

Anxiety and Depression among Students with Visual Impairment: In the Case of Shashemene  
and Sebeta Primary Schools.

A Thesis Submitted to Addis Ababa University School of Social Work in Partial Fulfillment  
of the Requirement of Masters of Social Work

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## **DECLARATION**

I, Redwan Idris Ebu, declare that the thesis work entitled, “Anxiety and Depression among Students with Visual Impairment: In the Case of Shashemene and Sebeta Primary Schools.”, is my own effort and study. I have produced it independently, except for the guidance and suggestions of the research advisor. However, given my visual impairment, I am assisted with exceptional support. All sources of materials used for the study have been properly cited and acknowledged.

This study submitted by me for the award of master of social work degree, is my original work. It has not been previously submitted for the award of any degree or other qualification at any university or institution.

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**Date:** 2025/ /.

# STATEMENT OF CERTIFICATION

**Addis Ababa University**

**School of Graduate Studies**

This is to certify that the thesis prepared by Redwan Idris, “Anxiety and Depression among Students with Visual Impairment: In the Case of Shashemene and Sebeta Primary Schools”, and submitted in partial fulfillment of the requirement for degree of Master of social work complies with the regulations of the university and meets the accepted standard with respect to originality and quality.

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## ABSTRACT

*This study assessed levels of anxiety and depression along with the associated factors. coping mechanisms among students with visual impairments at Shashemene and Sebeta Primary Schools was among the concern. An institution-based cross-sectional design was employed. 175 students were selected via multistage sampling (purposive setting selection) and stratified random sampling. Validated instruments measured anxiety (YAM-5), depression (Reynolds Adolescent Depression Scale), perceived social support (SS-A), and coping mechanisms (CRI-Y adapted). Data were analyzed in SPSS 26 and Stata 14 using descriptive statistics and binary logistic regression.*

*Results revealed high prevalence: 39.4% experienced severe anxiety disorders and 36% severe major depressive disorders. Protective factors against anxiety included older age (OR: 0.643,  $p=0.002$ ), supportive school environments (OR: 0.576,  $p=0.007$ ), family/friend support, and parental education (OR: 0.434,  $p=0.011$ ). Higher impairment severity significantly increased anxiety risk (OR: 1.709,  $p=0.021$ ). Duration of impairment, parental income, and employment were non-significant.*

*For depression, critical determinants were female gender (OR: 6.708,  $p=0.000$ ), younger admission age (OR: 2.918,  $p=0.000$ ), and longer school duration (OR: 3.72,  $p=0.000$ ). Students from Sebeta faced five times the depression risk of Shashemene students (OR: 5.106,  $p=0.006$ ). Visually impaired students predominantly favored adaptive coping strategies, especially positive reappraisal and problem-solving.*

*The findings underscore an urgent need for targeted mental health interventions. Key strategies include enhancing social support networks, addressing institutional disparities between schools, and promoting adaptive coping mechanisms. Interventions must be tailored considering gender, age at admission, duration of stay, and degree of visual impairment to effectively support this vulnerable population.*

**Keywords:** *Anxiety, Depression, coping strategies, risky factors, visual impairment*

## ACRONYMS AND ABBREVIATIONS

<b>APA</b>	American Psychiatric Association
<b>CRI-Y</b>	Coping Responses Inventory—Youth Form
<b>DSM</b>	Diagnostic and Statistical Manual of Mental Disorders
<b>GAD</b>	Generalized Anxiety Disorder
<b>LR</b>	Logistic Regression
<b>AD</b>	Anxiety Disorders
<b>MDD</b>	Major Depressive Disorder
<b>RADS</b>	Reynolds Adolescent Depression Scale
<b>SCT</b>	Social cognitive theory
<b>SPSS</b>	Statistical Package for the Social Science
<b>SS-A</b>	Social Support Appraisal Scale
<b>WHO</b>	World Health Organization
<b>YAM</b>	Youth Anxiety Measure

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# **CHAPTER ONE**

## **INTRODUCTION**

This study intended to assess the levels and associated factors for anxiety and depression among students with visual impairment in the case of Shashemene and Sebeta primary schools. It also examined coping strategies utilized by marginalized groups whenever they feel anxious or depressed. Conducting research among people with visual impairments is critically valuable since it provides research-based evidence as to the magnitudes and risk factors for anxiety and depression that need to be addressed by key actors of non-governmental humanitarian organizations, frontline government stakeholders, and professionals including but not limited to psychologists, psychiatrists, social workers, public health experts, sociologists, and other social sciences experts.

### **1.1. BACKGROUND OF THE STUDY**

Visual impairment is an eye condition that affects the visual system and function of vision. This contains a variety of conditions, ranging from moderate vision impairments to blindness, and includes limitations in visual function such as visual acuity, visual field, or contrast sensitivity (World Health Organization, 2023).

According to the World Health Organization investigation (2023), an estimated 2.2 billion people worldwide have near or distant vision impairment. One billion individuals with vision impairment may have been avoided or are yet unaddressed (WHO, 2023). The prevalence of vision impairment among children is significant in Africa and Asia's poorest regions (Bourne et al., 2017). Children under the age of 15 have been identified as being at increased risk of acquiring vision impairment and blindness (Bourne et al., 2017). In Saudi Arabia's Arar City,

14 children were found to have severe visual impairment, while seven school-aged children were blind (Salama et al., 2023).

Study shows, people with vision impairments are more likely to experience specific mental health disorders (Demmin & Silverstein, 2020). This appears to be especially significant for visually impaired persons, who must inevitably deal with losses, limited competence for certain tasks, or reliance on the assistance of others (Kurtović & Ivančić, 2017). As a result, those with visual impairments may be more likely to acquire mental health issues like depression and anxiety (Nyman et al., 2010).

The global and personal consequences of vision impairment are significant (Gordois et al., 2012; Khorrami-Nejad et al., 2016; Pelletier et al., 2016; & WHO, 2019). According to Kurtović & Ivančić (2017), sight is the major human sense that perceives 85% of information. Blindness deprives a person of vital information and impacts physical, cognitive, social, and emotional development (Kurtović & Ivančić, 2017).

It can cause considerable impairment and has been associated with massive economic damage estimated at US\$411 billion lost in workplace productivity because of poor vision (WHO, 2023). Besides its financial cost, it negatively impacts the quality of life (Khorrami-Nejad et al., 2016), unintended injuries, and loneliness (Brunes et al., 2019). It can provide difficulties for emotional and social adjustment, whether it is adjusting to a visual impairment or overcoming impediments to communication, movement, education, and daily life (Kurtović & Ivančić, 2017).

The beginning of a variety of health-risk behaviors, many of which can hurt health in the short and long term (Crosby et al., 2009). Kessler et al. (2007) found that the median age of onset for any mental health illness was 14 years, with an interquartile range of 7 to 24 years.

Recent global events, such as the COVID-19 pandemic, geopolitical events, and climate change, are anticipated to have a long-term mental health impact (Moitra et al., 2023).

Though there is a growing recognition of the need to include marginalized voices and people with lived experience of mental illness, disparities in access to adequate mental health care continue to exist globally and disproportionately affect socially disadvantaged populations (Moitra et al., 2023). Advances in integrating mental health care and adopting task-shifting are accompanied by implementation challenges (Moitra et al., 2023).

## **1.2. STATEMENT OF THE PROBLEM**

The association between mental health and eye health is not well known, especially among nations with low and middle income where poverty and barriers to health care worsen the effect of vision loss (Ben Gascoyne et al., 2021). The research indicates various risk factors for children's in care, causing mental health problems, mainly in low income countries.

According to Ali et al. (2020), children aged 9-19 years residing in three Pakistan care homes had significant rates of posttraumatic stress (70.45%) and common mental health symptoms (43.94%) within the clinical range. Similarly, the study's findings show that 23.4% of Syrian youngsters exhibited posttraumatic stress symptoms, while 17.6% had severe depression symptoms, (Ugurlu et al., 2016).

According to Ministry of Health in Ethiopia, (2021) the report showed that 12 - 25% of Ethiopian adolescence and youth are affected by mental disorder which is a leading non communicable health issue. Among all, the reports state that individuals with visual impairment are most likely to experience mental discomfort such as anxiety and depression than their counterpart (Demmin & Silverstein, 2020). Recent data in Ethiopia also refers the significant high levels of psychological distress among visually impaired individuals compared to those without vision loss (Munaw & Tegegn, 2022).

Mental problem among people living with epilepsy is also reached alarming level. For instance, Tareke et al. (2020) found that 35.4% of individuals with epilepsy experienced common mental disorders, with higher rates observed among females (39.9%) compared to males (32.3%). Associated factors included a family history of epilepsy, frequent seizure episodes, side effects of antiepileptic medications, inadequate social support, and poor adherence to treatment regimens (Tareke et al., 2020).

Even with this significant prevalence of mental health problem, treatment coverage is poor and varies by environment and population around the world (Moitra et al., 2023). To address their physical, social, and mental development, a strategic response is required (Ministry of Health, 2021). Moreover, Inequities is persisting in global mental health funding, and there has been slow progress in creating local capacity for mental health treatment programs and research (Moitra et al., 2023).

Psychological strengths are the main protective ability that helps teenagers to cope with stress (Harrison et al., 2019). The most important implication of creating positive self-esteem and preventing maladaptive behaviors is feeling welcomed and approved as a person (Pastor, 2020). Good self-esteem may assist individuals in constructively incorporating their impairment into their self-image, as opposed to making inferences about themselves as less worthy (Kurtović & Ivančić, 2017). Understanding the stress-coping process of at risk adolescents is critical for identifying helpful coping mechanisms that may support the prevention of negative mental health outcomes and the promotion of adaptive coping strategies and strengths that may be critical to adolescents facing adversity (Harrison et al., 2019).

According to Kurtović & Ivančić, (2017) socio-demographic characteristics, disability related factors, and personal and social factors, all had significant correlations with depression and life satisfaction, but there were some striking differences. A greater socioeconomic status can reduce existential stress and allow a person to engage in therapeutic, recreational, and social activities (Cho et al., 2015; Kamelska & Mazurek, 2015).

The age at which an impairment manifests itself has been shown to have significant impact on the adaptation process of visually impaired people, with later onset predicting more adjustment problems, including depressive disorder (Alimovic, 2012), whereas earlier onset (at birth or during early childhood) correlates with better daily functioning and life satisfaction (Runjic et al., 2015)

Ben Gascoyne et al. (2021), underline that the relationship between mental health and vision impairment differs depending on age and gender. In men with severe visual impairment or blindness, the incidence of self-reported anxiety and/or depression symptoms is projected to be more than four times higher than women with the same levels of vision loss and to rise with age. In Nigeria, men are frequently more economically active than women and may be more affected by vision impairment (Ben Gascoyne et al., 2021). Adolescents and youth account for 33% of Ethiopia's population, which has significant impact on the country's social, economic, and political agendas and positively contributes to the country's development if investment are made to maximize their health potential (Ministry of Health, 2021). A crucial, overriding reason to invest in health of adolescents and youth is that it is adolescents' and youth's fundamental right to life, development, and fulfillment of the highest feasible health standards through access to health services (Ministry of Health, 2021).

In Ethiopia, the focus of past researchers was mainly on the magnitude and associated factors among students with visual impairment at primary schools (Woldeamanuel et al., 2020;

Merrie et al., 2019; Derge et al., 2017; Anley et al., 2022). In Ethiopia, previous studies conducted on anxiety and depressions among people with visual impairment were mainly focused on adults with visual impairment (Munster et al., 2021; Munaw, & Tegegn, 2022; & Fentie et al., 2023). These researchers identified the magnitude of anxiety and depression among adults with visual impairment and associated factors. To the knowledge of this researcher, no study has yet been conducted in this study area to examine the prevalence of anxiety and depression among students with visual impairment at Shashemene and Sebeta primary Schools.

### **1.3. OBJECTIVES OF THE RESEARCH**

#### **1.3.1. General objective**

The overall objective of the research is to assess the levels and associated factors to anxiety, and depression along with coping mechanisms employed among students with visual impairment in the case of Shashemene and Sebeta Primary Schools.

#### **1.3.2. Specific objectives**

- The specific objectives of the research are to:
- ✓ Assess the level of anxiety and depression among students with visual impairment at the Shashemene and Sebeta Primary Schools.
- ✓ Determine statistical association between level of students' mental health problems (AD/MDD), and their socio demographic characteristics.
- ✓ Examine statistical association between level of students' anxiety and depression, and institutional factors.
- ✓ Determine statistical association between level of students' mental health problems (AD/MDD), and level of social support they receive from family, friends, and others.
- ✓ Identify coping strategies used by students with visual impairment to get relief from anxiety and depression.

#### **1.4. RESEARCH QUESTIONS**

- This research is to address the following three research questions.
- ✓ To what extent students with visual impairment have experienced anxiety and depression?
- ✓ Is there statistical association between students' socio demographic characteristics, social support they perceived and institutional factors with the students' levels of anxiety and depression?
- ✓ What are the coping strategies used by students with visual impairment when they come across anxiety and depression?

#### **1.5. SCOPE OF THE STUDY**

This study is among studies conducted on adolescent Ethiopian's, which focused on primary school adolescent students with visual impairment at shahshamene and sebeta boarding schools for the blind. It is limited to the scope of identifying magnitude and prevalence of common mental health problems (anxiety and depression) among the students, along their association with students' socio demographic characteristics, perceived social support from family friend and others, as well as institutional factors. Student's coping strategy is also among the concern.

#### **1.6. SIGNIFICANCE OF THE STUDY**

This study provides magnificent understanding for Shashemene and Sebeta primary schools for visually impaired students by indicating the prevalence, risk factors, and determinants of anxiety and depression among their students. Identifying the range of these mental health problems are mandatory for designing appropriate interventions and support systems that address the specific needs of this population.

By recognizing core factors or determinants, the research informs the development of practical strategies to alleviate these conditions and improve support system. Studying the coping mechanisms adopted by students clarify their adaptive capacities, enabling instructors to strengthen effective strategies that promote wellbeing.

The findings could also influence educational policies, ensuring practice are aligned with the unique mental health desires of visually impaired students. Through specialized support services, schools can develop inclusive environments that encourage emotional and psychological health.

The study refers to the understanding of the psychosocial challenges faced by visually impaired adolescents, putting a basis for enhancing their mental health outcomes and quality of life. It is important evidence based approaches in developing equitable support systems within educational frameworks

## **1.7. ORGANIZATION OF PAPER**

This Document is organized containing 6 major Chapters, with each chapter having well-articulated sub topics. the first, chapter one is the introduction session, describing background of the study, statement of the problem, objective of the study, research questions, significance of the study and scope of the study. Chapter two is the literature review session of the document emphasizing on anxiety and depression magnitude, types, determinants, coping mechanisms and other related literatures. In addition, theoretical frame work is included. Chapter three provides a clear description of research design, sampling method, sample size, instruments of data collection, method of data analysis and other procedures. Major results are interpreted in chapter four. Chapter five compares and contrasts the result of this research with respect to the previous researches of similar topic, under the title discussion. Final chapter, chapter six is all about conclusion and implication for social work.

## 1.8. OPERATIONAL DEFINITION

- **Marginalized Group:** A population experiencing systemic exclusion from societal resources, opportunities, and support structures, resulting in measurable disadvantages in health, education, and psychosocial well-being, due to disability and/or mental illness.
- **Anxiety Disorders (AD):** Clinically significant anxiety symptoms measured by standardized scale (YAM 5), generating a total score. Severity was categorized based on established collapsed score ranges: Moderate AD and Severe AD.
- **Major Depressive Disorder (MDD):** Clinically significant depressive symptoms measured by a standardized scale (RADS), generating a total score. Severity was categorized based on established collapsed score ranges: Moderate MDD and Severe MDD.
- **Coping Strategies:** Specific behavioural or cognitive efforts to manage stress, measured using a scale assessing the frequency of use of 8 distinct strategies.
- **Social Support:** The perceived level of emotional, instrumental, Educational, Economical or informational assistance received from family members, Friends and others, measured via a Likert-type scale, higher scores indicate greater perceived support.
- **Institutional factors:** factors influencing mental wellbeing of students due to uncomfortable school setting.
- **Socio demographic characteristics:** Student's background of visual impairment and factors related to age and gender.

## CHAPTER TWO

### REVIEW OF RELATED LITERATURE

#### 2.1. OVERVIEW OF ANXIETY AND DEPRESSION

Anxiety disorders and major depressive disorder represent significant categories of mental health conditions characterized by distinct core features and functional impairment. Anxiety disorders manifest as persistent (typically lasting six months or longer), excessive fear (an emotional reaction to perceived imminent threat) and anxiety (apprehensive concern regarding future threats) that is disproportionate to the actual situation. This heightened state causes clinically significant distress or impairment in social, occupational, or other critical areas of functioning, encompassing disorders such as generalized anxiety disorder, panic disorder, and social anxiety disorder (American Psychiatric Association [APA], 2022).

In contrast, major depressive disorder (MDD) is defined by the presence of either a predominantly depressed mood or a marked loss of interest or pleasure (anhedonia) persisting for a minimum of two weeks. This core symptom cluster must be accompanied by at least five additional symptoms (e.g., significant changes in weight or appetite, sleep disturbances, psychomotor agitation or retardation, fatigue, feelings of worthlessness or excessive guilt, diminished ability to think or concentrate, or recurrent thoughts of death or suicide), collectively resulting in substantial distress or functional impairment (APA, 2022).

It is evident that anxiety and depression are distinct phenomena while sharing a number of generic characteristics (Fajkowska et al., 2018). The distinctions between them can be best understood in terms of their diverse and multifaceted character, adaptive roles, and relationships with motivation, positive affect, regulatory processes, and sophisticated cognitive processes (Fajkowska, 2013).

