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ADDIS ABABA UNIVERSITY

College of Education and Language Studies
School of Psychology

**Assessment of Mental Health Concerns among Students in
Addis Ababa University through Online Platform: Self-
Diagnosis, Coping Mechanisms and Influence on Academic
Performance**

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June 2026

Addis Ababa,

Ethiopia

Assessment of Mental Health Concerns among Students in Addis Ababa University through Online Platform: Self- Diagnosis, Coping Mechanisms and Influence on Academic Performance

A Thesis is submitted to the School of the College of Education and Language
Studies Addis Ababa University, in Partial Fulfillment of the requirement for the
Master of Arts Degree in Counseling

By

Genet Mekuria

June 2026

Advisor: Professor Belay Tefera

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This is submitted to school of Psychology, College of Education and Language Studies, Addis Ababa University in Partial Fulfilment of the Requirement for the Master of Arts Degree in Counseling Psychology.

This is to certify that the thesis is prepared by Genet Mekuria titled “Assessment of Mental Health Concerns among Students in Addis Ababa University through Online Platform: Self-Diagnosis, Coping Mechanisms and Influence on Academic Performance” and submitted in Partial fulfilment of the requirement for the Master’s Degree in Counseling Psychology in complies with the regulations of the College and meets the accepted standards with respect to originality and quality.

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Declaration

I hereby declare that the information presented in this Document is my original work. All the scholarly sources that have been included in this document have been acknowledged accordingly. No part of this document has been submitted before to qualify for any other academic results.

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List of Acronyms and Abbreviation

AAU	Addis Ababa University
AI	Artificial Intelligence
APA	American Psychiatric Association
CBT	Cognitive Behavioral Therapy
CSS	Cyberchondria Severity Scale
DSM	Diagnostic and Statistical Manual of Mental Disorders
eHEALS	eHealth Literacy Scale
FMHS	Faculty of Mental Health Sciences
GHQ	General Health Questionnaire
ICT	Information and Communication Technology
IU	Intolerance of Uncertainty
KII	Key Informant Interview
M	Mean
MDD	Major Depressive Disorder
N	Total Sample Size
N	Sub-group Sample Size
PSS	Perceived Stress Scale
R	Pearson Correlation Coefficient
SD	Standard Deviation

SPSS	Statistical Package for the Social Sciences
SWLS	Satisfaction With Life Scale
WHO	World Health Organization
α	Cronbach's Alpha (Reliability Coefficient)
X^2	Chi-Square Statistic

Acknowledgement

First and foremost, I would like to express my sincere gratitude to the Addis Ababa University undergraduate students who generously shared their time and experience by participating in this study.

I would like to thank my manager Kristin Pipho and colleagues at Allstar Psychology Service for their understanding and support throughout my research journey.

I would also like to thank my advisor Professor, Belay Tefera, for his invaluable input which has guided my work from the very beginning. Gedion Yekunoamlak and Bezawit Mulugeta, my research assistants, have greatly contributed to the study by providing insight into data collection and tool validation, and for that I am very grateful.

Finally, I would like to extend my gratitude to my parents and friends whose words of encouragement have helped me preserve and go through with study.

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Abstract

This mixed-methods study conducted in June 2026 assessed the relationships between general mental health distress, digital health tracking, self-diagnosis, and academic functioning among 400 undergraduate students at Addis Ababa University. The results showed that 78% of all surveyed participants utilized online platforms to research their health symptoms when feeling unwell, relying primarily on smartphones to access Google and various artificial intelligence tools. Within the subgroup of 312 active online health information seekers, a striking 87.8% reported experiencing moderate to high levels of baseline psychological distress. Moreover, the study identified significant behavioral consequences of these habits, noting that 55.4% of the student population displayed moderate cyberchondria and 8.3% suffered from high cyberchondria. Pearson correlation analyses confirmed that using online resources as a digital coping mechanism was associated with an increase, rather than a reduction, in mental distress ($r=.253$, $p<.01$), functioning as a maladaptive behavioral loop that feeds health anxiety. This elevated mental distress was subsequently found to have a significant negative correlation with general life satisfaction ($r=-.274$, $p<.01$) and a positive correlation with negative academic impacts ($r=.201$), indicating that unmanaged digital searching explicitly disrupts concentration, study workflows, and subjective well-being.

Keywords: Cyberchondria, mental health distress, online self-diagnosis, digital coping mechanisms, health anxiety,

1.Introduction

1.1 Background of the Study

Online health information seeking refers to the utilization of internet-based resources such as search engines, dedicated health websites, and social media platforms to retrieve data and information regarding medical conditions, physical symptoms, and potential treatments (Baumgartner & Hartmann, 2011). The rapid global expansion of this digital information has made medical knowledge widely accessible, leading individuals to increasingly search for symptoms, diseases, and treatments online before consulting healthcare professionals (Bujnowska-Fedak & Węgierek, 2020). While online searches can enhance health awareness and promote self-management, excessive or repetitive engagement with these platforms is strongly linked to health anxiety. Within psychological literature, health anxiety is understood as a state characterized by excessive, distressing worry and a persistent fear of having or developing a serious medical illness (American Psychiatric Association, 2022).

When individuals repeatedly search online, they often experience a compounding cycle of worry, uncertainty, and the misinterpretation of both search results and benign bodily sensations. This cognitive overload frequently escalates pre-existing health anxiety rather than solving it. Although this problem is worldwide, it is particularly concerning in low-income countries characterized by limited health infrastructure and critical shortages of healthcare professionals. In countries like Ethiopia, where internet access is often more affordable and immediate than physical healthcare, the consequences of excessive online health searching may be especially pronounced. The Ethiopian healthcare system faces severe structural challenges, including a sparse number of medical professionals, prolonged wait times in public facilities, high expenses in private clinics, and a low physician-to-patient ratio across various regions. These systemic barriers drive individuals to rely heavily on searching the internet as an alternative source of medical advice. However, digital health literacy remains low among many users in Ethiopia.

Under these conditions, individuals are highly vulnerable to experiencing an escalation of distress that transitions from general health anxiety into cyberchondria. To properly address these issues, it is essential to clarify that health anxiety and cyberchondria are two distinct psychological constructs, though they are deeply interrelated. Illness Anxiety Disorder

(IAD) historically labeled as hypochondriasis is a formal clinical condition marked by an intense, obsessive preoccupation or fear of having a serious disease in the absence of a formal medical diagnosis (American Psychiatric Association, 2022). Cyberchondria, on the other hand, is a behavioral phenomenon defined specifically as an excessive and repetitive pattern of online health information seeking that is driven by health anxiety and results in increased distress, worry, and reassurance-seeking behaviors (Starcevic & Berle, 2013). While health anxiety represents the underlying psychological vulnerability regarding illness that can exist independently of technology, cyberchondria is an internet-fueled, maladaptive behavioral loop where the act of searching itself generates further anxiety.

This vulnerability particularly affects young adults and university students, who represent a highly digitally connected demographic. College students are uniquely susceptible to cyberchondria due to a combination of high daily internet usage, academic difficulties, stressors, and financial constraints that limit their access to professional medical care. According to the Cognitive Behavioral Model of Health Anxiety, these individuals encounter normal or ambiguous bodily sensations and misinterpret them as signs of serious illness, which triggers excessive worry and sends them online in search of reassurance (Salkovskis & Warwick, 2001). This process is further explained by the Intolerance of Uncertainty theory, which posits that individuals with a low tolerance for ambiguous health information experience severe discomfort when symptoms are unclear, prompting repeated online searches to achieve certainty (Carleton, 2016).

Unfortunately, because online health information is frequently inconsistent or inaccurate, these searches fail to provide lasting relief. Instead, they intensify uncertainty and doubt, trapping the student in a self-reinforcing loop of distress (Vismara et al., 2020). In the short term, cyberchondria acts as a dysfunctional coping mechanism that provides a temporary, perceived sense of relief or fear reduction (McElroy & Shevlin, 2014; Starcevic & Berle, 2013). Eventually, however, this obsessive health monitoring severely impairs student lives, negatively affecting their academic performance, mental health, emotional well-being, and daily functioning.

1.2. Statement of the problem

Online health information seeking refers to the utilization of internet-based resources—such as search engines, dedicated health websites, and social media platforms—to retrieve data and information regarding medical conditions, physical symptoms, and potential treatments (Baumgartner & Hartmann, 2011). The rapid global expansion of this digital information has made medical knowledge widely accessible, leading individuals to increasingly search for symptoms, diseases, and treatments online before consulting healthcare professionals (Bujnowska-Fedak & Węgierek, 2020). While online searches can enhance health awareness and promote self-management, excessive or repetitive engagement with these platforms is strongly linked to health anxiety. Within psychological literature, health anxiety is understood as a state characterized by excessive, distressing worry and a persistent fear of having or developing a serious medical illness (American Psychiatric Association, 2022). When individuals repeatedly search online, they often experience a compounding cycle of worry, uncertainty, and the misinterpretation of both search results and benign bodily sensations. This cognitive overload frequently escalates pre-existing health anxiety rather than solving it.

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To properly address these issues, it is essential to clarify that health anxiety and cyberchondria are two distinct psychological constructs, though they are deeply interrelated. Illness Anxiety Disorder (IAD) historically, labeled as hypochondriasis is a formal clinical condition marked by an intense, obsessive preoccupation or fear of having a serious disease in the absence of a formal medical

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Unfortunately, because online health information is frequently inconsistent or inaccurate, these searches fail to provide lasting relief. Instead, they intensify uncertainty and doubt, trapping the student in a self-reinforcing loop of distress (Vismara et al., 2020). In the short term, cyberchondria acts as a dysfunctional coping mechanism that provides a temporary, perceived sense of relief or fear reduction (McElroy & Shevlin, 2014; Starcevic & Berle, 2013). In the long run, however, this obsessive health monitoring severely impairs student lives, negatively affecting their academic performance, mental health, emotional well-being, and daily functioning.

Mental health concerns among university students have increasingly become a critical area of focus globally. With the rapid expansion of digital technology, students frequently utilize the internet to seek information regarding their psychological well-being. While online resources can offer immediate support, frequent and repetitive searching for medical symptoms often

exacerbates psychological distress, a phenomenon known as cyberchondria—defined as excessive online health information seeking driven by health anxiety that results in increased distress rather than reassurance (Starcevic & Berle, 2013; McElroy & Shevlin, 2014). This reliance on online platforms can shift from a benign search for understanding into a compulsive behavior pattern that heightens health anxiety rather than mitigating it (McMullan et al., 2019; Starcevic & Berle, 2013). When students self-diagnose using unverified internet sources, it often results in unmanaged stress, inappropriate coping mechanisms, and subsequent declines in day-to-day functioning.

Globally, online health research has integrated into daily routines whenever individuals face health anxieties. Studies show that even when individuals find the information they seek, it can paradoxically heighten anxiety, leading to compulsive symptom checking (Starcevic et al., 2016). Systematic reviews from high-income countries confirm that individuals searching for health information online are highly prone to health anxiety, especially when relying on it repetitively (McMullan, 2020; Starcevic et al., 2016). This vulnerability is acute among young adults, as a cross-sectional study among Pakistan university students revealed that moderate-to-high cyberchondria affected more than half of the surveyed students and was significantly associated with self-diagnosis (Sabir & Naqui, 2023).

Regionally, the prevalence of these psychological challenges is stark. A recent systematic review on the prevalence of youth mental health struggles in sub-Saharan Africa reported that one in seven children and adolescents (14.3%) experience psychological challenges, and one in ten meets the criteria for a psychiatric diagnosis (Cortina et al., 2012). In Ethiopia specifically, the prevalence of mental distress symptoms was found to be 34.6%, with a perceived need for professional mental healthcare reaching 70.5% among distressed university students (Negash, Medhin, et al., 2020). Subgroup analyses indicate that health information seekers accounted for 52.48% of these populations in the Amhara region, and 57.45% among health professionals, with computer and internet access significantly predicting health information-seeking behaviors (Tegegne et al., 2022).

While existing Ethiopian literature confirms that university students heavily utilize the internet and social media for health-related information, there remains a critical gap in empirical evidence regarding how students specifically utilize online platforms for self-diagnosis, the exact nature of the coping mechanisms they subsequently adopt, and how these specific digital behaviors

ultimately influence their academic performance and life satisfaction. Research indicates that online health information seeking behaviors are associated with negative outcomes including reduced academic functioning, decreased life satisfaction, and increased psychological distress (Mochcovitch et al., 2019; McElroy & Shevlin, 2014). However, no comprehensive study has examined the full extent of these relationships specifically within the Ethiopian university context, particularly at Addis Ababa University.

1.3. Research Questions

How do online support seeking, internet-based self-diagnosis, and coping mechanisms influence general mental health distress, cyberchondria, resilience, life satisfaction, and academic performance among undergraduate students at Addis Ababa University.

In more specific terms, this study addresses the following research questions.

1. What is the level of General Mental Health Distress among Undergraduate Addis Ababa University Students?
2. What is the prevalence of online support seeking behavior regarding mental health among undergraduate students at Addis Ababa University?
3. What is the prevalence of internet-based self-diagnosis of mental health support among Addis Ababa Undergraduate Students?
4. How do students utilize online platforms to cope with or control their mental health concerns?
5. What are the contributions of students' coping mechanisms to the development of cyberchondria among undergraduate students at Addis Ababa University?
6. What are the contribution of students' coping mechanisms to their development of resilience among undergraduate students at Addis Ababa University?
7. What is the impact of online mental health support seeking on general life satisfaction of undergraduate students?
8. What is the impact of online mental health support seeking on academic performance of undergraduate students?

1.4 Research Objectives

1.4.1 General Objectives

To assess the prevalence of mental health distress among undergraduate students at Addis Ababa University, and to examine the impacts of online mental health support-seeking, internet-based self-diagnosis, and coping mechanisms on their psychological well-being and perceived academic performance.

