense of alienation and disconnection from others.

Suicidality risk is significantly impacted by trauma. Up to 37% of people with PTSD reported having attempted suicide, and up to 52% reported having suicidal thoughts, suggesting a strikingly substantial correlation between childhood trauma and suicidal behaviour. Suicidal ideation and suicide attempt rates were similarly high in traumas associated with assaultive violence and peacekeeping (Ásgeirsdóttir et al., 2018). Traumas that are directly experienced and interpersonal may be more incapacitating (Douglas & Wodak, 2016). According to Joiner (2005), they are consistent with the interpersonal-psychological explanation of suicide.

2.5 Sociodemographic Factors and Suicidal Risk

The sociodemographic factors associated with suicide risk included age, gender, educational level, employment status, income, and family status (Berkelmans et al., 2021). Social risk factors are those that have the potential to have an impact on a person's way of life. These elements, which can be both intrinsic and extrinsic, have a high correlation with the beginning and advancement of suicidal thoughts and actions. Gender disparities are one of the most prevalent social risk variables that increase the likelihood of suicide attempts. It was discovered that women are more likely than men to have suicidal thoughts and attempts (Bilson, 2018). Research from several nations consistently demonstrates that women have greater rates of suicidal ideation and attempts (Olaoseibikan, 2020).

Despite the fact that women are more likely to attempt suicide, the majority of these efforts end in failure. According to Thompson and Swartout (2018), non-life-threatening suicide attempts are 25–60 times more prevalent than life-threatening ones. Compared to women, males are three to four times prone to commit suicide, even though women are more likely to attempt suicide.

In addition, societal determinants of suicide rates may include socioeconomic status. According to a study by Machado et al. (2015), there is a positive correlation between the suicide rate and wealth disparity. According to cross-sectional panel surveys, suicidal thoughts might be strongly influenced by lower socioeconomic levels in several countries (Silva et al., 2016). Low and middle-income countries account for about 80% of all suicides (WHO, 2021). Living in a high-crime area,

facing discrimination, having trouble in school, being impoverished, and lacking basic meals and nutrition are all consequences of poverty. Low socioeconomic status may also make it more difficult to get mental health care (Silva et al., 2016).

Adolescent suicide risk is significantly influenced by life experiences. According to Olaosebikan (2020), some event stressors are more likely than others to be linked to youth suicide. According to Olaosebikan (2020), young people typically find their sense of self through social connections like peer groups, forming new close relationships, and boosting their confidence and security. Thus, losing a friend and dealing with relationship problems may have an impact on young people's suicidal thoughts and attempts. Olaosebikan (2020) revealed that social relationship problems account for 20% of juvenile suicide cases. Suicidal behaviors are also closely linked to academic pressures (Kosik et al., 2017). Suicidal behavior may result from poor academic performance, which is a unique predictor of significant mental illness. 14% of youth suicide cases were found to be related to school-related problems or academic stress (Olaosebikan, 2020). According to Olaosebikan (2020), young people who are unemployed or uneducated are also more likely to commit suicide since they lack structure and have few options for the future.

Significant social and economic factors associated with suicide include long-term factors like poor social stability and rigid sociocultural norms, as well as immediate factors like relationship breakdown, unemployment, financial instability, harassment, and shifts in social and financial status (low family relationships, being alone, having limited resources, and/or being saddled with debt) (Batty et al., 2018).

Certain socioeconomic risk factors for suicide may function differently in various social contexts. For instance, people from minority ethnic groups are more likely to commit suicide if they reside in areas with a lower percentage of members of their own ethnic group than if they live in areas with a higher percentage (Neeleman & Wessely, 1999). Whether social isolation is defined objectively (e.g., living alone) or through subjective loneliness, social isolation, such as that caused by anxiety, bereavement, or social rejection, is also a significant risk factor for suicide (Calati et al., 2019).

In his 1897 sociological study, E. Durkheim was the first to highlight the significance of social factors in the aetiology of suicide (Durkheim, 2005). Durkheim's research on the impact of social

factors on suicide is significant (Krauss & Krauss, 1968) by demonstrating the inverse relationship between suicide rates and social integration. According to Durkheim, the kind of suicide associated with a lack of social integration is egotistical. As a result, social support and social isolation appear to be risk and protective factors for suicide, respectively. Halbwachs re-examined Durkheim's theory of social integration as a cause of suicide, which was based on a model of social disorganization, in his extensive statistical analysis of the causes of suicide (Trout, 1980).

According to Halbwachs' psychosocial theory of suicide, a suicidal act should be examined from two perspectives: one relating to social causes and the other to individual causes (Trout, 1980). According to his theory, the onset of suicidal thought is caused by both perceived burdensomeness—the sense that one is a burden to others—and unmet belongingness—the feeling that one is no longer an essential member of a community. Suicidal desire arises when the cognitive variables of perceived burdensomeness and rejected belonging coexist. Suicidal competence, which is frequently acquired through repeated suicide attempts, can then lead to suicidal acting out.

Experiences that are adverse in other areas of life may be accounted for through a family's physical, societal, and economic assets. (Parcel et al., 2010). The adverse impacts of adolescent mental health issues may be reduced in households with highly educated parents and increased in those with less educated parents. It has been demonstrated that parents who have more education spend more time actively interacting with their kids (Jackson, 2015).

2.6 General Health, Substance Use and Suicidal Risk

The physical health of people with mental illness is a significant concern in mental health policy and practice. According to the World Federation for Mental Health (WFMH) (2004), "there can be no health without mental health" because of the complex connections between mental illness and general health conditions (Prince et al., 2007). The widespread belief that people with mental illness have very poor physical health and a much shorter life expectancy is also reflected. According to de Hert et al. (2009), people with severe mental illness (SMI) have a death rate that is two to three times greater when compared to people with physical illness.

In addition, studies show that emotional dysregulation is a major reason behind suicidal behavior, and it is closely linked to poor general health. According to Rogante et al. (2024), people with poor

physical and mental health frequently struggle to control their emotions. This lack of emotional regulation makes them more vulnerable to suicide risk.

Furthermore, the relationship between general health and suicide can be explained through the biopsychosocial model, which posits that mental health and physical health originates from biological, psychological, and social phenomena (Engel, 1977). Poor physical health may reduce resilience, limit social engagement, and impair cognitive functioning, thereby increasing vulnerability to mental health disorders and suicidal behavior.

Substance use is a significant risk factor for suicidal behavior and is frequently comorbid with mental health disorders. Hawton et al. (2018) found that substance use increases suicide risk through impaired judgment, increased impulsivity, and emotional dysregulation. These effects reduce the individual's ability to manage distress and increase the likelihood of acting on suicidal thoughts. According to a 2015 survey by the Substance Abuse and Mental Health Services Administration, 1.4 million people over the age of 18 made nonfatal suicide attempts, and 9.8 million people seriously considered suicide in the previous 12 months (Piscopo et al., 2016)

Substance use is an independent risk factor for suicidal behavior. Disinhibition may result from acute or chronic drug abuse that causes impairment of judgement, decreased impulse control, and disruption of neurotransmitter pathways, leading to suicidal tendencies. In addition, drug abuse can lead to neurotoxic damage and other serious medical conditions by placing physiological and metabolic stress on the body. This is especially important in older populations with higher rates of chronic medical comorbidities and neurological disorders, which make them less physiologically resilient. Suicide is most closely linked to mental illness in older populations, followed by substance use disorders, particularly alcohol use disorder. Therefore, compared to young people, older adults are more likely to engage in suicidal behavior (Pompili et al., 2010).

Substance use can function both as a coping mechanism and as a risk factor. Esposito-Smythers and Spirito (2004) suggest that individuals may use substances to cope with negative emotions, but this behavior ultimately exacerbates psychological distress and increases suicide risk. Additionally, chronic substance use contributes to physiological and neurological damage, further impairing mental health and decision-making processes.

2.7 Social Support, Suicide, GAD, PTSD, and MDD

According to Cohen & Wills (1985) stress-buffering hypothesis, social support improves coping skills, emotional control, and resilience, all of which lessen the detrimental consequences of stress. Depression, anxiety, and suicide thoughts are less common among people who believe they have more support from friends, family, or the community. In high-stress contexts like universities, where students frequently deal with academic, social, and personal difficulties, this protective impact is especially crucial (Hefner & Eisenberg, 2009).

Suicidal behavior and social support are strongly inversely correlated, according to empirical studies. For instance, Kleiman and Riskind (2013) discovered that people who felt more social support had considerably fewer suicide thoughts. Furthermore, social support has been demonstrated to directly lessen depressive symptoms by boosting self-esteem and creating a sense of belonging, which lessens susceptibility to suicide thoughts (Gariépy, Honkaniemi, & Quesnel-Vallée, 2016).

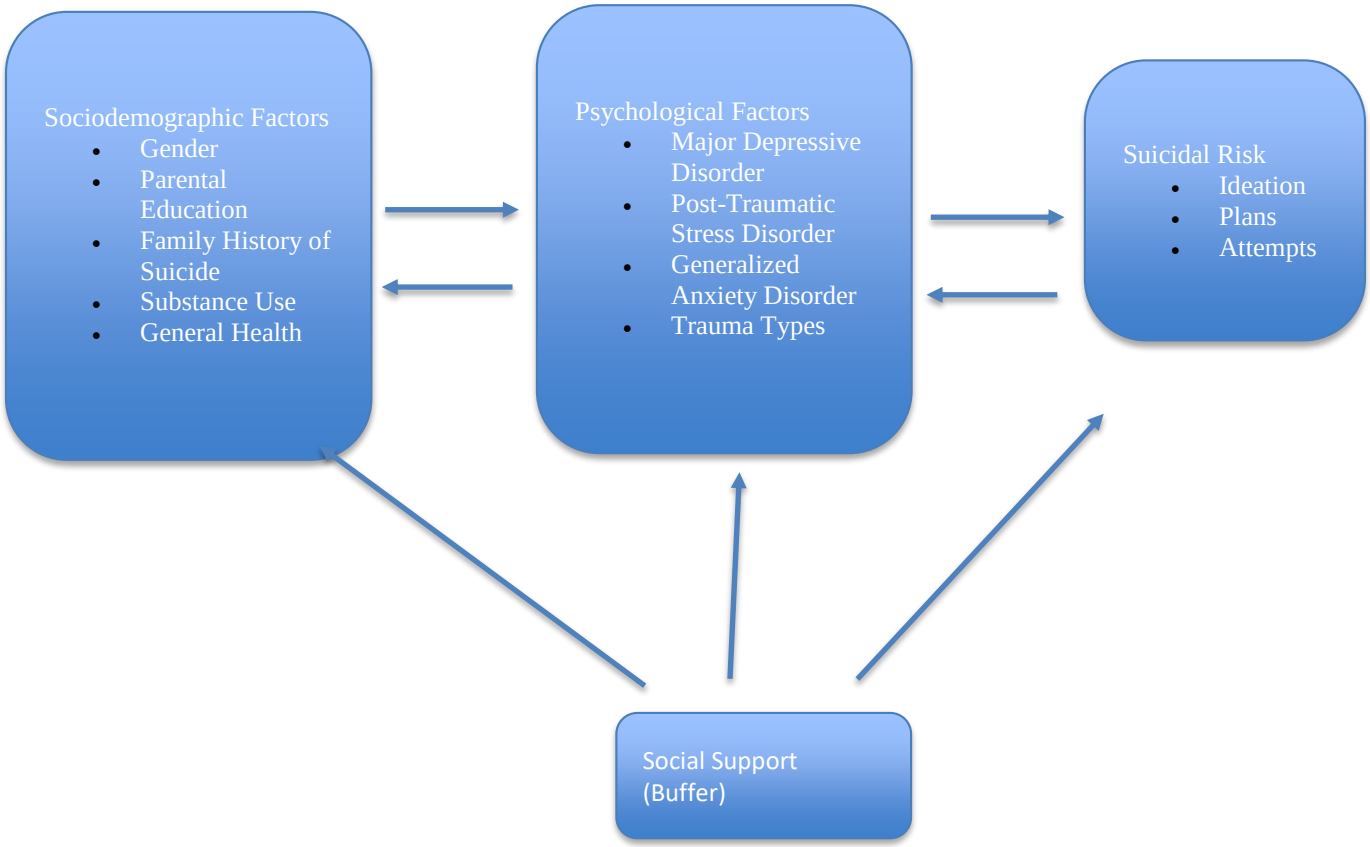
Anxiety and social support are known to be related. Anxiety levels can be lowered by social support because it can improve emotional control, lessen perceived threat, and offer comfort in trying circumstances (Peter et al., 2016). People who have robust support networks are more likely to use adaptive coping mechanisms and are less likely to experience the physiological arousal and persistent worry that are linked to anxiety disorders. According to Hefner and Eisenberg (2009), people who lack supportive relationships are more likely to experience loneliness, negative cognitive patterns, and emotional distress, which is why low levels of social support have been associated with an increase in depressive symptoms.