## **2.2. MAGNITUDE OF ANXIETY AND DEPRESSION**

Worldwide, anxiety and depression become increasingly prevalent among adolescents. The investigations emphasize that those mental disorders influenced by social, psychological, and biological factors. For instance, Liu et al. (2024) suggested that failing to address these conditions on time has probability to lead to long- term consequences. So, the serious need for early intervention is very important. Post pandemic studies in Chile support global trends. It discloses higher rates of anxiety and depression in youth and strengthening evidence that the COVID-19 pandemic increased pre-existing mental health challenges in this population.

Research indicates that individuals with visual impairments experience higher rates of anxiety and depression compared to general population. Okeke et al. (2023) found a significant prevalence of anxiety and stress in visually impaired patients at Nigerian hospitals, perceiving that these symptoms badly impacted their vision related quality of life. Similarly, Boadi-Kusi et al. (2023) reported raised anxiety and depression levels among those with visual impairments, mainly in case relating severe or sudden –onset vision loss. These mental health challenges often exist due to the struggles associated with adapting to functional limitations (Boadi-Kusi et al., 2013; Okeke et al., 2023).

Research conducted by Parravano et al. (2021) showed that individuals with visual impairment show an evidently higher prevalence of depressive disorders approximately twice higher than that of general population. Their study also identified differences in prevalence depending on factors such as the degree of vision loss, age, and gender. Likewise, findings by De Castro et al. (2022) revealed the association between functional limitations, including visual impairment, and severe mental health challenges among adolescents across 26 low- and middle- income countries. These results are aligning with much evidence indicating increased psychological distress among people living with disabilities.

International research consistently proves that a large percentage of adolescents worldwide suffer of anxiety and depression. World Health Organization (2021) report shows that 31.9% of 13 to 18 years- olds are affected by anxiety disorders and depressive incidence of 13.3% of this age group. Particularly this rate is higher among vulnerable populations, including adolescents with disabilities such as visual impairments. Among these groups, the probability of expressing anxiety and depression is increased by factors linked to their condition, such as social stigma, reduced independence, and very low level of support services (Fentie et al., 2023).

Regarding Ethiopia, anxiety and depression are among the highest mental health problems for young individuals. The National Adolescents and Youth Health Strategy (2021-2025) give emphasis to the importance of applying effective interventions to address these challenges. According to Fentie et al. (2023), visual impairments significantly increase the threat of mental health issues among adolescents in Ethiopia. The raised percentage of depression and anxiety are due to social isolation, emotional frustration, and diminished self-esteem.

Finding by Kurtović & Ivančić, (2017) also support this. They emphasized that impaired individuals exhibit higher rates of depression and lower life satisfaction compared to their non-disabled individuals. As a result giving emphasis to the serious demand for specialized mental health support systems for this vulnerable group is mandatory.

## **2.3. TYPES OF ANXIETY**

### **2.3.1. Generalized worry**

Generalized worry represents the core cognitive feature of Generalized Anxiety Disorder (GAD), defined as persistent, excessive, and uncontrollable apprehension focused on potential future threats across multiple life domains (e.g., health, finances, work). This worry is disproportionate to the actual likelihood or impact of feared outcomes (APA, 2013).

Unlike adaptive worry that facilitates problem-solving, generalized worry is pervasive, cyclical, self-perpetuating, and often occurs independently of immediate stressors (Borkovec et al., 1998). It constitutes a maladaptive cognitive process fundamentally linked to intolerance of uncertainty, characterized by catastrophizing ambiguous situations and overestimating risks (Dugas et al., 1998).

This worry manifests through interconnected cognitive, emotional, behavioral, and physical symptoms. Cognitively, it involves uncontrollable, persistent rumination that individuals struggle to halt despite recognizing its excessiveness, alongside hypervigilance to potential threats (attentional bias reinforcing anxiety cycles) and cognitive avoidance (using worry to distract from more distressing emotional imagery, paradoxically maintaining anxiety) (APA, 2013; Hirsch & Mathews, 2012; Borkovec et al., 2004). Emotionally and behaviorally, it leads to restlessness or feeling "on edge," significant difficulty concentrating due to worry preoccupation, and indecisiveness stemming from fear of negative outcomes (APA, 2013; Behar et al., 2009; Dugas et al., 1998). Physically, chronic generalized worry results in muscle tension (often causing headaches or body aches), persistent fatigue due to sustained cognitive strain, and sleep disturbances like insomnia from nighttime rumination (APA, 2013; Hofmann et al., 2005; Staner, 2003).

Clinically, generalized worry significantly impairs daily functioning and contributes to GAD's chronic course if left untreated (Kessler et al., 2012). Neurobiological research correlates it with heightened amygdala activity and prefrontal cortex dysregulation, highlighting its underlying neural mechanisms (Etkin et al., 2010). Cognitive-behavioral models explain its persistence by proposing that worry reinforces avoidance behaviors, thereby preventing emotional processing and perpetuating the anxiety cycle (Wells, 1999).

### **2.3.2. Panic and Physical Symptoms**

Panic attacks, the hallmark feature of Panic Disorder, are defined by sudden and intense surges of fear or discomfort peaking within minutes, accompanied by pronounced physical symptoms reflecting acute autonomic nervous system activation (APA, 2013). These attacks can occur unexpectedly or in response to triggers and are distinguished from general anxiety by their abrupt onset, overwhelming sense of imminent catastrophe (e.g., fears of dying or losing control), and intense somatic focus, where physical symptoms are central to the experience rather than secondary (Klein, 1993; Clark, 1986). The symptomatic presentation involves a constellation of manifestations: autonomic symptoms (e.g., palpitations/tachycardia from noradrenergic hyperactivity, sweating/trembling, nausea/dizziness); respiratory symptoms (e.g., dyspnea/choking sensations often linked to hyperventilation-induced hypocapnia, chest pain frequently mimicking cardiac events); and neurological/cognitive symptoms (e.g., derealization/depersonalization, catastrophic misinterpretations like fear of dying, chills/hot flashes) (APA, 2013; Yeragani et al., 2002; Furman et al., 2005; Ley, 1985; Foldes-Busque et al., 2011; Dresler et al., 2013; Clark, 1986).

Clinically, recurrent panic attacks are fundamental to Panic Disorder diagnosis and significantly increase the risk of developing agoraphobia (APA, 2013). Neurobiological models implicate hyperactivity within the amygdala, locus coeruleus, and brainstem nuclei, potentially generating "false suffocation alarms" (Klein, 1993). Crucially, the physical sensations themselves drive a maladaptive "fear of fear" cycle and avoidance behaviors, perpetuating the disorder and increasing relapse risk (Clark, 1986; Roy-Byrne et al., 2006). Cognitive-behavioral models further emphasize the role of interoceptive conditioning, where bodily sensations become conditioned stimuli eliciting panic (Bouton et al., 2001).

### **2.3.3. Separation Anxiety**

Separation Anxiety Disorder is defined by developmentally inappropriate and excessive fear or distress regarding separation from major attachment figures (e.g., parents, caregivers) or home environments, persisting for at least four weeks in children/adolescents or six months in adults (APA, 2013). Distinct from normative separation distress, Separation Anxiety Disorder involves persistent cognitive preoccupation with catastrophic harm (e.g., accidents, death) befalling attachment figures and significant functional impairment due to resistance to separations (Bögels et al., 2013). While historically viewed as a childhood condition, Separation Anxiety Disorder is now recognized as prevalent in adults, manifesting as debilitating worry about separation from spouses, children, or symbolic "safe" figures (Shear et al., 2006). Symptomatology encompasses cognitive symptoms (recurrent distress about loss, intrusive catastrophic imagery of permanent separation, reluctance to be alone due to perceived vulnerability), behavioral symptoms (avoidance of separations leading to refusal of school/work/solo activities, "shadowing" or clinging behavior, separation-themed nightmares), and physical symptoms (somatic complaints like headaches/nausea/vomiting occurring predictably around separations, tachycardia/palpitations in response to separation cues) (APA, 2013; Silverman et al., 2003; Eisen & Schaefer, 2005; Kearney et al., 2003; Bögels et al., 2013; Kossowsky et al., 2013).

Clinically, Separation Anxiety Disorder causes substantial impairment in social and academic/occupational functioning, with school refusal present in approximately 75% of childhood cases (Kearney & Albano, 2004). It is associated with an elevated risk for comorbid conditions, particularly depression and panic disorder (Battaglia et al., 2016).

Neurobiological research points to dysregulation within amygdala-prefrontal circuitry during attachment-related stress, heightening threat sensitivity (Gee et al., 2013).

Adults with Separation Anxiety Disorder frequently exhibit maladaptive attachment styles, often linked to histories of childhood trauma (Manicavasagar et al., 2010).

#### **2.3.4. Social Anxiety**

Social Anxiety Disorder also called social phobia, means having a strong, lasting fear (at least 6 months) of social or performance situations. People with Social Anxiety Disorder are terrified of being watched, judged negatively, embarrassed, or rejected by others (APA, 2013). This fear makes them avoid situations like parties or public speaking, or endure them with intense distress, hurting their work, school, or social life. It's more than just shyness. People with Social Anxiety Disorder expect social interactions to go badly (like thinking "I'll say something stupid") and do things to try to feel safer (like avoiding eye contact or over-preparing what to say), but these habits actually keep the anxiety going (Clark & Wells, 1995). It usually starts in the teen years (Kessler et al., 2005).

Symptoms show up in thoughts, actions, and the body. Thinking-wise, people worry a lot beforehand about being humiliated, beat themselves up for a long time after social events, and constantly look out for signs that people don't like them (like a frown) (Hinrichsen & Clark, 2003; Rachman et al., 2000; Heimberg et al., 2014). Behaviorally, they avoid situations, use subtle tricks to avoid attention (like talking very little or hiding shaky hands), and struggle to speak up or make friends (APA, 2013; Wells et al., 1995; Alden & Taylor, 2004). Physically, they often blush, sweat, or tremble visibly when they think people are watching, feel sick or tense up during interactions, or find their voice shakes or their mind goes blank when they feel judged (Edelmann & Baker, 2002; Anderson & Hope, 2009; Schneier et al., 2020).

## **2.4. TYPES OF DEPRESSION**

### **2.4.1. Anhedonia**

Anhedonia is a core symptom of depressive disorders, defined as a marked reduction in or complete loss of the ability to experience pleasure (American Psychiatric Association [APA], 2013). It represents a multifaceted deficit in reward processing, encompassing diminished interest in previously enjoyed activities, reduced motivation toward rewarding stimuli, and impaired capacity to anticipate or derive satisfaction from positive experiences (Der-Avakian & Markou, 2012).

The Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM-5) classifies anhedonia as one of two primary diagnostic criteria for major depressive disorder (MDD), where it must persist for at least two weeks and reflect a notable change from baseline functioning (APA, 2013).

Anhedonia, a core diagnostic criterion for major depressive disorder (APA, 2013), manifests through interconnected behavioral, emotional, and cognitive symptoms. Individuals exhibit a significantly reduced pleasure response, characterized by blunted emotional reactions and a lack of joy or satisfaction even when engaging in previously rewarding activities like hobbies, social interactions, or sensory experiences (Treadway & Zald, 2011). This core deficit extends to motivational deficits, where diminished anticipation of rewards leads to decreased goal-directed behavior, apathy, procrastination, and withdrawal from effortful pursuits (Der-Avakian & Markou, 2012). Social withdrawal is prevalent, marked by a loss of interest in interpersonal connections, avoidance of social engagements, indifference towards relationships, and feelings of detachment (Rizvi et al., 2016).

Cognitive impairments involve disruptions in reward learning and decision-making; affected individuals struggle to associate actions with positive outcomes, fostering pessimism about future rewards (Treadway & Zald, 2011). Furthermore, emotional blunting or "emotional numbing" may occur, reducing responsiveness not only to positive but also to negative stimuli (Rizvi et al., 2016).

Clinically, anhedonia is a significant predictor of depression severity, treatment resistance, and functional impairment (Rizvi et al., 2016). Its persistence during remission signals a heightened relapse risk, underscoring its role as a trait marker for depressive pathology (Der-Avakian & Markou, 2012).

#### **2.4.2. Dysphoric mood**

Dysphoric mood, synonymous with depressed mood, is a fundamental symptom of depressive disorders, defined by persistent and intense feelings of sadness, emptiness, hopelessness, or worthlessness (American Psychiatric Association [APA], 2013). Unlike normal, passing sadness, dysphoria is a pervasive state that significantly impairs daily life and must be present most of the day, nearly every day, to be clinically relevant (Nolen-Hoeksema, 2020). The DSM-5 lists dysphoric mood as one of two core symptoms necessary for diagnosing major depressive disorder (MDD), the other being a loss of pleasure (anhedonia) (APA, 2013). This mood state is linked to dysregulation in specific brain circuits involved in emotion processing and control (Disner et al., 2011). Symptoms manifest across different areas: emotionally, as deep sorrow, excessive guilt, worthlessness, hopelessness, and irritability (especially in adolescents) (Stringaris et al., 2018); cognitively, as repetitive negative thinking (rumination) and difficulty solving problems; and physically, as observable restlessness or slowed movements (APA, 2013).

Clinically, the severity of dysphoria predicts how severe the depression will be, the risk of suicidal thoughts or actions, and the likelihood of the depression becoming long-lasting (Nolen-Hoeksema, 2020). While it often occurs alongside anhedonia, dysphoria specifically relates to high levels of negative feelings. Importantly, if dysphoric mood persists even after treatment, it significantly increases the chance of the depression returning (Buckman et al., 2018).

### **2.4.3. Negative self-evaluation**

Negative self-evaluation is a core cognitive feature of depression, marked by persistent and distorted judgments about a person's own value, capabilities, or ethics. This involves excessive self-criticism, feelings of worthlessness, guilt, or inadequacy that is much stronger than the situation warrants (American Psychiatric Association [APA], 2013).

Beck's (1979) influential cognitive theory explains that these negative judgments arise from deep-seated, unhelpful belief patterns (negative schemas) that become active during depression. Key ways this symptom shows up include: extreme guilt over minor or imagined past mistakes, sometimes reaching unrealistic levels (APA, 2013); a deep-seated belief of being fundamentally inadequate or defective, even when evidence suggests otherwise (Beck et al., 1979); intense self-hatred and internal abusive thoughts (Rnic et al., 2016); negative views about oneself ("I'm a failure"), the world ("Everyone is against me"), and the future ("Things will never get better") (Beck, 1979); a tendency to focus intensely on personal flaws while ignoring strengths (Gotlib & Joormann, 2010); and thoughts that others would be better off if one were dead (APA, 2013).

Brain studies link this symptom to over activity in areas involved in self-judgment, like the subgenual anterior cingulate cortex (sgACC) (Gotlib & Joormann, 2010). Clinically, negative self-evaluation predicts whether depression will become long-lasting, how well it responds to

treatment, and the risk of suicidal thoughts or actions (Rnic et al., 2016). Importantly, this symptom is often more persistent than mood problems and can linger even when other depression symptoms improve, making it a sign of vulnerability for future episodes (Beck & Bredemeier, 2016). While therapies like CBT directly target these negative thoughts through cognitive restructuring, deeply held negative beliefs may require longer-term treatment (Renner et al., 2019).

#### **2.4.4. Somatic complaints**

Somatic complaints physical symptoms that lack a clear medical explanation are common and significant features of depressive disorders, especially in diverse cultural settings (American Psychiatric Association [APA], 2013). These symptoms highlight how mood problems and bodily issues affect each other, often leading people to feel overly distressed about their physical health (Kirmayer & Robbins, 1996).

The DSM-5 includes these physical symptoms as important signs for diagnosing major depressive disorder (MDD), particularly when they happen alongside mood-related problems (APA, 2013). Key physical symptoms seen in depression include various types of unexplained pain (like headaches or muscle aches) (Bair et al., 2003), stomach or bowel problems (Henningsen et al., 2003), constant exhaustion or a heavy feeling in the limbs (Demyttenaere et al., 2005), significant sleep issues (either too little or too much) (APA, 2013), sensations like dizziness or shortness of breath without a heart/lung cause (Katon & Sullivan, 1990), and major changes in appetite or weight (APA, 2013).

Research links these physical symptoms to problems in the body's stress response system (HPA axis), its defense system (immune pathways), and how it processes physical sensations (Dantzer et al., 2008). Clinically, these complaints are important because they can cause doctors to miss the underlying depression (Simon et al., 1999), lead to greater difficulty with

daily activities and work than mood symptoms alone (Löwe et al., 2008), and predict poorer response to standard depression medications when physical symptoms are prominent (Silverstein & Patel, 2011). They are also the dominant way depression shows up in 50-80% of cases in many non-Western cultures (Kirmayer & Sartorius, 2007).

## **2.5. DETERMINANTS OF ANXIETY AND DEPRESSION**

Anxiety and Depression among adolescents with visual impairments rises from several determinants such as psychological, demographic, socioeconomic, cultural, and family-related factors. These understandings refer to the need for all-inclusive mental health intervention with the engagement of various disciplines, culturally sensitive, promote inclusivity, and equally address emotional well-being and physical rehabilitation.

### **2.5.1. Demographic factors**

The long lasting development of anxiety and depression among adolescents with visual impairment influenced by various demographic factors. According to Cohen et al. (2018) childhood and adolescence are the most critical stage for mental health, with visually impaired individuals facing significant challenges because of reduced autonomy, low peer connection, and self-confidence. As indicated by Parravano et al. (2021), severe visual impairments are associated with high mental health risks, which is largely caused due to greater reliance on others and limited independence.

Functional inability associated with visual impairment act as the main key determinant to mental health instabilities, as indicated by De Castro et al. (2022). Gascoyne et al. (2022) also supports this connection, representing that low independence increased psychological distress across both youth and adults.

