STRATEGIES TO PROMOTE MENTAL HEALTH AMONG STUDENTS IN HIGHER EDUCATION INSTITUTIONS IN ETHIOPIA

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DEDICATION

This thesis is dedicated to:

My father Esmael Roba and my late mother Fatuma Umer (Rahima-hullah)

My wife Makida Kemal

My kids Imad, Siyam and Imran

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DECLARATION

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Adem Esmael Roba

March 2023

Date

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ABSTRACT

Pieces of evidence show that due to various factors mental health problems are on the rise among students in higher education institutions globally and particularly in Ethiopia. The level of positive mental health and associated factors among students in higher education are not widely known. There are limited evidences on mental health programs or strategies that help to promote the mental well-being of learners in higher institutions in Ethiopia. The purpose of this study was to develop and describe strategies for the promotion of students' mental health in higher education in Ethiopia. A sequential exploratory mixed-method design was used in three phases. In phase I: the qualitative phase, in-depth interviews were conducted among 28 purposefully selected students and key informants from different categories and genders. Translation to English, verbatim transcription of recorded audio files, coding, and finally thematic analysis was employed for qualitative data management and analysis. In phase II: the quantitative phase, a cross-sectional study was conducted among systematically selected 805 students who filled out a self-administered questionnaire. Data were cleaned and entered into EPI-data version 3.1.1 and analysed using SPSS version 26. Univariate analysis and bivariate logistic regression were employed for quantitative data management. Statistically, a significant association was determined by OR and CI of 95% with a p-value <0.05. In phase III of this study, the mental health promotion strategy for students in higher institutions was developed and described. The findings of the qualitative phase of the study indicated five interrelated and connected themes which were generated from the coding of all transcripts and thematic analysis. These

themes include *mental health problem experiences and potential causes, mental health problem effects on students, help sought for their problem and mental health programs, suggested approaches for mental health promotion strategies,* and *roles of different individuals and institutions*.

The result of the qualitative study was also utilized for the development of a questionnaire for the quantitative phase and as input for the development of the mental health promotion strategy of students in higher education in Ethiopia. In this study, 303 (37.6%) of the respondents have not flourished positive mental health with a confidence interval of CI (34.2, 41.0); while 502 (62.4%) of the respondents have flourishing positive mental health with a confidence interval of CI (59.0, 65.8). Current family breakdown of students' biological parental marital condition, 500-1000km distance of university from family hometown, having had a history of substance use in the last 12 months, having low perceived social support, having low daily spiritual experiences, and not having any monthly financial support showed statistically significant negative association to flourishing positive mental health. A strategy for the promotion of the mental health of learners in higher education institutions was developed and described. The study reveals substantially low flourishing positive mental health among the students due to different factors in a higher institution. The absence of mental health programs was also indicated as a major problem. The developed strategies will empower students to maintain psychological well-being and enable higher institutions to promote the well-being of the learners by establishing safe and supportive learning and campuses.

Key words: *higher education institutions, mental health promotion, positive mental health, strategies, students, university, wellbeing*.

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LIST OF ABBREVIATIONS AND ACRONYMS

ACHA	American College Health Association
AIHW	Australian Institute of Health and Welfare
AMSA	Australian Medical Students' Association
AOR	Adjusted Odds Ratio
CACUSS	Canadian Association of College and University Student Services
CMD	Common Mental disorders
CMHA	Canadian Mental Health Association
COR	Crudes Odds Ratio
ETB	Ethiopian Birr
GDP	Global Development Program
HUCS	Heads of University Counselling Services
IHEs	Institutions of Higher Education
MHC SF	Mental Health Continuum Short Form
MHF	Mental Health Foundation
OCHA	Ontario College Health Association
RCP	Royal College of Psychiatrists
USA	United State of America
WHO	World Health Organization
WHOQOL	World Health Organization Quality of Life

CHAPTER 1: ORIENTATION TO THE STUDY

1.1. Introduction

Mental and behavioural disorders are among the most common health conditions, affecting more than 25% of all people at some time during their lives. They are also universal and have an economic impact on societies and the quality of life of individuals and families (World Health Organization [WHO] 2001:19). According to Mental Health Foundation (MHF) (2007:1), mental health presents one of the greatest challenges that current and future generations will face. In 2000; 12% of the burden of disease was due to mental and neurological disorders. By 2020, it is projected that 15% of the total disease burden worldwide will be attributed to mental and behavioural disorders; hence WHO calls for action to reduce the disease burden (WHO 2001:16-19).