1. To determine the level of general mental health distress among undergraduate students at Addis Ababa University.
2. To assess the prevalence of online mental health support-seeking behavior among undergraduate students at Addis Ababa University.
3. To assess the prevalence of internet-based self-diagnosis of mental health concerns among undergraduate students at Addis Ababa University.
4. To evaluate how undergraduate students utilize online platforms to cope with or control their mental health concerns.
5. To examine the contribution of students' coping mechanisms to the development of resilience.
6. To examine the contribution of students' coping mechanisms to the development of cyberchondria.
7. To evaluate the impact of online mental health support-seeking on the general life satisfaction of undergraduate students.
8. To investigate the impact of online mental health support-seeking on the perceived academic performance of undergraduate students.

1.5 Significance of the study

The study is important as showing often many students' reliance on internet to search for health concerns without professional support or guidance. By examining the pattern of online health information well-being and academic impacts, the study will contribute to the limited empirical evidence on cyberchondria within Ethiopian context. The findings will help university administrators, mental health professions and health care providers better recognize and understand students who are struggling with health-related anxiety. In addition, the study will

contribute to interventions, awareness program and digital health literacy at promoting to use online health resources in a healthier way and improving students' well-being.

1.6. Delimitation of the study

The study is deliberately delimited to undergraduate and postgraduate students at Addis Ababa University, so the findings may not apply to students from other universities and general population. It only shows how students use online platforms to manage health concerns and how it relates to health anxiety and cyberchondria. The study relies on self-reported about online behaviors coping strategies and impacts on well-being and academics. Other factors in clinical diagnosis are not included in this study.

1.7 Operational Definition

- **General Mental Health:** An individual's overall psychological and emotional well-being, including their capacity to manage stress, regulate emotions, and function effectively in daily life, as well as their perceived state of cognitive and social functioning within the university environment.
- **General Mental Distress:** the presence of negative emotional states such as anxiety, stress and depressive symptoms that interfere with normal functioning and specific feeling of stress, worry and helplessness that disrupt a student's emotion.
- **Online platform:** it is a technological space that connects a group of people and information using the internet. e.g. Google, AI, TikTok, Telegram or specific Apps. Students use health information and symptom checkers in this platform to seek health information.
- **Prevalence of use of online platform:** The self-reported frequency, duration which students use internet platforms to search for their symptoms or health information.
- **Self-Diagnosis:** The independent process by which a student identifies, labels, or concludes that they have a specific mental health disorder or clinical condition based on unverified information, symptom checklists, or algorithmic feedback, without seeking validation from a qualified healthcare professional.

- **Self-diagnosis through online platform:** it is the process of identifying a condition using internet, books and experience resources. Students use health information and symptom checkers
- **Coping Mechanism through online platform:** specific strategies, behaviors and thought pattern individuals use to manage stress, difficult emotions and internal pain. Watching social media pages to share feelings and getting advice, talking to friends, or family when feeling stressed, spending more time on other unnecessary things instead of seeking help).
- **Resilience:** It reflects an individual's capacity for emotional regulation, flexibility, and adjustment in the face of stressors, and is measured by the perceived contribution of coping strategies to reducing stress and improving emotional well-being.
- **Health Anxiety:** A psychological state characterized by excessive, persistent, and distressing worry about having or developing a serious illness or mental health condition, driven by misinterpreting normal bodily sensations or emotional fluctuations as signs of severe pathology.
- **Cyberchondria:** A behavioral manifestation of health anxiety where an individual compulsively, repeatedly, and excessively searches the internet for medical or psychological symptoms, which paradoxically escalates their underlying distress, panic, and anxiety rather than alleviating it.
- **Impacts of online platform use:**
 - **General life satisfaction:** Students overall cognitive and subjective evaluation of their life including satisfaction with their current academic and living conditions.
 - **Academic Performance:** The measurable outcomes of a student's educational experience, evaluated through their self-reported ability to meet deadlines, attend classes regularly, maintain focus, and achieve successful grades, free from disruptive interference caused by mental distress or unmanaged cyberchondria.

2. Review of Related Literature

This chapter synthesizes the literature related to Mental Health, Distress, Cyberchondria, coping mechanisms, and Mental Health services. The review will look at the conceptualization of Mental Health, by focusing on the meaning and definitions of mental health and Ill health, general Mental Health distress and by zooming in on cyberchondria. The review will highlight the epidemiology/prevalence of mental health concerns in Ethiopia. The synthesis will also include discussions on coping mechanisms to mental health concerns and resilience. The distinction between general mental health services and internet-based mental health services will be highlighted. The literature review will conclude by looking at different theoretical perspectives in the topic of study, positing gaps in research and presenting the conceptual framework.

2.1. Conceptualization of Mental Health: meaning and definition of concepts

Mental Health has for long been an important field of discussion in the field of Psychology and beyond. The 21st century has seen an increased attention being afforded to mental health in academic and public discourse as well as health policy discussions. This global attention has been driven by a growing awareness of the consequences of mental health on individuals', groups' and societies' wellbeing, life satisfaction and productivity (Herrman et al., 2005). The recognition of the burden of mental health has further been bolstered by its impact on young people, thus driving mental health studies, research and interventions globally.

With the increased attention to mental health, there has been a proliferation of definitions, theories, perspectives and paradigms. A key issue regarding the difficulty of having a uniform definition for Mental Health lies in the problem of distinguishing between normal and abnormal behavior. The multidimensional nature of mental health contributes to its complexity of definition and leads to a diversity of approaches for devising a precise, scientific definition of “abnormal behavior.” (Galderisi et al., 2015). Abnormality has been defined as, the deviation from the average/cultural standards (Barlow et al., 2018), subjective discomfort/distress or the psychological consequences of the behavior for the individual (American Psychiatric Association, 2013) and as an impairment of adaptive functioning (American Psychiatric Association, 2022).

This noted deviance in the definition of what is abnormal, or normal psychological functioning has distinct cultural and societal elements and standards that mitigate it. Societal expectations and standards often draw the boundary of normality, which blurs the boundary between wellbeing and illness (Sue et al., 2019). Some cultures may hold certain behaviors as adaptive or functional, well in the statistical norm of acceptable behaviors, while others may hold the same behaviors as maladaptive and a deviation from the norm. Cultural differences in the definition of Mental Health and abnormal behavior, in addition to subjective interpretations of functional behavior and affect has led to a shift toward defining mental health along a continuum. Rather than a dichotomy of illness and wellbeing, which considers abnormal and normal behavior as absolute states, this shift has led to a view which marks them as the two ends of a continuum (or scale) of behavior, with completely normal functioning at one end and totally abnormal behavior at the other (Keyes, 2005).

Mental Health

In addition to varying across, theoretical, cultural, and professional disciplines, the definition of Mental health and abnormal behavior has also exhibited a temporal change. Historically, mental health has been exclusively defined as the absence of mental distress or illness. Contemporary definitions of mental health move a step beyond the mere absence of distress and also includes resilience, coping mechanisms, positive psychology, and emotional wellbeing and creating and sustaining positive social relationships or social capital (Keyes, 2002; Seligman & Csikszentmihalyi, 2000). With this in mind, the WHO (2020) defines Mental Health as follows:

“Mental health is a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn and work well, and contribute to their community.”

This definition moves mental health from just the absence of psychopathology to a holistic wellness with wide-ranging ramifications for the wellbeing of the individual as well as society. This definition also informs how we define Ill health or Mental Illness.

General Mental Health Distress

The definition of general Mental health distress builds on the mental health definition and accommodates the multi-dimensional nature of the concept. Mental health distress, mental disorder

or mental illness can be defined as a condition or a combination of conditions marked by cognitive, behavioral and affective disturbances, social dysfunction, abnormal behavior and any or all combination of these symptoms (American Psychiatric Association, 2022). The definition posits factors such as the environment, physiology, genetics, social environment, and chemicals as key drivers of mental illness.

To better understand mental health distress and abnormal behaviors, developing a classification or a taxonomy of illness has been of prime importance. Even though taxonomizing abnormal behaviors has proven to be challenging, the importance of it is highlighted by it being necessary to describe and ultimately understand abnormal behavior. To this end, researchers and practitioners have both widely used the different iterations of the Diagnostic and Statistical Manual of Mental Disorders (DSM), which includes hundreds of different psychological disorders.

Anxiety disorders present one of the most common mental health illnesses. It is characterized by excessive, and persistent apprehension, tension, fear (often without substantial reasons for the fear) of one or multiple events or domains. A feeling of tension and apprehension is a natural bodily reaction to different stressors and is often adaptive and functional. Hans Selye () has defined an adaptive form of stress which he called Eustress. This type of stress or anxiety helps, rather than hinders, our daily functioning. Anxiety disorders on the other hand, arise in situations in which there is no external reason or cause and occurs without external justification and begins to cause behavioral dysregulation to impede people's daily functioning.

The Illness Anxiety Disorder (IAD) which is under the anxiety disorder umbrella of disorders and was labeled as Hypochondriasis in earlier iterations of the DSM. IAD is defined as an intense and obsessive preoccupation or fear of having or acquiring a disease, without having a formal diagnosis of a disease or without somatic symptoms the disease (American Psychiatric Association, 2022). The common symptoms for IAD include persistent checking for somatic symptoms and seeking reassurance through medical checks or through seeking health information about their symptoms. The digital age has fundamentally altered the reassurance seeking behavior in IAD. Now more than ever, access to online health information has been made available and individuals can search for their perceived symptoms, and access health related contents and information on demand. However, this new development, rather than alleviating fears such online health information

seeking behaviors have been known to escalate anxiety. This phenomenon is known as cyberchondria (Starcevic, & Berle, 2013).

Cyberchondria

Concept, definition and introduction of the problem

Online health information seeking refers to the use of internet-based sources such as search engines, health websites and social media platforms to obtain information about health conditions symptoms, and treatments (Baumgartner & Hartmann, 2011). In the rapid growth of digital technology this issue has become strongly common among young adults, college students and digital health literacy individuals.

While searching for health information online can enhance awareness and self-diagnosis which might promote self-management. Excessive and repetitive searching might lead to cyberchondria. Cyberchondria is defined as excessive online health information seeking that is driven by health anxiety and results in increased distress rather than reassurance (Starcevic & Berle, 2013).

Previous studies have shown or examined online health information and psychological impacts across diverse populations. Studies have investigated positive relationship between using online health information and health anxiety which increased level of anxiety and distress (Starcevic & Berle, 2013; McElroy & Shevlin, 2021).

Prevalence of Mental Health Concerns in Ethiopia

Mental illness remains a major public health concern in Ethiopia. The prevalence of mental illness in Ethiopia is generally reported to range between 14–32% (Habtamu et al., 2018; Engidaw et al., 2020). While historically the intervention and health policy focus in developing countries has been on communicable diseases, the burden of disease, reduction in productivity and quality of life due to mental illness has been undeniable. Youth and university students are particularly susceptible to mental health issues due to being in a myriad of stressors including academic stressors, financial stressors and psychosocial stressors.

Pursing Higher education often involves significant changes in the lives of students. Often times they must relocate to a different environment without the support of their social capital and immerse themselves in a novel university environment which renders them vulnerable to mental

illness. The prevalence of mental illness in university students in Ethiopia has shown to be high. Systematic reviews and meta-analysis show that, the prevalence of mental illness in Ethiopian Universities and colleges to be a pooled estimate of 37.73% (95% CI: 30.43% to 45.03%) (Alem, et al., 2020). More specifically, depression was studied to have a pooled prevalence of 35.52% (Fentahun et al., 2024). Students in medical fields in Ethiopian universities were found to be suffering from depression (51.30%), anxiety (30.10%) as well as comorbid depression and anxiety (21.20%) (Kebede, Anbessie & Ayano, 2019). These results indicate the need for screening, early intervention and related programs to ameliorate the negative effects of mental illness on students, academic performance, overall health, life satisfaction and interpersonal and social relationships. While these needs are acutely felt, significant gaps in availing mental health services in Ethiopia remain.

Significant barriers remain in the accessibility of mental health services in Ethiopia. The country lags in important indicators of access to mental health services. There is a marked shortage in psychiatric and psychotherapy facilities, trained mental health professionals (Psychiatrists, Psychologists, and Psychiatric Nurses) (Fekadu et al., 2019). In addition, there remains a significant gap in mental health literacy and education as persistent misinterpretation of the cause of mental health issues as spiritual and moral, has led to prejudice and stigma towards people in need of mental health care and support (Tadesse, 2025). Finally, cost remains a significant barrier for people to access mental health services. Public facilities are often time-consuming and entail long waiting time periods, while private institutions are often not affordable, especially for university students and young adults (Mekonnen et al., 2023).

As a solution to the barriers for accessing mental health services, university students may resort to online health information seeking behaviors (Seboka et al., 2022). With the increased availability of on-demand internet and recently Artificial Intelligence tools that utilize large language models, students are increasingly resorting to looking up their perceived symptoms online as a means of reassurance and self-diagnosis. The ease of accessing such health information through the internet coupled with the barriers to mainstream mental health services have increased online health information seeking behaviors (Chereka et al., 2025; Seboka et al., 2022).

2.2. General Mental Health Services and Internet-Based Mental Health Services

Individuals seek help with mental health concerns in different ways. Mainstream mental health services such as psychotherapy, counseling, psychiatric treatments, are one alternative for individuals in need of mental healthcare. Alternatively, traditional or informal sources of treatment include services in religious institutions, family and interpersonal support structures (Seboka et al., 2022). Due to rapid changes in technology and significant barriers in accessing mainstream services, the internet has emerged as a different modality of accessing mental health services for individuals (Chereka et al., 2025; Seboka et al., 2022).

The proliferation of internet access and rapid changes in digital technologies has resulted in an increased utilization of the medium as a mental health service, leading to internet based mental health services (Adem et al., 2022; Guracho et al., 2024). These services are defined by the usage of internet systems to provide counseling, mental health information, and psychoeducation, through qualified professionals.

This relatively recent development has come with undeniable advantages in availing mental health services to individuals who face barriers in accessing traditional face-to-face mental health services (Adem et al., 2022). Internet based mental health services give anonymity, convenience, and interactive resources which individuals may access at their convince and discretion at any time.