### **2.5.2. Socioeconomic and environmental factors**

Adolescents with disability from low life standard are in an increased risk of anxiety and depression due to factors such as poverty, limitation to education and health service, and social discrimination. Fentie et al. (2023) identified that financial problems and scarce resource allocation highly worsen the rate of developing mental illness for underserve communities. Parravano et al. (2021) again emphasized that limited employment opportunities brings economic dependence on others. It deepens feeling of helplessness and anxiety.

In Ethiopia, adolescents in rural and low income urban areas are suffer of high rate of mental health risks because of food insecurity, low standard living conditions, and inadequate healthcare services (Ministry of Health, 2021). Additionally, Cho et al. (2015) argue that individuals with visual impairments often come across a range of obstacles in accessing mental health support, which worsen their psychological pain.

### **2.5.3. Psychological factors**

Boadi- Kusi et al. (2023) have been investigated on how mental health challenges like anxiety associate with the daily activities of those living with vision loss. The study recognizes functional limitations, fears of relying on others, and social stigma as key determinants of anxiety, mainly among those who faces adaptation challenges. The study recommends the positive impacts of supportive environment including family, healthcare professionals, and community services in improving mental illness caused by anxiety, and advocates for integrating psychological support into all-inclusive care approaches.

Okeke et al. (2023) also revealed that anxiety and stress significantly reduce vision related quality of life. Their findings indicated that fear of getting severe vision problem, dependence on others, and socioeconomic factors contribute to high level anxiety. And those factors are associated with reduced quality of life.

The researchers underline the requirement of integrated health care models that address both emotional well-being and physical health needs.

Adolescents with visual impairments faces increased emotional difficulties due to their disability. Demmin and Silverstein (2020) reported how self-perception, societal pressure, and body image make worse anxiety and depression. The stage of adolescence is age of brain maturation but, becomes exceptionally challenging for these individuals as they have to develop adaptive coping strategies. Liu et al. (2024) distinguished those ongoing changes in brain areas leading to emotional regulation during adolescence increased vulnerability to mental health disorders. Similarly experienced trauma or violence also significantly predicts anxiety and depression. According to Fajkowska et al. (2018), adolescents with disabilities, including those with visual impairments experienced increased risk of abuse and neglect which lead to mental health issues. Otwombe et al. (2015) also strengthened this.

They demonstrate that traumatic events result long term psychological consequences. Especially, for those lacking adequate support systems the impact of trauma is heightened.

#### **2.5.4. Cultural and societal expectations**

The mental health of adolescents with visual impairments is significantly influenced by cultural norms and societal stigmas that are related to disability. Societal expectations can highly influence marginalized groups such as individuals with visual impairment. Diminished independence and physical capability often marginalize these individuals, developing feeling of exclusion. Fentie et al. (2023) revealed that stigma and social exclusion badly increase mental health challenges like anxiety and depression.

In Ethiopia, adolescents face increased rate of stress due to societal factors. Academic success and conformity to traditional gender roles are among the factors Ministry of Health (2021). Excessive pressure of social media exposure encourages negative self-comparisons extremely increasing vulnerability to mental illness, Liu et al. (2024).

Family relationships have essential role in adolescent mental well-being. According to Liu et al. (2024), factors like family conflict, insufficient parental support, and overprotective behaviors can increase the development of anxiety and depression, and differently supportive family environments serve as protective factors.

Boadi-Kusi et al. (2023) give emphasis to the protective effect of social support. They indicate that positive engagement with family and community lessens psychological suffering. However, social isolation and stigma highly affects visually impaired individuals that causes loneliness and anxiety.

## **2.6. FACTORS ASSOCIATED WITH ADOLESCENTS' ANXIETY AND DEPRESSION**

The research by Otwombe et al. (2015) indicating adolescents who face socioeconomic difficulty have witnessed and experienced violence, including sexual abuse, which suggests that these adolescents may potentially face additional stressors. It is noteworthy that abusive parenting practices employed by a caregiver who is also having mental health issues have been linked to a higher risk of mental, physical, and problem behavioral problems in teenagers (Meinck et al., 2017).

Cluver et al. (2015) disclose unfavorable childhood experiences, such as malnourishment, abuse, exposure to violence, AIDS-related orphan hood, parent-death from AIDS, and food insecurity the detrimental effects of adolescent's mental health problems in South African. According to Meinck et al. (2017), adolescents may also be impacted by abusive parenting

practices, including being subjected to emotional and physical violence at the hands of a caregiver (such as a parent or grandparents). In addition, they can come across their caregiver's mental health issues, which could make them feel helpless to assist their caregiver and worry about the caregiver's, their own, and their families' well-being (Meinck et al., 2017).

Stressful early childhood experiences can seriously undermine the development of adaptive coping skills necessary to deal with challenges in adulthood, in addition to providing the foundation for unhealthy lifestyles, dysfunctional interpersonal relationships, and poor health outcomes (Danese & McEwen, 2012). Persistent socioeconomic disparities are linked to stress vulnerability in addition to being associated with health disparities, unhealthy lifestyle choices, and poor health outcomes, particularly when it comes to financial and educational opportunities (Shonkoff et al., 2009; Danese & McEwen, 2012).

## **2.7. COPING STRATEGIES**

Camara et al. (2017) have studied the role of social support in helping adolescents cope with stress. Their study targeted to analyze the supportive relationships teenagers rely on. They also assess how these associations influence their experience of stress. Sometimes interactions with parents, peers, or friends can worsen stress mostly during conflicts. The researchers emphasize that social support is the most protective factors for adolescents facing challenging situations (Camara et al., 2017). The study mainly focused on the adolescents' willingness to seek social support. But their willingness depends on the nature and quality of their relationships, which are shaped by factors such as their trust in others and their capacity for understanding (Camara et al., 2017).

Adolescents might expect seeking assistance when come across challenges if they understand available social support systems. They can also truthfully evaluate the help accessible to

them. Their awareness to the available social support may shape their ability to manage stressors and control their emotions caused from difficult situations (Camara et al, 2017).

Psychological strengths are protective factors that play an effective role in how adolescents handle stress. Mainly, for those experiencing poverty, highlighting the need to explore their psychological strength is significant (Lee et al., 2017). The Research conducted in socioeconomically disadvantaged South African settings also emphasizes this. The research shows the disrupted cyclical link between poverty and mental health issues. This could help to address the issue and improve community mental well-being by enhancing economic opportunities, and contribute to poverty alleviation efforts (Otwombe et al., 2015).

Research by Lee et al. (2017) explored how South Korean adolescents cope with multiple risk factors. The study found that resilient teenagers are who established strong peer and teacher relationships and adopt in school settings. This is effective coping methods even if they are facing significant adversities. But, those with fewer risk factors and poorer school adjustment did not utilize such strategies (Lee et al., 2017).

Additional research indicates differences in stress management strategies based on emotional wellbeing. Diener et al. (2006) found that individuals with higher happiness levels more likely to adopt positive appraisal techniques, seek social support, and adopt healthy biopsychosocial coping methods. On the other hand, those experiencing anxiety and depression are more inclined to unhealthy behaviors. Additionally, studies indicate that depression associates with increased rates of anxiety, substance abuse, suicidal predispositions, and stressed familial relationships (Kessler et al., 2008; Sunderland et al., 2010; Zbozinek et al., 2012).

## 2.8. LITERATURE SUMMARY

This chapter reviews existing knowledge on anxiety and depression, focusing on adolescents, particularly those with visual impairments. Anxiety disorders involve persistent, excessive fear or worry about real or future threats, leading to significant distress and impairment in daily life. Major Depressive Disorder (MDD) is characterized by a depressed mood or loss of pleasure (anhedonia) for at least two weeks, plus other symptoms like sleep or appetite changes, fatigue, guilt, concentration problems, or suicidal thoughts, also causing major impairment. While distinct, anxiety and depression share common features and often occur together.

Globally, these conditions are highly prevalent among adolescents. The World Health Organization reports that 31.9% of 13-18-year-olds experience anxiety disorders, and 13.3% experience depression. Rates are significantly higher among vulnerable groups, including adolescents with disabilities like visual impairment. International research consistently shows that individuals with visual impairments experience anxiety and depression at much higher rates than the general population, often approximately twice as high. This increased risk is linked to factors such as the severity and suddenness of vision loss, the resulting functional limitations, reduced independence, social stigma, isolation, diminished self-esteem, and limited access to support services.

Specific types of anxiety are detailed. Generalized Anxiety Disorder (GAD) involves excessive, uncontrollable worry about various life areas. Panic Disorder features sudden, intense panic attacks with strong physical symptoms like palpitations, sweating, and dizziness. Separation Anxiety Disorder involves excessive fear of separation from attachment figures. Social Anxiety Disorder is characterized by an intense fear of social scrutiny and judgment.

Core features of depression include anhedonia (loss of pleasure), dysphoric mood (persistent sadness/hopelessness), negative self-evaluation (worthlessness, guilt), and somatic complaints (physical symptoms like unexplained pain, fatigue, and sleep/appetite changes without clear medical cause).

The development of anxiety and depression in adolescents with visual impairments arises from a complex interplay of factors. Demographic factors include the severity of vision loss and age, with childhood/adolescence being a critical period. Socioeconomic and environmental factors like poverty, limited access to education and healthcare, unemployment, food insecurity, and inadequate living conditions significantly increase risk. Psychological factors encompass the challenges of adapting to vision loss, fear of dependency, negative self-perception, societal pressures regarding body image, and experiences of trauma or abuse. Cultural and societal expectations, including stigma, social exclusion, pressure for academic success, rigid gender roles, and negative social media influences, further contribute to mental distress. Family dynamics are crucial; conflict, insufficient support, or overprotection can increase risk, while supportive family environments act as protective buffers. Lack of social support and isolation are major risk factors.

Coping strategies are vital for managing stress and mental health challenges. Social support from family, peers, teachers, and the community is identified as one of the most important protective factors. Adolescents who perceive available support and feel able to seek help cope better. Psychological strengths and resilience, fostered through positive relationships and successful adaptation (e.g., in school settings), also help mitigate the impact of adversity. Conversely, individuals experiencing anxiety and depression are more likely to use unhealthy coping mechanisms. Research highlights a cyclical link between poverty and poor mental

health, suggesting that improving economic opportunities can benefit community mental well-being.

The literature strongly emphasizes the need for comprehensive, culturally sensitive mental health interventions for adolescents with visual impairments. These interventions should integrate psychological support with physical rehabilitation, address the various determinants (psychological, socioeconomic, cultural, and familial), promote inclusivity, and actively work to reduce stigma and barriers to care.

## **2.9. THEORETICAL FRAMEWORK**

### **2.9.1. Bio-psychosocial Models**

The researcher has implemented an all-inclusive theoretical model (Bio-psychosocial Models) to understand the nature of the problems and their contributing factors. Indeed, a conceptual framework that integrates it and assesses the relationship between the individual, social/environmental, biological, and psych-behavioral factors involved in depression, as well as the effect of the intervention on these factors, should serve as the basis for research to thoroughly examine these and other similar interventions (kinser & Lyon, 2014). A few of the several factors that contribute to stress vulnerabilities and both acute and chronic stress are individual burdens, both acute and chronic, the biological environment, and the psychosocial environment. A person's life may contain a wide range of complex and possibly stressful elements that may interact to increase the likelihood that they will experience depression (kinser & Lyon, 2014).

Two aspects, for example, are crucial to the reciprocal relationship between stress susceptibility and depression in each of these distinct types. To begin with, every individual has a distinct sense of control when faced with stress and hopelessness. Numerous cross sectional and longitudinal studies have shown that environmental factors outside of an

individual's control are a major cause of changes in stress related psychoneuroimmunology in people experiencing stressful life conditions (Geronimus et al., 2006; Glover et al., 2006).

Second, ruminations which are negative thoughts that are frequent and persistent are a habit that affects everyone. Ruminative actions could be considered normative since humans have developed to be extremely sensitive to stressors or interpersonal distress to preserve safety and social bonds (Buss, 2000; Seligman et al., 2006). To maintain their health, a person must be knowledgeable of, able to use, and motivated to do so (Danner et al., 2001).

### **2.9.2. Social cognitive theory (SCT)**

As proposed by Bandura (1977), suggests that human behavior arises from the reciprocal interaction between personal factors, environmental factors, and behavioral factors. Personal factors include an individual's thoughts, beliefs, emotions, and self-efficacy. Environmental factors contain social support, societal attitudes, and the physical and social environment. Behavioral factors encompass an individual's actions, skills, and behaviors. SCT emphasizes that these factors are interconnected and influence one another dynamically. For example, a student's low self-efficacy (personal factor) might lead to avoidance behaviors (behavioral factor), which can limit their social interactions (environmental factor) and further decrease their self-esteem (personal factor). Conversely, a supportive school environment (environmental factor) can foster positive coping mechanisms (behavioral factor), leading to improved self-efficacy (personal factor) and reduced anxiety.

This model helps to understand the psychological and behavioral reasons that contribute to anxiety and depression in this population.

### **2.9.3. Transactional model of stress and coping**

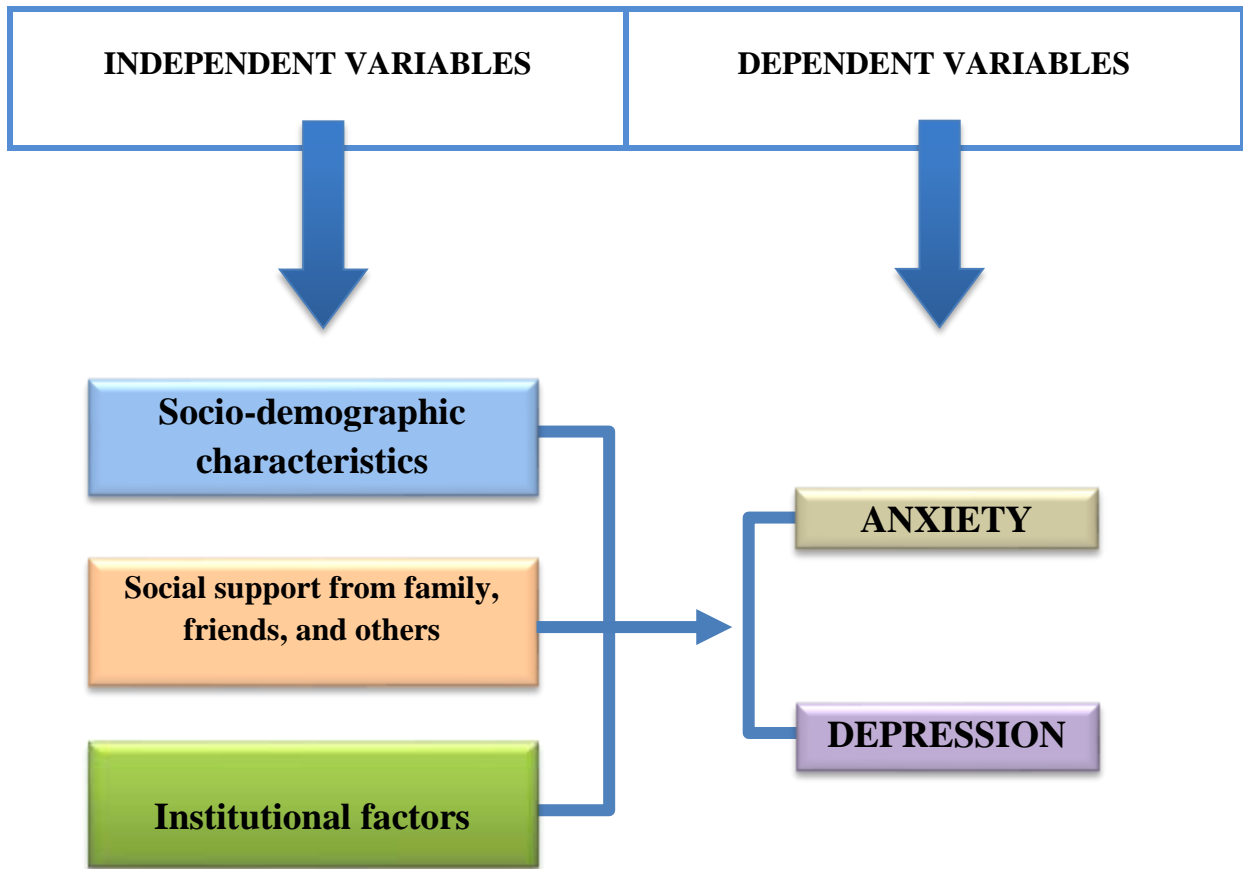
The research has also applied Lazarus and Folkman's transactional model of stress and coping (1984). Stress happens when a person views a situation as threatening or harmful. This is based on how individuals evaluate stressors in relation to their goals and available resources.

Persons with disabilities often face specific challenges related to their disability. For example: inability to move through the environment, gaining educational materials, or weak social interactions are some of the challenges. Such things may cause primary stress conditions, where the person notices harm, risk, or obstacle.

Coping strategies are explained by the model as important tools to manage stress. Two types of strategies are highlighted. These are Problem-focused and Emotion-focused coping strategies. The problem-focused is described by activities like seeking assistance and developing compensatory strategies whereas, the Emotion-focused can be defined by relaxation techniques, and social support.

By applying this framework, the study clarifies how stressors, personal evaluations, and coping methods interact specifically for those with visual impairments. The approach simplifies understanding the stress experiences tied to disability related challenges.

**Figure 1: Conceptual Framework: indicating the direct and forward association between the independent variables and dependent variables**



**Source:** Own construction based on literature review (2025)

## **CHAPTER THREE**

### **METHODS AND MATERIALS**

This section describes the methodology employed to explore anxiety and depression in students with visual impairment, along with factors to these conditions and coping mechanisms they adopt. Methodology includes research design, study area description, sampling method and sample size determination, and instrument of data collection. The methods used to collect and analyze data, as well as quality assurance method and ethical considerations are implemented to insure a responsible research practices.