Mental health problems are also representing ever-increasing challenges as post-secondary institutions strive to meet the needs of their students (MHF 2007:4). As stated in Cleary, Walter & Jackson (2011:253), it is not uncommon for college students to demonstrate at-risk behaviours and experience mental health problems that impair their emotional and physical health and have implications for their academic program of study.

College Student Health Survey reveals that 27.1% and 15.7**%** of the students were diagnosed with a mental health illness within their lifetime and within the past 12 months respectively (University of Minnesota–Twin Cities 2007:4). Similarly, 25.1**%** of students reported being diagnosed with at least one mental health condition within their lifetime (MHF 2007:3). Another report from Heads of University Counselling Services (HUCS) (2002:7) reveals an increase in the number of students with severe psychological problems presenting themselves to university counselling services.

The prevalence of developmental and adjustment problems as well as various forms and degrees of mental illness on college and university campuses cannot be ignored (Gilchrist 2014), and the mental health situation of students in higher education in Ethiopia is also not different. Almost half of the students (49.1%) are reported as having mental distress among university students (Tesfaye 2009:86). Compared to that of the community adult population in different parts of Ethiopia, which was 17% and 11.7% of Butajira and Addis Ababa respectively (Alem, Kebede, Woldesemait, Jacobsson & Kullgrea, 1999:48, Kebede, Alem

& Rashid 1999:5) the prevalence of mental distress is high among students in higher institutions. Mental health care on campuses in the United States is fragmented, and it was also difficult to access psychiatric support or find continuity of care for these students. Ultimately, what is lacking is a comprehensive mental health strategy for campuses and universities (Ontario College Health Association [OCHA] 2009:18 & HUCS 2002:7). Thus, different bodies have generated evidence showing that mental health promotion can influence risk and protective factors and reduce the incidence and prevalence of some mental disorders (WHO 2005b:7). According to OCHA (2009:19) universities and colleges need to promote mental health and provide coordinated mental health services to a critical population in society; because college and university students are at the highest risk for mental health illnesses in society.

Mental health promotion is one component of mental health policy, defined as “a process of enabling people to increase control over the determinants of their mental well-being and to improve it” (WHO 2005a:14). Promotion of mental health overlaps with prevention in many aspects, yet both of them are also distinct in that the emphasis in mental health promotion is on positive mental health (what can be done to keep people healthy or to become even healthier) rather than illness prevention (what can be done to avoid illness) (Department of Health 2001). “Strategies to promote the mental well-being of those who are at risk, those who are at increase risk, and those are experiencing or recovering from mental health problems” are included in the definition of mental health promotion (WHO 2004a:16). Mental health promotion is also imperative, in which, in addition to treatment, efforts are made to support the factors that have been shown to promote mental health and address the factors that constitute risk factors for mental disorders (WHO 2005c:). Unless this is done, the burden of mental illness will continue to grow (Desjarlais, Eisenberg, Good & Kleinman 1995).

Most countries that report having a mental health policy also have all the essential components including mental health promotion incorporated into them (WHO 2005a:14). In line with this urban and rural health extension workers in Ethiopia were trained to focus on mental health promotion and mental illness prevention activities in the community (Federal Democratic Republic of Ethiopia Ministry of Health 2012:15-22); but little is done if any, regarding mental health promotion among students of higher education institutions.