However, despite the obvious benefits of Internet based mental health services, and particularly online health information seeking behaviors present challenges and difficulties. The unregulated and unsupervised content available on the internet often gives exaggerated, inaccurate, and inconsistent health information, which can potentially lead to difficulties in interpretations of the individual's perceived symptoms (McMullan et al., 2019; Starcevic & Berle, 2013). This unregulated access to inconsistent mental health information, rather than providing reassurance for the individual, may increase their anxiety and confusion, potentially resulting in Cyberchondria. Nevertheless, individuals utilize different mechanisms and support structures to help them cope with mental health concerns.

2.3. Coping Mechanisms to Mental Health Concerns and Resilience

Coping Mechanisms

Individuals utilize different coping styles and mechanisms to help them better adapt to mental health concerns. These mechanisms may have differing levels of efficacy and efficiency. According to the transactional model of stress and coping, stress can be conceptualized as a dynamic appraisal-dependent process that arises from the interaction between the individual and the environment (Lazarus & Folkman, 1984). Coping on the other hand is an assortment of cognitive and behavioral strategies and efforts that aim to manage stress. While coping mechanisms are understood to be highly individualized processes, that depend on the individuals' social capital, situational factors, locus of control and other personal resources (Skinner et al., 2003; Carver & Connor-Smith, 2010); two main types of coping have been identified in the literature.

The first type of coping is called Problem-Focused Coping. Problem-Focused coping involves efforts or strategies that aim to rectify or ameliorate the root cause of stress (Freire et al., 2020). This type of coping intends to directly address the main stressor or provide a solution for it. Interventions or mechanisms that look to remove stressors are categorized under Problem focused coping mechanisms. With regards to mental health concerns, coping mechanisms that look to change erroneous thinking styles or cognitive errors that cause and compound illness can be examples of problem focused coping mechanisms.

The second type of coping is Emotion-Focused Coping. This type of coping involves efforts towards minimizing the negative fallout from stressors (Aldao et al., 2010). The main aim of emotion-focused coping is to regulate emotional responses to different types of stressors. Meditation and relaxation techniques, seeking emotional support from family and friends, and distancing themselves from stressors are some manifestations of emotion-focused coping mechanisms (Folkman, 2011; Frydenberg, 2019). Seeking assurance and support from close group of people in the face of mental health concerns can be an example of emotion-focused coping mechanisms for stressors related to mental health. Interestingly, studies show individuals use a combination of both emotion focused and problem focused coping mechanisms for optimal functioning in their day to day lives (Aldao et al., 2010; Carver & Connor-Smith, 2010). Psychotherapy also involves a models and mechanisms that utilize a combination of problem and

emotion-focused interventions, to remedy the emotional toll of mental illness as well as to address the key underlying cause of a disorder.

University students employ different problem focused and emotion focused coping mechanisms to keep up with the academic and other stressors in their environment. Students may rely on problem-focused coping mechanisms such as seeking academic support, and time management to help them address the core stressors directly (Freire et al., 2020). They may also utilize emotion focused mechanisms such as mindfulness, journaling, substance use and exercising, to help them better manage their emotional responses to stressors (Chen et al., 2024). As mentioned previously, students may also engage in online health information seeking behaviors as a means of coping to different academic, social and personal pressures. University students may engage in adaptive and functional coping or maladaptive and dysfunctional coping (Starcevic & Berle, 2013).

Resilience

Resilience is an important protective factor that shields individuals from emotional disturbances and stressors that can potentially overwhelm their ability to cope. Resilience closely mirrors the emotion-focused coping mechanisms discussed earlier, as it enables better emotional regulation, flexibility and adjustment. Students with higher levels of resilience are generally better able to cope with psychological distress and are less likely to develop severe emotional and behavioral problems (Connor & Davidson, 2003).

2.4. Theories guiding the study

Three main theories can be highlighted in literature cyberchondria, health information seeking relevant to the current study. These are Cognitive Behavioral Theory of Health Anxiety, Intolerance of Uncertainty theory and cyberchondria as maladaptive coping.

Individuals interpret bodily sensations and health related information which is primarily guided by cognitive behavioral model of health anxiety. According to this model, health anxiety arises when normal or ambiguous physical sensations are misinterpreted as sign of serious illness, leading to excessive worry and reassurance seeking behaviors (Salkovskis & Warwick, 2001). In this process internet plays a big role by providing large amounts of health information that may support misinterpretation and for developing anxiety and rather than bringing solutions.

The concept of Cyberchondria is aligned to cognitive behavioral perspective. Starcevic and Berle (2013) propose that excessive online health information seeking functions as a maladaptive coping strategy driven by health anxiety. While individuals search online to seek information to minimize uncertainty and gain reassurance, repeated exposure to ambiguous information increases distress and reinforces a cycle of anxiety. The anxiety cycle is consistent which emphasizes the role of negative beliefs, attentional bias toward threat and compulsive reassurance seeking cognitive behavioral theories.

The theory of intolerance of uncertainty provides explanation for why some individuals are more vulnerable to cyberchondria. Individuals with low tolerance for uncertainty experience discomfort when health information is unclear, prompting repeated online searches to achieve certainty (Carleton, 2016). However, because online information is often inconsistent this behavior tends to increase anxiety rather than minimize it. The two theoretical perspectives explain the reliance on online platforms for personal management may contribute to increasing health anxiety and cyberchondria among young populations or students.

A third perspective merges with cyberchondria and coping mechanisms. In this conception, Cyberchondria is posited as a maladaptive and dysfunctional coping mechanism (Santoro et al., 2026; Starcevic & Berle, 2013). This perspective highlights online health information searching behavior is a form of reassurance seeking and provides temporary relief for individuals as it is perceived to answer some questions individuals have on their health (McElroy & Shevlin, 2014; Starcevic & Berle, 2013). This behavior seeks to reduce fear and anxiety over perceived health symptoms. Individuals through repeatedly searching for their perceived symptoms look to get better clarity and reduce worry about their symptoms.

While these repeated searches of health information may provide temporary relief for individuals in the short term, in the long run it may intensify anxiety over one's health. This is in part due to online health information being inconsistent, inaccurate, and excessive leading to increased uncertainty and doubt which again drives further searching for reassurances (Vismara et al., 2020). Thus, creating a self-reinforcing cycle of health information seeking and anxiety. According to this perspective, Cyberchondria is a dysfunctional coping mechanism, because even if it provides temporary sense of relief and reduction in anxiety, ultimately it feeds to the loop of distress and

seeking more reassurance through further health information seeking behaviors (Starcevic & Berle, 2013; McElroy & Shevlin, 2014).

2.5. Empirical Evidence

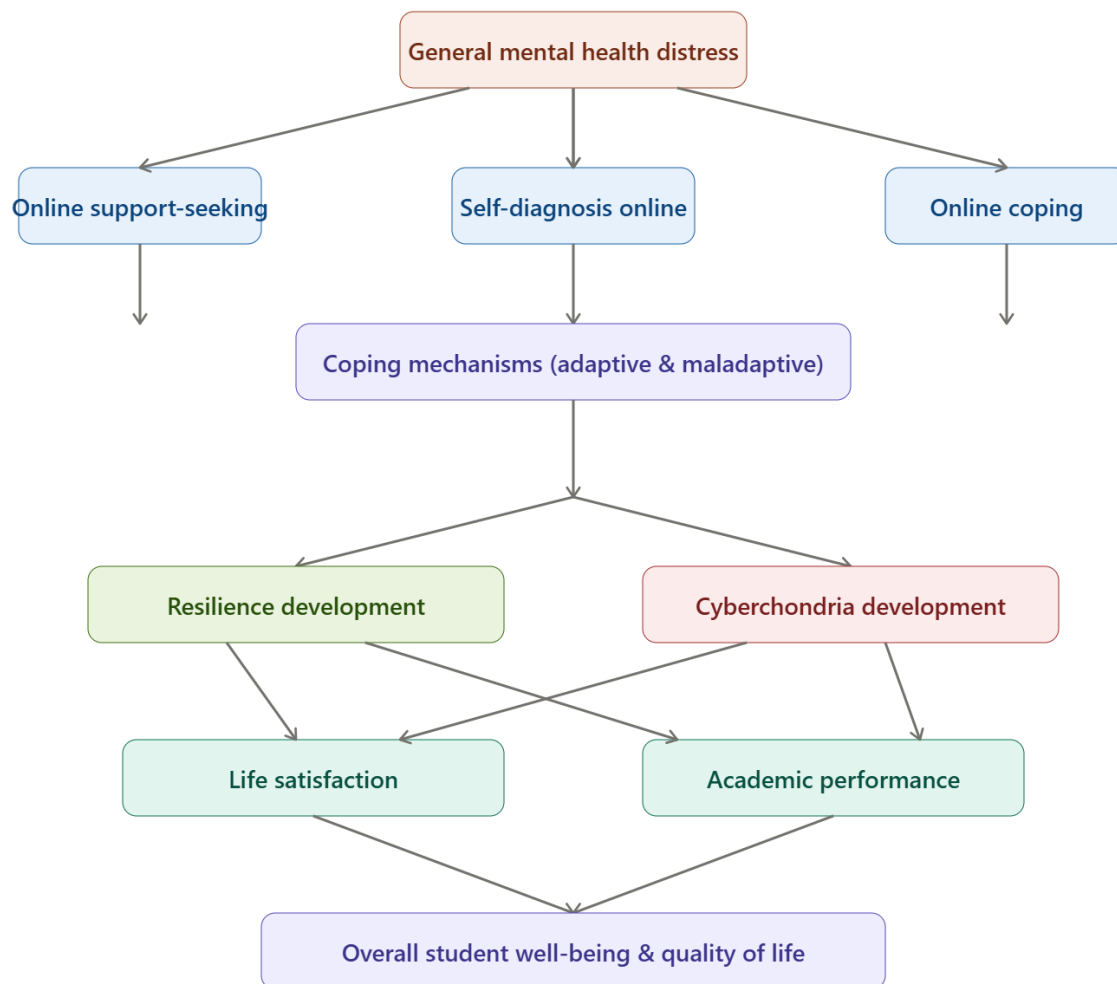
International studies have consistently shown a strong relationship between seeking health information using online increased health anxiety and cyberchondria. Studies across Europe and North America found checking symptoms online frequently is significantly associated with heightened anxiety reassurance seeking behaviors and difficulty tolerating uncertainty (Baumgartner & Hartmann, 2011; Starcevic & Berle, 2013). Research using standardized tools such as the Cyberchondria Severity Scale further confirmed that excessive online health searches are linked to poorer psychological well-being and increased distress rather than symptom relief (McElroy & Shevlin, 2014; Mochcovitch et al., 2019). Studies focus on university students identifying young adults as a risk group due to their high internet use and tendency to rely on online sources for health-related issues and to make decisions.

Research in Africa focusing on cyberchondria is limited when we compare it with other continents, but there are some existing studies that show the association of seeking health information using internet and anxiety. A study in Ghana University shown university students frequently rely on the internet for health-related information often using it as a primary source before consulting health care professionals (Osei Asibey et al., 2017).

Nigerian private University found undergraduate students used internet daily with 83.2% of respondents reporting internet use for health purpose and fewer consulted health professionals afterwards. (Adegbilero-Iwari et al., 2021). This indicates digital platforms are becoming a primary source for African students which shows cyberchondria is becoming major public health concern in Africa.

2.6. Conceptual Framework

Figure 1



3. Research Methods

3.1. Study Design

This study utilizes a basic mixed-methods framework, specifically employing an explanatory sequential design to investigate how undergraduate students at Addis Abeba University navigate mental health concerns via online platforms, self-diagnosis, and digital coping mechanisms, and how these behaviors influence their life satisfaction and academic performance. The methodology consists of two consecutive stages: an initial quantitative phase dedicated to measuring statistical prevalence, correlations, and predictive regressions of mental distress, cyberchondria, and self-diagnosis, followed by a secondary qualitative phase. This qualitative follow-up uses in-depth interviews to explain, contextualize, and enrich the quantitative patterns by illuminating exactly why and how these digital cycles manifest dynamically in the daily lives of the students.

3.2 Study Setting

The study was conducted at Addis Ababa University (AAU), the largest and oldest public university in Ethiopia, situated in the capital city, Addis Abeba. AAU operates across multiple campuses.

As a premier academic institution, Addis Ababa University provides students with campus-wide Wi-Fi networks alongside computer laboratory centers, affording them relatively high access to internet services compared to the general Ethiopian population. This environment might heavily facilitate student reliance on personal smartphones and institutional networks to engage with social media and digital platforms.

3.3 Population

The general population for this study will consist of all registered undergraduate students across the seven colleges at Addis Ababa University during the 2025/2026 academic year.

3.4 Eligibility Criteria

To ensure an unbiased and representative sample, a multi-stage cluster random sampling technique was employed to select participants rather than assessing the entire student body or selecting departments arbitrarily.

Inclusion Criteria:

Students who are registered as full-time regular undergraduate students at Addis Abeba University.

- Students belonging to the specific departments selected randomly during the first stage of sampling across the seven target colleges.
- Students currently enrolled in their second year or third/middle year of study (as first-year students lack established university academic performance records, and final-year students face distinct graduation stressors).

Specification of the Sampling Process:

1. Stage 1 (Cluster Selection): Out of all departments operating under the seven target colleges, three departments were selected completely at random using a lottery system to eliminate selection bias.

2. Stage 2 (Participant Selection): Within those three randomly selected departments, probability proportional to size (PPS) sampling was used, followed by simple random sampling from the registrar's student rosters to select individual second- and third-year students who met the inclusion criteria.

Exclusion Criteria:

Students who are freshmen were excluded because they don't belong to any of the departments selected. Graduating students in the selected universities were also excluded because they are overburdened meeting graduation requirements and, therefore, their stress is transient and may not be deep-seated.