#### **3.1. RESEARCH DESIGN**

An institution-based cross-sectional research design was employed to assess the magnitude of potential anxiety and depression and their associated risk factors among students with visual impairments, as observed in Shashemene and Sebeta primary schools. Cross-sectional studies can be either descriptive or analytic (Alexander, 2015a). Descriptive cross-sectional studies characterize the prevalence of health outcomes or phenomena under investigation (Alexander, 2015a).

#### **3.2. STUDY AREA DESCRIPTION**

The research is conducted at sebeta and shashemene town; which are located respectively 20 Km and 262 Km to the south and southeast of Addis Ababa, capital of Ethiopia. Sebeta is a town found at Highland climatic zone, which is a part of shagar city sub city. The school called Sebeta special boarding school for the blind is one of the oldest Boarding schools for students with visual impairment in Ethiopia. It established in September, 1964 G.C, during the reign of emperor Hailezilase with the vision to see an educated citizen who develops the skills and abilities to analyze, evaluate, innovate, and research as well as acquire a basic democratic view of love and respect for the country, work and local communities.

The school also aimed to make the students of Sebeta primary school for the blind to score good grades, Increase student participation, Make educational materials complete and to increase community participation to strengthen the relationship between the school and the local community.

The school is supported by government of Oromia regional state. Currently there are 148 male and 102 female primary school students are attending class.

Regarding staffs and teachers there are over 43 staffs including Ganat Kifle Danyew the director of the school and chaka adunya Fayisa Vice director of the school. There are 11 male and 20 female teachers currently teaching the students in the school, alongside 10 staff members serving as care givers.

Catholic school for the blind is the second study area which is found in Shashemene town. Shashemene is among major towns in oromia regional state, with generally hot climate. This school is a boarding school established in 1981 G.C, with the vision of aspires to give light to the visually impaired by rehabilitating them through education. It strives to educate them to a stage of self-reliance. The aim of the school is to make the visually impairer's live in dignity, respect, independent and be part of transformation.

The School enrolls students up to Grade 7, after completion they join formal school. Currently, there are 100 students in the school attending their education, among these 51 of them are male and 49 are female students. The school has total staffs of 29. 8 of them are academic teachers with 3 female and 5 male. The rest 21 are care givers, school security and managerial staffs including academic director Sister Sara Joseph and vice director Johannes Philiphose. The main source of income for the school is a donation gain from catholic communities and volunteers.

Students with visual impairments attending Shashemene Catholic School for the Blind and Sebeta special boarding school for the blind were considered the target population for this research. These schools selected due to their large population of students among other boarding schools of visual impairment. Currently, there are 350 students at the two study sites.

### 3.3. SAMPLE SIZE DETERMINATION

To select the required sample size for this study, Kothari's (2004) sample size determination formula was applied to calculate a representative sample from the total population of students with visual impairments. The formula is as follows:

$$n = \frac{Z^2pqxN}{e^2(N - 1) + Z^2pq} = \frac{1.96^2(0.5)(1 - 0.5)(350)}{(0.05)^2(350 - 1) + (1.96)^2(0.5)(0.5)} = \frac{336.14}{1.8329} \approx 183$$

Where:

**n:** The sample size for a finite population.

**N:** Total number of visually impaired students at Shashemene and Sebeta primary schools (350).

**P:** Proportion estimate (0.5).

**Q:** 1 - p (0.5).

**e:** Margin of error (5%).

**Z $\alpha$ /2:** Normal reduced variable at a 0.05 level of significance (Z=1.96).

- Based on the calculated sample size above (n=183), the proportional number of sample was identified for the two study areas using the following equation.

$$\text{sample size for Shashemene} = \frac{N_{sh} \times n}{N} = \frac{100 \times 183}{350} = \frac{18300}{350} \approx 52 \text{ samples}$$

$$\text{sample size for Sebeta} = \frac{N_{sb} \times n}{N} = \frac{250 \times 183}{350} = \frac{45750}{350} \approx 131 \text{ samples}$$

Where:

**N<sub>sh</sub>**: Total number of visually impaired students at Shashemene primary School.

**N<sub>sb</sub>**: Total number of visually impaired students at Sebeta primary School.

**n**: The sample size for a finite population.

**N**: Total number of visually impaired students at Shashemene and Sebeta primary schools (350).

### 3.4. SAMPLING METHODS

A multistage sampling method was used to select participants of the study from the target study population. In the first stage, the research settings were selected purposively, due to their large population. Then, a stratified random sampling method was used to select the sample of participants from two primary visual impairment schools. This sampling technique was used because the target population is heterogeneous in terms of level of grade, being female and male, and number of students. Finally, via using simple random sampling technique (lottery method) the required numbers of samples were selected from each stratum according the size of total number of target groups in the two research sites.

### 3.5. INSTRUMENTS OF DATA COLLECTION

To gather data from the participants, a range of questionnaires was used. The items have different sections including, the sociodemographic characteristics which assess the gender,

age, family socioeconomic status, onset of visual impairment, and institutionally related factors.

The Youth Anxiety Measure for DSM-5 (YAM-5) developed by Muris et al. (2017) was used to measure anxiety disorders among students with visual impairment. The 28 items measure four sub-scales such as separation anxiety, social anxiety, panic and physical symptom and generalized worry. The measure was arranged in a four point Likert scale response format as '0' never to 3 'always'. The original scale had strong reliability with Cronbach alpha values of 0.93 for the non-clinical sample and 0.92 for the clinical sample.

Regarding the cut-off points, scoring, and interpretation of this scale, scores ranging from 0 to 27 indicate minimal to no anxiety or social discomfort. In this study, visually impaired students with anxiety disorder scores within this range are likely to experience no or only mild anxiety.

According to the original scale's cut-off points, scores between 28 and 56 indicate moderate anxiety or social discomfort. Therefore, in this study, students with visual impairment in this range likely exhibit clear signs of anxiety and social discomfort in their daily activities, although these feelings do not dominate all aspects of their lives.

In the YAM-5, severe anxiety is indicated by scores ranging from 57 to 84. Primary school students with visual impairments who score in this range are likely experiencing significant anxiety and social discomfort, which can disrupt daily functioning and social interactions.

The YAM-5 also includes subscales that assess specific anxiety domains: separation anxiety (Items 1–6), social anxiety (Items 7–16), panic and physical symptoms (Items 17–22), and generalized worry (Items 23–28).

To assess the level of depression among visually impaired students' of Shashemene and Sebeta primary schools, the Reynolds Adolescent Depression Scale, 2<sup>nd</sup> edition (RADSD-2) developed by Reynolds (2008) was used. It is a self-report instrument that is broadly used to assess depressive symptoms in adolescents aged 11 to 20.

The scale is composed of 30 questions that were designed to measure four subscales of depression. These subscales include dysphoric mood, anhedonia, negative self-evaluation, and somatic complaints. For Dysphoric Mood items (1, 7, 8, 14, 16, 19, 23, 29), Anhedonia/Negative Affect items (5, 9, 10, 12, 15, 18, 25), Negative Self-Evaluation (items 3, 4, 11, 17, 20, 22, 27, 28) and Somatic Complaints items (2, 6, 13, 21, 24, 26, 30) are used to measure depression scale among students with visual impairment. It is rated on a four point Likert scale format representing '1' as *almost never* to '4' *most of the time*. As far as the overall reliability coefficient of the scale is concerned, it was found to be in between 0.92 to 0.95 Cronbach's alpha suggesting strong level of reliability.

The cutoff scores were defined as below 60, indicating little to no depressive disorder. Individuals in this range are not considered at a risk for clinical depression. A score of 60-79 indicates mild to moderate depression. It suggests some presence of depressive symptom. And high score 80 and above indicate significant depressive symptoms. This indicates a need for clinical intervention or mental health support. 76 is a cutoff point that identifies clinically significant depression. If scores exceeding this threshold, it suggests the presence of depressive symptoms that need further clinical evaluation.

The researcher employed the Social Support Appraisal Scale (SS-A) which was developed by Vaux et al. (1986). The 23 questions were designed to evaluate perceived social support from family, friends, and others. It examines how individuals feel loved, valued, and involved.

The scale was arranged on six points Likert scale response format ranging from 1 '*strongly disagree*' to 6 '*very strongly agree*'. Items 1-9 evaluate perception of support from family, items 10-18 evaluate support from friends and items from 19-23 are used to evaluate other forms of support.

The Coping Responses Inventory-Youth Form (CRI-Y) Moo's (1993) adapted to measure Adolescents with Visual Impairments. Respondents were asked to indicate how frequently they used each coping mechanism in a recent stressful circumstance using a four-point Likert scale ranging from no (0) to yes, fairly often (3). The subscales and their relevant items are listed below: Approach coping (1-10), positive reappraisal (11-15), seeking guidance and assistance (16-20), problem solving (21-25), avoidance coping or cognitive avoidance (25-30), acceptance or resignation (31-35), seeking alternative rewards (36-40), emotional discharge (41-45), and anxiety management (46-48). The total score is gained By summing all item responses. Higher scores indicate greatly perceived social support.

### **3.6. DATA QUALITY ASSURANCE METHODS**

To ensure data quality, the researcher reviewed high-quality articles from well-regarded indexing organizations such as Web of Science and Scopus, as well as nationally accredited journals. A pilot test involving 5% of the participants was conducted to assess the reliability of the tools, to ensure content validity, and other quality assuring techniques with the help of psychology expert.

All instruments were translated into the participants' mother tongue by a language expert to minimize confusion. Trained data collectors read the questionnaires to participants and ensured all items were answered. Data quality control included coding, entry into SPSS, data cleaning, recoding, and model fit testing under the supervision of a research assistant.

### **3.7. PROCEDURES OF DATA COLLECTION AND ETHICAL CONSIDERATION**

A formal letter from the School of Social Work, Addis Ababa University, was submitted to the target schools' principals to obtain permission for data collection. The research adhered to ethical guidelines for working with vulnerable groups, such as prioritizing dignity and avoids paternalism by centering their voices and choices in decisions affecting them. A consent form was attached to the questionnaire, allowing participants to indicate their willingness to participate. The study's objectives were explained to participants before they began the survey.

### **3.8. METHODS OF DATA ANALYSIS**

The data were analyzed using SPSS version 26 and Stata 14. Descriptive statistics (frequency, percentage, mean, standard deviation, range, variance, skewness, and kurtosis) were used to summarize data and address research objectives.

Partial and semi-partial correlations were computed to evaluate the strength and significance of relationships between independent and outcome variables. Binary logistic regression was performed to identify determinants of anxiety and depression. Even though, the scales were organized using likert scale measurements, due to the nature of the data the logistic regression was collapsed into binary. The Hosmer and Lemeshow test was used to assess the goodness of fit for the logistic model.

## CHAPTER FOUR

### DATA ANALYSIS AND INTERPRETATION

The data collection process succeeded a commendable return rate of 95.6%, which was effective progress of data collection. The research has focused on assessing the prevalence and magnitude of anxiety disorder and major depressive disorder, along with the determinants, and coping mechanisms employed by primary school students. The Findings provides a wide range of understandings to the issue and offer valuable insights in to mental health challenges of the targeted population.

#### 4.1. ANALYSIS FOR ANXIETY DISORDERS

##### 4.1.1. Magnitude and Prevalence of AD

**Table 1:** Shows the distribution of total anxiety disorders score among visually impaired primary school students (N=175).

	Minimum	Maximum	Mean	Std. Devi	Skewness	Kurtosis
AD	5.00	68.00	32.0914	12.00827	0.849	0.184

The current results suggest that the highest total anxiety score is found to be 68, while the least total anxiety score is 5. If we see the average of anxiety among the visually impaired students, it is 32.09 with a 12.01 standard deviation, justifying a moderate spread in anxiety scores around the mean; see Table 1 above.

The skewness is 0.849, which indicates a moderate positive skew. This suggests that the distribution is slightly skewed to the right, with more students having scores on the lower end of the scale (moderate anxiety) but some students scoring significantly higher (severe anxiety). The kurtosis value is 0.184, which is close to zero, which suggests the distribution of scores is approximately normal in terms of peak and tail behavior. This data indicates variability in anxiety levels among visually impaired students. And it shows a tendency

toward moderate anxiety and some students experiencing significantly higher level score indicating severe anxiety.

**Table 2: Shows the magnitude of anxiety disorders among visually impaired primary school students (N=175).**

	Frequency	Percent
Moderate	106	60.6
Severe	69	39.4
	175	100

Table 2 presents data on the prevalence of Anxiety disorders among primary school students with visual impairments (N=175). Students with moderate anxiety disorders represent 60.6% of the sample, whereas 69 students, accounting for 39.4% of the sample, experienced severe anxiety disorders.

This suggests that while the majority of the students do experience moderate anxiety disorders, a significant proportion (nearly 40%) do, highlighting the need for attention to mental health support for this population.

**Table 3: Shows the descriptive statistics for four anxiety types (N=175).**

Anxiety types	Range	Mean	Std. Devi	Variance	Skewness	Kurtosis
Generalized worry	14	6.365	2.9052	8.44	0.284	-0.22
Panic & physical symptoms	18	7.12	4.01469	16.118	0.566	-0.29
Separation anxiety	18	8.257	4.2096	17.721	0.17	-0.228
Social anxiety	30	10.64	6.2699	39.312	0.597	0.192

- Descriptive statistics for four anxiety types is summarized as follow:

- ✓ **Generalized worry.**

On average, participants scored about 6.37 in generalized worry with a standard deviation of 2.91 and a range of 14. This result suggests that the scores are moderately spread around the mean. The positive skewness (0.284) indicates a slight rightward tilt; more scores are clustered below the mean, but the skew is minimal (close to 0). The negative kurtosis (-0.22) suggests that the distribution is slightly flatter than a normal distribution (platykurtic).

- ✓ **Panic & physical symptoms.**

Participants had an average score of 7.12 with an 18 range and a 4.01 standard deviation, showing more variability compared to generalized worry. Positive skewness indicates noticeable rightward skew, meaning more participants scored on the lower end, with some high scores pulling the distribution to the right. Slightly flatter distribution compared to the normal curve.

- ✓ **Separation anxiety.**

Average score is 8.26 with a range of 18 and 4.21 Standard deviation: moderate spread of scores. Very slight positive skew, close to 0, suggesting a near-symmetrical distribution. Negative kurtosis indicates slightly flatter than normal, indicating a platykurtic distribution.

- ✓ **Social anxiety.**

The largest range (30) among all anxiety sub-scales, indicating higher variability. The highest average score (10.64) among the four anxiety measures. The largest standard deviation (6.27), indicating considerable spread in scores. Noticeable positive skew, suggesting more

scores are on the lower end, with some extreme high scores pulling the tail to the right.

Positive kurtosis suggests the distribution is slightly more peaked than normal.

To summarize, generalized worry and separation anxiety have relatively lower variability and are close to symmetrical distributions (low skewness and kurtosis). Panic and physical symptoms and social anxiety exhibit higher variability (larger standard deviations and ranges) and moderate positive skewness. Social anxiety has the largest range, standard deviation, and variance, reflecting the greatest spread in scores. Kurtosis values for all variables indicate that none of the distributions are heavily peaked or heavily flat, with most being close to a normal distribution.

In conclusion, while all four variables show slight positive skewness, social anxiety stands out as the most variable and right-skewed, suggesting that individuals tend to score on the lower end, but with some high outliers.

#### 4.1.2. Interpretation of Partial and Semi-Partial Correlations for AD with Independent Variables

Partial and semi-partial correlations were computed to evaluate the strength and significance of the relationships between independent variables and anxiety disorders. Partial correlation assesses the unique relationship between two variables while controlling for others. Semi-partial correlation assesses the unique contribution of an independent variable to the dependent variable while controlling for other variables.

**Table 4:** Shows the distribution of partial and semi-partial correlations for anxiety disorders with independent variables (N=175).

Factors	Partial corr.	Semi-partial Corr.	Partial Corr. <sup>2</sup>	Semi-partial Corr <sup>2</sup>	P-value
Gender	-0.0371	-0.0265	0.0014	0.0007	0.6389
Current age	-0.2323	-0.1703	0.0539	0.029	0.0029
School	0.3286	0.2482	0.108	0.0616	0.000
Duration of stay since admission	0.022	0.0157	0.0005	0.0002	0.7807
Age at admission	0.0313	0.0224	0.001	0.0005	0.6923
Age at first occurrence	0.0967	0.0693	0.0094	0.0048	0.2207
Duration of impairment	0.1295	0.0931	0.0168	0.0087	0.1005
Degree of visual impairment	0.1672	0.121	0.028	0.0146	0.0334
Family income	-0.0892	-0.0639	0.008	0.0041	0.2591
Parental level of education	-0.1896	-0.1377	0.0359	0.019	0.0157
Employment status of parents	-0.1984	-0.1444	0.0394	0.0208	0.0114
Family support	-0.4109	-0.3214	0.1688	0.1033	0.000
Friends support	-0.1969	-0.1432	0.0388	0.0205	0.012
Other support	0.1947	0.1416	0.0379	0.02	0.013

The correlations between gender and anxiety disorders are weak and non-significant, suggesting no meaningful relationship in this dataset (partial correlation<sup>2</sup>: 0.0014, p-value > 0.05). There is a negative, moderate, and significant correlation between a student's current age and anxiety sub-scales, indicating that older age is associated with reduced anxiety levels.

The semi-partial squared value shows that current age accounts for 2.9% of the variance in anxiety disorders when controlling for other factors (p-value: 0.0029).