Promoting the mental health of university students is needed because student mental health problems are a growing concern on college campuses (Castillo & Schwartz 2013:291). In addition, schools are obvious locations for mental health promotion programmes that target issues such as improving problem-solving abilities and the reduction of substance abuse (Sturgeon 2007:40)**.** School-based mental health programs can prevent the onset or worsening of mental health conditions into adulthood and help ensure that the number of people completing education is maximized. This leads to increased productivity and economic development for society as a whole (WHO 2010:44).

It is clear that simply improving and extending formal health services cannot alone solve contemporary health challenges. A comprehensive approach to mental health promotion is needed (WHO 2005c**:**32). Building strengths, abilities, and resources is the core goal of mental health promotion, which places a strong emphasis on good mental health. The concept of positive mental health refers to the individual having a positive sense of well-being, resources such as self-esteem, optimism, a sense of mastery and coherence, satisfying personal relationships and resilience or the ability to cope with adversities (WHO 2005c**:**59).

The creation of measures to lessen mental illness and enhance mental health and well-being is the current topic of global attention. Hence, WHO (2005c**:**56-7) underline the urgent need to develop mental health strategies and to enhance the promotion of mental health at different levels because of the great value of mental health in different context especially, among universities where stress and common mental health problems higher compared to that the of the general population. One of the most effective interventions in schools is the promotion of positive mental health and well-being rather than the prevention of mental illness (Grogan, Kenny, Kirk, Donnell, Neill, Shearer & Sheridan 2013:8).

Mental health problems have very high rates of prevalence; they are often of long duration, and have adverse effects on many areas of people's lives, including educational performance, employment, income, personal relationships and social participation (Friedli & Parsonage 2009:12)

1.2. Background

Royal College of Psychiatrists (RCP) (2011:40) recommended that higher education institutions should respond to the increase in demand for mental health services through mental health promotion. As stated in SCMH (2006:5) there is also a premise that the focus of services will be shifting from mental health care to promoting mental well-being and stated that mental well-being must be put on the agenda of schools if we are to see a new generation of emotionally aware young adults in 2015.

In the United State of America (USA), it has been estimated that mental disorders account for nearly half of the disease burden for young adults (WHO 2008) and most lifetime mental disorders have the first onset by age 24 years (Kessler, Berglund & Demler 2005). However, only fewer than 25% of individuals with a mental disorder sought treatment in the year before the survey (Blanco et al 2008:1429).

Although there are examples of good practice in prevention, treatment and rehabilitation, (RCP 2011:20) and counselling services being offered by all Universities (Barry 2001:25) yet there is a pressing need for an increase in the availability of comprehensive assessment and treatment services as well as mental health promotion activities both at the organizational and individual level (RCP 2011:20). According to WHO (2001:16) assuring universal access to appropriate and cost-effective services, including mental health promotion and prevention services; and promoting healthy lifestyles, and reducing risk factors for mental and behavioural disorders are some of the ways of reducing the burden of mental disorders. While the promotion of positive mental health in all members of society is an important goal; much remains to be learned about how to achieve this objective (WHO 2001:10) which needs clear strategies.

1.3. Statement of the problem

Mental health is an essential part of human flourishing. Mental health and mental illness are often given a low priority, despite growing evidence of the burden of disease and costs to the economy larger than previously estimated (Ngui, Khasakhala, Ndetei, & Roberts. 2010: 241; Arias, Saxena and Verguet. 2022:2). According to Bloom et al (2011) the World Economic Forum claims that mental health conditions are the greatest threat to Global Development Program (GDP), ahead of any other type of health condition, noting the dramatic impact mental health conditions have on productivity and quality of life. More than 60% of students met criteria for one or more mental health problems, a nearly 50% increase from 2013 (Lipson, Zhou, Abelson, Heinze, Jirsa, Morigney, Patterson, Singh, and Eisenberg. 2022:138).

Students studying in institutions of higher learning are more at risk of developing mental health problems or disorders compared with their peers of similar age groups in the general population (Nordin, Talib, Yaacob, and Sabran. 2010). As university undergraduates are considered to be the country's leaders of the future, these issues need to be looked into with utmost urgency.