3.5 Sample size determination

3.5.1 To ensure that the survey findings are statistically representative of the undergraduate population at AAU, the sample size was calculated **Cochran's (1977)** formula.

$$n_0 = \frac{Z^2 * p * q}{e^2}$$

Where the breakdown of the formula

Where:

n_0 = the desired sample size.

Z = the standard normal deviation at the required confidence level (set at 1.96 for a 95% confidence interval).

p = the estimated proportion of an attribute present in the population. Since the exact baseline prevalence of digital self-diagnosis and cyberchondria among AAU undergraduates was unknown prior to the study, p was set at 0.50 (50%) to achieve the maximum variability and ensure a conservative, maximum sample size.

$q = 1 - p = 0.50$.

e = Margin of error (0.05 or 5%).

$$N = (1.96)^2(0.5)(0.5) / (0.05)^2 = 384$$

Using Cochran formula, the minimum required sample size was calculated to be 384 students. To guard against potential non-response rates, missing data, or incomplete survey entries, the target sample size was intentionally increased to a rounded total of 400 participants. To distribute this sample equitably across the institution, a multi-stage cluster sampling method was applied across the seven target colleges. Using a lottery method to ensure an equal probability of selection, three departments were randomly selected from each of the seven colleges, establishing a cluster framework of 21 total departments. To achieve the final sample size of 400 students while accounting for slight variations in departmental registration sizes, approximately 19 regular, full-time undergraduate students were randomly sampled from each of these 21 departments using probability proportional to size (PPS) selection based on institutional rosters. This multi-stage distribution ensures broad institutional representation while maintaining a statistically rigorous sample population.

After the first phase was done the sampling shifted to a purposeful sampling procedure to select key format. To determine the standard cutoff points for the cyberchondria severity levels, an equal interval classification method was applied based on the theoretical boundaries of the five-point Likert scale. Since the tool evaluates four distinct items with individual scores ranging from 1

(Strongly Disagree) to 5 (Strongly Agree), the overall response spectrum spans a total range of four units. Dividing this maximum possible score range into three mathematically equal tiers (with an interval width of 1.33 units per tier) establishes an objective, scale-based template for classification.

3.6 Data Collection Tools and Scale

Data were collected using a structured self-administered questionnaire that contains several sections including socio-demographics, prevalence of online health information-seeking behavior, online self-diagnosis, coping mechanisms, resilience, cyberchondria, and impacts on students' lives (academic and life satisfaction). These components are described below as well as in Table 1 showing the sources of these sub-scales, number of items, format of questioning and the reliability indices

Socio-demographic questionnaire section: - the section was designed to collect background information such as age, year of study, department, financial status, internet access, device used for internet and frequency of internet use.

General mental health distress subscale: which assessed students' experience of stress, anxiety, emotional exhaustion and difficulty of relaxing. The sub-scale contains 5 items and uses five-point Likert type response scale ranging from strongly disagree to strongly agree.

Prevalence of online health information use: it assessed the extent to which students used online platforms to seek advice, support and solutions for health-related concerns. The subscale contained 5 items and used five-point Likert type response scale ranging from strongly disagree to strongly agree. Which is derived from Norman & Skinner (2006). eHEALS

Online self-diagnosis subscale: it was measured which students used online information to diagnosis or interpret and make conclusion about their health. The sub-scale contained 5 items and used five-point Likert type response scale ranging from strongly disagree to strongly agree. Which is derived from Norman & Skinner (2006) eHEALS.

Coping Mechanism Subscale: - it was designed to assess how students used online platforms to reduce stress, seek reassurance and manage worries related to their health concerns. The sub-scale

contained 5 items and used five-point Likert type response scale ranging from strongly disagree to strongly agree, developed by (Carver, 1997).

Cyberchondria severity subscale: —it was designed to measure anxiety and repeated searching after reading health-related information online. It contained 4 items and used five-point Likert type response scale ranging from strongly disagreement to strongly agree. Which is derived from McElory and Shevlin (2014).

Resilience (Coping effectiveness subscale): it was designed to perceive contributions of coping styles to students' general mental health, including reduction of stress improvement in emotional well-being and management of anxiety. The sub-scale contained 5 items and used five-point Likert type response scale ranging from strongly disagree to strongly agree, developed by (Carver, 1997).

Life satisfaction subscale: - it was designed to overall satisfaction with life outlook for future. The subscale contained five items and used 5 items and used five-point Likert type response scale. The items are derived from (Diener, Emmons, Larsen & Griffin, 1985). Satisfaction With Life Scale (SWLS).

Academical Impact subscale: it was designed to measure the effect of online mental health searching on academic functions, including concentration, time spent on class work, and emotional distress during study. The sub-scale contained 4 items and used five-point Likert type response scale. Which is derived from (Norman& Skinner2006).

Table 1
Self-Administered Questionnaire and its Reliability Indices

Components (sub-scales)	Sources	Number of items	Formats of questioning	Reliability Indices (Cronbach a)
Socio-demographics	Self-developed	6	Open-ended	-
General mental health distress	Cohen, Kamarck and Mermelstein (1983), Goldberg(1972) and Kristensen, Borritz, Villadsen and Christensen(2005)	5	Five-point rating	0.738
Prevalence of use of online health information platform	Norman & Skinner (2006)	7	Five-point rating (one question is yes/ no type	0.701
Self-diagnosis through online platform	Norman & Skinner (2006)	5	Five-point rating	0.783
Coping mechanism thorough online platform	Carver (1997)	5	Five-point rating	0.748
Resilience	Carver, 1997	5	Five-point rating	0.830
Health anxiety (cyberchondria)	McElory and Shevlin (2014)	4	Five-point rating	0.782
General life satisfaction	Diener, Emmons, Larsen & Griffin, 1985	5	Five-point rating	0.856
Perceived academic learning	Norman, & Skinner (2006)	4	Five-point rating	0.771
Total scale	-	40 (Excluding socio-demographics		0.884

The questionnaire was translated into Amharic, checked for concordance by the advisor and then pre-tested with a sample of 30 participants to check item clarity, appropriateness and the information from this pretest was used to revise the tool for final data collection. Some items were dropped because of participants' repeated questions for clarity and difficulty understanding them,

others were slightly improved and the final version was presented in the appendix and the summary reports in Table 1.

3.7 Data Analysis

Data was entered, cleaned, and analyzed using IBM SPSS Statistics version 26. Prior to analysis, data were checked for completeness, missing values, and outliers.

Descriptive statistics, including means, standard deviations, frequencies, and percentages, were used to summarize the data. Cronbach's alpha was used to assess the internal consistency reliability of the study instruments.

3.8 Ethical Consideration

The researcher obtained an official letter from Addis Abeba University school of psychology data can be gathered from concerned establishment. Participation will be voluntary, and students will provide informed consent after being briefed on the purpose, procedures, and potential risks of the study. Confidentiality and anonymity will be ensured by not collecting identifying information and securely storing completed questionnaires. Participants will have the right to withdraw at any time without any consequences, and the findings will be reported in a way that protects participants' privacy.

4. Result

4.1. Descriptive stat on socio-demographic(N=400)

A total of (N=400) students were included in this study at Addis Ababa University students, which include eight colleges and 19 departments. The socio-demographic characteristics of student age range from 18 to 29 years. Most participants were female (55.5%) as examined. Many participants were second year undergraduate students and based on allowance their financial status was medium (66.3%).

Table 1:

Descriptive Statistics on Socio-Demographic Measures

Variable	Groups	Freq.	Percent %
1. Age (Min=18, Max=29, (Mean 21.)	18 to 20 years	186	46.5
	21 to 25 years	205	51.2
	26 to 29 years	9	2.3
2. Sex	Male	178	44.5
	Female	222	55.5
3. Study year in the UG program	2 nd year	207	51.7
	3 rd year	158	39.8
	4 th year	30	7.5
	5 th year	5	1.0
4. Monthly Allowance	Low	124	31
	Medium	265	66.3
	High	11	2.8
5. Have access to the internet	Yes	390	97.5
	No	10	2.5
	Total	400	100

4.2. General Mental Distress

For the level of general mental health distress among AAU undergraduate students N=312 active online users were evaluated. According to the analysis most of the student population experiences moderate level of distress which is 66.3% (n=207). High general mental health distress was 21.5% (n=67) while only 12.2% (n= 38) reported small level of general mental health distress. According

to the analysis, over four-fifths of students (87.8%) experience moderately high distress regarding mental health concern.

Table 2:

Students Perceived Rating of their General Mental Distress (N=312)

Items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean
1 I often feel emotionally overwhelmed by my daily life	15(3.7)	44(10.8)	108(26.4)	110 (26.9)	35(8.6)	3.34
2 I experience frequent feelings of stress or tension	9(2.2)	55(13.4)	85(20.8)	163(39.9)	0	3.29
3 I feel anxious or worried most of the time	21(5.1)	75(18.3)	91(22.2)	126(30.8)	0	3.03
4 I find it hard to switch off my worries and truly relax	20(4.9%)	77(18.8)	105(25.7)	111(27.1)	0	2.98
5 I feel mentally exhausted or drained.	14 (3.4)	54(13.2)	81(19.8)	163(39.9)	1(0.2)	3.27
Mean for total General Mental Health sub-scale 3.181 and Standard Deviation is .65110						
Remarks:						
• Figures out of parenthesis are frequencies and those in parenthesis are percentages						

To provide context for the above descriptive results, the following qualitative narratives will be illustrated of the student participants.

Respondent 1: Male, 3rd year, 22 years old and law department

‘There are days when I feel exhausted by the amount of reading, assignments and exams. It’s not only schoolwork but also the pressure I have to deal with in my daily life stresses me too much. Sometimes I just sit all day thinking about where to start and it’s difficult to think clearly.’

Respondent 2: Female, 4th year, 24 years and Midwifery

‘My mind often feels tired; I always worry about my future and health and it’s harder to cope with stress. Even sometimes small problems are very big for me I do not have a good mental energy to think clearly and deal with them.’

Participants described their mental fatigue and difficulty of concentration in the qualitative data because of academic schoolwork, future and health issues. When we see both quantitative and qualitative together it suggests General Mental health distress is common experience among university students.

4.3. Online Information Use: Health support seeking and self-diagnosis

4.3.1. Prevalence of online health support seeking

As indicated in Table 3, the internet use or digital engagement is 97.5% (n=390) confirmed direct use or access to the internet and which is smartphones served as primary access tool for 83.3% (n=333). More than half of the sample 51.7%(n=207) reported they ‘always’ use internet for general purposes. To identify the prevalence of using internet for searching symptoms at Addis Ababa University undergraduate student 78% (n=312) of the total sample (N=400) reported they use the internet when feeling ill or unhealthy (Table 5). Google/Website served as primary tool 26.3% (n=105) while AI is the secondary tool 24% (n=96). The frequency of these online health users state that, 47.8% (n=149) ‘Sometimes’ search for seeking information online and regular engagement was also 13.5%(n=42) reported always. Physical concerns were the most prominent, with 64.1% (n=112) for mental and emotional health related symptoms as shown

Table 3:
Descriptive statistics of participants on Internet Use for General Purposes

Items	Options	Frequency	Percent %
Use of internet for general purposes	Never	4	1
	Rarely	11	2.8
	Sometimes	62	15.5
	Often	116	29.0
	Always	207	51.7
	Total	400	100
Primary tools for internet	Smartphone	333	83.3
	Laptop	63	15.8
	Other	4	1.1
Prevalence of searching for symptoms when you feel ill(N=400)	Yes	312	78
	NO	88	22
Primary tool for searching symptoms	Total	400	100
	Google/Website	105	26.3
	AI	96	24
	Google/Website and AI	69	17.3
	Other		
Type of health-related symptoms do they usually search	Physical	200	50
	Mental	112	28
	Total	312	78
	Rarely	48	12
	Sometimes	149	37.5
Frequency of searching for symptom online	Often	73	18.5
	Always	42	10.5

Table 4

Prevalence of Online Information Search for Managing Mental Health Concern

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean
1	I use online platforms to find practical ways to manage or solve my health concerns.	6 (1.5%)	32(7.8%)	87(21.3%)	186 (45.5)	3 (0.7%)	3.21
2	I often look for advice or support about my health on the internet.	5 (1.3%)	31 (7.8%)	78 (25%)	194 (48.5%)	6(1.5%)	3.29
3	When I face a health problem, I use online sources as a primary way to find solutions.	12 (3%)	44(11%)	131 (32.8)	123 (30.8%)	5 (1.3%)	3.34
4	I regularly search for health-related support on social media or websites.	17 (4.3%)	73 (18.3%)	103 (25.8%)	121 (30.8%)	1(0.3%)	3.18
5	I rely on online platforms whenever I have health concerns.	23 (5.8%)	89 (22.3%)	107(26.8 %)	96(24%)	0	3.10
Total mean score for Prevalence is 3.2258 and Standard Deviation is .61914							
<i>Remarks:</i>							
<i>Figures out of parenthesis are frequencies and those in parenthesis are percentages</i>							

As shown in Table 4 the overall composite score shows a total mean prevalence score of 3.23(SD=0.62), The table proves that online platforms are highly utilized and trusted resources for Undergraduate students.

To provide context for the above descriptive results, the following qualitative narratives will be illustrated of the student participants.

Respondent 1: Female, 4th year, 24 years and Midwifery

'I use the internet a lot to search for my health but am medical student so I don't rely on it completely. I use it as first supporter but if the problem is more than few days, I go to see a doctor, and it is also easy to talk about emotional stress on internet.'

Respondent 2: Male 3rd year, 25 Software Engineering

'Whenever I feel something weird or feel some symptoms my first step is searching for my symptoms on AI. I don't like hospitals so it's easy for me to read by myself and make the suggestions that are given online.'

While both students use online platforms as a primary solution for health management. Their trust boundaries are still different but still applies for their concerns.

The quantitative findings and qualitative narratives result shows online platform have become primarily health management resource for undergraduate students in AAU.