School environments have a positive, moderate, and highly significant correlation with anxiety disorders, suggesting that schooling may influence the likelihood of developing anxiety, contributing to 6.16% of the variance (p-value: 0.000). The duration of stay since admission to the school has a weak and non-significant correlation, indicating no meaningful association with anxiety disorders (p-value > 0.05). Age at admission and age at first occurrence show negligible and non-significant relationships with anxiety disorders.

Family support has the strongest negative correlation, illustrating that family support significantly reduces anxiety disorders, accounting for 10.33% of the variance (squared values: 0.1688 (partial), 0.1033 (semi-partial), P-value: 0.000). Friends' support shows a moderate, significant negative correlation, suggesting a protective role in anxiety (squared values: 0.0388 (partial), 0.0205 (semi-partial), P-value: 0.012). Other forms of support have a moderate, significant positive correlation with anxiety disorders, suggesting a complex relationship (partial: 0.0379, semi-partial: 0.02, p-value: 0.013).

The employment status of the student's parents has a moderate, significant negative correlation with anxiety disorders, suggesting that parental employment may reduce anxiety levels (squared values: 0.0394 (partial), 0.0208 (semi-partial), P-value: 0.0114). The degree of visual impairment has a weak but significant positive relationship, suggesting that the severity of impairment contributes slightly to the variance in anxiety disorders.

Parental educational level has a weak-to-moderate, significant negative correlation, indicating that higher parental education is associated with lower anxiety levels.

The findings reveal that current age, school environment, parental education, employment status, and various forms of perceived social support from family, friends, and others significantly correlate with anxiety disorders and serve as significant predictors. Family support exhibits the strongest protective effect, followed by parental employment and education. Risk factors, including the school environment and other forms of support, positively correlate with anxiety disorders, suggesting nuanced dynamics that require further exploration.

#### **4.1.3. Interpretation of the binary logistic regression model summary for AD**

The summary presents statistical measures used to evaluate the performance and significance of a binary logistic regression model predicting anxiety disorders. The analysis was conducted using 175 data points collected from visually impaired students at Shashemene and Sebeta primary schools. The likelihood ratio chi-squared ( $\chi^2$ ) statistic is 115.01 (LR  $\chi^2$  (14) = 115.01). This value represents the chi-squared statistic, which tests whether the independent variables, taken together, significantly predict the outcome variable (i.e., whether the model performs better than an intercept-only model). The number 14 indicates the total number of independent variables (predictors) included in the model. A higher chi-squared value indicates a better fit of the model to the data.

The p-value associated with the likelihood ratio test is highly significant (p-value < 0.001). A p-value of 0.0000 indicates that the model is statistically significant at all conventional thresholds (0.01, 0.05, or 0.10), confirming that the model, as a whole, significantly predicts the likelihood of anxiety disorders. Therefore, the inclusion of predictors is justified.

The log-likelihood of the model (-59.8) serves as a measure of how well the model fits the data, reflecting the likelihood of observing the data given the model. A higher log-likelihood value (less negative) generally indicates a better fit. The Pseudo R<sup>2</sup> value (0.4900) measures

the goodness of fit for the logistic regression model and is analogous to the R-squared value in linear regression. A Pseudo  $R^2$  of 0.4900 suggests that approximately 49% of the variation in the dependent variable (anxiety disorders) is explained by the model. This value indicates a moderate to good fit, with the model accounting for a substantial proportion of the variance in the outcome.

#### **4.1.4. Interpretation of Goodness-of-Fit for Binary Logistic Regression Model**

The Hosmer-Lemeshow test assesses whether the predicted probabilities from the logistic regression model align effectively with the observed outcomes. This test groups observations into ten categories based on their predicted probabilities and compares observed to expected values.

The Hosmer-Lemeshow chi-squared statistic is 5.80, with a p-value of 0.6691 for the Hosmer-Lemeshow test, which is well above the conventional significance threshold of 0.05. A high p-value indicates no significant difference between observed and predicted outcomes, suggesting that the model fits the data well. Since  $P\text{-value} > 0.05$ , we do not reject the null hypothesis. The Hosmer-Lemeshow test provides strong evidence of a good model fit. Thus, the binary logistic regression model is appropriate for predicting anxiety disorders in this dataset, with no evidence of misfit.

#### 4.1.5. Key Determinants of AD among visually impaired primary school students in Sebeta and Shashemene

**Table 5: Shows the determinants of anxiety disorders among visually impaired students of Sebeta and Shashemene Blind primary schools (N=175).**

Factors	Odds Ratio	Std. Err.	P>z	[95% Conf. Interval]
Gender	0.678	0.354	0.457	0.244 1.887
Current age	0.643	0.091	0.002**	0.488 0.848
School	10.476	6.334	0.000*	3.203 34.263
Duration of stay since admission	1.064	0.169	0.698	0.779 1.453
Age at admission	1.072	0.138	0.588	0.833 1.379
Age at first occurrence	1.187	0.117	0.08***	0.978 1.44
Duration of impairment	1.216	0.126	0.059***	0.992 1.489
Degree of impairment	1.709	0.397	0.021**	1.084 2.695
Employment status of parents	0.576	0.117	0.007**	0.387 0.859
Family Support	0.884	0.024	0.000*	0.838 0.932
Friend Support	0.898	0.039	0.015**	0.824 0.979
Others Support	1.131	0.058	0.017**	1.022 1.251
Parents income	0.814	0.397	0.673	0.313 2.118
Parental level of education	0.434	0.143	0.011**	0.227 0.829
Cons	29.154	73.537	0.181	0.208 4090.28

\*\*\* Significant at the 10% level, \*\* Significant at the 5% level, \* Significant at the 1% level.

This report analyzes the determinants of anxiety disorders among visually impaired students in primary schools located in Sebeta and Shashemene. The data includes odds ratios, standard errors, p-values, and confidence intervals for various factors. The model indicates that gender

does not have a statistically significant impact on the likelihood of anxiety disorders [Odds Ratio: 0.678, P-value = 0.457, 95% Confidence Interval: 0.244, 1.887].

Current age is significantly associated with a decreased likelihood of anxiety disorders, suggesting that older students are less likely to experience these conditions [Odds Ratio: 0.643, P-value = 0.002, 95% Confidence Interval: 0.488, 0.848]. The school environment significantly influences anxiety disorders, with notable variations observed between different schools, highlighting the importance of addressing school-specific factors [Odds Ratio: 10.476, P-value = 0.000, 95% Confidence Interval: 3.203, 34.263].

Duration of stay shows no significant association with anxiety disorders [Odds Ratio: 1.064, P-value = 0.698, 95% Confidence Interval: 0.779, 1.453]. Similarly, age at admission does not significantly influence the likelihood of anxiety disorders [Odds Ratio: 1.072, P-value = 0.588, 95% Confidence Interval: 0.833, 1.379]. However, there is a borderline significant positive association suggesting that age at first occurrence may slightly increase the risk of anxiety disorders [Odds Ratio: 1.187, P-value = 0.082, 95% Confidence Interval: 0.978, 1.44].

Duration of impairment shows a statistically significant impact on the likelihood of experiencing anxiety disorders. Students who lost their vision more recently have 1.216 times higher odds of facing anxiety disorders compared to those with a longer duration of impairment [Odds Ratio: 1.216, P-value = 0.059, 95% Confidence Interval: 0.992, 1.489].

Higher degrees of impairment are significantly associated with an increased likelihood of anxiety disorders. Students with severe to profound visual impairment are 1.709 times more likely to encounter anxiety disorders compared to those with mild-to-moderate impairment [Odds Ratio: 1.709, P-value = 0.021, 95% Confidence Interval: 1.084, 2.695].

Parental employment conditions significantly reduce the likelihood of anxiety disorders, indicating a protective role. Students with parents in better employment conditions are 0.576 times less likely to experience anxiety disorders compared to their counterparts [Odds Ratio: 0.576, P-value = 0.007, 95% Confidence Interval: 0.387, 0.859].

Family support is a strong protective factor against anxiety disorders. For students who received family support, the odds of developing anxiety disorders were reduced by 0.884 times compared to those who did not receive support [Odds Ratio: 0.884, P-value = 0.000, 95% Confidence Interval: 0.838, 0.932].

Support from friends significantly reduces the likelihood of anxiety disorders. Students receiving support from friends have 0.898 times lower odds of experiencing anxiety disorders compared to their peers without such support [Odds Ratio: 0.898, P-value = 0.015, 95% Confidence Interval: 0.824, 0.979].

Other forms of support slightly decrease the likelihood of anxiety disorders, which may reflect contextual factors that require further investigation [Odds Ratio: 1.131, P-value = 0.017, 95% Confidence Interval: 1.022, 1.251]. Parental income shows no significant association with anxiety disorders [Odds Ratio: 0.814, P-value = 0.673, 95% Confidence Interval: 0.313, 2.118]. However, higher parental education significantly reduces the likelihood of anxiety disorders, underscoring its protective role [Odds Ratio: 0.434, P-value = 0.011, 95% Confidence Interval: 0.227, 0.829].

**Model summary of binary logistic regression for anxiety disorders.**

Number of observations = 175	
LR $\chi^2(14)$ = 115.01	
Probability value > $\chi^2$ = 0.0000	
Log likelihood = -59.852444	Pseudo $R^2$ = 0.4900
<b>Logistic model for anxiety disorders, goodness-of-fit test.</b>	
Number of observations = 175	
Number of groups = 10	
Hosmer-Lemeshow $\chi^2(8)$ = 5.80	
Probability value > $\chi^2$ = 0.6691	

**4.2. ANALYSIS FOR MAJOR DEPRESSIVE DISORDERS**

**4.2.1. Magnitude and prevalence of MDD**

**Table 6: Shows the distribution of total major depressive disorders score among visually impaired primary school students (N=175).**

	Minimum	Maximum	Mean	Median	Std. Dev	Skewness	Kurtosis
MDD	31	111	55.1029	52	15.35334	1.271	1.897

Table 6 summarizes the descriptive statistics for the total major depressive disorder scores among visually impaired primary school students (N=175). The lowest recorded depression score is 31, indicating the least severe level of depression among the students. The highest recorded depression score is 111, reflecting the most severe level of depression.

The average depression score is 55.10, suggesting a moderate overall level of depression within the group. The median score is 52, indicating that half of the students scored below 52 and the other half scored above, which demonstrates a central tendency close to the mean.

The standard deviation is 15.35, indicating a moderate spread of scores and reflecting variability in major depression levels within the sample. The skewness value is 1.271, which signifies a strong positive skew. This suggests that a majority of students have scores clustered at the lower end (indicating moderate depression), while a significant number of students' exhibit severe depression scores. The kurtosis value is 1.897, indicating a sharper peak and heavier tails in the distribution compared to a normal distribution. This suggests a notable concentration of scores near the mean, as well as more extreme values at both ends.

The data reveal variability in depression severity among visually impaired students, with most scores clustered at moderate levels, while a considerable number of students experience severe depression. The positive skewness and higher kurtosis highlight the presence of a subset of students with disproportionately severe depression scores, underscoring the need for targeted mental health interventions.

**Table 7: Shows the magnitude of major depressive disorders among visually impaired primary school students (N=175).**

	<b>Frequency</b>	<b>Percent</b>
<b>Moderate</b>	<b>112</b>	<b>64</b>
<b>Severe</b>	<b>63</b>	<b>36</b>
	<b>175</b>	<b>100</b>

Table 7 illustrates the prevalence of major depressive disorders among visually impaired primary school students (N=175). The majority of students with visual impairment (64%) do experience moderate major depressive disorders. However, substantial proportions (36%) of

these students are affected by severe major depressive disorders. This underscores the importance of prioritizing mental health interventions and support for this population, as a significant number are experiencing severe major depressive symptoms.

**Table 8: Shows the descriptive statistics for four major depression sub-scales (N=175).**

Major depressions	Range	Mean	Std. Devi	Variance	Skewness	Kurtosis
Anhedonia	20	12.7429	4.34532	18.882	1.121	0.965
Dysphoric mood	19	13.3943	4.16043	17.309	0.858	0.475
Negative self-evaluation	21	13.7657	4.06937	16.56	0.992	1.92
Somatic complaints	21	14.2743	4.42098	19.545	0.987	0.433

- Descriptive statistics for four major depressive types is summarized as follow:

- ✓ **Anhedonia.**

The difference between the highest and lowest scores is 20. On average, participants scored 12.74 on this measure, with a standard deviation of 4.35. The scores exhibit a moderate spread around the mean. A positive skew of 1.121 indicates a rightward tilt in the distribution, suggesting that more participants scored lower on this variable, with a few high scores influencing the distribution to the right. Positive kurtosis of 0.965 suggests the distribution is leptokurtic (more peaked than a normal distribution), indicating that scores are clustered tightly around the mean with fewer extreme values.

- ✓ **Dysphoric mood.**

The scores span a range of 19 points. The average score for this variable is 13.39, with a standard deviation of 4.16. The spread of scores is moderate, slightly smaller than that of anhedonia. Skewness of 0.858 suggests that most participants scored below the mean, with













*Model summary of binary logistic regression for major depression disorder (MDD).*

Number of observations = 175
LR $\chi^2$ (14) = 107.61
Probability value > $\chi^2$ = 0.0000
Log likelihood = -60.540805      Pseudo $R^2$ = 0.4706

*Logistic model for major depression, goodness-of-fit test*

Number of observations = 175
Number of groups = 10
Hosmer-Lemeshow $\chi^2$ (8) = 7.26
Probability value > $\chi^2$ = 0.5086



Seeking Guidance and Support showed the high variance (13.61), suggesting that there is significant variability in how students seek social or emotional assistance. While, anxiety Management exhibited the lowest variance (3.37), indicating more consistent use of this strategy across participants.

Regarding skewness and kurtosis of the distribution, the distribution of positive reappraisal scores was negatively skewed (-1.272) and had a kurtosis value of 1.489, indicating a clustering of scores at the higher end of the scale and a more peaked distribution. Acceptance displayed positive skewness (0.841), implying that more students used this strategy less frequently. Coping strategies such as problem-solving and seeking alternative rewards demonstrated near-normal distributions, with skewness and kurtosis values close to zero.

In general, this findings implies that, positive reappraisal and problem-solving appear to be the most favored and consistent coping strategies, indicating that visually impaired students are more likely to adopt active and adaptive coping mechanisms. While lower scores on acceptance suggest a potential reluctance to adopt passive coping behaviors. This may reflect resilience or a determination to confront challenges. High variability in seeking guidance & support implies differing levels of social reliance, which may be influenced by factors such as social confidence or access to supportive networks.

## CHAPTER FIVE

### DISCUSSIONS

This chapter demonstrates major findings of the study along with the previous studies with the same topic. As far the research objectives, major findings for the prevalence and determinants of AD and MDD are discussed. Findings for coping strategies are also be described.

#### 5.1. DISCUSSIONS ON PREVALENCE OF AD

The finding of the study shows that the mean anxiety score of (32.09) and Standard deviation of (12.01). This illustrates a moderate anxiety level and it is consistent with previous investigation by Boadi-Kusi et al. (2023) and Demmin and Silverstein (2020), indicating the increased experience to anxiety among individuals with visual impairments due to their different challenges. Regarding investigation on distribution's positive skewness (0.849) and kurtosis, which is (0.184), are close to normal. This indicated that, while the majority of students report moderate anxiety, a smaller subgroup exhibits severe anxiety. These findings goes with the research by Okeke et al. (2023), who revealed that visual impairment associate with higher anxiety and stress. Among all, students those do not provided adequate psychosocial support is the most vulnerable groups.

As indicated in Table 2 nearly 40% (39.4%) of primary school students with visual impairments are affected by severe level of anxiety disorder. The majority of students 60.6%, do exhibit moderate symptoms level, which agrees with the previous study on the psychological health of visually impaired individuals, recommending the importance of strengthening the provision of mental health support for students with visual impairment, suffering by emotional discomfort. Findings by Brunelle et al. (2020) support the high prevalence of anxiety level among students with disability, often associated to societal

discrimination and exclusion. Leach et al. (2012) on the other hand identified how such mental health struggles can destructively affect academic achievement and quality of life, with recommending the important value of early detection and an accessible system.

Research by Gebreegziabher et al. (2024) explained a complex nature of anxiety, influenced by interrelated individual, social and environmental determinants. Their investigation in Northwest Ethiopia showed that adolescents with high rate of observed mental challenge and reduced social support have exhibited a high possibility of experiencing anxiety, the same assumption with the current study's observations, indicating that visually impaired students, who face various challenges such as social exclusion and limited mobility, might come across increased high susceptibility to anxiety disorder (Gebreegziabher et al., 2024).

According to Fentahun et al, (2024), the prevalence of Anxiety disorder is significant among Ethiopian students. The primary contributing factors are school related stressors and family difficulties. A nearly 40% severe anxiety prevalence in the current study agrees with range reported in their review, which is additional evidence indicating environmental and family related stressors as a significant factors that influence students mental health.

The data demonstrated a mean generalized worry score of (6.37), Standard Deviation of (2.91) and a 14-point range, which is moderate variability in responses. The distribution showed slight skewness (0.284), and mild platykurtic characteristics (-0.22). This indicates relatively symmetrical spread of scores with limited extremes. The findings agree with the understandings of generalized anxiety disorder (GAD) defined by the American Psychiatric Association (2013), having the thought of generalized worry as a subscale with a very limited range of variability and, it is a persistent anxiety thought with no further fluctuation. The low skewness supports the idea of generalized worry intensity clusters within a limited range for

most individuals, consistent with Fajkowska et al.'s (2018) statement that indicates worry as a central and stable element of anxiety disorders, rarely manifesting in severe extremes.