Healing or perseverance is the improvement in rebuilding of one's sense of self and interpersonal relationships. According to the "social causation" theory (Johnson, Cohen, Dohrenwend, Link, & Brook, 1999), social resources such as interpersonal support indicate general well-being, while a lack of social resources anticipates mental health issues. Theories have been put forth to explain support health on this theory. according to the stress-buffering paradigm, people were only (or mostly) shielded during traumatic experiences by altering the demands of the circumstances and by changing the meaning of the trauma (Cohen & Wills, 1985).

Overall, the literature indicates that social support serves as a significant protective factor against depression, anxiety, and suicidal ideation, primarily through enhancing emotional resilience and reducing feelings of isolation. However, its influence on PTSD appears to be more nuanced. requiring the integration of trauma-focused interventions to effectively address trauma-specific symptoms

2.8 Conceptual Framework

This conceptual model explains the relationship between suicide risk, social support, psychological variables, and sociodemographic factors. Psychological factors in this paper comprise Major Depressive Disorder (MDD), Post Traumatic Stress Disorder (PTSD), Generalised Anxiety Disorder (GAD) and trauma types that could make individuals vulnerable to suicidal risk. Socio demographic factors such as gender, parental education, family history of suicide, substance use and general health are included since these factors can impact on experiences, access to support and susceptibility to mental health problems. Additionally, by providing emotional, social, and material resources, social support is thought to act as a buffer against the negative impacts of psychological challenges.



Chapter 3: Methods

3.1 Research design

The study used a correlational design and implemented cross-sectional approach. Correlational design is selected because it is a type of non-experimental design that is used to compare the degree to which two or more variables are associated (Cook & Cook, 2008. The study used a non-experimental and analytical (inferential) method since it tries to demonstrate associations and potential predictive linkages (inference links) between PTSD, MDD, GAD, suicide risk, and sociodemographic factors, rather than testing the effects of an experimental treatment (Nwabuko, 2024). This study is cross-sectional, in which Setia (2016) states that it allows for the simultaneous evaluation of exposures and outcomes at a single moment in time, making it effective for discovering connections in a specified population. In this study, as it is cross-sectional, data is collected from students using standardized questionnaires and sociodemographic questions.

3.2 Population and Sampling

The selected institution for conducting this research is Addis Ababa University, and the target population is among regular undergraduate students. The data collected from Addis Ababa University's main registrar's office indicates that the number of students enrolled in the regular program in 2017 E.C. is 27,517. There are 12 colleges.

In this study, a non-probability sampling technique was implemented, specifically Convenience and Snow-ball sampling is used. This method was chosen because it is suitable for studies where participants do not have an equal probability of selection (Rahman, 2023). This is because, the researcher could not find the list of students and their contact information from the registral due to confidentiality.

Convenience sampling was used to recruit participants who were accessible and who could be reached by going to the college. While snowball sampling was used to reach additional eligible participants through referrals from initial respondents (Etikan, 2016; Ting et al., 2025). In this research, the researcher contacted the 12 colleges from Addis Ababa University, and collected the contact information of students. Then through those contacts, the researcher collected the data. The participants were also asked to refer another student who fits the criteria. This approach

facilitated efficient recruitment within the study context and helped to access participants who met the inclusion criteria. Although Cochran's formula indicated a recommended minimum sample size of approximately 384 participants, the final sample consisted of 215 respondents. This reduction was due to practical constraints, including limited accessibility to participants and finding voluntary participants.

Inclusion and Exclusion Criteria

Inclusion Criteria

1. Enrollment Status: In this study, only students who are currently enrolled in the regular undergraduate program at Addis Ababa University will be included. This is because it assures a homogeneous group in terms of academic background and developmental stage.
2. Age: Participants must be above the age of 18.

3.3 Data Collection Instrument

For the measurement of variables, a standardized questionnaire and a sociodemographic questionnaire was used (see Appendix section B). The first part of the instruments is socio-demographic questions. Sociodemographic questions contain questions such as age, gender, place of birth, current residence, educational background, family socioeconomic status, and some personal background if there is suicidal risk with their close family members and family psychiatric history. Socio-demographic questions are provided to see the characteristics of the participant

The second part of the instrument is the Suicidal Behaviors Questionnaire–Revised (SBQ-R), which assesses Suicidal risk (See Appendix section C). The scale was developed by Osman et al. (2001). SBQ-R has 4 questions. The questions are on lifetime suicide ideation and attempts, frequency of suicidal ideation over the past year, communication of suicidal intent, and future likelihood of suicidal behavior. The answers for the questions vary based on the questions; however, all of the questions are Likert type. For instance, when measuring lifetime suicidal ideation and intent, it uses a Likert scale of 1 (*never*) to 4 (*I have attempted to kill myself and really hoped to die*). Some answers have a letter subpart (e.g., 3a, 3b). In this, while the question scores remain the same, they are analyzed differently. A score of seven or above in the general population and eight or above in clinical samples suggests elevated suicide risk.

The third part of the instruments is the Beck Depression Inventory (BDI), which has 21 questions, and is be administered, which measures MDD (see Appendix section D) The scale was developed by Beck et al. in 1961. The scale has 21 themes (for instance, mood, self-hate, pessimism, fatigue, sleep, weight, …). It uses Likert scale questions and has an answer from 0 to 3. For instance, to measure mood it ranges from 0 (*I do not feel sad*) to 3 (I *am so sad or unhappy that I can't stand it).* The answers for the questions vary based on the questions. Some answers have a letter subpart (e.g., 2a, 2b). In this, while the question scores remain the same, they are analyzed differently.

The fourth part of the instruments is the Beck Anxiety Inventory, which has 21 questions, and will be administered. Which measures GAD (see Appendix section E). The scale was developed by Beck et al. in 1988. The scale has 21 themes (for instance, Numbness or tingling, feeling hot, Fear of the worst happening, Heart pounding or racing, terrified, …) It uses Likert scale questions and has an answer from 0 to 3. For instance, to measure fear of the worst happening, it ranges from 0 (*I do not have a fear of the worst happening*) to 3 (I *severely have a fear of the worst, and it bothers me a lot*).

The fifth part of the instrument measures PTSD and called the PTSD Scale-Self Report for DSM-5 PDS-5 (Foa, 2013), it has 24 questions (see Appendix section F). This scale was developed by Foa (2013). The scale has two sections, which are the trauma screening statement and the PTSD diagnostic scale test for stress. The scale meets the criteria of DSM-5 and displays the stress level of the participants by using the Likert scale format. The PTSD scale has two sub-sections in addition to the PTSD diagnostic assessment. The first sub-section assesses distress and interference of the trauma among the participants, and the second subsection assesses the symptoms and duration of the stress among the participants. The PSD-5 scale uses a Likert scale from 0 (not at all) to 4 (severe / 6 or more times in a week) for questions like *"Bad dreams or nightmares related to the trauma."* The PSD-5 demonstrated internal consistency (with Cronbach's $\alpha = .95$) and test reliability ($r = .90$), and it also presented a decent convergent validity with the PTSD checklist definite version ($r = .90$) (Foa et al., 2016).

3.4 Data Collection Procedure

In the beginning of data collection, the researcher contacted the School of Psychology and received a support letter to contact mental health institutions. This is aiming to collaborate with the centers,

to support participants if they feel any kind of discomfort during and after their participation on the study. Then the researcher contacted 2 institutions (Aha psychological services and Erq mead service for all) and Addis Ababa University Student Development and Success Bureau and got a support letter. Then the researcher applied for ethical clearance at the Research Ethics Committee at the School of Psychology and received an ethical clearance for the planned research (Ethical Clearance attached in Appendix Section G).

For this research, the data was collected electronically using Google Forms. This is because Google Forms is a secure and accessible online platform. In this research, an online approach is used; this is because online data collection ensures accessibility and minimizes logistical challenges. Skipping items is allowed in the form because the Google Form is marked as not 'required.' At the end of the form, the participant received a thank you message and the researcher's contact information, along with contact information for mental health centers, including the university counselling center. In this research the counselor contacted 3 mental health facilities and made a collaboration to ensure participants' safety. If they felt any psychological distress, they were provided information to contact psychological centers. From the participants only one participant called the researcher, and the researcher informed her about the mental health institution that participant could go from the already contacted list. Then followed up and the participant went to the center that was recommended.

In this study, the researcher contacted each college's administrative offices or academic coordinators to identify active class representatives. The researcher collected the class representatives' phone numbers to facilitate communication. Then, the Google Form link was sent via the official Telegram class group, which is frequently used by students for academic discussion to collect data. In the Telegram group, a brief introductory message with the Google Form link, the study's objective, completion time, ethicality, and the researcher's contact information in case of questions or concerns was shared. In addition, students were also asked to share the link with other students in their networks.

In the Google Form it has six sections. The first section is the consent form. In this section the consent explains the nature of the study, voluntary participation, and ethical considerations such as confidentiality and anonymity. The second section is socio-demographic questions, the third section is the Suicidal Behaviors Questionnaire–Revised (SBQ-R), the fourth section is the Beck

Depression Inventory, the fifth section is the Beck Anxiety Inventory, and the sixth section is the PTSD Scale-Self Report (PDS-5). Then the data was stored electronically, ready for analysis.

3.5 Data Analysis

As it used a quantitative design, participants' responses are numerically scored, coded, and analyzed using statistical software, SPSS. Before the analysis, the data were screened, coded, and checked for accuracy. Both descriptive and inferential statistical techniques were used. Descriptive statistics including frequencies, percentages, means, standard deviations, and skewness were computed. With this analysis an overall descriptive statistic about suicidal risk and PTSD, depression, and anxiety among university students is presented.

The relationship between PTSD, depression, anxiety, and suicidal risk were computed by Pearson product-moment correlation analysis was conducted. The influence of trauma exposure type on PTSD, GAD, MDD, and suicide risk. To compare mean differences between trauma types Analysis of Variance (ANOVA) was conducted. After the ANOVA results, results were examined using Tukey post hoc tests to identify group differences and determine which trauma types significantly differed by PTSD, anxiety, depression, and suicidal risk.

To identify the role of socio-demographic and social factors in predicting suicidal risk, multiple regression analysis was employed. Variables such as gender, parental education, social support, substance use, general health, and psychiatric history were entered into the model as predictors, while suicide score was treated as the dependent variable. Additionally, independent samples t-tests were conducted to examine mean differences in suicide scores based on categorical variables such as gender and substance use.

To determine whether general health predicts suicidal risk, linear regression analysis was conducted with general health as the predictor variable and suicide score as the outcome variable. It is assumed that general health predicts weather there is a suicidal risk or not. variables were entered as general health as an independent variable and suicidal risk as a dependent variable. In the present study, the statistical significance was assessed at $p < .05$, which is consistent with the standard threshold commonly used in statistical analysis (Conn et al., 2014)

3.6 Ethical Consideration

In this research, ethical clearance from Addis Ababa University, School of Psychology, is granted. The researcher contacted the School of Psychology and received a support letter to contact mental health institutions. This is aiming to collaborate with the centers, to support participants if they feel any kind of discomfort during and after their participation on the study. Then the researcher contacted 2 institutions (Aha psychological services and Erq mead service for all) and Addis Ababa University Student Development and Success Bureau and got a support letter. Then the researcher applied for ethical clearance at the Research Ethics Committee at the School of Psychology and received an ethical clearance for the planned research (Ethical Clearance attached in Appendix C).