4.3.2. Online Self-Diagnosis

As shown in Table 5, the overall composite mean score for online self-diagnosis was $M = 3.33$, that shows that AAU students moderately lean toward digital platforms to evaluate their health concerns.

Table 5

Use of online information or self-diagnosis

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean
1	I try to identify my health problems using information on the internet.	8 (2%)	27(6.6%)	83 (20.3%)	195 (47.7%)	2 (0.5%)	3.50
2	I rely on online sources to understand what illness I might have.	8 (2%)	49 (12%)	100 (24.4%)	156 (38.1%)	2(0.5%)	3.30
3	I compare my symptoms with information I found online.	7 (1.7%)	19 (4.6%)	61 (14.9%)	225 (55%)	3 (0.7%)	3.63
4	I make conclusions about my health based on what I read online.	14 (3.4%)	84 (20.5%)	112 (27.4%)	105 (25.7%)	0	2.98
5	I prefer to diagnose my symptoms online before seeking professional help.	19 (4.6%)	51 (12.5%)	90 (22%)	151(36.9%)	4 (1%)	3.22
Mean for total Self-Diagnosis sub-scale 3.3251 and Standard Deviation is .58645							
<i>Remarks:</i>							
<i>Figures out of parenthesis are frequencies and those in parenthesis are percentages</i>							

To provide context for the above descriptive results, the following qualitative narratives will be illustrated of the student participants.

Respondent 1: Female, 3rd year 23 years old and Journalism and communication department

‘When I feel sick, I’ll check if my symptoms are like one of health concern which I got online. I want to know what am feeling is just a temporary stress feeling or serious health condition, so I compare each my feeling with symptoms I read online’

Respondent 2: Male, 3rd year, 22 years old and law department

‘I think it’s better to try the exact name of health condition before reaching the hospital, I want to know about my health condition before the doctor tells me I don’t think they are always trustworthy.’

The qualitative narratives show that online self-diagnosis is commonly used and initial stage for students while managing health concerns, which also helped them to gather information, compare their symptoms and take an action whether medical is necessary.

When the two data integrated, the students are not only reading their health information they are also as an active baseline tool to gather information cross sectional their symptoms and independently diagnosis themselves whether they need to see doctor or not.

4.4. Use of Online Information as Coping Mechanisms and Effectiveness

4.4.1. Use online information as coping mechanisms to mental health concerns

The overall composite mean score for digital coping mechanism was $M=3.22$, that indicates on average, AAU students moderately rely on digital platforms as resource to manage health related stress.

Table 6
Students perceived rating of coping mechanism (N=312)

	Items	1)Strongly disagree	2)Disagree	3)Neutral	4)Agree	5)Strongly agree	Mean
1	I use online platforms to reduce my stress about health concerns.	7 (1.7%)	61(14.9%)	107(26.2%)	139 (34)	1 (0.2%)	3.21
2	I seek reassurance from online health information when I feel worried.	10 (2.4%)	50 (12.2%)	96 (23.5%)	157 (38.4%)	2(0.5%)	3.29
3	I use the internet to find ways to cope with my health-related stress.	11(2.7%)	32 (7.8%)	110(26.9%)	162 (39.6%)	0	3.34
4	I feel more in control of my health concerns after using online resources.	13 (3.2)	48 (11.7%)	124 (30.3%)	129(31.5%)	1(0.2)	3.18
5	I rely on online platforms to manage my worries about my health.	13 (3.2%)	66 (16.1%)	114 (27.9%)	121(29.6%)	1(0.2%)	3.10
Mean for total Coping Mechanism sub-scale 3.2241 and Standard Deviation is .4910							
<i>Remarks:</i>							
<i>Figures out of parenthesis are frequencies and those in parenthesis are percentages</i>							

To provide context for the above descriptive results, the following qualitative narratives will be illustrated of the student participants.

Respondent 1: Male, 3rd year, 25 years old and software engineering

‘Every time I get symptoms, my mind immediately jumps to worst case, which makes me anxious. After seeing the symptoms online, I think my symptoms are common and it gives me relief. These days it’s the way I cope whenever I feel something unusual.’

Respondent 2: Male, 2nd year 20 years old and social work department

‘When I was dealing with severe sleep issues and excessive worry during my exams, I searched how to control my worry and how I track my behavioral issues and what relaxation strategies are best for me. My coping helped me to reduce my anxiety without reaching any counseling and medical office.’

Qualitative narratives show the use of digital resources are immediate during struggle. It allows participants to recognize their illness or symptoms are common, which gives them psychological relief. This shows the internet is being primary coping tool when students encounter unusual senses.

When we brought the two results together, it revealed that online health seeking directly increases student resilience and is one of the first coping strategies to deal with their symptoms. The internet is accessible and autonomous alternative for undergraduate students which helps them to regulate their own mental and well-being.

Table 7
Perceived improvements in mental distress because of online support (N=312)

	Items	1)Strongly disagree	2)Disagree	3)Neutral	4)Agree	5)Strongly agree	Mean
1	The ways I cope with my health concerns help reduce my stress.	7(1.7%)	37(9%)	124(30.3%)	145(35.5%)	2(0.5%)	3.31
2	My coping strategies improve my emotional well-being.	8(2%)	44(10.8%)	116(28.4%)	145(35.5%)	2(0.5%)	3.28
3	I feel mentally better after using coping strategies for my health concerns.	11(2.7%)	43(10.5%)	118(28.9%)	143(35%)	0	3.25
4	My coping methods help me manage anxiety related to my health.	6(1.5%)	45(11%)	112(27.4%)	151(36.9%)	1(0.2%)	3.30
5	Overall, my coping strategies positively affect my mental health.	10(2.4%)	40(9.8%)	123(30.1%)	141(34.5%)	1(0.2)	3.26

Mean for Total Resilience sub-scale is 3.2819 and Standard Deviation is .66257

Remarks:

Figures out of parenthesis are frequencies and those in parenthesis are percentages

The overall distribution shows that while many students do not find online platforms to be cure for their mental health related distress, a significant portion actively drives protective value from online coping resources to manage their stress.

4.4.3. Unintended impacts of Online support (Cyberchondria)

Table 7

Perceived Improvements in Mental Distress because of Online Support (N=312)

	Items	1)Strongly disagree	2)Disagree	3)Neutra l	4)Agree	5)Strongly agree	Mean
1	Searching for health information online increases my anxiety.	24(5.9%)	114(27.9%)	96(23.5%)	73(17.8%)	6(1.5%)	2.75
2	I feel worried after reading medical information on the internet.	23(5.6%)	112(27.4%)	88(21.5%)	90(22%)	0	2.78
3	I spend more time than I intended searching for health-related information online.	29(7.1%)	130(31.8%)	85(20.8%)	69(16.9%)	0	2.62
4	I find it difficult to stop searching for health information online.	65(15.9%)	133(32.5%)	63(15.4%)	53(13%)	0	2.33
For Cyberchondria total Mean is 2.6202 and Standard Deviation is .67391							
	Category	Frequency(n)		Percent %			
Cyberchondria level (N= 314)	Low cyberchondria	112		36.3			
	Moderate Cyberchondria	174		55.4			
	High Cyberchondria	26		8.3			
	Total	312		100%			

According to the cyberchondria analysis (N=314) of students 55.4% (n=174) shows moderate level of cyberchondria, while 36.3% (n=114) shows 8.3 % (n=26) experienced high level of cyberchondria.

To provide context for the above descriptive results, the following qualitative narratives will be illustrated of the student participants.

Respondent 1: Female, 3rd year, 23 years old and journalism and communication department

‘Sometimes while searching for my symptoms, it gives me worst scenario I remember last year I was feeling weird and showing unusual behavioral issues and my social battery has decreased and when everyone asked what is wrong with me, I looked up online and it gives the worst symptoms, I ended up more panicked.’

Respondent 2: Male, 3rd year, 23 years old and accounting and finance department

‘Once I look up my symptoms online, I find it difficult to just stop I feel relieved maybe sometimes but then I start to check again what if my symptoms are a little different and spend more time looking for better answers.’

Qualitative narratives show that the participants provide analysis of how cyberchondria is active in this research sample. It shows or demonstrates that searching symptoms online is becoming more easily a routine for undergraduate students which is time-consuming heightened emotional distress.

Both quantitative and qualitative data show online platforms show frightening, worst-case scenarios that trap more students to endless searching online, which results in more time consuming and emotional distress for the student.

4.5. General Impacts of Online mental Health support

4.5.1. Impacts on general life satisfaction

The overall mean indicates that the students report a moderate level of general life satisfaction overall.

Table 8
Perceived Impacts of Online Mental Health Support on Life Satisfaction

	Items	1)Strongly disagree	2)Disagree	3)Neutral	4)Agree	5)Strongly agree	Mean
1	I am satisfied with my life overall.	18(4.4%)	43(10.5%)	126(30.8%)	126(30.8%)	2(0.5%)	3.16
2	My life conditions are good.	13(3.2%)	31(7.6%)	99(24.2%)	169(41.3%)	3(0.7%)	3.37
3	I feel content with my life at present.	17(4.2%)	40(9.8%)	125(30.6%)	131(32%)	2(0.5%)	3.19
4	I am happy with the direction my life is going in.	24(5.9%)	42(10.3%)	120(29.3%)	128(31.3%)	1(0.2%)	3.13
5	I feel positive about my future.	15(3.7%)	31(7.6%)	79(19.3%)	183(44.7%)	7(1.7%)	3.43

Total Mean for total General life satisfaction is 3.2578 and Standard Deviation is .69728

To provide context for the above descriptive results, the following qualitative narratives will be illustrated of the student participants.

Respondent 1: Male, 3rd year, 23 years old and Accounting and finance

'My current living conditions are good and stable. I am learning what I want and I love my access to technologies these days I can do what I want with that. Things might not be perfect but still am happy with the resources I have available in my academic journey.'

Respondent 2: Male. 2nd year, 20 years old and social work department

‘Overall am happy with my life but if I must answer about the specific path of life, I am uncertain that it’s more neural. I just want to balance my health and academic demands.’

The students note that their current living conditions are good and stable, despite the environment struggle they remain neutral with available resources and academic journeys. This shows the combination of stability, academic journey and use of digital fosters a life satisfaction

Both quantitative and qualitative data show that general life satisfaction among university students is not permanent state. Instead, it represents the combination of academic pressure regular use of digital platforms, stability all alongside the pressure to manage personal health against the traditional institutions.

4.5.2. Academic impact

As shown in table 9 small amount of undergraduate populations experiences distraction and anxiety from online searches, the broader part of the population successfully balances their online health information seeking habit with their academic learning.

Table 9
Perceived impacts of Online mental health support search on academic learning

Items		1)Strongly disagree	2)Disagree	3)Neutral	4)Agree	5)Strongly agree	Mean
1	Searching for mental health information online interferes with my ability to concentrate on my studies and academic assignments.	31(7.6%)	89(21.8%)	102(24.9%)	90(22%)	3(0.7)	2.83
2	I often experience increased anxiety or emotional distress after searching for mental health concerns online.	27(6.6%)	120(29.3%)	96(23.5%)	72(17.6%)	0	2.68
3	I frequently spend time searching for health information that should be dedicated to my university coursework.	43(10.5%)	115(28.1%)	93(22.7%)	62(15.2%)	2(0.5%)	2.57
4	My academic efficiency has decreased due to the time and mental energy I spend searching for mental health information online.	72(17.6%)	115(28.1%)	80(19.6%)	47(11.5%)	1(0.2%)	2.33

Total Mean for Perceived academic Learning is 2.6016 and standard Deviation is .74814

To provide context for the above descriptive results, the following qualitative narratives will be illustrated of the student participants.

Respondent 1: Male, 3rd year, 22 years old and law department

‘One day I was trying to do my assignments, suddenly I felt unwell and tried to search online and I got completely distracted. Instead of working I keep reading and it breaks my concentration’

Respondent 2: Female, 4th year, 24 years old and Midwifery

‘The emotional distress and worry from the result I got online after searching my symptoms online stayed in my mind and I couldn’t focus on my class while the instructor is teaching.

The two respondents illustrate how online health-seeking can be across over learning concentration and focus. The digital searching might create cognitive interference, negatively impacting study habits.

When integrated both analysis it proves that online health seeking routines are tied with student academic performance. The searching habit interference with learning habits, classroom focus and assignment completion.

4.6 Contribution of coping mechanism to mental health (N=312)

This finding shows that students who find themselves experiencing psychological distress or health anxiety are more frequently searching for or used internet resources to cope with their symptoms.

Table 10:

Pearson Correlation Between Digital Coping Mechanisms and General Mental Health Distress

Variables	1	2
1 Digital Coping Mechanism	-	-
2 General Mental Health	.253	-

4.7 Life satisfaction and academic impact

As shown in Table 11, negative correlation was observed between general mental health distress and students’ life satisfaction. High levels of psychological distress are associated with low life satisfaction among undergraduate students.

Second, the analysis showed weak positive correlation between general mental health distress and academic impact scores. Higher frequency of mental health distress is associated with greater negative impact on their academic performance, focus and overall progress.

Table 11:

Pearson Intercorrelation Between General Mental Health Distress and Academic Impact, General Mental Health Distress and Impact on Academic Performance

Variable	1	2	3
1 General mental health distress	-	-	-
2 Life satisfaction	-.274	-	-
3 Academic impact	.201	-.006	-

5. Discussions

This study examined the prevalence and nature of cyberchondria, general mental health distress, online self-diagnosis, and digital coping mechanisms among undergraduate students at Addis Ababa University (AAU). In this section, the findings from the previous chapters are discussed. With the goal of achieving the research objectives, the findings of the study will be synthesized with the relevant literature in cyberchondria. The discussion will follow the research questions.