The (Mean 7.12, Standard Deviation = 4.01 and Range = 18) demonstrated greater variability compared to generalized worry for the panic and physical symptoms anxiety sub types. The positively skewed distribution suggested that lower score was more common and fewer high values distributed right ward. These findings align with previous study indicating that panic symptoms tend to occur episodically. It frequently appeared due to response to specific causes or intensified physical stimulation, which contributes to their increased variability (American Psychological Association [APA], 2013). Moreover, the platykurtic nature of the distribution supports investigation by Fajkowska et al. (2018), who elaborate the unstable intensity of panic symptoms, divergent from the stable nature of generalized worry.

As regards the finding on separation anxiety score, (Mean = 8.26, Standard deviation = 4.21 and Range of 18) confirmed variability with moderate spread. The minor positive skew and slight platy kurtosis reflects a nearly symmetrical distribution, suggesting that separation anxiety demonstrates as a relatively consistent but variable experience among individuals.

This character agrees with developmental factors by APA (2013), which propose that separation anxiety tends to stabilize over time. Likewise, Fajkowska et al. (2018) observed that separation anxiety commonly interact with attachment related issues, which might explain indicated symmetry in scores.

Social anxiety is a type with high mean score of (10.64) among the evaluated subscales, with (Standard deviation = 6.27 and Range = 30) showing the greatest variability in responses.

The Distribution character was explained by significant positive skewness and a leptokurtic form, indicating many of the respondents score lower social anxiety level, with few of them scored high social anxiety level, skewing the distribution toward the right.

This observation is consistent with investigation suggesting that social anxiety vary widely based on situational triggers and personal coping ability, particularly, in its clinical expression (American Psychological Association [APA], 2013). Moreover, Fajkowska et al. (2018) recommend higher spread and variability in scores, possibly caused from the complex interaction of environmental, cognitive, and emotional factors that might be permanent influences to social anxiety.

Generally, finding showing Generalized worry and separation anxiety as less variable and nearly a symmetrical distributions which implies the consistent nature among the participants, whereas, panic and physical symptoms, and social anxiety demonstrated higher variability and skewness which indicates their responsiveness to individual differences and situational factors. Specially, Social anxiety was with the largest range and highest standard deviation, underscoring significant variation in how participants experienced it.

These results support the complex and multi-dimensional structure of anxiety, consistent with the investigation suggested by Fajkowska et al. (2018) and the diagnostic criteria defined in the DSM-5 (APA, 2013). The skewness and kurtosis values indicating varied distribution across anxiety subscale emphasize the necessity of developing personalized intervention that associated with each anxiety subtype.

Biffu and Guracho (2021) conducted a research on Ethiopian children and youth's with disability facing anxiety disorder. And they observe that anxiety disorders are highly prevalent among Ethiopian Children and adolescents, especially those living with disabilities or long-lasting health conditions, which support the current finding demonstrating that approximately 40% of students with visual impairment report severe anxiety disorder. This figure can indicates larger tendencies in mental health issue among marginalized groups.

Okeke et al, (2023) were also conducting related research in Nigeria and demonstrating notable relation between anxiety symptoms and life style of individuals with visual impairment. Their findings emphasize that vision related difficulties such as limited independence and reduced social engagement deeply impact mental health of these vulnerable groups, which is consistent with current investigation.

## **5.2. DISCUSSIONS ON DETERMINANTS OF AD**

Investigations by Boadi-Kusi et al. (2023) showed that mental health among visually impaired people is highly affected by psychological factors like coping strategies and perceived social support. The study recommends the importance of addressing both personal and environmental factors to enhance wellbeing of this vulnerable group. Protective factors like Supportive school settings and strong family relationships are among the determinants that can reduce anxiety risks in this group (Boadi-Kusi et al., 2023).

This study identifies several factors that influence the likelihood of anxiety disorders among adolescent students with visual impairment. Based on the investigation gender had statistically insignificant association with likelihood of having anxiety. This finding diverges from the previous conclusions indicating being male or female as a significant factor that can determine anxiety disorder. For instance, Gebreegziabher et al. (2024) identify gender as a significant factor that associate with mental health of teenagers. This difference might assume that the difference of culture and gender roles can mediate the relationship between gender and mental disorder of students with vision problem.

Current age is a determinant associated to a lower risk of anxiety disorders aligning with the studies by (Fentahun et al., 2024; Bifftu & Guracho, 2021). These studies found that students with older age are most likely to experience low level of anxiety. Most of the time students with older age develop stronger coping skills and emotional resilience and these reduces

anxiety. This is also consistent with cognitive-emotional development theories proposed by (Eysenck & Fajkowska, 2017) suggesting age as a contributor for emotional regulation.

In this study School environments is among the factors greatly influence the likelihood of experiencing anxiety disorders. Gebremariam et al. (2023) were similarly, found the direct impact of factors like teacher attitudes, peer interactions, and availability of mental health resources on student's mental health. Their research recommends the importance of adopting school specific intervention to address stressors, and this can help reduce anxiety.

Variables such as duration of stay and age at admission showed statistically an insignificant association with anxiety disorder. This contrasts the research investigations conducted by Meinck et al. (2017). Their study found that extended time in institutional settings worsens anxiety symptoms. However, the absence of such an association might suggest supportive school environments for visually impaired students help to reduce the anxiety, potentially countering the effects seen in other contexts.

The border line significant association between age at first diagnosis and anxiety disorder in this study is consistent with the study finding by Demmin and Silverstein (2020). They observed that detecting mental health conditions early might improve long-term outcomes, supporting the weak connection between younger ages at first diagnosis and anxiety disorders. Similarly, the significant impact of duration of visual impairment supports findings by Zhang et al. (2013). Their research showed anxiety is more severe among students with recent vision loss, and they face challenges for adjustment.

Regarding degree of visual impairment current study indicated the significant association between severe visual impairment and anxiety disorder. This finding is also collaborates with the study by Bourne et al. (2017) & Kurtović & Ivančić. (2017). Their study underlined that the significant vision loss often forces people to rely more on others, isolates them socially,

and exposes them to stigma. These challenges can exacerbate the possibility to face anxiety directly.

In the current findings, Variables such as Parental employment, family support, and support from friends are among the protective factors against anxiety disorders and These results is consistent with Pastor (2020) and Merrie et al. (2019), who proposed how socio-economic stability and strong social connections reduce anxiety symptoms. Parental education also plays a protective role. Which are in agreement with Otwombe et al. (2015) indicating educated parents are more aware and involved, improving adolescents' mental health. Lastly, other forms of support show weaker but still notable effects, suggesting their impact on anxiety is complex. Further research should explore how these specific factors interact to influence mental health outcomes.

### **5.3. DISCUSSIONS ON PREVALENCE OF MDD**

Depression among students showed relatively the same trend. The average score (Mean =55.10, Standard Deviation=15.35), reflect that there is moderate severity. The positive skewness (1.271) and high kurtosis (1.897) indicates that most of the scores clustered around moderate levels however, subset experienced severe symptoms. This aligns with studies indicating that visually impaired individuals faced increased depression risks caused by social, emotional, and environmental factors (Cho et al., 2015; Choi et al., 2018). The research finding showing 36% of the students come across measures for severe major depressive disorders which goes with the report by De Castro et al. (2022) whose reports was that in low and middle income nations are with scare mental health resources. Such a high prevalence recommends a serious mental health attention in this group. And it is consistent with previous research on the relationship between visual impairment and psychological wellbeing.

Study by Bifftu and Guracho (2021) found that health problems like depression are among widely prevalent cases for children and youth with disabilities in Ethiopia. The study mainly emphasized anxiety but, they explained that disabilities often contribute to different factors that increase vulnerability to mental health conditions. These assumptions support the present findings, which indicate that over one third of students with visual impairments are affected by severe level of MDD.

The various nature of depression in this group is explained by its subscales. The subscales anhedonia, dysphoric mood, negative self-evaluation, and somatic complaints are discussed as follow. Anhedonia, described by a moderate spread, (Mean=12.74, Standard Deviation = 4.35) and a leptokurtic distribution, reflects scores clustered closely around the mean. This is consistent with the report of Fajkowska et al. (2018), who identified anhedonia as a main depressive sign across various contexts. Dysphoric mood (Mean= 13.39, Standard deviation= 4.16), negative self-evaluation (Mean= 13.77, Standard Deviation = 4.07), and somatic complaints (Mean= 14.27, Standard Deviation = 4.42) confirmed moderate spread and positive skewness. These analyses suggest that while moderate symptom levels are collective, some of students experiences severe symptoms. This finding is the same with the work of Mayro et al. (2020), who emphasized the frequent incidence of somatic symptoms, accompany depression among individuals with visual impairments.

The results support the previous research underlining how mental health struggles significantly influence the daily activities of those with visual impairments (Parravano et al., 2021; Kurtović & Ivančić 2017). Factors like social stigma, inadequate accessibility, and educational systems that do not encourage inclusion may worsen these complications (Camara et al., 2017). Also, the pandemic's effects on psychological wellbeing have been significant, which recent evidence highlighting intensified levels of anxiety and depression among youth in the consequences of COVID-19 (Frontiers, 2024).

Fentahun et al. (2024) studied depression risk factors among Ethiopian students in their work. They explore that social isolation, stigma, and shortage of mental health services as major contributors. They examine how these factors may extremely affect visually impaired students and state the possibility to exacerbate their vulnerability to major depressive disorders (MDD). This association proofed by the current study finding of a 36% severe level of MDD prevalence rate in this population, implying that exceptional challenges faced by visually impaired individuals worsen their risk.

According to Boadi-Kusi et al. (2023), individuals with visual impairments are disposed to mental suffering because of factors like dependence and limited social participation. The research also recommends the serious importance of applying all-inclusive mental health support strategies designed to address the specific requirements of this population, and this perspectives supports the current study's emphasis on developing specialized interventions.

Gebreegziabher et al. (2024) found the high vulnerability rate of depression among adolescents with disabilities in North West region of Ethiopia due to interconnecting factors like socioeconomic adversity and inadequate access to support networks. These challenges may explain the high prevalence of major depressive disorder (MDD) observed among students in this population.

Okeke et al. (2023) investigated the relationship between visual impairment and mental disorders in Nigeria. The finding shows a significant association between the severity of visual impairment and mental health issues including depression. These findings support the present study's results that suggest students with visual impairments may experience similar contextual stressors across different regions.

Finally, Kurtović & Ivančić (2017) confirmed that life satisfaction and access to social assistance are mandatory in decreasing rate of depression among people with visual

impairments. The research also elaborates the importance of promoting supportive psychological environment and ensuring accessible mental health resources, and this could significantly reduce the prevalence of MDD among students with visual impairments.

#### **5.4. DISCUSSIONS ON DETERMINANTS OF MDD**

The main determinants of major depressive disorder identified by the study are gender, current age, school attended, duration of stay, and age at admission. They are significant factors associated with MDD among visually impaired students. The differences between the genders are revealed by the study. The female students showing a 6.7 times higher probability of affecting by MDD compared to males, which supports the investigation by Fentahun et al. (2014), who reported higher depression rates among female students in Ethiopia. The researchers suggest that gender based disparities in mental health may result from intersecting social, cultural, and biological influences, including girls' disproportionate care giving responsibilities and societal pressure related to gender roles.

Regarding the protective relationships between older age and reduce depression symptoms aligns with Gebreegziabher et al. (2024), whose research in Northwest Ethiopia indicates decline in depressive symptoms as adolescents get older. This might be due to older individuals having aware of more effective coping strategies over time or develop strong emotional strength from life experiences help them lowering their vulnerability to depressive conditions.

The differences among the schools concerning the prevalence of MDD is consistent with the findings of Gebremariam et al. (2023), whose research confirmed that institutional factors like resource availability, supportive attitudes, and peer relationships significantly influence students' mental wellbeing. The rate of MDD among students at Sebeta Primary School is

five times greater than that of students at shashemene. This emphasizes the important role of school environments in determining mental health outcomes.

The research investigated that individuals with long term institutional stay face a 3.7 times higher possibility of major depressive disorder (MDD), aligning with Gebreegziabher et al. (2024), who suggest that lengthy exposure to institutional stressors such as insufficient tailored care or lack of care may strengthen depressive symptoms. Additionally, admission at a younger age increases the odds of facing MDD approximately three times and this is consistent with the finding of fentahun et al. (2024). The research indicates that early admission into institutional environments lacking familial or psychological support could increase susceptibility to depression.

The finding also indicates a marginally significant association between the degree of visual impairment and depressive symptoms. According to Gebreegziabher et al. (2024), severe level of visual impairment associates with increased mental problem. Because individuals with visual impairment may come across functional challenges and experiences of stigma.

Variables such as parental employment status, social support, and parental income presented as they have no significant associations with MDD in this study, differing from previous research like Gebremariam et al. (2023), which identified parental engagement and socioeconomic stability as protective factors against mental health challenges. These inconsistencies refer to the requirement for more studies into how contextual differences may shape the influence of these variables.

## 5.5. DISCUSSIONS ON COPING STRATEGIES

The data presented in Table 11 specifies the adaptive coping strategies utilized by students with visual impairments. The documented existing literature on effective coping mechanisms among people with disabilities, along with the current findings is stated below.

The major use of approach coping strategies, (Mean= 21.03), including positive reappraisal and problem solving strategy is consistent with previous studies indicating that visually impaired individuals commonly employ active and problem focused strategies to manage stressors. The findings by Choe et al. (2014) Support this investigations, with students who utilized problem solving strategies and reframing challenges as opportunities for positive life aspects had better psychological adjustment and greater resilience. These findings strengthen the association of active coping strategies and improved emotional wellbeing among these target population.

The study found average score for positive reappraisal (Mean = 11.63), showing cognitive reform as a main coping strategy, which is consistent with Moos's (1993) work that emphasize the adaptive function of restructuring mental health factors to achieve control or derive meaning. Folkman and Moskowitz (2000), underscores that the positive reappraisal strategy is associated with higher self-esteem, increased emotional stability, and improved life satisfaction especially, among individuals managing chronic stress or living with disabilities.

Acceptance (Mean = 4.67), was the least commonly used type of coping strategy utilized by students with visual impairment, which clearly indicates that the students with visual impairments preferred action oriented steps to address causes of stress rather than leaving themselves to passive strategies. The Previous researches also support this conclusion; indicating Problem focused approaches have been shown to enhance resilience and mental

wellbeing more effectively than acceptance strategies (Groomes & Leahy, 2022). On the other hand, environmental and social barriers in the students' contexts might also restrict their ability to adopt acceptance as a coping strategies.

The finding shows the significant variability among the students with visual impairment in seeking guidance and support, (variance = 13.61). This indicates that even though some of the students highly dependent on social support network others might rely more on their own strategies to manage stressors. This variation aligns with the conclusions of Wong and Wong (2006), who emphasized that the use of social support is influenced by factors such as social confidence, resource availability, and cultural context. Also, the differences of individuals utilizing social coping strategies could be caused by varying access to support systems, such as those provided by family, friends, or institutional structures.

Anxiety management strategy with the minimal variability (variance= 3.37), reflects constant use of this coping strategy among participants, illustrating that visually impaired students involve emotional anxiety management in a relatively consistent manner. Livneh and Antonak (2005) give emphasis for the positive impact of emotional regulation to enhance mental wellbeing and preventing chronic anxiety or depression among people with disabilities.

The value for (Skewness is= -1.272 and kurtosis= 1.489) for positive reappraisal strategies and this refers to the concentration of raised scores. This shows wide and frequent use of positive reappraisal as a coping strategy, which aligns with research by Folkman and Lazarus (1988) that recognized positive cognitive reframing as a dominant strategies for individuals managing long-lasting difficulties. But, acceptance presented with a positive skewness, which is 0.841), inferring that most of the students applied this strategy rarely.

Generally, the study suggested a tendency of the students with visual impairment to adopt active, problem focused and action oriented coping strategies, showing their resilience and dedication to address difficulties effectively. The infrequent use of passive strategies like acceptance strengthens the inherent preference of coping practices. These observations are consistent with Moos's (1993) investigation on understanding coping mechanisms. He suggest that targeted interventions encouraging problem solving skills, improved positive reframing ability, and promoting social support networks as an effective strategies that could enhance stress management in this population. Additional studies should give emphasis regarding the impact of environmental and social perspectives on developing coping strategies among visually impaired individuals, and the long term impact of various coping strategies on mental wellbeing of this population.

## CHAPTER SIX

### CONCLUSION AND IMPLICATIONS FOR SOCIAL WORK

#### 6.1. CONCLUSION

This study look at prevalence, as well as the determinants of anxiety and depression, along with coping strategies employed by visually impaired primary school students at Shashemene and Sebeta blind boarding schools. Among 175 participants, significant rates of both conditions were observed: 39.4% affected by severe AD, and 36% showed severe MDD symptom, underlining the necessary need for specialized mental health interventions. Moderate severity levels were indicated by average anxiety and depression scores of 32.09 and 55.10, respectively.

Social anxiety is the most pronounced anxiety subtype, showing the highest variability and mean score. For depression, somatic complaints were most prevalent, whereas negative self-evaluation scores clustered tightly around the mean, reflecting consistent patterns.

Key factors influencing AD included school environment, with schooling is the risk factor for anxiety. Strong familial support was the most effective safeguard against anxiety, accompanied by friend support. Parental employment and education levels inversely correlated with anxiety level, while degree of visual impairment contributed slightly. For MDD, gender differences were clear determinants, with girls at more risk. Older age identified as protective against MDD, whereas school difference, long school stays, and young age enrolment raised experiencing MDD.

Students mainly adopted active coping strategies, such as problem solving and positive reappraisal, than passive strategies like acceptance. Variability in seeking support and guidance underscored differing social trust levels. This reflects the student's tendency to prefer active approaches to challenges.