During the research all participants were informed well electronically of what the aim of the research is and the process of the research this is to ensure participants know what to expect. participants were also told that they can withdraw from the research at any time and for any reason. Furthermore, participants got the option of omitting questions they do not want to answer. To clarify, there were no questions involved that deliberately mislead participants. In addition to that, before conducting the research, all participants participated voluntarily without being influenced, intimidated, or manipulated. on the research. To keep confidentiality, the researcher will not disclose any content of the information gathered to a third party. In addition, the information gathered will be used only for the purpose for which participants have given their consent to.

Chapter 4: Analysis and Discussion

4.1 Analysis

Socio-demographic characteristics

Socio-demographic information is summarized in Table 1 below. In the study, 215 participants were included; 97.2% were between the ages of 18 and 24.1.9% female, and 58.1% male. Regarding college, the questionnaires were sent to different colleges. The biggest percentage of respondents was from the College of Business and Economics (34.0%), with the College of Social Sciences coming in second (18.1%). According to their year level, third-year students (38.1%) and fourth-year students (28.4%) made up the majority in terms of year of study. Only a small percentage of fifth and sixth-year students took part, but first and second-year students together made up about 30%.

Regarding GPA, 38.1% of the participants had a GPA between 3.00 and 3.49, and more than half (51.6%) reported a GPA between 3.50 and 4.00. In terms of social support, the majority of respondents said that they had support; 58.6% said they had strong support, 30.7% said they had some support, and only 10.7% said they had little or no support.

In terms of substance use, 92.6% of participants said they did not use substances, while 7.4% said they used at least one of these substances. 92.6% of respondents said they had no personal history of mental illness, while 7.4% said they had. The majority of participants self-rated their health as very good (40.9%), excellent (26.0%), or good (24.7%), while only a small number indicated fair (5.6%) or poor (2.8%) health.

In regard to family history, the majority of participants (63.3%) said they had married parents, followed by single-parent households (28.8%) and divorced parents (7.9%). In terms of parental education, a significant portion of mothers (32.1%) and fathers (34.0%) had completed college or education. Some parents had formal education, especially mothers (20.5%). The majority of participants (91.2%) stated that neither parent had a history of mental illness, but only 8.1% said that one or both parents had. Participants perceived social status was as follows: 10.3% rated themselves in the low category (levels 1–3), (47.0%) perceived themselves as having a middle social status (levels 4–6), while (42.7%) reported a high social status level.

Table 1: Sociodemographic Characteristics of Participants

Variable	Category	n (%)
Age	18–24 years	209 (97.2)
	25–29 years	6 (2.8)
Gender	Male	125 (58.1)
	Female	90 (41.9)
Year of Study	First and second year	65 (30.2)
	Third and fourth year	143 (66.5)
	Fifth and sixth year	7 (3.3)
GPA	Below 2.50	5 (2.4)
	2.50–2.99	17 (7.9)
	3.00–3.49	82 (38.1)
	3.50–4.00	111 (51.6)
Social Support	Strong	126 (58.6)
	Moderate	66 (30.7)
	Low or none	23 (10.7)
Substance Use	Yes	16 (7.4)
	No	199 (92.6)
Psychiatric History (Self)	Yes	16 (7.4)
	No	199 (92.6)
Self-Rated Health	Excellent or very good	144 (66.9)
	Good	53 (24.7)
	Fair or poor	18 (8.4)
Parental Marital Status	Married	136 (63.3)
	Single or divorced	79 (36.7)
Father’s Education	Up to secondary school	88 (40.9)
	College, university, or postgraduate	117 (54.5)
	Do not know	5 (2.3)
Mother’s Education	Up to secondary school	114 (53.0)
	College, university, or postgraduate	92 (42.8)
	Do not know	5 (2.3)
Parental Psychiatric History	None	196 (91.2)
	Any	19 (8.8)
Subjective Social Economic Status	Low (levels 1–3)	22 (10.3)
	Middle (levels 4–6)	101 (47.0)
	High (levels 7–10)	92 (42.7)

Prevalence of the MDD, GAD, PTSD, and Suicidal Risk

The prevalence of MDD, GAD, PTSD, and suicidal risk is summarised in **Table 2**. For MDD (n = 171), 49.1% (n = 84) of participants experienced at least mild depressive symptoms, while 50.9% reported minimal symptoms. For GAD (n = 179), 51.4% (n = 92) had at least mild anxiety symptoms, whereas 48.6% reported minimal symptoms. Regarding suicidal risk (n = 209), 28.7% (n = 60) of participants were at risk, while 71.3% had no risk. Finally, PTSD (n = 42) was identified in 9.5% (n = 4) of respondents, although the high level of missing data (80.5%) should be noted.

Table 2: Prevalence of MDD, GAD, PTSD, and Suicidal Risk

Variable	Category	Frequency (n)	Valid Percent (%)
MDD	Minimal	87	50.9
	Mild	45	26.3
	Moderate	26	15.2
	Severe	13	7.6
	Total	84	49.1
GAD	Minimal	87	48.6
	Mild	35	19.6
	Moderate	27	15.1
	Severe	30	16.8
	Total	92	51.4
Suicidal Risk	No risk	149	71.3
	At risk	60	28.7
	Total	60	28.7
PTSD	No PTSD	38	90.5
	PTSD present	4	9.5
	Total	4	9.5

Independent T-test Gender and Suicide risk

An independent samples t-test was conducted to examine whether suicide risk scores differed between male and female participants, results are presented in Table 3 below. There was a statistically significant difference in suicidal risk scores between genders, $t(152.64) = -4.322$, $p < .001$. Females ($M = 6.90$, $SD = 4.01$) reported higher suicide risk than males ($M = 4.73$, $SD = 2.90$).

An independent samples t-test was conducted to examine whether suicide risk scores differed between participants who reported substance use and those who did not. The results showed that participants who used substances (M = 8.33, SD = 4.15) tended to have higher suicide risk scores than those who did not use substances (M = 5.45, SD = 3.45). This difference was statistically significant, t(207) = 3.07, p = .002.

Table 3: Independent t-Test of Gender, Substance Use, and Suicide Risk

Variable	Group	N	Mean	SD	T	df	P	Mean Difference
Gender								
	Male	120	4.73	2.90				
	Female	89	6.90	4.01	-4.32	152.64	< .001	-2.17
Substance Use								
	Yes	15	8.33	4.152				
	No	194	5.45	3.454	3.071	207	.002	2.885

ANOVA on Suicide risk, MDD, GAD, and PTSD

A one-way Analysis of Variance (ANOVA) was conducted (presented in table 4) to examine whether there were significant differences in suicide risk, MDD, GAD, and PTSD scores across the trauma type groups (no trauma / illness / physical assault / sexual assault / war / child abuse / accident / disaster). The results revealed statistically significant differences in suicide risk scores, F(7, 201) = 3.417, p = .002, MDD scores, F(7, 163) = 3.463, p = .002, GAD scores, F(7, 171) = 5.321, p < .001, and PTSD scores, F(5, 36) = 5.901, p < .001. Since the ANOVA results were statistically significant, post hoc analyses (presented in Table 4) were conducted to identify which specific group means differed significantly from one another.

All of the primary variables consistently exhibit significant differences, according to the Tukey post hoc analysis. Sexual assault victims scored considerably higher on Suicide risk than those who had no trauma (p = 0.009), a serious illness (p = 0.003), or military combat (p = 0.049).

Significant differences were found for MDD between the "none" group and both physical assault ($p = 0.020$) and sexual assault ($p = 0.013$), suggesting that individuals who experienced these traumas had higher levels of depression. The differences were even more noticeable for GAD, where the "none" group scored significantly lower than both sexual assault ($p = 0.003$) and physical assault ($p < 0.001$). The post hoc results for PTSD indicate that individuals who encountered physical assault exhibited significantly elevated PTSD scores relative to all other trauma categories, including no trauma, severe illness, sexual assault, military combat, and child abuse (all $p < .05$).

Suicide risk scores differ among trauma exposure groups, from lower to higher means, according to the Tukey HSD homogenous subgroup. The participants with the highest mean suicide risk score ($M = 8.19$) were those who had been sexually assaulted. At the same time, those who had undergone military combat or a serious illness had the lowest suicide scores.

Table 4: ANOVA Results for Suicide Risk, MDD, GAD, and PTSD Across Trauma Types

Outcome Variable	Sum of Squares (Between)	df	Mean Square	F	p
Suicide Risk	282.756	7	40.394	3.417	.002
MDD	2591.001	7	370.143	3.463	.002
GAD	5283.152	7	754.736	5.321	< .001
PTSD	3832.390	5	766.478	5.901	< .001

Table 5: Tukey Post Hoc Comparisons of Trauma Types on Suicide Risk, MDD, GAD, and PTSD

Dependent Variable	Group (I)	Group (J)	Mean Difference (I–J)	Std. Error	Sig.	95% CI Lower	95% CI Upper
Suicide Risk	None	Sexual assault	-3.017	0.832	.009	-5.56	-0.47
	Serious illness	Sexual assault	-3.720	0.954	.003	-6.64	-0.80
	Sexual assault	Military combat	3.729	1.213	.049	0.01	7.45
MDD	None	Physical assault	-8.623	2.556	.020	-16.47	-0.77
	None	Sexual assault	-9.544	2.717	.013	-17.89	-1.20
GAD	None	Physical assault	-13.277	2.888	.000	-22.14	-4.41
	None	Sexual assault	-12.707	3.199	.003	-22.53	-2.89
	Physical assault	Child abuse	16.739	4.917	.018	1.65	31.83
	Sexual assault	Child abuse	16.169	5.106	.038	0.50	31.84
PTSD	None	Physical assault	-37.278	7.107	.000	-58.66	-15.90
	Serious illness	Physical assault	-33.542	7.716	.001	-56.76	-10.33
	Sexual assault	Physical assault	-28.867	8.323	.016	-53.91	-3.83
	Military combat	Physical assault	-35.867	8.323	.002	-60.91	-10.83
	Child abuse	Physical assault	-39.000	9.306	.002	-67.00	-11.00

Correlation among Suicide risk, MDD, GAD, and PTSD

A correlation analysis was conducted to see the relationship between suicide risk, MDD, GAD, and PTSD which is presented in table 6. According to the correlation report, all of the variables have a substantial and positive connection with suicide. Suicide risk and MDD have a substantial positive relation ($r = .635$, $p < .01$). Suicide risk is also strongly correlated with GAD ($r = .535$, $p < .01$) and PTSD symptoms ($r = .592$, $p < .01$). Furthermore, there is a strong positive correlation

between MDD and GAD (r = .844, p < .01) and GAD and PTSD (r = .899, p < .01), and a moderately positive correlation between MDD and PTSD (r = .559, p < .01).

Table 6: Correlations Among Suicide Risk, MDD, GAD, and PTSD

Variables	Suicide Risk	MDD	GAD	PTSD
Suicide risk	1			
MDD	.635**	1		
GAD	.535**	.844**	1	
PTSD	.592**	.559**	.899**	1

MDD, GAD, and PTSD as predictors of Suicide risk

A linear regression analysis was conducted to examine whether MDD, GAD, and PTSD symptoms predict suicide risk. The results showed that all three variables significantly and positively predicted suicide risk. MDD was the strongest predictor (β = .635), followed by PTSD (β = .592) and GAD (β = .535), indicating that higher levels of psychological distress are associated with increased suicide risk.

Table 7: Linear Regression Analysis of MDD, GAD, and PTSD as Predictors of Suicide Risk

Variable	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
MDD	0.218	0.020	0.635	10.684	<.000
GAD	0.151	0.018	0.535	8.375	<.000
PTSD	0.118	0.025	0.592	4.641	<.000

Sociodemographic factors, MDD, GAD, PTSD as Prediction of Suicidal Risk

The regression results presented in Table 8, indicate that certain variables significantly predict the outcome, whereas others do not. General health is the most important predictor (β = 0.494, p <

.001), which means that higher outcome scores are linked to better health. The father's education (β = 0.232, p = .024) and the availability of social support (β = 0.147, p = .035) also have positive effects on the outcome. In addition, Gender and family suicide history significantly predicted suicide scores. Gender was a significant predictor (β = .171, p = .010), while family suicide history also significantly predicted suicide scores (β = −.147, p = .027).