5.1. Levels of General Mental Health Distress

According to the findings, most active online health information seekers (87.8%) experienced moderate to high levels of general mental health distress. In addition, 66.3% of students reported moderate distress and 21.5% reported high distress. These findings are aligned with previous studies conducted in Ethiopia on the prevalence of mental illness, which places the pooled prevalence of mental illness among Ethiopian university students at approximately 37.73% (Alem et al., 2020) and depression at 35.52% (Fentahun et al., 2024). In terms of understanding the possible causes of the significant high distress levels observed in the current study, the multi-causal stressors that students face which include academic demands, financial pressures, and psychosocial challenges should be considered. Crucially, the scarcity and lack of accessibility of mental health services in Ethiopia adds to the problem at hand. (Fekadu et al., 2019; Mekonnen et al., 2023).

More examinations on response patterns on the levels of general mental health distress questionnaire reveal important insights. Participating students indicated that they felt emotionally overwhelmed (mean=3.34), mentally exhausted (mean=3.27), and that they frequently felt stress and tension (mean=3.29). The item-level responses further shed light on the nature of students' distress. Students reported frequently feeling emotionally overwhelmed (mean=3.34), experiencing stress and tension (mean=3.29), and feeling mentally exhausted (mean=3.27). Taken together, these findings suggest that AAU undergraduate students carry a considerable psychological burden. High levels of distress help explain why students increasingly rely on the internet for health reassurance, especially given the ongoing lack of mental health resources and the stigma surrounding them (Tadesse, 2025). This aligns with Salkowski and Warwick's (2001) cognitive behavioral model of health anxiety, which suggests that highly anxious individuals often misread vague physical symptoms. Rather than helping, the internet frequently worsens this cycle

by flooding users with overwhelming amounts of medical information that can easily validate and intensify their initial fears.

5.2. Online Health Information Use (prevalence, self-diagnosis, and as a coping mechanism)

An overwhelming majority of the respondents (97.5%) have reported to have access to the internet and that they use smartphones to browse the internet (83.3%). Most importantly, 78% of participating university students indicated that they regularly search for their perceived symptoms on the internet when they feel unwell. This notably high rate of online health information seeking behavior is congruent with global (Baumgartner & Hartmann, 2011; Starcevic & Berle, 2013) as well as regional studies (Osei Asibey et al., 2017; Adegbilero-Iwari et al., 2021). which explored increased reliance on the internet for health information particularly amongst university students. These studies have shown that students resort to online health information sources before consulting a health professional due to cost, accessibility, and flexibility considerations

The study showed that a significant number of university students often used Large Language Models or AI tools to search for their perceived health symptoms. this finding is consistent with the literature which shows that as digitalization and technology continues to evolve, and as the capabilities and complexities of AI tools increase, more people are resorting to this tools as mental health resources (Adem et al., 2022; Guracho et al., 2024). While the convenience and privacy of online mental health tools are well established, the quality of the information provided remains a major concern. When students are exposed to inaccurate or inconsistent health advice, it can inadvertently amplify their health anxiety and contribute to cyberchondria (McMullan et al., 2019).

Online Self-Diagnosis and its Implications

When it comes to self-diagnosis, based on online health information, the overall composite mean score for self-diagnosis was $M=3.33$, which indicates that university students moderately lean toward digital platforms to evaluate their health concerns. This result shows that in addition to looking up perceived symptoms, students appraise and evaluate their health concerns based on online health information. Item level analysis shows that students most strongly endorsed comparing their symptoms with online information (mean=3.63) and trying to identify health problems using the internet (mean=3.50). The importance of these findings is due to the close link

between online self-diagnosis behaviors and an increase in cyberchondria, which has been corroborated by studies (Starcevic & Berle, 2013). This is particularly true when students are exposed to unreliable, inconsistent and exaggerated health information resources which may fundamentally change how individuals perceive their health status (McMullan et al., 2019).

The findings from the study (mean=3.22) align with Seboka et al.'s (2022) observation which posited online health information seeking as an agentic response to barriers in accessing mainstream mental health services. the critical challenges in accessing mental health services in Ethiopia play a crucial role in maintaining this behavior (Fekadu et al., 2019; Mekonnen et al., 2023). In this context, online self-diagnosis serves as a first port of call for students seeking to make sense of their health concerns.

5.3 Digital Coping Mechanisms as a Maladaptive Response to Health Distress

When it comes to how online health information is used functionally as coping mechanisms, a mean composite score of 3.22 shows that students moderately rely on digital platforms to manage health-related stress. The findings also showed a statistically significant positive correlation ($r=.253$, $p<.01$) between general mental health distress and using online health information resources as a coping mechanism. This finding is congruent with the theoretical framework of the study that posits cyberchondria as a maladaptive and dysfunctional coping mechanism (Santoro et al., 2026; Starcevic & Berle, 2013).

Online health information seeking can be classified as an example of an emotion-focused coping mechanism, according to Lazarus and Folkman's (1984) transactional model of stress and coping. The aim of online health information seeking is often time knowing and understanding the perceived symptoms in order to reduce the negative affective impact of health uncertainty. the results from the current study show the association between digital coping mechanisms and mental health distress, indicating that online health information seeking as an emotion focused coping mechanism is maladaptive. This finding aligns with the literature which shows that while digital coping mechanism provides temporary respite by dispelling uncertainty (accurately or inaccurately), it also increases health anxiety by reinforcing excessive searching behavior (McElroy & Shevlin, 2014). This contrasts with adaptive coping strategies, such as problem-

focused approaches (e.g., seeking professional help, academic support) or evidence-based emotion regulation techniques (e.g., mindfulness), which have been shown to be more effective in sustaining psychological wellbeing (Aldao et al., 2010; Frydenberg, 2019).

5.4 Effectiveness of online support: resilience and Cyberchondria

Cyberchondria among AAU Undergraduate Students:

The results showed that 55.4% of active online health seekers had moderate cyberchondria, while 8.3% reported high levels. In total, over 63% of the samples experienced clinically significant cyberchondria. This supports previous research showing a clear link between excessive online health searches and increased anxiety (McElroy & Shevlin, 2014; Mochcovitch et al., 2019). One participant's experience clearly captured this cycle: a minor symptom led to an hour of scrolling, uncovering terrifying potential diagnoses and leaving them far more anxious than before. This matches Starcevic and Berle's (2013) definition of cyberchondria, where searching for health answers online creates distress instead of offering reassurance.

The intolerance of uncertainty theory (Carleton, 2016) is especially useful in interpreting these results. Students with a low tolerance for ambiguity are more likely to do repeated online searches to gain assurance regarding their health status. However, because online health information is typically inconsistent and context-free, such searches frequently result in increased ambiguity and worry, reinforcing future search behavior. This sample clearly reflects Vismara et al.'s (2020) self-reinforcing cycle, in which online health searches, rather than bringing closure, feed a circle of anguish and information searching. The prevalence of physical health symptoms (50%) versus mental and emotional health (28%) is also noteworthy. While physical symptoms may appear to be easier to search online, the interaction between physical and mental health concerns among university students indicate that these two domains are inextricably linked. This conclusion may reflect a persisting stigma associated with mental illness in Ethiopian society (Tadesse, 2025), discouraging students from openly acknowledging or seeking mental health problems.

5.5 Implications for Life Satisfaction and Academic Performance

The study found a significant negative correlation between general mental health distress and life satisfaction ($r = -.274$, $p < .01$), indicating that higher levels of distress are associated with lower life satisfaction among AAU undergraduate students. This result is consistent with the broader

literature emphasizing the wide-ranging consequences of mental health on individuals' wellbeing and life satisfaction (Herrman et al., 2005), and resonates with the WHO's (2020) holistic definition of mental health as a state that enables individuals to realize their abilities, learn and work well, and contribute to their communities. When students are burdened by elevated levels of distress, their capacity to lead fulfilling academic and personal lives is substantially diminished.

In addition, a positive correlation was observed between general mental health distress and academic impact ($r=.201$), indicating that greater distress is associated with more negative effects on academic performance, concentration, and overall academic progress. While this correlation was weak, it nonetheless points to a practically meaningful relationship: mental health distress translates into academic difficulties for a portion of the student population. This finding reinforces the argument made in the literature review regarding the urgent need for mental health screening, early intervention, and support programs in Ethiopian universities (Kebede, Anbessie & Ayano, 2019; Fentahun et al., 2024). The joint impact of mental health distress on both life satisfaction and academic functioning underscores the multidimensional burden of unaddressed psychological distress, a burden that the current study suggests is being partially, and inadequately, managed through digital coping strategies.

6. Conclusions and Recommendations

6.1. Conclusions

This thesis showed important empirical evidence regarding the prevalence of online health information users and cyberchondria among undergraduate students at Addis Ababa University. The results showed clearly that most students engage in online health symptom searching, that most participant of the student result showed moderate to high levels of both mental health distress and cyberchondria. The digital coping mechanisms are positively associated with, rather than protective against, elevated distress. These results are further linked to reduced life satisfaction and greater perceived learning impact this support among African University, the cognitive behavioral model of health anxiety, intolerance of uncertainty theory; searching symptoms online(cyberchondria) as coping mechanism. It also is immediate, contextually appropriate interventions to show connection of mental health distress and university setting and the danger of seeking symptom information online behavior among Ethiopian Students.

6.2. Limitations and Directions for Future Research

Several limitations could be listed when interpreting this research finding. The study was conducted at a single University (AAU), which limits the generalizability of the broader Ethiopian university student population. The cross-sectional design also shows causal inferences about the relationship between online health information seeking, cyberchondria, and mental health distress. Additionally, self-report measures are considered as social bias, which may have resulted in distress or online health seeking behaviors while reporting themselves. Future research should employ different kind of research design the effect of cyberchondria and mental health over time and include multiple universities and more diverse populations across Ethiopia. Qualitative methods could also be employed to deepen understanding of the subjective experience of using online for health purposes and the reason behind.

Looking ahead, future researchers should explore the role of digital health literacy, resilience, and institutional mental health support might step in moderating the relationship between online health information seeking (cyberchondria) and mental health outcomes.

6.3. Recommendations

The findings of this research offer important practical and theoretical insights. Based on the above findings and discussions the following recommendations are suggested by the researcher. For university administrators, mental health supporters support more undergraduate students at Addis Ababa University.

For Addis Ababa University Administration: Given the widespread prevalence of online health information seeking and its association with distress and maladaptive coping, universities should focus on targeted mental health literacy programs that help students with the skills to critically evaluate online health information and recognize the risks of excessive symptom searching. Additionally, concentrating and focusing on the access of to campus based mental health services including counseling, psychoeducation, and peer support group could address the structural barriers. As we see the increasing use of AI as a health information tool, might cause unknown problem, universities and public health authorities should also consider developing, evidence based digital mental health resources that provide reliable guidance for Ethiopian university students.

The training should include how students critically evaluate online medical or psychological claims and identifying reliable health sources and for those who avoid traditional face to face counseling service when facing distress in their daily life, student support service should verify e-counseling lines or digital support forum. It might help the students with the digital environment they already inhabit will allow them to intercept self-diagnosis behavior and make them connected toward professional human care.

For University counselors and mental health practitioners: Since the result shows high frequency of online symptom searches and the anxiety spikes caused by self-diagnosis which is also using online platform for health coping significantly predicts academic disruption counseling interventions must address different kinds of techniques to help students to break compulsive reassurance seeking on their phone.

For Future Researchers: This research was strictly done to undergraduate students within the digital infrastructure of AAU. Future researcher should expand regional or rural public universities

across Ethiopia and people who lives in cities where variations of internet reliability, day to day life problems or culture might alter the dynamics of health management.

Theoretical Implications: The results in this study lend empirical support to the three theoretical frameworks outlined in the literature review. First, the cognitive behavioral model of health anxiety (Salkovskis & Warwick, 2001) is supported by the observation that students experiencing elevated distress engage more heavily in online health information seeking, a pattern consistent with the misinterpretation of ambiguous symptoms and compulsive reassurance seeking behaviors central to this model. Second, the intolerance of uncertainty theory (Carleton, 2016) is reflected in the pattern whereby online health searches fail to resolve students' health concerns but instead intensify anxiety, suggesting that ambiguous online information heightens rather than reduces uncertainty. Third, and perhaps most compellingly, the conceptualization of cyberchondria as a maladaptive coping mechanism (Starcevic & Berle, 2013; McElroy & Shevlin, 2014) is directly supported by the positive correlation between digital coping and mental health distress, confirming that digital platform use as a coping strategy is associated with worse, not better, psychological outcomes in this population. Together, these findings contribute to a growing body of evidence contextualizing cyberchondria within the African university setting, an area that has been significantly underrepresented in the international literature.

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Annex 1

DATA COLLECTION FORUM

The purpose of this study is to understand internet health information-seeking behaviors and their impact on academic performance and psychological distress. Participation in this study is entirely voluntary. You have the right to withdraw from the study at any time. Any information you provide will remain anonymous (confidential) and will be used solely for academic research purposes. By completing this questionnaire, you confirm that you understand the nature of the study and voluntarily agree to participate.

Section 1: Socio-Demographic Question

- | Item | Response/Answer |
|---|--|
| 1. What is your Age: | _____ Age |
| 2. Sex: | ☐ Male ☐ Female |
| 3. Year of study: ☐ 1st ☐ 2nd ☐ 3rd ☐ 4th ☐ 5th or above | |
| 4. What is your College/Department: | _____ year |
| 5. Monthly allowance / financial status: | ☐ Low ☐ Moderate ☐ High |
| 6. Access to the internet: | ☐ Yes ☐ No |

Section 2: The following statement aims to understand your general mental health and well-being. Please indicate how much you agree with each statement based on your recent experiences.

1. I often feel emotionally overwhelmed by my daily life.
2. I experience frequent feelings of stress or tension.
3. I feel anxious or worried most of the time.
4. I find it hard to switch off my worries and truly relax.
5. I feel mentally exhausted or drained.

Section 3: Prevalence

Have you ever googled your symptoms when you feel ill?

☐ Yes ☐ No

How often do you use the internet for general purposes?

☐ Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Always

Primary tools you use for searching for your symptoms?

☐ Google/Website ☐ AI ☐ Telegram ☐ Tik Tok ☐ Specific app

What type of health-related symptoms do you search for?