The findings showed the significant mental health problem on visually impaired students, caused by individual and environmental factors. Possible interventions addressing risk factors such as school environment, social support gaps, younger age admission as well as longer stay , and strengthening protective factors like family support, friend support, level of parental education and employment status is necessary to enhancing well-being and resilience. Encouraging adaptive coping skills and all-inclusive support systems is essential to lessen these challenges.

## **6.2. IMPLICATIONS FOR SOCIAL WORK**

### **✓ IMPLICATION FOR PRACTICE**

Social work interventions pointing visually impaired students in shashemene and sebeta boarding primary schools should consider important components informed by the study's findings. Since family support is the active factor, practitioners should prioritize participating families in the intervention process. This includes evaluating parents' employment conditions and providing resources, such as facilitating their involvement in income generating opportunities, because stable parental employment was associated with reduced anxiety among students. The finding 39.4% of students reporting severe level of anxiety and 36% facing severe level of depression recommends careful mental health evaluation. These assessments should focus identifying separation and social anxiety, which were shown to have high variability, as well as widely analyzing depressive symptoms throughout all sub scales to determine those most vulnerable or showing severe symptoms.

Social work Involvements should promote adaptive coping strategies, such as positive reappraisal and problem-solving, particularly in Sebeta and Shashemene boarding primary schools. Younger students call for tailored support, as younger age correlated with increased anxiety and depression levels. The study also underlined female students need attention due to their increased risk of major depressive disorder (MDD), alongside with the students with

longer school term. These groups appeared as high risk groups for MDD, requiring prioritized psychosocial support from social workers and collaborating stakeholders. By addressing these factors, interventions can more effectively enhance the emotional and social well-being of visually impaired students.

#### ✓ **IMPLICATION FOR EDUCATION**

The study gives emphasis to the serious need for schools in Sebeta and Shashemene to encourage supportive environments that prioritize students' mental health. There is significant impact of school environment on anxiety and depressive disorders, as a result institutions should adopt strategies to create mentally healthy environment and promote psychological well-being. This includes training educators and staff to recognize and respond for students facing mental health challenges, alongside establishing systemic frameworks to address these problems collaboratively. In this study the Shashemen's school environment is supportive than educational settings in Sebeta, with both needing for significant improvement for the students mental health. Wide-ranging awareness campaigns are essential to drive out community misconceptions and develop collaboration with existing mental health programs. The awareness could enhance students' access to effective coping strategies and professional support. Additionally, the association between higher parental education levels and reduced anxiety in children recommends the importance of initiatives empowering and educating parents to advocate for their children's emotional and academics needs. Finally, specific interventions addressing the unique contexts of each school are important to ensure effective and sustainable mental health outcomes.

### **✓ IMPLICATIONS FOR POLICY**

Policy makers should improve the mental well-being of visually impaired students by directing resources toward mental health services in educational settings particularly in Sebeta and Shashemene boarding primary schools, including access to counselors, social workers, and psychiatrists. Hard work on policy making and implementation could tackle factors that worsen anxiety and depression, such as school environments. This needs improving interagency cooperation among education, healthcare, and social services to ensure all-inclusive support. Policies should further assist parents, particularly those facing unemployment or economic hardship, to reduce factors affecting their children’s mental health. Moreover, developing accessible and inclusive learning environments suitable to specific needs of visually impaired students supported by policy is mandatory for both academic achievement and psychological stability. Gender related policies should implement well to address the vulnerability of female students to mental health disorders. Finally, guidelines should regulate boarding school enrolment ages, as early admission and prolonged stays are associated with increased risks of mental health issues, requiring policies that balance educational needs with mental well-being.

### **✓ IMPLICATION FOR RESEARCH**

This study gives emphasis to important topics for future research. Longitudinal studies are needed to clarify cause and effect relationships between risk factors like schooling, family support) and the appearance of anxiety and depressive disorders in students with visual impairments. Additional research should study the complex role of “other forms of support,” which demonstrated a context dependent positive association with anxiety disorders, to identify basic reasons. Qualitative examinations could brighten the daily challenges, educational barriers, and societal influences faced by visually impaired students, contributing better outlook on how mental health issues influence their lives.

Research should also focus on understanding adaptive strategies such as seeking guidance, problem solving, and positive reappraisal to inform well defined effective interventions that enhance psychological resilience. Additionally, evaluating the value of mental health programs appropriate to this population is essential. Finally, expanding the scope of investigation to include severe mental health conditions, in addition to common disorders, would provide a more wide-ranging approach to supporting this vulnerable group.

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**ANNEX II: Letter of Confirmation from Schools**



**በኢትዮጵያ ካቶሊካዊ ቤተክርስቲያን**

**የሻሻሜ ካቶሊክ ዓይነስውራን ትምህርት ቤት**

**ETHIOPIAN CATHOLIC CHURCH**

**SHASHEMENE CATHOLIC SCHOOL FOR THE BLIND**

Date: 25/10/2024

Ref: SCSB/72/24

To A.A University

Objective: Regarding the data collection from Shashemene Catholic School for the Blind.

Student Redwan Idris came from A.A University to do the data collection from our School at Shashemene.

He interviewed according to the questioners each student who are visually impaired here in Shashemene Catholic school for the Blind.

We assure that, he did the data collection successfully and he is happy for the availability that the school has offered to him.

We wish him more success in his study and ending of his study.

With best regards,

Sister Sara Yoseph

Directress of Shashemene Catholic School for the Blind

Sr Saaraa Yoseef  
Dura Ibeetuu muummaa M/B  
ቢ/ር ሃ/ራ ሃ/ሪያ  
የትምህርት ማኅበር

Sr Sara Yoseph/Head-Mistress



EMAIL: [schoolfortheblindshashe@gmail.com](mailto:schoolfortheblindshashe@gmail.com) PHONE: +251461102728 PO BOX: 18



MANA BARUMSAA IJOLLEE QAROO DHABEYYII SABBATAA

የሰበታ ሙረሐ ዕውራጌ ት/ቤት

SEBETA SPECIAL BOARDING SCHOOL FOR THE BLIND

Lakk M/B/I/Q/Dh/S/G: 35/325/195/15

Guyyaa: 12/06/2017

To: Redwan Idris

Graduate school Student

School of Social Work

Addis Ababa University

Addis Ababa, Ethiopia

Subject: Successful Completion of Data Collection

Dear Student. Redwan Idris,

This letter serves to confirm the successful completion of data collection at Sebeta Special Boarding School for the Blind. We acknowledge that you conducted research on "Anxiety and Depression among Students with Visual Impairment" at our school.

The data collection process, which took place at Sebeta Special Boarding School, located in Sebeta Sub-city, Sheger City, Oromia Region, Ethiopia, has been completed to our mutual satisfaction.

We appreciate your cooperation and the professional manner in which you conducted your research within our school. We wish you the best in your academic endeavours and look forward to the findings of your study.

Sincerely,

Ms. Ganat Kifle

Academic Directress



Handwritten signature and official stamp of the Academic Directress.

L.S.P: 137

Lakk bilbilaa: 0113380661, 0113380006

**ANNEX III: Informed Consent and Questionnaire**  
**Addis Ababa University**  
**School of Social Work**

**Consent Form for Participation in Research Study**

Study Title: Anxiety and Depression among Students with Visual Impairment: In the Case of Shashemene and Sebeta Primary Schools.

You are being asked to participate in a research study that aims to study the levels of anxiety and depression among students with visual impairment in Shashemene and Sebeta primary schools. This study is designed to identify the challenges these students face and explore ways to support their mental health and well-being. Participation in this study is completely voluntary. You may choose not to participate, or you may withdraw from the study at any time without any consequences or loss of benefits to which you are entitled.

There are minimal risks associated with this study. Some of the questions may cause emotional discomfort or distress. If you experience any distress, you will be given information about available support services. Potential benefits include gaining a better understanding of how anxiety and depression affect students with visual impairments and providing information that may improve support systems in schools.

All information collected during this study will be kept confidential. Personal information will be protected, and responses will be anonymized. Data will be stored securely and only accessed by the research team. Your name or identity will not be revealed in any reports or publications based on this study. The total time commitment is approximately 30 minutes for each participant.

If you have any questions or concerns about the study, or if you would like to withdraw your consent, please contact:

Principal Investigator:

Redwan Idris, School of Social Work, Addis Ababa University

Contact Information: **phone number** +251 92 231 2555 **Email:** redone.idris2@gmail.com

By signing this form, you agree that you have read the above information, understood the purpose of the study, and voluntarily agree to participate. You also agree to allow your child to participate, if applicable.

Participant's Name: \_\_\_\_\_ Participant's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Parent/Guardian's Name (if applicable): \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Researcher's Name: Redwan Idris \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## **Part I: Sociodemographic Characteristics**

1. Gender: 1. Male  2. Female
2. Name of school: 1. Shashemene Catholic school for the Blind   
2. Sebeta special boarding school for the blind
3. Current age (in years): \_\_\_\_\_
4. Age at admission to the institution (in years): \_\_\_\_\_
5. Age at which visual impairment was first occurred (in years): \_\_\_\_\_
6. Duration of visual impairment (in years): \_\_\_\_\_
7. Type of visual impairment: 1. Congenital  2. Acquired
8. Degree of visual impairment 1. Mild,  2. Moderate  3. Severe  4. profound
9. Family income: 1. below poverty line , 2. Middle class  3. Upper class.
10. Parent educational level: 1. No formal education,  2. primary,  3. Secondary,   
4 higher education.
11. Employment status of parents: 1. Employed  2. Unemployed,  3. Retired,   
4. Self-employed.
12. Access to assistive devices or technologies: 1. braille materials,  2. screen readers

## **Part II: Institutional-Related Variables**

13. Type of institution/school: 1. special school for the visually impaired   
2. Mainstream school with support  3. Boarding School for the Blind
14. Duration of stay in the institution (in years): \_\_\_\_\_
15. Level of support provided: 1. individual assistance,  2. Group support   
3. specialized training
16. Availability of extracurricular activities: 1. sports,  2. Arts,  3. social clubs
17. Participation in inclusive education programs: 1. therapy,  2. Counseling,   
3. academic support
18. Access to rehabilitation services 1. Orientation and mobility training,  2. life skills  
training

### Part III: Anxiety scale

This scale is designed to measure your anxiety disorders. The item is arranged in Likert-type f-point scale as (0 = never, 1 = sometimes, 2 = often, and 3 = always). Indicate your response by putting tick mark (✓) in one of the boxes against each item.

S. no	Scale	Responses			
		0	1	2	3
1	I am afraid to go anywhere without someone familiar to guide me.				
2	I get frightened if someone familiar leaves without letting me know.				
3	I am afraid that someone I trust will leave and never come back.				
4	I am afraid that something bad will happen, and I won't be able to see my parents again.				
5	I have very scary dreams that I lose my parents or get separated from them.				
6	I don't feel well when I have to go somewhere without my parents or a familiar person to help me navigate.				
7	At school, I don't speak to the teacher unless someone introduces me first or if I feel comfortable.				
8	If I meet a new person, I don't speak unless I feel comfortable or someone, I trust is with me.				
9	At school, I don't speak much to the kids in my class unless I know them well.				
10	I don't speak when there's a new visitor at our home, unless I'm introduced or made to feel safe.				
11	I find it scary to meet new people, especially if I don't know how they'll treat me.				
12	I find it scary to eat or drink if other people are around because I worry about how I'm doing things.				
13	I am afraid that others will hear or notice that I am embarrassed (e.g., my voice might shake).				
14	I am afraid I'll do something embarrassing, like not knowing where something is.				
15	I am very afraid that other kids don't like me or won't understand me because of my visual impairment.				
16	I am afraid I might do or say something wrong in front of others because I can't see what's happening.				
17	I panic for no reason and can't explain why I feel so scared.				
18	I suffer from anxiety or panic attacks, and it's hard to calm down once they start.				
19	All of a sudden, I become so scared that my heart starts to beat very quickly, and I feel out of control.				
20	When I panic, I am afraid that something terrible might happen to me.				
21	I have severe anxiety attacks where I tremble all over and feel very scared.				
22	I am afraid of having another anxiety or panic attack.				
23	I worry about a lot of things, especially things I can't control because of my visual impairment.				
24	I think a lot about what can go wrong, especially in situations where I need help.				
25	I find it hard to stop worrying, even when things are going okay.				
26	I worry a lot about not doing well in school because of the challenges I face.				
27	I worry a lot about the bad things happening in the world, especially things that might affect me.				
28	I don't feel well because I worry so much, and it feels overwhelming.				

## Part IV: Depression Scale

The following questions are designed to measure your level of depression and experiences over the past two weeks; each item is scored on a **4-point Likert scale**: Indicate your agreement or disagreement by putting tick mark (✓) in one of the boxes against each item.

**(1= Almost Never, 2 = Sometimes, 3 = Often and 4 = Most of the Time)**

S. no	Scale	Responses			
		1	2	3	4
1	I feel unhappy, even when things seem okay around me.				
2	I feel lonely, especially when I can't join in with what others are doing.				
3	I feel that no one truly understands how hard things are for me.				
4	I feel stressed; especially when I have to do things that others can see easily.				
5	I feel like life is not worth living because of all the challenges I face.				
6	I feel like crying, especially when I feel left out.				
7	I feel sad when I can't do things others take for granted.				
8	I feel down in the dumps, like nothing can make me feel better.				
9	I feel like I am not as good as others because of my visual impairment.				
10	I feel like people don't care about me or my needs.				
11	I feel like a failure when I can't do things as independently as I want to.				
12	I feel like nobody loves me, and that I'm just a burden.				
13	I feel like nothing ever works out for me, no matter how hard I try.				
14	I feel hopeless about my future because of the limitations I face.				
15	I feel like I can't do anything right, especially in situations where vision is important.				
16	I feel like things will never get better, no matter how hard I try.				
17	I feel helpless, especially when I have to rely on others for things I wish I could do alone.				
18	I feel like there's no point in trying anymore because everything is so hard for me.				
19	I feel anxious, especially when I have to navigate new places or situations.				
20	I have trouble sleeping because I keep thinking about all the challenges I face.				
21	I feel like I don't enjoy things anymore, even the things I used to like.				
22	I feel like I don't have any energy to deal with everything I have to manage.				
23	I feel tired even when I haven't done much, because of how overwhelming life feels.				
24	I feel like everything takes too much effort, especially things that come easily to others.				
25	I feel like I don't have any motivation to do things because they're so hard for me.				
26	I feel like I don't want to do anything, even things I used to like.				
27	I feel like everything is a struggle, especially tasks that require help or guidance.				
28	I feel like I can't concentrate because I'm always worrying about things.				
29	I feel irritable because everything feels harder for me than for others.				
30	I feel like I don't have a future that I can look forward to.				

## Part V: Social support Scale

The SS-A focuses on the extent to which individuals feel supported, loved, and valued by the people around them. Each item is rated on a 6-point Likert scale, typically ranging from **1 = Strongly Disagree** to **6 = Very Strongly Agree**.

S. <sup>no</sup>	Scale	1	2	3	4	5	6
1	My family cares about me, even though I live away from them at the special school.						
2	I am loved by my family, and they stay connected with me even when I'm at school.						
3	My family holds me in high esteem and supports my education at the special school.						
4	I can rely on my family to be there for me, even when I'm not living at home.						
5	My family respects me and the challenges I face at the special school.						
6	I am important to my family, and they make sure I have what I need while at school.						
7	My family is sensitive to my personal needs and communicates with the school to support me.						
8	I matter to my family, and they check in on me to make sure I'm doing well at school.						
9	I feel valued by my family, and they encourage me to do my best at the special school.						
10	I am well liked by my friends at school, and we support each other in our daily activities.						
11	My friends at school care about me and help me when I need assistance with things I can't see.						
12	My friends respect me and understand that I have my own unique strengths, even with my visual impairment.						
13	I am included by my friends in school activities, and they help me participate in ways that work for me.						
14	I can rely on my friends at school to help me, especially when I need guidance in unfamiliar spaces.						
15	I feel accepted by my friends at the special school, even when I need extra help due to my visual impairment.						
16	I am trusted by my friends at school, and they rely on me just as much as I rely on them.						
17	My friends at school are sensitive to my personal needs, especially when we work together on tasks.						
18	I feel valued by my friends at school, and they don't see my visual impairment as a limitation.						
19	The teachers and staff at the special school care about me and make sure I am safe and supported.						
20	The teachers and staff at the school hold me in high esteem and encourage me to achieve my goals.						
21	I matter to the teachers and staff at the school, and they go out of their way to make sure I'm included.						
22	I can rely on the teachers and staff at school when I need help with something because of my visual impairment.						
23	I feel valued by the teachers and staff at the special school, and they support me in growing and learning.						

## Part VI: Coping strategy

Respondents were typically asked to rate how often they use each coping strategy in a recent stressful situation on a four-point Likert scale ranges from no (0) to yes, fairly often (3).