Table 8: Multiple Regression Analysis of Sociodemographic and Psychosocial Predictors of Suicide Risk

Variable	B	Std. Error	Beta	T	Sig.
Constant	7.378	3.494	—	2.112	.036
General health	1.082	.238	.297	4.540	.000
Father's education level	.834	.250	.326	3.337	.001
Gender	1.246	.480	.171	2.597	.010
Family suicide history	-1.778	.799	-.147	-2.226	.027
Alcohol/substance use	-1.544	.896	-.112	-1.723	.087
Social ladder position	-.139	.118	-.074	-1.186	.237
Social support	.399	.341	.076	1.170	.244
Personal psychiatric history	-.893	.856	-.065	-1.044	.298
Parental marital status	-.320	.405	-.051	-.790	.431
Mother's education level	-.181	.239	-.071	-.756	.450
Parents psychiatric history	.195	.343	.039	.570	.569
GPA	.158	.304	.033	.520	.604
Age	-.676	1.420	-.032	-.476	.635

The results of the analysis are presented in Table 9, Suicide scores significantly predicted MDD (β = .635, $p < .001$). Similarly, suicide scores significantly predicted GAD (β = .535, $p < .001$) and PTSD symptoms (β = .592, $p < .001$), indicating that higher suicide scores are consistently associated with higher levels of psychological distress across all three mental health outcomes.

Linear regression analyses were conducted to examine whether social support predicts MDD, GAD, and PTSD. Social support significantly predicted MDD ($\beta = -0.266$, $p < .001$) and GAD ($\beta = -0.218$, $p = .003$), indicating that higher perceived social support is associated with lower levels of MDD and GAD symptoms. However, social support did not significantly predict PTSD ($\beta = -0.135$, $p = .395$)

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Table 9: Linear Regression Analyses of Suicide Risk and Social Support as Predictors of MDD, GAD, and PTSD

	B	**SE**	**B**	**T**	**P**
Suicide					
MDD	1.853	0.173	.635	10.684	< .001
GAD	1.890	0.226	.535	8.375	< .001
PTSD	2.966	0.639	.592	4.641	< .001
Social Support					
MDD	4.306	1.198	.266	3.594	.000
GAD	4.018	1.355	.218	2.966	.003
PTSD	3.568	4.151	.135	.859	.395

4.2 Discussion

Introduction

The present study examined the relationships between Post-Traumatic Stress Disorder (PTSD), Major Depressive Disorder (MDD), and Generalized Anxiety Disorder (GAD) symptoms and their influence on suicidal risk among college students. It also investigated whether general health predicts suicide risk and how trauma exposure and socio-demographic factors contribute to GAD, MDD, PTSD, and skewed suicidal risk (M = 5.66, SD = 3.576). In this research, most participants reported lower symptoms on PTSD, GAD, MDD, and Suicidal risk.

With a mean of 5.66 (SD = 3.576) Suicide risk scores ranged from 3 to 17. This suggests that the majority of participants reported lower scores with fewer higher values. With a mean of 11.90 (SD = 10.851) the MDD scores ranged from 0 to 47, indicating that the majority of participants had comparatively lower MDD scores with fewer higher scores. With a mean of 12.31 (SD = 12.882) GAD scores ranged from 0 to 55, showing a similar trend where lower scores were more common and higher scores were less frequent. PTSD scores ranged from 2 to 64, with a mean of 8.81 (SD = 14.406) and a high positive skewness of 2.735 the majority of participants had low scores.

Trauma Exposure and Psychological Outcomes

The findings indicate that trauma exposure significantly influences psychological outcomes, particularly GAD and suicide risk. Participants exposed to physical assault (M = 20.86) and sexual assault (M = 20.29) reported the highest GAD scores. Specifically, the difference between “none” and physical assault was highly significant (, $p < .001$), while the difference between “none” and sexual assault was also significant ($p = .003$). In addition, the comparison between physical assault and child abuse was statistically significant ($p = .018$). Whereas those exposed to child abuse reported comparatively lower scores (M = 4.13). Post hoc analyses further revealed that sexual assault was significantly associated with higher suicide scores compared to no trauma ($p = .009$), serious illness ($p = .003$), and military combat ($p = .049$).

These results demonstrate that trauma type is a critical determinant of psychological severity, with interpersonal trauma showing stronger associations with adverse mental health outcomes than non-interpersonal trauma. This pattern is consistent with evidence showing that interpersonal trauma, particularly sexual and physical assault, is more strongly linked to PTSD, MDD, and suicidality than

accidental or illness-related trauma (Kessler et al., 2017). A significant correlation between sexual assault and college students' lifelong suicidal thoughts and attempts has also been reported (Dworkin, DeCou, & Fitzpatrick, 2022). According to the findings of another study, the majority of persistent PTSD symptoms in cases of intimate partner abuse may be explained by the severity of sexual violence (Bennice, Resick, Mechanic, & Astin, 2003).

According to Hovens et al. (2015), stress-related depression, which matches the definition for major depressive disorder, can be either caused directly or indirectly by mental health issues. Previous research indicates that 61% of patients with first-episode depression and 51% of patients with recurrent depression had recent or childhood trauma, including traumatic experiences in childhood. Overall, these results support the body of research on trauma that indicates interpersonal trauma has more severe and long-lasting psychological effects than non-interpersonal trauma like accidents or disease. The finding also emphasize that it is important to take trauma type into account when evaluating mental health issues (Hovens et al., 2015).

Gender differences and suicidal risk

In this research result, it was highlighted that, significantly, female scores (M = 6.90), on suicidal risk are higher than that of male scores (M = 4.73), ($p < .001$). This finding is consistent with the WHO (2021) report, which reported suicidal ideation and attempts are higher in females, while males have higher rates of suicide. This means that gender-wise, even if individuals are facing similar psychological distress, they could have different responses. According to Mahalik et al. (2003), females are more likely to figure out psychological distress, seek care, and disclose mental health problems. On the other hand, because of culturally reinforced standards of emotional control and masculinity, men frequently repress their emotions.

Men are assumed to be self-reliant and firm when it comes to suicidal behavior. Additionally, they are hesitant to acknowledge when they need help because they perceive it as a show of weakness (Murphy, 1998). Women are quick to accept help, appreciate interdependence, and seek counsel from peers. When making judgements in a relationship context, women consider a number of issues and feel freer to change their minds. It has been reported that women are empowered and protected against suicide by their distinct differences from men. Men's suicide risk variables are different from women's suicide preventive factors (Murphy, 1998). This result could potentially highlight the need for suicide prevention strategies to be

gender-sensitive, incorporating different emotional communication styles, stigma reduction strategies, and tailored intervention approaches for male and female students.

Substance Use and Suicide risk

Substance use was significantly associated with higher suicide scores (p = .002), with users reporting higher mean scores (provide score here) than non-users (provide score here). This finding is consistent with studies showing that substance use significantly increases suicide risk through impulsivity, emotional dysregulation, and impaired cognitive functioning (Hawton et al., 2018). The prevalence of lifetime suicide attempts among patients with substance addiction are reported to be between 21% and 42%. Substance use independently increases the risk of suicidal behavior. Drug misuse can also cause physiological and metabolic stress, which can result in neurotoxic damage and other serious health issues. This is especially important for older people since they have more chronic medical comorbidities and neurological illnesses, which make them less physiologically resilient (Blow, Brockmann, & Barry, 2004).

According to the findings of another study, substance abuse increases the statistical risk of suicidal behavior in young people's clinical and community groups (Esposito-Smythers & Spirito, 2004). Due to its psychopharmacological effects on the brain, alcohol intoxication may be a proximal risk factor for suicidal behavior in troubled kids. Because substance abuse exacerbates co-occurring psychopathology and increases stress, it may also be a distal risk factor for suicidal behavior. Furthermore, among impulsive suicide attempters with a majority of externalizing symptoms, substance use may be the result of an underlying syndrome of problem behavior. On the other hand, substance use may be a coping mechanism for unpleasant emotional states in non-impulsive suicide attempters with prominent internalizing symptoms (Esposito-Smythers & Spirito, 2004). What this means is that substance use acts as a behavioral risk amplifier for suicidal ideation. Substance use increases suicide risk by lowering cognitive and emotional barriers that typically prevent individuals from acting on suicidal thoughts during distress.

Relationship between Suicide Risk, PTSD, MDD, and GAD

The correlation analysis demonstrated strong and statistically significant relationships among Suicidal risk, MDD, GAD, and PTSD. Specifically, suicide was strongly associated with MDD ($r = .635$, $p < .01$), GAD ($r = .535$, $p < .01$), and PTSD ($r = .592$, $p < .01$), suggesting that increases of emotional distress are meaningfully linked to higher suicidal ideation. These results are consistent with epidemiological research

done by Riera-Serra et al. (2024); the result indicated that patients with depressive disorders are predisposed to suicide risk.

Similarly, strong positive relationship between MDD and suicide risk was reported by Beck (2019). He reported that MDD reduces future-oriented thoughts and increases perceived entrapment. Future-oriented thinking and perceived entrapment are central to suicidal behavior (Beck et al., 2019).

In this research, anxiety and suicidal risk also showed a correlation ($r = .535$). Anxiety disorder have been associated with increased suicidal risk because they increase emotional, biological, and cognitive stress alteration (Nock et al., 2019). PTSD also showed a correlation with suicide ($r = .592$); this is because exposure to a traumatic event that causes intrusion, avoidance, negative alterations in mood and cognition, and alterations in arousal and reactivity is connected to suicidal thoughts and attempts (Panagioti et al., 2020).

In this research, a correlation was indicated between the variables MDD, GAD, and PTSD. MDD and GAD had a strong correlation ($r = .844$). There was a significant correlation between anxiety and PTSD ($r = .899$). Moreover, there was a moderate correlation ($r = .559$) between MDD and PTSD. GAD and PTSD share common symptoms, which are hypervigilance, sleep disturbance, intrusive memories, and heightened physiological arousal (Bleich et al., 1997). Additionally, neurobiological research showed that dysregulation in fear-processing circuits, including elevated amygdala activation and decreased prefrontal control, supports persistent threat perception in both PTSD and anxiety (Kredlow et al., 2022).

The strong positive correlation between MDD and GAD ($r = .844$) tends to confirm that MDD and GAD have a high comorbidity, and symptoms develop alongside one another when the individual is in psychological distress. The relationship between depression and trauma suggested that depression could be a result of trauma alongside PTSD. Trauma progresses from anxiety-driven symptoms to depression and loneliness (Lupien et al., 2022).

General Health Predicting Suicide risk

In the regression analysis, general health was found to be the strongest predictor for suicidal risk ($\beta = 0.494$, $p < .001$). This indicates lower general health is strongly correlated with higher suicidal risk. This finding highlights the assumption that there is an interdependence of physical health and mental health. Research findings also acknowledge this result (McCloughen, Foster, Huws-Thomas, and Delgado, 2012).

This can be explained through the biopsychosocial model**,** which indicates that the interplay of biological, psychological, and social factors influences mental health outcomes (Engel, 1977). Low general health diminishes Clarity in cognition, emotional resilience, and behavioral functioning, which are essential coping mechanisms in demanding situations like university life. In addition, Low general health inhibits participation in social, recreational, and intellectual activities, resulting in social isolation and a lack of belonging.

Suicidal risk is specifically linked to general health. Even after controlling for potential confounders, almost all physical health disorders raised the risk of suicide. Several specific illnesses, such as traumatic brain injury, were linked to a significant risk of suicide. Additionally, having several physical health issues significantly raised the likelihood of suicide (Ahmedani et al., 2017).

Suicidal Risk and Social Factors

In the regression analysis that was conducted to find the predictive power of socio-demographic variables for suicide ideation, it was found that father's education, social support availability, and psychiatric history are significant predictors. This indicates that suicide is beyond an individual psychological phenomenon; it extends to social contexts. This is the result of emotional development, coping mechanisms, and access to mental health resources being influenced by social networks, parental education, and family structure (Cohen & Wills, 1985).