☐ Physical ☐ Mental/Emotional

The following statements assess how often you use online platforms to seek health related support or information. Please indicate how much you agree with each statement based on your behavior.

1. I use online platforms to find practical ways to manage or solve my health concerns.
2. I often look for advice or support about my health on the internet.
3. When I face a health problem, I use online sources as a primary way to find solutions.
4. I regularly search for health-related support on social media or websites.
5. I rely on online platforms whenever I have health concerns.

Section 4: The following statements relate to your experiences when searching for health-related information online. Please indicate how much you agree with each statement.

1. Searching for health information online increases my anxiety.
2. I feel worried after reading medical information on the internet.
3. I spend more time than I intended searching for health-related information online.
4. I find it difficult to stop searching for health information online.

Section 5: The following statements relate to how you use online information to identify or interpret your health conditions. Please indicate how much you agree with each statement.

1. I try to identify my health problems using information from the internet.

2. I rely on online sources to understand what illness I might have.
3. I compare my symptoms with information found online.
4. I make conclusions about my health based on what I read online.
5. I prefer to diagnose my symptoms online before seeking professional help.

Section 6: The following statements assess how you use online platforms to manage or cope with your health concerns. Please indicate how much you agree with each statement.

1. I use online platforms to reduce my stress about health concerns.
2. I seek reassurance from online health information when I feel worried.
3. I use the internet to find ways to cope with my health-related stress.
4. I feel more in control of my health concerns after using online resources.
5. I rely on online platforms to manage my worries about my health.

Section 7: The following statements evaluate how effective your coping strategies are in improving your mental health. Please indicate how much you agree with each statement based on your experience.

1. The ways I cope with my health concerns help reduce my stress.
2. My coping strategies improve my emotional well-being.
3. I feel mentally better after using coping strategies for my health concerns.
4. My coping methods help me manage anxiety related to my health.
5. Overall, my coping strategies positively affect my mental health.\

Section 8: The following statements are to understand your overall satisfaction with life. Your honest responses will help provide insight into your well-being.

1. I am satisfied with my life overall.
2. My life conditions are good.

3. I feel content with my life at present.
4. I am happy with the direction my life is going in.
5. I feel positive about my future.

Section 9: The following statements assess how your mental health and health related concerns affect your academic performance. Please indicate how much you agree with each statement.

1. Searching for mental health information online interferes with my ability to concentrate on my studies and academic assignments.
2. I often experience increased anxiety or emotional distress after searching for mental health concerns online.
3. I frequently spend time searching for health information that should be dedicated to my university coursework.
4. My academic efficiency has decreased due to the time and mental energy I spend searching for mental health information online.

Annex 2

በአዲስ አበባ ዩንቨርሲቲ

ሳይኮሎጂ ት/ቤት

የመረጃ መስብሰቢያ መጠይቅ በተማሪዎች የሚሞላ

የዚህ ጥናት ዋነኛ ዓላማ ተማሪዎች የጤና ሁኔታቸውን አስመልክቶ በኢንተርኔት መረጃ የመፈለግ ልምዳቸው ምን እንደሚመስል ለመረዳት ነው። በተጨማሪም ይህ ልምድ በአካዳሚክ ውጤታቸውና በስነ-ልቦናዊ ደህንነታቸው ላይ የሚያሳድረውን ተጽዕኖ እንዲሁም የሚያጋጥሟቸውን የጤና ስጋቶች ለመቋቋም የሚጠቀሙባቸውን መንገዶች ለመተንተን ያለመ ነው። በዚህ ጥናት ላይ መሳተፍ ሙሉ በሙሉ በፈቃደኝነት ላይ የተመሰረተ መሆኑን ተረድተው በማንኛውም ሰዓት ጥናቱን ማቋረጥ መብት ነው። የሚሰጡት ማንኛውም መረጃ ምስጢራዊነቱ ተጠብቆ ለትምህርታዊ ምርምር ስራ ብቻ የሚውል ሲሆን፣ ይህንን መጠይቅ መሙላትዎ በጥናቱ ለመሳተፍ መስማማትዎን ያረጋግጣል።

ክፍል ሀ፡ ግለ-ማህበራዊ መረጃዎች (socio-demographics)

1. እድሜ፡ _____ አመት
2. ጾታ፡ ☐ ወንድ ☐ ሴት
3. የትምህርት ዘመን (ዓመት)፡- ☐ 1ኛ ☐ 2ኛ ☐ 3ኛ ☐ 4ኛ ☐ 5ኛ እና ከዚያ በላይ
4. ኮሌጅ/ትምህርት ክፍል፡ _____
5. ወርሃዊ ገቢ/የገንዘብ አቅም፡ ☐ ዝቅተኛ ☐ መካከለኛ ☐ ከፍተኛ
6. የኢንተርኔት አገልግሎት ያገኛሉ? ☐ አዎ አገኛለሁ ☐ አይ አላገኝም
7. ለኢንተርኔት የሚጠቀሙት መሳሪያ፡ ☐ ስማርት ስልክ ☐ ላፕቶፕ ☐ ታብሌት ☐ ሌላ

ክፍል ለ፡ አጠቃላይ መመሪያ

ከክፍል ሐ እስከ ክፍል በ ያሉት ጥያቄዎች የሚከተለውን የደረጃ መለኪያ በመጠቀም ይመልሱ፡-

1 = በፍጹም አልስማማም

2 = አልስማማም

3 = መካከለኛ/እርግጠኛ አይደለም

4 = እስማማለሁ

5 = በጣም እስማማለሁ

ክፍል ሐ:- አጠቃላይ የአእምሮ ጤናዎን እና ደህንነትዎን

(General Mental Health)

የሚከተሉት አረፍተ ነገሮች አጠቃላይ የአእምሮ ጤናዎን እና ደህንነትዎን ለመረዳት የታለሙ ናቸው። እባክዎን በቅርብ ጊዜ ልምዶችዎ ላይ በመመስረት ለእያንዳንዱ አረፍተ ነገር ያለዎትን የስምምነት ደረጃ ይግለጹ።

ተ ቁ		1)በፍጹም አልስማምም	2)አልስማማም	3)መካከለኛ/እርግጠኛ አይደለም	4)እስማማለሁ	5)በጣም እስማማለሁ
1	በዕለት ተዕለት ህይወቴ በስሜት የመጨናነቅ ሁኔታ ይታይብኛል።					
2	በተደጋጋሚ የውጥረት ወይም የጭንቀት ስሜት ይሰማኛል።					
3	አብዛኛውን ጊዜ እጨነቃለሁ ወይም እሰጋለሁ።					
4	ጭንቀቴን አስወግጄ ዘና ማለት ይከብደኛል።					
5	የአእምሮ ዝለት ወይም የድካም ስሜት ይሰማኛል።					

ክፍል ሠ:- የኢንተርኔት መድረኮችን ለጤና ድጋፍ ወይም መረጃ ፍለጋ ስለመጠቀም (Prevalence of Online Use)

የሚከተሉት አረፍተ ነገሮች የጤና ድጋፍን ወይም መረጃን ለማግኘት ምን ያህል ጊዜ የኢንተርኔት መድረኮችን እንደሚጠቀሙ የሚገመግሙ ናቸው። እባክዎን በተገቢው ባህሪ ላይ በመመስረት ለእያንዳንዱ አረፍተ ነገር ያለዎትን የስምምነት ደረጃ ይግለጹ።

1. ህመም ሲሰማዎት ምልክቶችዎን በኢንተርኔት (Google) ፈልገው ያውቃሉ?

☐ አዎ አውቃለሁ ☐ አይ አላውቅም

2. ለተለያዩ ጉዳዮች ኢንተርኔት ምን ያህል ጊዜ ይጠቀማሉ?

☐ በፍጹም ☐ አልፎ አልፎ ☐ አንዳንዴ ☐ ብዙ ጊዜ ☐ ሁልጊዜ

3. ለጠቅላላ ዓላማዎች በብዛት ኢንተርኔት (የድህረ-ገጽ) አገልግሎት የሚጠቀሙት በምን ያህል ጊዜ ልዩነት ነው?

☐ በፍጹም አልጠቀምም ☐ አልፎ አልፎ ☐ አንዳንድ ጊዜ ☐ በብዛት ☐ ሁልጊዜ

4. ስለ ህመም ምልክቶችዎ ለመፈለግ የሚጠቀሙባቸው ዋና ዋና መንገዶች/መተግበሪያዎች ምንድን ናቸው?

☐ ጎግል/ድህረ-ገጾች ☐ አርቲፊሻል ኢንተለጅንስ (AI) ☐ ቴሌግራም ☐ ቲክቶክ ☐ የተለየ የጤና መተግበሪያ (Specific app)

5. ምን ዓይነት ከጤና ጋር የተያያዙ የህመም ምልክቶችን ነው የሚፈልጉት?

☐ የአካል (Physical) ☐ የአእምሮ/የስሜት (Mental/Emotional)

ተቁ		1)በፍጹም አልጠቀምም	2)አልጠቀምም	3)መካከለኛ/አርግጠኛ አይደለም	4)አጠቃላይ	5)በጣም አጠቃላይ
3	ለጤና ነክ ጉዳዮች እርዳታ ለማግኘት በተደጋጋሚ የኢንተርኔት ገጾችን እጠቀማለሁ					
4	ስለ ጤናዬ ምክር ወይም ድጋፍ ለማግኘት ብዙ ጊዜ ኢንተርኔት ላይ እፈልጋለሁ					
4	የጤና ችግሮቼን ለመረዳት የኢንተርኔት መረጃዎችን መጠቀም የተለመደ ልምዴ ነው					
5	በማህበራዊ ሚዲያ ወይም በተለያዩ ድረ-ገጾች ላይ የጤና ድጋፎችን ዘወትር እፈልጋለሁ					
6	የጤና ስጋት ሲያጋጥመኝ በኢንተርኔት መረጃዎች ላይ እተማመናለሁ					

ክፍል ረ፡-የኢንተርኔት ጤና መረጃ ራስን ለመመርመር እንዴት እንደሚጠቀሙ
(online information for self-diagnosis)

የሚከተሉት አረፍተ ነገሮች የጤና ሁኔታዎን ለመለየት ወይም ለመተርጎም የኢንተርኔት መረጃን እንዴት እንደሚጠቀሙ የሚመለከቱ ናቸው። እባክዎን ለእያንዳንዱ አረፍተ ነገር ያለዎትን የስምምነት ደረጃ ይግለጹ።

ተቁ		1)በፍጹም አልስማም	2)አልስማምም	3)መካከለኛ/እርግጠኛ አይደለሁም	4)እስማማለሁ	5)በጣም እስማማለሁ
1	ከኢንተርኔት ባገኘሁት መረጃ የጤና ችግሮቼን ለመለየት እሞክራለሁ					
2	ምን ዓይነት ህመም ሊኖርብኝ እንደሚችል ለመረዳት በኢንተርኔት መረጃዎች ላይ እመሰረታለሁ					
3	የህመም ምልክቶቼን በኢንተርኔት ካገኘሁት መረጃ ጋር አነጻጽራለሁ።					
4	በኢንተርኔት ባነበብኩት መረጃ ላይ በመመስረት ስለ ጤናዬ ድምዳሜ ላይ እደርሳለሁ					
5	የባለሙያ እርዳታ ከመፈለጌ በፊት ምልክቶቼን በኢንተርኔት መመርመርን እመርጣለሁ					

ክፍል ሰ፡- የጤና ስጋቶችዎን ለመቆጣጠር ወይም ለመቋቋም የኢንተርኔት መድረኮችን መጠቀም

(Coping mechanism through Online)

የሚከተሉት አረፍተ ነገሮች የጤና ስጋቶችዎን ለመቆጣጠር ወይም ለመቋቋም የኢንተርኔት መድረኮችን እንዴት እንደሚጠቀሙ የሚገመግሙ ናቸው። እባክዎን ለእያንዳንዱ አረፍተ ነገር ያለዎትን የስምምነት ደረጃ ይግለጹ።

ተቁ		1)በፍጹም አልስማም	2)አልስማምም	3)መካከለኛ/እርግጠኛ አይደለሁም	4)እስማማለሁ	5)በጣም እስማማለሁ
1	የጤና ስጋቶቼን ለመቆጣጠር ወይም ለመፍታት እንዲረዱኝ ተግባራዊ መንገዶችን በኢንተርኔት እፈልጋለሁ።					

2	የጤና ሁኔታዬ አሳሳቢ አለመሆኑን ለማረጋገጥ ደጋግሜ በኢንተርኔት እፈልጋለሁ					
3	የጤና ችግር ሲያጋጥመኝ መፍትሄዎችን ለማግኘት እንደ ዋና መንገድ ኢንተርኔትን እጠቀማለሁ።					
4	የጤና ሁኔታዬን በንቃት ለመቆጣጠር በኢንተርኔት ከማገኛቸው ምንጮች የሚሰጡ ምክሮችን ወይም መፍትሄዎችን በተግባር አውላለሁ					
5	ስለ ጤንነቴ ከማሰብ ለመቆጠብና ትኩረቴን ለመቀየር የኢንተርኔት ገጾችን እጠቀማለሁ					

ክፍል ሹ-የአእምሮ ጤናዎ መሻሻል (Resilience)

የሚከተሉት አረፍተ ነገሮች የመቋቋሚያ ስልቶች የአእምሮ ጤናዎን በማሻሻል ረገድ ምን ያህል ውጤታማ እንደሆኑ የሚገመግሙ ናቸው። እባክዎን በልምድዎ ላይ በመመስረት ለእያንዳንዱ አረፍተ ነገር ያለዎትን የስምምነት ደረጃ ይግለጹ

ተቁ		1)በፍጹም አልሰማም	2)አልሰማምም	3)መካከለኛ/አርግጠኛ አይደለሁም	4)እስማማለሁ	5)በጣም እስማማለሁ
1	የጤና ስጋቶቼን የምቋቋምባቸው መንገዶች ውጥረቴን ለመቀነስ ይረዱኛል					
2	የመቋቋሚያ ስልቶቼ ስሜታዊ ደህንነቴን ያሻሽላሉ					
3	የመቋቋሚያ መንገዶችን ከተጠቀምኩ በኋላ የተሻለ የአእምሮ ሰላም ይሰማኛል					
4	ዘዴዎቼ ከጤና ጋር የተያያዘ ጭንቀትን ለመቆጣጠር ይረዱኛል።					