S. no	Scale	Responses			
		0	1	2	3
1	I tried to understand why the problem happened.				
2	I made a plan to deal with the problem.				
3	I asked a friend or family member for advice.				
4	I looked for information about how to solve the problem.				
5	I tried to think of different ways to handle the situation.				
6	I discussed my feelings with someone I trust.				
7	I worked out a way to change the situation.				
8	I thought about what I could do differently next time.				
9	I focused on how to make things better.				
10	I kept track of what I was feeling				
11	I tried to look on the bright side of things.				
12	I thought about how this could help me grow as a person.				
13	I reminded myself of the things I can do well.				
14	I thought about how this situation might make me stronger.				
15	I focused on the positives in my life.				
16	I asked someone to help me with the problem.				
17	I talked to my family about what was bothering me.				
18	I reached out to a teacher or counselor for support.				
19	I called a friend to talk about my feelings.				
20	I looked for support from people who care about me.				
21	I tried to come up with solutions to the problem.				
22	I brainstormed ideas to deal with the situation.				
23	I thought about what other people have done in similar situations.				
24	I used my skills to find a way to cope.				
25	I wrote down my thoughts to clarify my feelings.				
26	I tried not to think about the problem.				
27	I distracted myself with other activities.				
28	I avoided people who reminded me of the problem.				
29	I daydreamed to escape from my worries.				
30	I pretended the problem didn't exist.				
31	I just accepted the situation without trying to change it.				
32	I told myself that there was nothing I could do.				
33	I gave up trying to solve the problem.				
34	I accepted that things might not change.				
35	I resigned myself to whatever happened				
36	I did something I enjoy, like playing sports or listening to music.				
37	I treated myself to something special.				
38	I spent time with friends to feel better.				
39	I focused on my hobbies to distract myself.				
40	I engaged in fun activities to lift my spirits				
41	I cried to let my feelings out.				
42	I yelled or expressed my frustration.				
43	I shared my feelings with someone who listens.				
44	I vented to someone who understands.				
45	I let my emotions out in a safe way.				
46	I practiced relaxation techniques to calm down.				
47	I took deep breaths to reduce my anxiety.				
48	I focused on calming thoughts when I felt stressed.				













# ANNEX V: Translated Afan Oromo Informed Consent and Questionnaire

## Yuunivarsitii Finfinnee

### Mana barnootaa 'Social Work'

#### Unka hayyamaa Qo'annoo qorannoo keessatti hirmaachuuf qophaa'e

**Mata Duree Qorannoo:** Qorannoo Cinqii fi Dhiphina Barattoota Arguu Dadhaban irratti Manneen Barnootaa Sadarkaa 1ffaa Shaashamannee fi Sabbattaatti gageeffame.

Qo'annoo qorannoo sadarkaa Dhiphinaafi Cinqii barattoota ijaan arguu dadhaban manneen barnootaa sadarkaa tokkoffaa Shaasheemenee fi Sabbataa keessatti mul'atan qorachuuf kaayyeffate irratti akka hirmaattan gaafatamtaniittu. Qorannoon kun kan qophaaye rakkoowwan barattota kanniin mudatan adda baasuu fi karaalee fayyaa sammuu fi nageenya isaanii ittiin deeggaran qorachuuf kan qophaa'eedha. Qorannoo kana keessatti hirmachuun guutummaatti fedhii irratti kan hundaayuuha. Qoranicha irratti hirmachuu dhiisuu akkasumas Yeroo barbaaddetti bu'aa tokko osoo hin dhabin ykn rakkoo tokko malee irraa bahuu filachuu dandeessa.

Qorannoo kanaan walqabatee yaaddoowwan xiiqqoon ni jiru. Gaaffiiwwan tokko tokko jeequmsa miiraa fi miira namatti hin tolle fiduu danda'u. Yoo wanti si jeequ jiraate waa'ee tajaajila deeggarsa jiruu odeeffannoon siif kennama. Faayidaan argamuu danda'u Dhiphinni fi Cinqii barattoota ijaan arguu dadhaban irratti dhiibbaa akkamii akka geessisu hubachuu fi odeeffannoo sirna deeggarsa manneen barnootaa keessatti fooyyessuu danda'u kan dabalatu dha.

Odeeffannoon qorannoo kana keessatti walitti qabame hundi iccitii ta'ee ni eegama. Odeeffannoon dhuunfaa eegumsa kan qabu yoo ta'u, deebiin kennamus eennun irraa akka kenname hin ibsamu. Daataan kun haala nageenya qabuun kan kuufamuu fi garee qorannoo qofaan kan itti fayyadamamu ta'a. Maqaan ykn eenyummaan keessan gabaasa ykn barruu qorannoo kana irratti hundaa'e kamiyyuu keessatti hin ibsamu. Yeroon waliigalaa tokkoon tokkoon hirmaattotaaf tilmaamaan daqiiqaa 30 dha.

Waa'ee qorannichaa gaaffii ykn yaaddoo yoo qabaattan ykn hayyama keessan ofirraa dhiisuu yoo barbaaddan, maaloo qunnamaa:

Qorataa Muummee:

Reedwaan Idriis, Mana Barnootaa 'Social work' irraa, Yuunivarsiitii Finfinnee.

Odeeffannoo Quunnamtii: **Lakkoofsa Bilbilaa:** +251 92 231 2555

**Imeelii:** redone.idris2@gmail.com

Unka kana mallatteessuudhaan odeeffannoo armaan olii dubbisuu kee mirkaneessita, kaayyoo qorannichaa hubachuu kee fi fedhii keetiin hirmaachuuf walii galtee jirta. Akkasumas yoo barbaachisaa ta'e daa'imni keessan akka hirmaatu hayyamuuf walii galtaniittu.

Maqaa Hirmaataa: \_\_\_\_\_ Mallattoo Hirmaataa: \_\_\_\_\_ Guyyaa: \_\_\_\_\_

Maqaa Warraa/Guddistuu (yoo jiraate): \_\_\_\_\_ Mallattoo: \_\_\_\_\_ Guyyaa: \_\_\_\_\_

Maqaa Qorataa: Reedwaan Idriis Ebuu, \_\_\_\_\_ Mallattoo: \_\_\_\_\_ Guyyaa: \_\_\_\_\_

## **Kutaa I: Amaloota ‘socio-demography’**

1. Saala: 1. Dhiira  2. Dubartii
2. Maqaa Mana Barumsaa:
  1. Mana Barumsaa Kaatolikii Shaashamannee warra ija hin qabnee.
  2. Mana Barumsaa Sabataa Sadarkaa Tokkoffaa Namoota ija hin qabnee.
3. Umurii Ammaa (Waggaadhaan): \_\_\_\_\_ .
4. Umurii wayta gara dhaabbatichaa seenan (Waggaadhaan): \_\_\_\_\_ .
5. Umrii yeroo jalqabaaf dadhabinni ijaa irratti argame (waggaadhaan): \_\_\_\_\_ .
6. Turtii Yeroo dadhabinni ijaa irra ture (waggaadhaan): \_\_\_\_\_ .
7. Gosa dadhabina ijaa: 1. Dhalootaan  2. Yeroo booda kan argame
8. Sadarkaa dadhabina ijaa: 1. Salphaa  2. Giddugaleessa  3. Jabaataa  4. Gadi-fagoo
9. Galii maatii: 1. Sarara hiyyummaa gadi  2. Giddu-galeessa  3. Sadarkaa olaanaa
10. Sadarkaa Barnoota maatii:
  1. Barnoota idilee hin qabu  2. Barnoota sadarkaa tokkoffaa
  3. Barnoota sadarkaa lammaffaa  4. barnoota olaanoo
11. Haala Qaxarrii Maatii:
  1. Qaxaramanii  2. Hojii dhabeeyyii  3. Soorama  4. Hojii dhuunfaa
12. Meeshaalee ykn teeknooloojiiwwan gargaarsaa argachuu:
  1. Meeshaalee Bireelii  2. Dubbistoota iskiiriinii

## **Kutaa II: Jijjiiramoota dhaabbataa wajjiin walqabatan**

13. Gosa Dhaabbataa/Mana Barumsaa:
  1. Mana barumsaa addaa namoota ija hin qabneef
  2. Mana barumsaa idilee keessatti deeggarsa waliin
  3. Mana Barnoota Bultii addaa warroota ija hin qabneef
14. Yeroo turtii dhaabbaticha keessaa (waggaadhaan): \_\_\_\_\_ .
15. Sadarkaa deeggarsa kennamuu :
  1. Gargaarsa dhuunfaa  2. Deeggarsa garee  3. Leenjii addaa
16. Hojiiwwan barnootaan ala taasifaman:
  1. Ispoortii  2. Aartii  3. Gumiiwwan hawaasaa
17. Sagantaa barnoota hunda hammate irratti hirmaachuu:
  1. Yaala  2. Gorsa  3. Deeggarsa barnootaa
18. Tajaajila deebisanii dhaabuu argachuu :
  1. Ibsa fi leenjii sochii  2. Leenjii dandeettii jireenyaa





## Kutaa V: Safartuu deeggarsa hawaasummaa

Safartuun kun namoonni dhuunfaa namoota naannoo isaanii jiraniin hangam akka deeggaraman, akka jaallataman fi gatii akka argatan hangam akka itti dhaga'amu irratti xiyyeeffata. Tokkoon tokkoon gaaffii safartuu 'likert' qabxii 6 qabuun Kan safaramu yoo ta'u,

**1=cimsee walii hin galu hanga 6= sirritti cimsee walii galaatti safarama.**

Lakk	Safartuu	1	2	3	4	5	6
1.	Maatii/kunuunsituu/ koo irraa fagaadhee jiraadhus isaan waa'ee koo ni yaadu.						
2.	Ani Maatii / kunuunsaa /kootiin baay'een jaalatama, yeroon mana barumsaa jirus ana waliin ni qunnamu.						
3.	Maatii/kunuunsaa/ koo iddoo guddaa naaf kennu, mana barumsaa addaa keessattis barnoota koo ni deeggaru.						
4.	Mana keessa jiraachuu baadhus maatii/kunuunsaa/ koo na dhaqqabuu akka danda'an Isaan amanachuu nan danda'a.						
5.	Maatii/kunuunsaa/ koo na kabajuu akkasumas qormaata mana barumsaa addaa keessatti na mudatu ni hubatu .						
6.	Maatii /kunuunsitoota/ kootiif barbaachisaa dha , yeroon mana barumsaa jirus wantoota na barbaachisan gabaachuu koo ni mirkaneessu.						
7.	Maatii/ kunuunsitoonni/ koo fedhii dhuunfaa kootiif ni dhimmamu, ana gargaaruufis mana barumsichaa waliin wal qunnamu.						
8.	Ani Maatii/kunuunsituu/ kootiif dhimma mana barumsaattis akkan gaarii hojjachaa jiru mirkaneeffachuuf na gaafatu.						
9..	Maatii koo/ kunuunsitoota koo biratti gatii guddaa akka qabuvnatti dhaga'ama, mana barumsaa addaa keessattis waanan danda'u hunda akkan godhu na jajjabeessu.						
10.	Hiriyyoota mana barumsaa koo biratti baay'een jaallatama, sochii guyyaa guyyaa keenya keessattis wal gargaarra.						
11..	Hiriyooni koo mana barumsaa naaf yaadu, wantoota ani arguu hin dandeenye irrattis yeroon gargaarsi na barbaachisu na gargaaru.						
12.	Hiriyooni koo na kabaju, ijaan arguu dadhabus cimina addaa mataa kootii akkan qabu ni hubatu.						
13..	Sochii mana barumsaa keessatti hiriyyoota kootiin kan hammatamu yommuu ta'u, isaanis karaalee naaf ta'aniin akkan hirnaadhu na gargaaru.						
14.	Keessumaa bakka hin beeknetti qajeelfama yeroon barbaadu hiriyyoota mana barumsaa kootii amanachuu nan danda'a.						
15.	sababa ijaan arguu dhabuu kootiin gargaarsi dabalataa yeroo na barbaachisuttillee Hiriyyoota koo mana barumsaa biratti fudhatama akkan qabu natti dhaga'ama,.						
16.	Hiriyyoota koo mana barumsaa biratti nan amanama, isaanis akkuma ani isaan amanutti na amanu.						
17.	Hiriyooni koo mana barumsaa fedhii dhuunfaa kootif ni dhimmamu keessattuu yeroo sochiiwwan irratti waliin hojjenu.						
18.	Hiriyyoota koo mana barumsaa biratti gatii akkan qabu natti dhaga'ama, isaanis hanqinna arguu koo akka daangeffama ykn hir'ina qaamaatti hin ilaalan.						
19.	Barsiisonniifi hojjettoonni mana barumsaa addaa naaf yaadu, nagaan fi deeggarsa argachuu koos naaf mirkaneessu.						
20.	Barsiisonnii fi hojjettoonni mana barumsichaa iddoo guddaa naaf kennu, galma koo akkan milkeessuufis na jajjabeessu.						
21.	Ani barsiisotaa fi hojjettoota mana barumsichaatif dhimma, hammatamuu koo mirkaneessuufis ni yaalu.						
22.	Arguu waanan dadhabeef yeroon waan tokko irratti gargaarsa barbaadu barsiisotaa fi hojjettoota mana barumsaa irratti hirkatuu/amanuu/ nan danda'a.						
23.	Barsiisotaa fi hojjettoota mana barumsaa addaa sanaa biratti gatii akkan qabu natti dhaga'ama, guddinaa fi barumsa koo keessattis na deeggaru.						

## Kutaa VI: Tooftaa Dandamachuu

Deebii kennitoonni yoo dhiheenya kana haala yaaddoo keessa seenanii jiru yoo ta'e madaalli 'Likert' qabxii afuriin gonkumaa (0) hanga eeyyee, yeroo baay'ee (3) jechuudhaan tokkoon tokkoo maloota dandamachuu hangam akka fayyadaman ni gaafatamu.

Lak	Safatruu	Deebii			
		1	2	3	4
1.	Rakkoon maaliif akka uumame hubachuuf ni yaala.				
2.	Rakkoo kana dandamachuuf karoora nan baafadha.				
3.	Hiriyaa koo ykn miseensa maatii/kunuunsaa/koo gorsa nan gaafadha.				
4.	Rakkoo kana akkamitti akka furamu danda'u odeeffannoo nan soqa.				
5.	Haala kana to'achuuf mala adda addaa yaada.				
6.	Nama amanu waliin waa'ee miira koo nan mari'adha.				
7.	Haala jiru jijjiiruuf karaa danda'een nan hojjedha.				
8.	Yeroo Itti aanutti kanaan adda maal gochuu qaba jedheen yaada.				
9.	Akkaataa wantoota ittiin fooyyessuu danda'u irratti ni xiyyeeffadha.				
10.	Miira natti dhagahamaa tureen abdii osoo hin kutatin itti fufa .				
11.	Gama ifa/gaarii/ wantota ilaaluuf nan yaala.				
12.	Rakkoo kana dandamadhee akka namaatti akkamitti guddachuu danda'a jedheen yaada.				
13.	Wantoota akka gaariitti hojjechuu danda'u of yaadachiisa.				
14.	Haalli Kun akkamitti akka na cimsu nan yaada.				
15.	Jireenya koo keessatti wantoota gaarii ta'an irrattin xiyyeeffadha.				
16.	Rakkoo koo kanaaf nama gargaarsa nan gaafadha.				
17.	Waan na yaaddessu maatii/kunuunsituu/ koo wajjin nan haasa'a.				
18.	Deeggarsa argachuuf barsiisaa ykn gorsaa bira nan deema.				
19.	Waa'ee miira koo haasa'uuf Hiriyaa kootif nan bilbila.				
20.	Namoota naaf yaadan irraa deeggarsa na barbaada.				
21.	Rakkoof furmaata kennuuf nan yaala.				
22.	Haala jiru dandamachuuf yaada adda addaa nan maddisiisa.				
23.	Namoonni haala wal fakkaataa keessa jiran biroo maal godhaniiru jedheen yaada.				
24.	Dandeettii kooti fayyadamee karaa rakkinicha ittin dandamadhu barbaada.				
25.	Miira koo ifa gochuuf yaada koo nan barreessa.				
26.	Waa'ee Rakkoo jiruu akkan hin yaadne nan yaala.				
27.	Sochiiwwan biroottiin yaada koo of dagachiisa.				
28.	Namoota rakkoo na yaadachiisan irraa nan fagaadha.				
29.	Waan na yaachisu jalaa miliquuf yaadaan nan hawwa.				
30.	Rakkoon akka hin jirre fakkeessa.				
31.	Haala jiru jijjiiruuf osoo hin yaalin nan fudhadha.				
32.	Wanti ani gochuu danda'u akka hin jirre ofitti hima.				
33.	Rakkoo furuuf yaaluu nan dhiisa.				
34.	Wantoonni jijjiiramuu akka hin dandeenye nan amana.				
35.	Waan uumamuu kamirraayyuu of nan baasa.				
36.	Wantoota na gammachiisan kan akka ispoortii taphachuu ykn muuziqaa dhaggeeffachuu nan raawwadha.				
37.	Wantoota addaatiin of nan kunuunsa.				
38.	Miirri gaariin akka natti dhaga'amuuf hiriyoota koo wajjin yeroon dabarsa.				
39.	Of dagachiisuuf gara wantoota hojjachuu jaalladhu irratti nan iyyeeffadha.				
40.	Ruuhii/keessa/ koo haaromsuuf sochiiwwan bashannansiisoo nan hojjedha.				
41.	Miirri koo akka gadi na dhiisuuf nan boo'a.				
42.	Aarii koo nan ibsa ykn nan iyya.				
43.	Nama na dhaggeeffatuuf miira koo nan qooda.				
44.	Nama na hubatuu danda'u irratti miira koo nan baasa.				
45.	Miira koo karaa sirrii ta'een nan baasa.				
46.	Tasgabbaa'uuf tooftaa ittiin boqadhu ykn bashannanu nan shaakala.				
47.	Yaaddoo koo salphisuuf hafuura dheeraa baafadha.				
48.	Yeroo yaaddoon/cinqiin natti dhaga'amu yaada ittiin tasgabbaa'u irratti xiyyeeffadha.				

## ANNEX VI: Plagiarism and AI Test Result

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### ORIGINALITY REPORT

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<b>9%</b> SIMILARITY INDEX	<b>4%</b> INTERNET SOURCES	<b>8%</b> PUBLICATIONS	<b>1%</b> STUDENT PAPERS
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AI detection includes the possibility of false positives. Although some text in this submission is likely AI generated, scores below the 20% threshold are not surfaced because they have a higher likelihood of false positives.

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