According to the stress-buffering hypothesis, which postulates that social support reduces the negative impact of stress on mental health, social support appeared as a protective factor (Cohen & Wills, 1985). Strong social support networks potentially encourage students to ask for assistance, express how they are feeling, and get validation, all of which minimize psychological stress. According to another study, suicidal risk and social support are negatively correlated (Kleiman & Riskind, 2013; Hu et al., 2023).

Adverse youth mental health outcomes have been associated with lower parental education (Chen et al., 2022). Suicide risk was significantly predicted by parental education. Increased financial resources, better mental health awareness, and easier access to healthcare services are frequently correlated with higher parental education. On the other hand, parents with less education may be less informed and have fewer options for early intervention.

MDD, GAD, and PTSD as a predictor to Suicidal Risk

The linear regression analysis showed that MDD, GAD, and PTSD significantly and positively predicted suicide risk. MDD was the strongest predictor (β = .635), followed by PTSD (β = .592) and GAD (β = .535), It has been established that depression is the best predictor of suicide risk. Like the results obtained in the current study, the longitudinal studies on depression and suicide have found that depression is a major predictor of suicide (Holma et al., 2010). In addition, according to a meta-analysis on factors predicting suicide conducted by Franklin et al. (2017), depression related factors emerged to be some of the most critical predictors of suicidal thoughts and behaviors.

It has also been shown that PTSD is a predictor of suicide risk. According to the results of Panagioti et al. (2017), certain PTSD symptom clusters, specifically the hyperarousal symptoms, emerged to predict suicidal ideation over time significantly. Suicidal ideation in PTSD is associated with increased rates of subjective distress and disproportionally heightened rates of healthcare utilization (Chan et al.2009). GAD also emerged to be a significant predictor of suicide risk. A meta-analysis of longitudinal studies by Bentley et al. (2016) showed that anxiety disorders predict a higher risk of suicidal risk.

Suicidal Risk as a predictor to MDD, GAD, and PTSD.

The results of this study clearly demonstrate that suicide scores have strong and consistent predictive power across MDD, GAD, and PTSD. MDD ($r = .635$, $p < .001$), GAD ($r = .535$, $p < .001$), and PTSD ($r = .592$, $p < .001$) all showed statistically significant positive predictive relationships with the suicide score (all $p < .001$). Rather than functioning as a secondary outcome and an end incident, suicide rsik appears to act as a central and meaningful indicator of broader psychological distress. Individuals with higher suicide risk scores were significantly more likely to report elevated levels of MDD, GAD, PTSD -related symptoms, highlighting the strength of this relationship.

The strongest predictive effect was observed between suicide and MDD (β = .635), reinforcing the well-established link between suicidal risk and MDD (Joiner, 2005). This suggests that as suicidal behavior intensifies, depressive symptoms also increase. Furthermore, it also indicates that after a suicidal attempt there could be depression symptoms.

Importantly, suicide scores also showed strong predictive relationships with PTSD (β = .592) and GAD (β = .535), indicating that suicidality is not limited to MDD alone. This suggests that as suicidal behavior

intensifies, anxiety and PTSD symptoms also increase. Furthermore, it also indicates that after a suicidal attempt there could be PTSD and GAD symptoms. Taken together, these findings suggest that suicide risk scores should be understood as a powerful predictor of multiple forms of psychological distress.

Social Support, MDD, GAD, and PTSD

The present study examined whether perceived social support predicts MDD, GAD, and PTSD among university students. The findings revealed that social support significantly and negatively predicted both MDD ($\beta = -0.266$, $p < .001$) and GAD ($\beta = -0.218$, $p = .003$), indicating that higher perceived social support is associated with lower levels of MDD and GAD symptoms. Nevertheless, PTSD was not significantly predicted by social support ($\beta = -0.135$, $p = .395$). These results indicate that social support has a significant buffering impact on mental health issues, but it may have a limited impact on trauma-related disorders like PTSD.

Social support means being valued, respected, loved, and cared for by those in one's life. Friends, family, instructors, the community, and any social groups one belongs to are just a few examples of where to get social support. There are two types of social support: tangible aid from others or perceived social support, which evaluates people's belief in the availability of enough support when needed (Yasin & Dzulkifli, 2010).

Previous research has shown that low social support, one of the predictors of psychological difficulties, is associated with MDD, GAD, attention problems, social problems, somatic complaints, and low self-esteem issues (Haque, 2001). Social support seems to have a crucial function in promoting health and wellness and acting as a buffer against life's stresses.

In contrast, passive coping strategies (avoidance) are a risk factor for depression and anxiety, while active coping strategies and perceived social support, particularly family social support and positive reinterpretation of events, can be seen as protective factors in MDD and GAD. Therefore, we can prepare a number of intervention techniques, such as cognitive, behavioural, and social approaches, to avoid depression and anxiety based on the findings of the majority of preventive resource (Roohafza et al., 2014)

The inverse relationship between social support and MDD is consistent with literature highlighting the protective role of supportive relationships in mental health outcomes. Social support is connected to

psychological well-being through providing resources on coping with stress and enhancing a sense of belongingness and self-worth (Cohen & Wills, 1985).

The stress-buffering hypothesis states that through increasing positive coping mechanisms and lowering feelings of loneliness, social support decreases the impacts of stressful events. In the same way, a study has shown that people with strong social networks are less likely to suffer from depression symptoms, especially in stressful situations like academical issues (Hefner & Eisenberg, 2009). This study supports this research result, because the study emphasizes perceived social support is significant in minimizing symptoms of depression.

Social support and anxiety symptoms in young people are related. Adolescents who experience a lack of social support may not communicate their emotions and may exhibit more avoidant behaviors, which might result in more internalizing symptomatology. However, according to Muris (2006), youth who have protective mechanisms available are more likely to successfully cope with difficult and stressful life situations, and social support alone may not be strong enough to shield youth from stressful experiences.

Anxiety symptoms can be lowered by social support because it can improve emotional regulation, reduce perceived threat, and offer comfort in stressful situations (Taylor, 2011). Individuals with high social support are less likely to experience heightened anxiety and physiological arousal and are more likely to see stressors as manageable. Social support can act as a stabilizing element, lowering vulnerability to anxiety disorders in university populations. As a result, the results highlight how crucial it is to create supportive environments in order to foster psychological resilience.

In this study, a non-significant correlation between social support and PTSD is reported. This raises the possibility that social support plays a more nuanced role in trauma-related outcomes. Social support is typically seen to be helpful for trauma rehabilitation; however, it doesn't always directly affect PTSD symptoms. Post-traumatic stress disorder (PTSD) symptoms include intrusive memories, avoidance, negative thoughts, and hyperarousal. These symptom clusters are closely associated with neurobiological and cognitive processes and may be difficult to treat with general support alone (American Psychiatric Association, 2013). This could help to explain why social support did not show up in the current study as a strong predictor of PTSD

The results of this study are largely in line with earlier research. Although there is much evidence that social support helps lower anxiety and sadness, research on its connection to PTSD has resulted in

conflicting findings. While some studies show that social support protects against PTSD, others show that factors like coping mechanisms and the severity of the trauma have an indirect or moderating influence (Ozer et al., 2003). By indicating that social support may not have a direct impact on PTSD symptoms in this sample of university students, the current findings add to the body of existing data.

In conclusion, social support is a strong buffer against GAD and MDD. However, it does not significantly influence PTSD in sampled university students. These findings highlight the importance of social support in enhancing mental health and the need for trauma-sensitive intervention for individuals with PTSD.

The overall implication of the present findings is that suicidal risk among university students cannot be adequately understood through a single psychological, social, or health-related factor. Instead, the findings suggest that suicidal risk emerges from the combined influence of trauma exposure, PTSD, MDD, GAD, general health, and psychosocial circumstances. The significant associations observed among PTSD, MDD, GAD, and suicidal risk indicate that these conditions are closely linked and may coexist within vulnerable student populations. Furthermore, the findings highlight the importance of considering general health and social support alongside psychological symptoms when examining suicidal risk. Although some variables did not remain significant when analyzed together, their significant relationships in earlier analyses suggest that they contribute to a broader network of factors associated with students' mental health. These findings suggest that understanding and addressing suicidal risk among university students requires a comprehensive perspective that integrates psychological, health-related, and social influences rather than focusing on any single factor in isolation.

Chapter 5: Conclusion

5.1 Summary

The objective of the study was to assess the association of PTSD, MDD, GAD, trauma exposure, socio-demographic factors, and suicidal risk among regular undergraduate students of Addis Ababa University. The study aimed to investigate the contribution of psychological symptoms and sociodemographic factors to the risk of suicide in students. The entire sample for this study was comprised of 215 participants who were chosen from a population of 27,517 students from 12 colleges. The study was quantitative, non-experimental, cross-sectional, and correlational, with a retrospective and analytical approach in order to examine the associations and predictive relationships between variables.

Data were collected using standardized self-report instruments, including the Suicidal Behaviors Questionnaire-Revised (SBQ-R), Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI), and the PTSD Checklist for DSM-5 (PDS-5), along with a socio-demographic questionnaire. The survey was administered electronically through Google Forms and distributed via Telegram student groups, with participants recruited using convenience and snowball sampling techniques. Data analysis was conducted using SPSS version 27, employing descriptive statistics, correlation, regression, ANOVA, and post hoc analyses to examine relationships between trauma exposure, mental health variables, and suicidal outcomes.

The study found that higher levels of PTSD, MDD, GAD, and trauma exposure were associated with increased suicidal risk and behavior among university students. Socio-demographic factors such as gender, social support, parental education, family psychiatric history and substance use also played a role in predicting suicidal risk. Overall, the findings highlight the significant impact of psychological distress and trauma on suicidal behavior, emphasizing the need for targeted mental health interventions and support systems for university students at Addis Ababa University.

5.2 Conclusion

The study found that PTSD, GAD, MDD, and suicide risk among university students is concentrated in a high-risk subgroup. with most participants reporting low to moderate symptoms of MDD, GAD, PTSD, and suicidal risk. But a smaller group had significantly higher levels of

risk. Exposure to trauma, and especially interpersonal trauma (sexual and physical assault), was strongly associated with higher GAD and suicide scores than non-interpersonal trauma. Gender differences were also seen, with females reporting higher suicidal ideation than males. Family history of suicide was also found to be a predictor od suicidal risk.

Substance use was found to be a significant risk factor for increased suicide. Social support was identified as a strong protective factor for depression and anxiety, although there was no statistically significant effect of social support on PTSD. Moreover, social support was a significant predictor of lower levels of anxiety and depression, highlighting the important buffering role of social support on general psychological distress.

Correlation analyses demonstrated significant relationships between PTSD, MDD, GAD, and suicidal risk, suggesting that these conditions are tightly intertwined. Ig the importance of physical well-being to mental health outcomes. Also, socio-demographic variables such as parental education and psychiatric history were important in predicting suicide risk

General health was identified as the strongest predictor of suicidal behavior, highlighting the importance of physical well-being in mental health outcomes. Additionally, socio-demographic factors such as parental education and psychiatric history significantly predicted suicide risk.

5.3 Limitations of the Study

The first limitation of this study is that the study used a cross-sectional design, which limits the capacity to determine causal correlations between variables. Secondly, the retrospective nature of the study may introduce recall bias, as participants were required to report past experiences, including trauma exposure and psychological symptoms.

Thirdly, convenience and snowball sampling, two non-probability sample techniques, were employed in the study. This method restricts the extent to which the results can be generalized because participants were not randomly selected. Finally, the final sample size (215) was also smaller than the recommended size based on Cochran’s formula, which may affect the statistical power of the analyses.

5.4 Recommendation

The following are recommended, based on the results of this study, to address suicidal risk and enhance the mental health and well-being of university students. To begin, universities should strengthen and broaden their mental health support resources by introducing routine screening and early identification efforts for students with symptoms of MDD, GAD, PTSD, and suicidal risk. These assessments should be available as part of students' health services to ensure the early detection and intervention of mental health disorders before they become severe. Universities should ensure that professional counseling services are adequately available and accessible, and are equipped to handle trauma-related mental health concerns.