5	በአጠቃላይ የመቋቋሚያ መንገዶች ለአእምሮ ጤናዬ በጎ አስተዋጽኦ አላቸው					
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**ክፍል ሙ:- በኢንተርኔት መረጃ ሲፈለግ ያጋጠሙ ችግሮች
(cyberchondria)**

የሚከተሉት አረፍተ ነገሮች የጤና መረጃን በኢንተርኔት በሚፈልጉበት ወቅት የሚያጋጥሙዎትን ተሞክሮዎች የሚመለከቱ ናቸው። እባክዎን ለእያንዳንዱ አረፍተ ነገር ያለዎትን የስምምነት ደረጃ ይግለጹ።

ተ ቁ		1)በፍጹም አልስማም	2)አልስማማ ም	3)መካከለኛ/እርግጠ ኛ አይደለሁም	4)እስማማለ ሁ	5)በጣም እስማማለሁ
1	የጤና መረጃን በኢንተርኔት መፈለጌ ጭንቀቴን ይጨምረዋል					
2	በኢንተርኔት ላይ ስለ ህክምና መረጃ ካነበብኩ በኋላ የመጨነቅ ስሜት ይሰማኛል					
3	በኢንተርኔት የጤና መረጃ ለመፈለግ ካቀድኩት በላይ ረጅም ጊዜ አጠፋለሁ					
4	በኢንተርኔት የጤና መረጃ መፈለግን ለማቆም ይከብደኛል					

ክፍል ቀ:- ኢንተርኔት መረጃ መተቅም የሚሳድራቸው ተጨማሪ ተጽኖዎች (Impacts)

የሚከተሉት አረፍተ ነገሮች በአጠቃላይ የህይወት እርካታ ላይ ያለዎትን ግንዛቤ ለመረዳት የታለሙ ናቸው። የእርስዎ እውነተኛ ምላሾች ስለ ደህንነትዎ ጠቃሚ መረጃ ለማግኘት ይረዳሉ

ተ ቁ		1)በፍጹም አልስማም	2)አልስማማ ም	3)መካከለኛ/እርግጠ ኛ አይደለሁም	4)እስማማለ ሁ	5)በጣም እስማማለሁ
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1	ባጠቃላይ በህይወቴ ረከቻለሁ					
2	የህይወት ሁኔታዎቼ መልካም ናቸው					
3	በአሁኑ ወቅት በህይወቴ ደስተኛ ነኝ					
4	ህይወቴ እየሄደበት ባለው አቅጣጫ ደስተኛ ነኝ					
5	ስለ ወደፊት ህይወቴ በጎ አመለካከት አለኝ					

ክፍል በ: የሚከተሉት አረፍተ ነገሮች የአእምሮ ጤናዎ እና ከጤና ጋር የተያያዙ ስጋቶች በትምህርት አፈጻጸም ላይ እንዴት ተጽዕኖ እንደሚያሳድሩ የሚገመግሙ ናቸው። እባክዎን ለእያንዳንዱ አረፍተ ነገር ያለዎትን የስምምነት ደረጃ ይግለጹ።

ተቁ		1) በፍጹም አልስማም	2) አልስማማም	3) መካከለኛ/እርግጠኛ አይደለሁም	4) እስማማለሁ	5) በጣም እስማማለሁ
1	በኢንተርኔት ላይ ስነ-ልቦናዊ ጤና መረጃ ላይ ትኩረት እንዳላረግ እንቅፋት ይሆንብኛል።					
2	ስለ ስነ-ልቦናዊ ጤና ስጋቶች በኢንተርኔት ከፈለኩ በኋላ ብዙ ጊዜ ይጭንቀት ወይም የስሜት መረበሽ ይሰማኛል።					
3	ለዩኒቨርሲቲ ትምህርቴ ሊውል የሚገባውን ብዙ ጊዜ የጤና መረጃዎችን በኢንተርኔት በመፈለግ አሳልፋለሁ።					
4	በኢንተርኔት ላይ የስነ-ልቦና ጤና					

መረጃ በኢንተርኔት ለመፈለግ በማባከነው ጊዜ የአእምሮ ድካም ምክንያት የጥናት ብቃት ቀንሷል።					
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Annex 3

በአዲስ አበባ ዩንቨርሲቲ

ሳይኮሎጂ ት/ቤት

የመረጃ መሰብሰቢያ ቃለ መጠይቅ ከ___ ጋር

የዚህ ጥናት ዋነኛ ዓላማ ተማሪዎች የጤና ሁኔታቸውን አስመልክቶ በኢንተርኔት መረጃ የመፈለግ ልምዳቸው ምን እንደሚመስል ለመረዳት ነው። በተጨማሪም ይህ ልምድ በአካዳሚክ ውጤታቸውና በስነ-ልቦናዊ ደህንነታቸው ላይ የሚያሳድረውን ተጽዕኖ እንዲሁም የሚያጋጥሟቸውን የጤና ስጋቶች ለመቋቋም የሚጠቀሙባቸውን መንገዶች ለመተንተን ያለመ ነው። በዚህ ጥናት ላይ መሳተፍ ሙሉ በሙሉ በፈቃደኝነት ላይ የተመሰረተ መሆኑን ተረድተው በማንኛውም ሰዓት ቃለ ምልልሱን ማቋረጥ መብት ነው። የሚሰጡት ማንኛውም መረጃ ምስጢራዊነቱ ተጠብቆ ለትምህርታዊ ምርምር ስራ ብቻ የሚውል ሲሆን፣ ይህንን መጠይቅ መሙላት በጥናቱ ለመሳተፍ መስማማት ያረጋግጣል።

ክፍል ሀ፡- ግለ-ማህበራዊ መረጃዎች

1. እድሜ፡ _____ አመት
2. ጾታ፡ ☐ ወንድ ☐ ሴት
3. የትምህርት ዘመን (ዓመት)፡- ☐ 1ኛ ☐ 2ኛ ☐ 3ኛ ☐ 4ኛ ☐ 5ኛ እና ከዚያ በላይ

4. ኮሌጅ/ትምህርት ክፍል: _____
5. ወርሃዊ ገቢ/የገንዘብ አቅም: ☐ ዝቅተኛ ☐ መካከለኛ ☐ ከፍተኛ
6. የኢንተርኔት አገልግሎት ያገኛሉ? ☐ አዎ አገኛለሁ ☐ አይ አላገኝም
7. ለኢንተርኔት የሚጠቀሙት መሳሪያ: ☐ ስማርት ስልክ ☐ ላፕቶፕ ☐ ታብሌት ☐ ሌላ

ክፍል ለ፡- አጠቃላይ ሁኔታ

6. ህመም ሲሰማዎት ምልክቶችዎን በኢንተርኔት (Google) ፈልገው ያውቃሉ?

☐ አዎ አውቃለሁ ☐ አይ አላውቅም
7. ለተለያዩ ጉዳዮች ኢንተርኔት ምን ያህል ጊዜ ይጠቀማሉ?

☐ በፍጹም ☐ አልፎ አልፎ ☐ አንዳንዴ ☐ ብዙ ጊዜ ☐ ሁልጊዜ
8. ለጠቅላላ ዓላማዎች በብዛት ኢንተርኔት (የድህረ-ገጽ) አገልግሎት የሚጠቀሙት በምን ያህል ጊዜ ልዩነት ነው?

☐ በፍጹም አልጠቀምም ☐ አልፎ አልፎ ☐ አንዳንድ ጊዜ ☐ በብዛት ☐ ሁልጊዜ
9. ስለ ህመም ምልክቶችዎ ለመፈለግ የሚጠቀሙባቸው ዋና ዋና መንገዶች/መተግበሪያዎች ምንድን ናቸው?

☐ ጎግል/ድህረ-ገጾች ☐ አርቲፊሻል ኢንተለጅንስ (AI) ☐ ቴሌግራም ☐ ቲክቶክ ☐ የተለየ የጤና መተግበሪያ (Specific app)
10. ምን ዓይነት ከጤና ጋር የተያያዙ የህመም ምልክቶችን ነው የሚፈልጉት?

☐ የአካል (Physical) ☐ የአእምሮ/የስሜት (Mental/Emotional)

1. የተለመዱ የአእምሮ ጤና ስጋቶች

- **ዋና ጥያቄ፡-** በአሁኑ ወቅት በአንተ/አንቺ ዘንድ በብዛት የሚታዩ የአእምሮ ጤና ስጋቶች ወይም የጭንቀት ስሜቶች ምንድናቸው?
- **ተጨማሪ ጥያቄዎች (Probes)፡-**
 - ትምህርት ላይ ትኩረት እንዳታደርጉ የሚያደርጓችሁ ዋና ዋና ነገሮች ምንድናቸው?
 - እነዚህ ስሜቶች ሲሰማችሁ በባህሪያችሁ ላይ ምን ዓይነት ለውጥ ታስተውላላችሁ? (ለምሳሌ፡- እንቅልፍ ማጣት፣ መረበሽ...)

2. የበይነመረብ የጤና ድጋፍ ፍለጋ ልምድ

- **ዋና ጥያቄ፦** የጤና ችግር ወይም ስጋት ሲያጋጥማችሁ ወደ ህክምና ተቋም ከመሄዳችሁ በፊት ኢንተርኔትን የመጠቀም ልምዳችሁ ምን ያህል ነው?
- **ተጨማሪ ጥያቄዎች፦**
 - በሳምንት ውስጥ ስንት ጊዜ ስለ ጤና ጉዳዮች ኢንተርኔት ላይ ትፈልጋላችሁ?
 - ከባለሙያ ጋር ከመነጋገር ይልቅ ኢንተርኔትን መምረጥ የሚቀልላችሁ ለምንድነው?

3. በኢንተርኔት አማካኝነት የራስን የችግር ሁኔታ ለመመርመር (Self-Diagnosis)

- **ዋና ጥያቄ፦** በኢንተርኔት ላይ ባነበባችሁት መረጃ መሠረት "ይህ በሽታ አለብኝ" ብላችሁ የራሳችሁን ምርመራ (Diagnosis) የሰጣችሁበት ጊዜ አለ?
- **ተጨማሪ ጥያቄዎች፦**
 - በራሳችሁ ላይ የሰጣችሁት ምርመራ ትክክል እንደሆነ ምን ያህል ትተማመናላችሁ?
 - ራስን በዚህ መልኩ መመርመር ጥቅሙ ወይስ ጉዳቱ ያመዝናል ብላችሁ ታስባላችሁ?

4. የጤና ጭንቀት እና የሳይበርኮንድሪያ (Cyberchondria) ተፅዕኖ

- **ዋና ጥያቄ፦** በአጠቃላይ ስለ ጤናሽ/ህ ስትጨነቅ/ቁ በኢንተርኔት ላይ መረጃ መፈለግ በስሜትሽ/ህ እና በትምህርትሽ/ህ ላይ የሚያመጣው ተፅዕኖ ምንድነው?
- **ተጨማሪ ጥያቄዎች፦**
 - በኢንተርኔት መፈለግህ የበለጠ ያረጋጋሃል ወይስ ጭንቀትህን ይጨምረዋል?
 - በኢንተርኔት ላይ ስለ በሽታዎች በምታነብበት ጊዜ ትምህርትህ ላይ ትኩረት የማጣት ወይም ከክፍል የመቅረት ሁኔታ ያጋጥምሃል

5. የመቋቋሚያ ዘዴዎች (Coping Mechanisms)

- **ዋና ጥያቄ፦** የሚያጋጥሟችሁን የአእምሮ ጤና ችግሮች እንዴት ነው የምትቋቋሙት?
- **ተጨማሪ ጥያቄዎች፦**
 - ምን ተግባራት ታድርጋላችሁ?
 - የትኞቹን ዘዴዎች ትጠቀማላችሁ? (ለምሳሌ፦ በግሩፖች ላይ መሳተፍ፣ ምክኒሮችን መተግበር...)
 - በኢንተርኔት የምታገኛቸውን መረጃዎች ወይም መተግበሪያዎች (Apps) ተጠቅማችሁ የጤና ስጋታችሁን ለመቀነስ የምታደርጓቸው ጥረቶች ምንድናቸው?

6. እነዚህ የመቋቋሚያ ዘዴዎች (Coping Mechanisms) ምን ያህል ከችግር ለማግኘት ይግዛሉ?

- **ዋና ጥያቄ:-** እነዚህ የመቋቋሚያ ዘዴዎች (Coping Mechanisms) ምን ያህል ከችግር ለማግኘት አገዙህ?
- **ተጨማሪ ጥያቄዎች:-**
 - እነዚህ ዘዴዎች በጤናችሁ እና በስሜታችሁ ላይ ያመጡት ለውጥ አለ? አዎንታዊ ነው ወይስ አሉታዊ?

Annex 4

List of Department

Program	Frequency	Percentage
Accounting and Finance	23	5.6%
BA in Amharic Language, Literature and Folklore	18	4.4%
BA in Education Planning and Management	21	5.1%
BA in English	17	4.2%
BA in Social Work	20	4.9%
Bachelor of Laws	25	6.1%
Bachelor of Science in Biology	22	5.4%
Bachelor of Science in Mathematics	23	5.6%
Bachelor of Science in System Information	20	4.9%
BSC in Architecture and Design	20	4.9%
BSC in Midwifery	25	6.1%
Doctor of Dental Medicine	24	5.9%
Electrical and Computational Engineering	17	4.2%
Journalism and Communication	21	5.1%
Logistics and Supply Chain Management	21	5.1%
Marketing Management	23	5.6%

Pharmacy	23	5.6%
Public Relations and Strategic Communication	22	5.4%
Software Engineering	15	3.7%
Total	409	100.0%