Second, universities should create and implement comprehensive, integrated mental health programs to address the interrelated nature of exposure to trauma, psychological distress, and suicidal risk. These programs should adopt trauma-informed care approaches and provide tailored support for students who have experienced high-risk traumatic events, specifically physical and sexual assault. Prevention and intervention efforts should be designed to reduce symptoms and promote the development of resilient coping skills, emotional regulation, and positive overall well-being.

Third, considering the predictive value of general health on suicidal risk, universities have a role in promoting the overall well-being of students and fostering the relationship between physical and mental health. Health promotion interventions should focus on healthy lifestyle behaviours, methods of coping with stress, proper sleep hygiene, physical activity and utilisation of health care services. Providing integrated services for physical and mental health could be a path to decreasing the level of psychological distress and suicidality among students.

Fourth, the protective factor of social support determined in the present study may indicate the role of universities in facilitating interpersonal connection and community. Peer-support groups, student mentors, support groups and extracurricular activities that foster a sense of inclusion and belongingness are necessary for implementation. Training and resources for faculty, staff and student leaders are needed to recognise and manage students who are experiencing psychological distress.

Fifth, suicide prevention could be part of routine university activities and incorporated into institutional policies. Suicide prevention could include a range of measures such as awareness campaigns, gatekeeper training, random ideation screening, crisis response, safety planning and referral procedures for at-risk students. mental health awareness and educational programmes should be implemented to reduce the stigma associated with mental health difficulties and help seeking. The promotion of mental health literacy among university students may be associated with earlier use of support services and the development of a campus culture which prioritises psychological well-being.

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Appendix

Section A: Informed Consent

You are invited to take part in a research study that aims to examine how post-traumatic stress disorder (PTSD), GAD, and MDD may predict suicidal thoughts among students at Addis Ababa University. Before you begin, please read the following information carefully. To participate in this study, you must be 18 years of age or older. The survey will take approximately 15–20 minutes to complete. Your participation is entirely voluntary, and you may choose not to take part or withdraw at any time and for any reason without any penalty or consequence. You may also skip any question that you do not feel comfortable answering. Your responses will be kept strictly confidential, and no identifying information such as your name, student ID, or contact details will be collected. The information you provide will be used only for research purposes and will be presented in summary form so that no individual can be identified. At the end of the survey, you will receive a brief explanation of the study and contact information for support services should you have any concerns. By clicking "I consent," you confirm that you have read and understood the information provided, are 18 years of age or older, and voluntarily agree to participate in this study.

I consent

Section B: Socio-Demographic Information

1. Age
    1. 15-19
    2. 20- 24
    3. 25-29
2. Gender
    1. Male
    2. Female
3. Year of Study
    1. 1st year

2. 2nd year
3. 3rd year
4. 4th year
5. 5th year
6. 6th year

4. College

1. Natural Science freshman
2. Social Science freshman
3. Addis Ababa Institute of Technology
4. Ethiopian Institute of Architecture Building Construction and Development
5. College of Natural Sciences
6. College of Health Sciences
7. College of Veterinary medicine and Agriculture
8. College of Business and Economics
9. College of Development Studies
10. College of Education and Behavioral Studies
11. College of Law and Governance Studies
12. College of Social Sciences
13. College of Humanities Language Studies
14. Journalism and communication
15. College of Performing and Visual Arts

5. What is your current Grade Point Average (GPA)?

1. Below 2.00
2. 2.00 – 2.49
3. 2.50 – 2.99

4. 3.00 – 3.49
5. 3.50 – 4.00

6. Do you have any psychiatric history?

1. Yes
2. No

7. Do you have physical health problems?

1. Yes
2. No

8.Do you currently have people in your life (family, friends, or others) you can rely on for support when facing difficulties?

1. Yes, I have strong support
2. Yes, I have some support
3. No, I have little or no support

9. Do you currently use any alcohol or substances (e.g., khat, cannabis, cigarettes, shisha, or other drugs)

1. Yes
2. No

10. Parental Marital Status

1. Single parent
2. Married
3. Divorced

11. What is the highest level of education your father has completed?

1. No formal education
2. Primary school (Grades 1–8)
3. Secondary school (Grades 9–12)
4. College/University (Diploma or Degree)

5. Postgraduate (Masters/PhD and above)
6. Don’t know

12. What is the highest level of education your mother has completed?
    1. No formal education
    2. Primary school (Grades 1–8)
    3. Secondary school (Grades 9–12)
    4. College/University (Diploma or Degree)
    5. Postgraduate (Masters/PhD and above)
    6. Don’t know
13. How would you rate yours or your family’s socio-economic status?"
    1. Very poor
    2. Poor
    3. Average
    4. Above average
    5. Wealthy
14. Did any of your parents have a psychiatric history
    1. Only my mother has a psychiatric history
    2. Only my father has a psychiatric history
    3. Both of my parents have a psychiatric history
    4. Neither of my parents have a psychiatric history
15. Did someone in your family attempted or committed Suicide
    1. Yes
    2. No

Section C: Suicide Behaviors Questionnaire–Revised (SBQ-R)

Instruction: Please check the number beside the statement or the phrase that best applies to you

1. Have you ever thought about or attempted to kill yourself?

    1. Never

    2. It was just a brief passing thought

    3a. I have had a plan at least once to kill myself but did not try to do it

    3b. I have had a plan at least once to kill myself and really wanted to die

    4a. I have attempted to kill myself, but did not want to die

    4b. I have attempted to kill myself, and really hoped to die

2. How often have you thought about killing yourself in the past year?

    1. Never

    2. Rarely (1 time)

    3. Sometimes (2 times)

    4. Often (3–4 times)

    5. Very often (5 or more times

3. Have you ever told someone that you were going to commit suicide, or thatyou might do it?

    1. No

    2a. Yes, at one time, but did not really want to die

    2b. Yes, at one time, and really wanted to die

    3a. Yes, more than once, but did not want to do it

    3b. Yes, more than once, and really wanted to do it

4. How likely is it that you will attempt suicide someday?

    0. Never

    1. No chance at all

2. Rather unlikely

3. Unlikely

4. Likely

5. Rather likely

6. Very likely

Section D: Beck's Depression Inventory

Instruction: Please check the number beside the statement or the phrase that best applies to you

1(Mood)

0 I do not feel sad

1 I feel blue or sad

2a I am blue or sad all the time and I can't snap out of it Beck et al.

2b I am so sad or unhappy that it is very painful

3 I am so sad or unhappy that I can't stand it

2.(Pessimism)

0 I am not particularly pessimistic or discouraged about the future la I feel discouraged about the future

2a I feel I have nothing to look forward to

2b I feel that I won't ever get over my troubles

3 I feel that the future is hopeless and that things cannot improve

3. (Sense of Failure)

0 I do not feel like a failure

1 I feel I have failed more than the average person

2a I feel I have accomplished very little that is worthwhile or that means any thing

2b As I look back on my life all I can see is a lot of failures

3 I feel I am a complete failure as a person (parent, husband, wife)

4. (Lack of Satisfaction)

0 I am not particularly dissatisfied

la I feel bored most of the time

lb I don't enjoy things the way I used to

2 I don't get satisfaction out of anything any more

3 I am dissatisfied with everything

5 (Guilty Feeling)

0 I don't feel particularly guilty

1 I feel bad or unworthy a good part of the time

2a I feel quite guilty 2a I feel bad or unworthy practically all the time now

3 I feel as though I am very bad or worthless

6 (Sense of Punishment)

0 I don't feel I am being punished

1 I have a feeling that something bad may happen to me

2 I feel I am being punished or will be punished

3a I feel I deserve to be punished

3b I want to be punished

7.(Self Hate)

0 I don't feel disappointed in myself

la I am disappointed in myself

lb I don't like myself

2 I am disgusted with myself

3 I hate myself

8. (Self Accusations)

0 I don't feel I am any worse than any¬ body else

1 I am very critical of myself for my weaknesses or mistakes

2a I blame myself for everything that goes wrong

2b I feel I have many bad faults

9. (Self-punitive Wishes)

0 I don't have any thoughts of harming myself

1 I have thoughts of harming myself but I would not carry them out

2a I feel I would be better off dead

2b I have definite plans about commit¬ ting suicide

2c I feel my family would be better off if I were dead

3 I would kill myself if I could

10 (Crying Spells)

0 I don't cry any more than usual

1 I cry more now than I used to

2 I cry all the time now. I can't stop it

3 I used to be able to cry but now I can't cry at all even though I want to

11. (Irritability)

0 I am no more irritated now than I ever am

1 I get annoyed or irritated more easily than I used to

2 I feel irritated all the time 3 I don't get irritated at all at the things that used to irritate me

12(Social Withdrawal)

0 I have not lost interest in other people

1 I am less interested in other people now than I used to be

2 I have lost most of my interest in other people and have little feeling for them #

3 I have lost all my interest in other people and don't care about them at all

13 (Indecisiveness)

0 I make decisions about as well as ever

1 I am less sure of myself now and try to put off making decisions

2 I can't make decisions any more with¬ out help

3 I can't make any decisions at all any more

14(Body Image)

0 I don't feel I look any worse than I used to

1 I am worried that I am looking old or unattractive

2 I feel that there are permanent changes in my appearance and they make me look unattractive

3 I feel that I am ugly or repulsive looking

15 (Work Inhibition)

0 I can work about as well as before

la It takes extra effort to get started at doing something

lb I don't work as well as I used to

2 I have to push myself very hard to do anything

3 I can't do any work at all

16.(Sleep Disturbance)

0 I can sleep as well as usual

1 I wake up more tired in the morning than I used to

2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep

3 I wake up early every day and can't get more than 5 hours sleep

17(Fatigability)

0 I don't get any more tired than usual

1 I get tired more easily than I used to

2 I get tired from doing anything

3 I get too tired to do anything

18 (Loss of Appetite) 0 My appetite is no worse than usual

1 My appetite is not as good as it used to be

2 My appetite is much worse now

3 I have no appetite at all any more

19 (Weight Loss)

0 I haven't lost much weight, if any, lately

1 I have lost more than 5 pounds

2 I have lost more than 10 pounds

3 I have lost more than 15 pounds

20(Somatic Preoccupation)

0 I am no more concerned about my health than usual

1 I am concerned about aches and pains or upset stomach or constipation or other unpleasant feelings in my body

2 I am so concerned with how I feel or what I feel that it's hard to think of much else

3 I am completely absorbed in what I feel

21 (Loss of Libido)

0 I have not noticed any recent change in my interest in sex

1 I am less interested in sex than I used to be

2 I am much less interested in sex now

3 I have lost interest in sex completely

Section E: Beck Anxiety Inventory (BAI)

Instruction: Please check the number beside the statement or the phrase that best applies to you

1. Numbness or tingling

0. I do not feel numbness or tingling

1. I mildly feel numbness or tingling but it doesn't bother me much

2. I moderately feel numbness or tingling and it wasn't pleasant

3. I severely feel numbness or tingling and it bothered me a lot

2.Feeling hot

0. I do not experience feeling hot

1. I mildly experience feeling hot but it doesn't bother me much

2. I moderately experience feeling hot and it wasn't pleasant

3. I severely experience feeling hot and it bothered me a lot

3.Wobbliness in legs

0. I do not feel wobbliness in legs

1. I mildly experience wobbliness in legs but it doesn't bother me much

2. I moderately experience wobbliness in legs and it wasn't pleasant at times

3. I severely experience wobbliness in legs and it bothered me a lot

4.Unable to relax

0. I am able to relax

1. I am mildly unable to relax but it doesn't bother me much

2. I am moderately unable to relax and it wasn't pleasant at times

3. I am severely unable to relax and it bothered me a lot

5.Fear of the worst happening

0. I do not have a fear of the worst happening

1. I mildly have a fear of the worst happening but it doesn't bother me much

2. I moderately have a fear of the worst and it is not pleasant at time

3. I severely have a fear of the worst and it bothers me a lot

6.Dizzy or lightheaded

0. I do not feel dizziness or light headedness

1. I mildly feel dizziness or light headedness but it doesn't bother me much

2. I moderately feel dizziness or light headedness and it doesn't feel pleasant at times

3. I severely feel dizziness or light headedness and it bothers me a lot

7.Heart pounding or racing

0. I do not feel my heart pounding/racing

1. I mildly feel my heart pounding/racing but it doesn't bother me much

2. I moderately feel my heart pounding/racing and it doesn't feel pleasant at times

3. I severely feel my heart pounding/racing and it bothers me a lot

8.Unsteady

0. I do not feel unsteady

1. I mildly feel unsteady but it doesn't bother me much

2. I moderately unsteady and it doesn't feel pleasant at times

3. I severely feel unsteady and it bothers me a lot

9.Terrified

0. I do not feel terrified or afraid

1. I mildly feel terrified or afraid but it doesn't bother me much

2. I moderately feel terrified or afraid and it doesn't feel pleasant at times

3. I severely feel terrified or afraid and it bothers me a lot

10.Nervous

0. I do not feel nervous

1. I mildly feel nervous but it doesn't bother me much

2.I moderately feel nervous and it doesn't feel pleasant at times

3. I severely feel nervous and it bothers me a lot

11.Feelings of choking

0. I do not have a feeling of choking

1. I mildly have a feeling of choking but it doesn't bother me much

2. I moderately have a feeling of choking and it doesn't feel pleasant at times

3. I severely have a feeling of choking and it bothers me a lot

12.Hands trembling

0.I do not experience hands trembling

1. I mildly experience hands trembling but it doesn't bother me much

2. I moderately experience hands trembling and it doesn't feel pleasant at times

3. I severely experience hands trembling and it bothers me a lot

13.Shaky

0. I do not feel shaky/unsteady

1. I mildly feel shaky/unsteady but it doesn't bother me much

2. I moderately feel shaky/unsteady and it doesn't feel pleasant at times

3. I severely feel shaky/unsteady and it bothers me a lot

14.Fear of losing control

0. I do not have a fear of losing control

1. I mildly have a fear of losing control but it doesn't bother me much

2. I moderately have a fear of losing control and it doesn't feel pleasant at times

3. I severely have a fear of losing control and it bothers me a lot

15.Difficulty breathing

0.I do not have difficulty in breathing

1. I mildly have difficulty in breathing but it doesn't bother me much

2. I moderately have difficulty in breathing and it doesn't feel pleasant at times

3. I severely have difficulty in breathing and it bothers me a lot

16. Fear of dying

0. I do not have a fear of dying

1. I mildly have a fear of dying but it doesn't bother me much

2 .I moderately have a fear of dying and it doesn't feel pleasant at times

3. I severely have a fear of dying and it bothers me a lot

17. Scared

0. I do not feel scared

1. I mildly feel scared but it doesn't bother me much

2. I moderately feel scared and it doesn't feel pleasant at times

3. I severely feel scared and it bothers me a lot

18.Indigestion or discomfort in abdomen

0. I do not experience indigestion

1. I mildly experience indigestion but it doesn't bother me much

2. I moderately experience indigestion and it doesn't feel pleasant at times

3. I severely experience indigestion and it bothers me a lot

19.Faint

0. I do not feel faint/lightheaded

1. I mildly feel faint/lightheaded but it doesn't bother me much

2. I moderately feel faint/lightheaded and it doesn't feel pleasant at times

3. I severely feel faint/lightheaded and it bothers me a lot

20.Face flushed

0.I do not have face flushed

1. I mildly have face flushed but it doesn't bother me much

2. I moderately have face flushed and it doesn't feel pleasant at times

3. I severely have face flushed and it bothers me a lot

21.Sweating (not due to heat)

0. I do not have hot/cold sweats

1. I mildly have hot/cold sweats but it doesn't bother me much

2. I moderately hot/cold sweats and it doesn't feel pleasant at times

3. I severely have hot/cold sweats and it bothers me a lot

Section F: PTSD Checklist (PDS-5)

Trauma Screen

Have you ever experienced, witnessed, or been repeatedly confronted with any of the following:(Check all that apply)

- Serious, life threatening illness (heart attack, etc.)
- Physical Assault (attacked with a weapon, severe injuries from a fight, held at gunpoint, etc.)
- Sexual assault (rape, attempted rape, forced sexual act with a weapon, etc.)
- Military combat or lived in a war zone
- Child abuse (severe beatings, sexual acts with someone 5 years older than you, etc.)
- Accident (serious injury or death from a car, at work, a house fire, etc.)
- Natural disaster (severe hurricane, flood, earthquake, etc.)
- Other trauma (Please describe briefly in the next question):
- none

If you marked "other," please write the trauma.

_____

If you marked any of the above items, which single traumatic experience is on your mind and currently bothers you the most:

(Check only one)

- Serious, life threatening illness(heart attack, etc.)
- Physical Assault (attacked with a weapon, severe injuries from a fight, held at gunpoint, etc.)

- Sexual assault (rape, attempted rape, forced sexual act with a weapon, etc.)
- Military combat or lived in a war zone
- Child abuse (severe beatings, sexual acts with someone 5 years older than you, etc.)
- Accident (serious injury or death from a car, at work, a house fire, etc.)
- Natural disaster (severe hurricane, flood, earthquake, etc.)
- Other trauma

Instructions

Below is a list of problems that people sometimes have after experiencing a traumatic event. Write down the most distressing traumatic event that you checked on the last page:

Please read each statement carefully and circle the number that best describes how often that problem has been happening and how much it has upset you over THE LASTMONTH. Rate each problem with respect to the traumatic event that you wrote about above.

1. Unwanted upsetting memories about the trauma

1. 0 none
2. 1 once in a week /little
3. 2 to 3 times in a week/some what
4. 4 to 5 times in a week/Very much
5. 4,6 to more than times in a week /severe

2. Unwanted upsetting memories about the trauma

1. 0 none
2. 1 once in a week /little
3. 2 to 3 times in a week/some what
4. 4 to 5 times in a week/Very much
5. 6 to more than times in a week/ severe

3. Reliving the traumatic event or feeling as if it were actually happening again

1. 0 none

2. 1 once in a week /little
3. 2 to 3 times in a week/some what
4. 4 to 5 times in a week/Very much
5. 6 to more than times in a week /severe

4. Feeling very EMOTIONALLY upset when reminded the trauma

1. 0 none
2. 1 once in a week /little
3. 2 to 3 times in a week/some what
4. 4 to 5 times in a week/Very much
5. 6 to more than times in a week/ severe

5. Having PHYSICAL reactions when reminded of the trauma (forexample, sweating, heart racing)

1. 0 none
2. 1 once in a week /little
3. 2 to 3 times in a week/some what
4. 4 to 5 times in a week/Very much
5. 6 to more than times in a week/ severe

6. Trying to avoid thoughts or feelings related to the trauma

1. 0 none
2. 1 once in a week /little
3. 2 to 3 times in a week/some what
4. 4 to 5 times in a week/Very much
5. 6 to more than times in a week / severe

7. Trying to avoid activities, situations, or places that remind you of the trauma orthat feel more dangerous since the trauma

1. 0 none

2. 1 once in a week /little
3. 2 to 3 times in a week/some what
4. 4 to 5 times in a week/Very much
5. 6 to more than times in a week / severe

8. Not being able to remember important parts of the trauma

1. 0 none
2. 1 once in a week /little
3. 2 to 3 times in a week/some what
4. 4 to 5 times in a week/Very much
5. 6 to more than times in a week / severe

8. Not being able to remember important parts of the trauma

1. 0 none
2. 1 once in a week /little
3. 2 to 3 times in a week/some what
4. 4 to 5 times in a week/Very much
5. 6 to more than times in a week / severe

9. Seeing yourself, others, or the world in a more negative way (for example, “Ican’t trust people,” “I’m a weak person”).

1. 0 none
2. 1 once in a week /little
3. 2 to 3 times in a week/some what
4. 4 to 5 times in a week/Very much
5. 6 to more than times in a week /severe

10. Blaming yourself or others (besides the person who hurt you) for what happened

1. 0 none

2. 1 once in a week /little
3. 2 to 3 times in a week/some what
4. 4 to 5 times in a week/Very much
5. 6 to more than times in a week /severe

11. Having intense negative feelings like fear, horror, anger, guilt, or shame
    1. 0 none
    2. 1 once in a week /little
    3. 2 to 3 times in a week/some what
    4. 4 to 5 times in a week/Very much
    5. 6 to more than times in a week / severe
12. Losing interest or not participating in activities you used to do
    1. 0 none
    2. 1 once in a week /little
    3. 2 to 3 times in a week/some what
    4. 4 to 5 times in a week/Very much
    5. 6 to more than times in a week / severe
13. Feeling distant or cut off from others
    1. 0 none
    2. 1 once in a week /little
    3. 2 to 3 times in a week/some what
    4. 4 to 5 times in a week/Very much
    5. 6 to more than times in a week/ severe
14. Having difficulty experiencing positive feelings
    1. 0 none
    2. 1 once in a week /little

3. 2 to 3 times in a week/some what
4. 4 to 5 times in a week/Very much
5. 6 to more than times in a week /severe

15. Acting more irritable or aggressive with others

1. 0 none
2. 1 once in a week /little
3. 2 to 3 times in a week/some what
4. 4 to 5 times in a week/Very much
5. 6 to more than times in a week/ severe

16. Taking more risks doing things that might cause you or others harm (for example, driving recklessly, taking drugs, having unprotected sex)

1. 0 none
2. 1 once in a week /little
3. 2 to 3 times in a week/some what
4. 4 to 5 times in a week/Very much
5. 6 to more than times in a week/ severe

17. Being overly alert or on guard (for example, checking to who is around you, being uncomfortable with your back to a door

1. 0 none
2. 1 once in a week /little
3. 2 to 3 times in a week/some what
4. 4 to 5 times in a week/Very much
5. 6 to more than times in a week/ severe

18. Being jumpy or more easily startled (for example, when someone walks up behind you)

1. 0 none
2. 1 once in a week /little

3. 2 to 3 times in a week/some what
4. 4 to 5 times in a week/Very much
5. 6 to more than times in a week/ severe

19. Having trouble concentrating

1. 0 none
2. 1 once in a week /little
3. 2 to 3 times in a week/some what
4. 4 to 5 times in a week/Very much
5. 6 to more than times in a week/ severe

20. Having trouble falling or staying asleep

1. 0 none
2. 1 once in a week /little
3. 2 to 3 times in a week/some what
4. 4 to 5 times in a week/Very much
5. 6 to more than times in a week/ severe

21. How much have difficulties been bothering you?

1. 0 none
2. 1 once in a week /little
3. 2 to 3 times in a week/some what
4. 4 to 5 times in a week/Very much
5. 6 to more than times in a week /severe

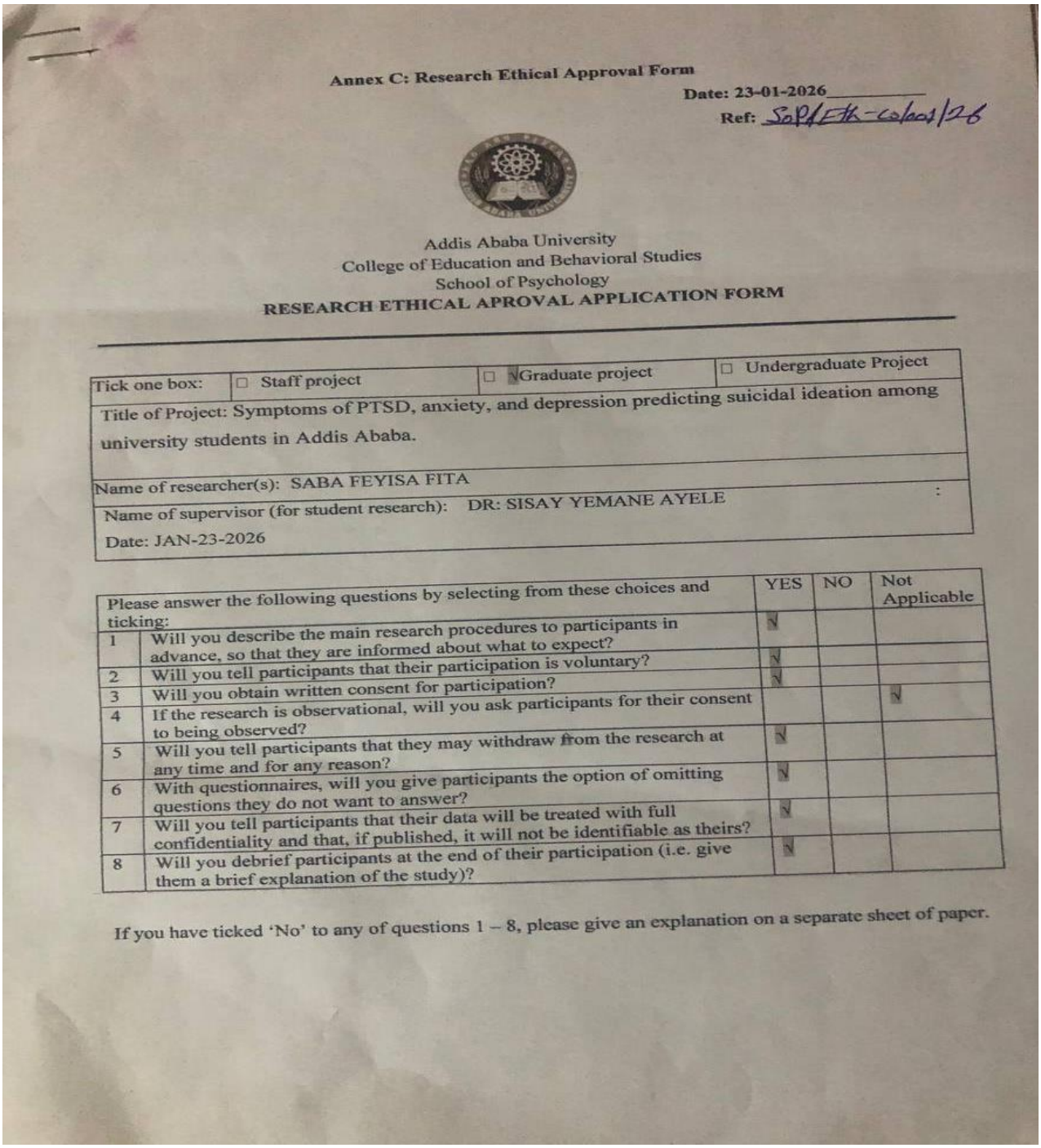
22. How much have these difficulties been interfering with your everyday life (forexample, relationships, work, or other important activities)?

1. 0 none
2. 1 once in a week /little

3. 2 to 3 times in a week/some what
4. 4 to 5 times in a week/Very much
5. 6 to more than times in a week /severe

23. How long after the trauma did these difficulties begin?
    1. Less than 6 months
    2. more than 6 months
24. How long have you had these trauma-related difficulties?
    1. Less than 1 month
    2. More than 1 month

Section G: Ethical Approval



Annex C: Research Ethical Approval Form

Date: 23-01-2026

Ref: SoP/Eth-cohort/26

Addis Ababa University
College of Education and Behavioral Studies
School of Psychology

RESEARCH ETHICAL APROVAL APPLICATION FORM

Tick one box:	☐ Staff project	☐ √Graduate project	☐ Undergraduate Project
Title of Project: Symptoms of PTSD, anxiety, and depression predicting suicidal ideation among university students in Addis Ababa.			
Name of researcher(s): SABA FEYISA FITA			
Name of supervisor (for student research): DR: SISAY YEMANE AYELE			
Date: JAN-23-2026			

	Please answer the following questions by selecting from these choices and ticking:	YES	NO	Not Applicable
1	Will you describe the main research procedures to participants in advance, so that they are informed about what to expect?	√		
2	Will you tell participants that their participation is voluntary?	√		
3	Will you obtain written consent for participation?	√		
4	If the research is observational, will you ask participants for their consent to being observed?			√
5	Will you tell participants that they may withdraw from the research at any time and for any reason?	√		
6	With questionnaires, will you give participants the option of omitting questions they do not want to answer?	√		
7	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	√		
8	Will you debrief participants at the end of their participation (i.e. give them a brief explanation of the study)?	√		

If you have ticked 'No' to any of questions 1 – 8, please give an explanation on a separate sheet of paper.

Please answer the following questions by selecting from these choices and ticking:		YES	NO	Not Applicable
9	Will your project involve deliberately misleading participants in any way?		√	
10	Is there any realistic risk of any participants experiencing either physical or psychological distress or discomfort? If Yes, give details on a separate sheet and state what you will tell them to do if they should experience any problems (e.g. who they can contact for help).	√		

If you have ticked 'Yes' to questions 9 or 10, please give your justifications on a separate sheet of paper

Please answer the following questions by selecting from these choices and ticking:			YES	NO	Not Applicable
11	Do participants fall into any of the following special groups?	Schoolchildren (under 18 years of age)		√	
		People with learning or communication difficulties		√	
		Patients		√	
		People in custody		√	
		People engaged in illegal activities (e.g. drug-taking, etc)		√	

There is an obligation on the lead researcher to bring to the attention of the School Research Ethics Committee any issues with ethical implications not clearly covered by the above checklist.

I am familiar with the APA Guidelines for ethical practices in psychological research (and have discussed them with the other researchers involved in the project).

SABA FEYISA FITA — JAN-23-2026 — Signature

Researcher (capital letters) — Date

Sisay Yemane — JAN-23-2026 — Signature

Supervisor (capital letters: for students) — Date

School of Psychology, Addis Ababa University College of Education and Language Studies

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OUTCOME OF ETHICAL APPROVAL APPLICATION

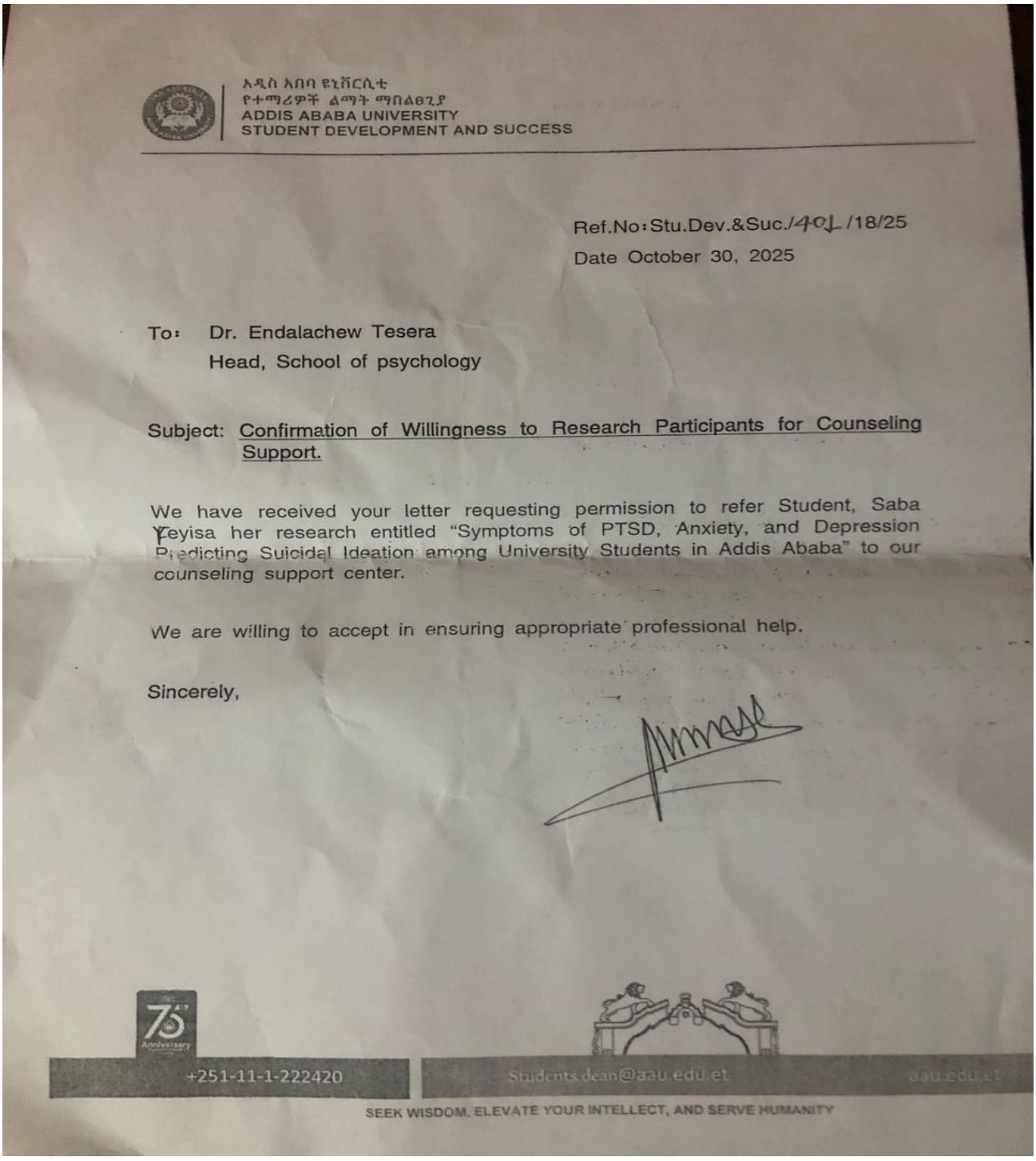
This research project has been considered using agreed Departmental procedures and is now approved.

Abera Tibebu — 23 Jan 2026 — Signature

(Chair, Research Ethics Committee) — Date

School of Psychology, Addis Ababa University College of Education and Language Studies

Section H: Collaborations



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ADDIS ABABA UNIVERSITY
STUDENT DEVELOPMENT AND SUCCESS

Ref.No:Stu.Dev.&Suc./401/18/25
Date October 30, 2025

To: Dr. Endalachew Tesera
Head, School of psychology

Subject: Confirmation of Willingness to Research Participants for Counseling Support.

We have received your letter requesting permission to refer Student, Saba Feyisa her research entitled "Symptoms of PTSD, Anxiety, and Depression Predicting Suicidal Ideation among University Students in Addis Ababa" to our counseling support center.

We are willing to accept in ensuring appropriate professional help.

Sincerely,

+251-11-1-222420
Students.dean@aau.edu.et
aau.edu.et
SEEK WISDOM, ELEVATE YOUR INTELLECT, AND SERVE HUMANITY

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erq ma'ed
SERVICE FOR ALL

Media
Mental Health
Education

Date: *29 OCT, 2025*

***EMMPS**/409/2018*

To: Head, School of Psychology
Endalkachew Tesera (PhD)
Addis Ababa University
Addis Ababa, Ethiopia

Subject: In response to the Letter of Cooperation Request

Dear Sir,

This letter is written in response to the "Letter of Cooperation" (Ref no. PSY/044/18/25) submitted by Ms. Saba Feyisa, which serves to confirm that Erq Maed Media and Psychological Services is pleased to cooperate with Ms. Saba Feyisa, a postgraduate student from the School of Psychology at Addis Ababa University, who is conducting a research study entitled: "Symptoms of PTSD, Anxiety, and Depression Predicting Suicidal Ideation among University Students in Addis Ababa."

Our organization recognizes the value of this research in enhancing our understanding of the mental health challenges faced by university students. In line with our shared commitment to promoting mental well-being, Erq Ma'ed expresses its willingness to collaborate by accepting participants whom the researcher may refer, should they wish to seek professional psychological support (counseling or psychotherapy).

All participants referred through this research will be served according to our organization's standard intake and screening, appointment, and payment procedures. We understand that the researcher is not requesting free services, and participants will be informed to follow the organization's service protocols.

We commend the researcher's ethical consideration in ensuring that participants have access to appropriate mental health support and affirm our readiness to cooperate in this important academic and humanitarian effort. Sincerely,

Tewodros Dilnesaw,

Counseling Service Coordinator, Erq Ma'ed
Email: tewodrosdilnesaw@gmail.com

Phone: 092023520

Erq Maed Media and Psychological Services

@erkmeadmedia

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Info@erqmaed.org