Studies specifically of university students have found a correlation between mental health problems and poorer educational outcomes, as well as increased impairment and more days out of role (Stallman 2010:249). Depression and anxiety are ranked number four and six, respectively in the top ten reported health problems afflicting college students (The American College Health Association (ACHA) 2006), which is not different from the situation of Madda Walabu University, where anxiety disorder is one of top ten list of student health problem (Madda Walabu University 2018:1).

Student mental health problems are a growing concern on college campuses (Castillo & Schwartz 2013:291). In addition, the de facto approach of mental illness treatment and prevention through risk reduction has not reduced the prevalence, burden, or early onset of mental disorders (Glied & Frank 2009). So, specific recommendations are given to universities as to how they can prevent the development of mental health conditions among their students, including by minimising stigma and promoting student wellbeing (AMSA 2013:3); because a holistic school approach to mental health promotion increases mental well-being and reduce the risk for mental disorders among students (Jane-Llopis & Anderson

2005a). Counselling, education and support by members of the health and social service teams can be crucial in preventing episodes of ill health. However, these strategies will have little effect on promoting population health or in lowering rates of illness in the population, because of our limited ability to predict which individuals will become sick (Helen 2001:712). So, in WHO (2005c**:**144) it was concluded that the need of more sophisticated research is needed to address mental health and how it may be promoted.

A review of literature on the subject reveals that information regarding mental health among university students was observed to be high (26%), particularly among the age group between16-24; the highest incidence of any age group with anxiety disorder are the most common, followed by substance use disorders and then affective disorders (Australian Institute of Health and Welfare (AIHW) 2011:166).

The information on positive mental health status, determinant factors and mental health promotion strategies among Ethiopian university students are unavailable. Strengthening the academic counselling and preventive mental health services for the students to provide a favourable learning environment in Ethiopian higher educational institutions is recommended (Suleyiman and Zewdu 2018:29). Hence, it is for these reasons that this research was undertaken to identify determinants of mental health, positive mental health status and literacy of mental health among students of higher education, as well as to promote mental health among this group following the development of a Mental health promotion strategies; because there is ample empirical evidence that providing universal programmes to groups of students can influence positive mental health outcomes and well-designed interventions can contribute to better mental health and well-being of the populations (WHO 2005c**:**176-182). The intent of this two-phase, sequential mixed methods study was to develop and describe strategies for the promotion of mental health among students in higher education.

Students in different years of studies deal with different risk factors from the time that they enter the university until they graduate, therefore, different coping strategies are required for students at different levels. Universities should be aware of these risk factors and implement measures to minimise those factors while providing mental health treatments to students (Mofatteh, 2020:61). Evidence-based interventions and psychosocial support are needed to promote mental health among Brazilian medical students (Pacheco, et al 2017:369).

1.4. Theoretical foundation of the study

1.4.1. Definition of theory

Kerlinger and Lee (2000:11) define and explain the meaning of a theory very well, as follows: “A theory is a set of interrelated constructs (concepts), definitions, and propositions that present a systematic view of phenomena by specifying relations among variables, with the purpose of explaining and predicting the phenomena”. This definition also added the idea of a theoretical rationale, which they defined as specifying how and why the variables and relational statements are interrelated. It also provides explanations and predictions of why specific independent variables influence or affect the specific variable.

1.4.2. Conceptual framework of the study

The developed mental health promotion approach is rooted in the Ottawa Charter for Health Promotion, which stated that ‘health is created and lived by people within the settings of their everyday life; where they learn, work, play and love’ (WHO 1986:3). Mental health promotion targets the whole population and focuses on enabling and achieving positive mental health (Jané-Llopis, Barry, Hosman & Patel 2005a:9). Mental health promotion should receive appropriate attention within health promotion (Sturgeon 2007:40)**.**

1.5. Theoretical framework

Theoretical frameworks offer flexible guidance for applying the abstract concepts of theory to a vast array of real circumstances. The theory specifies relations among variables to explain natural phenomena (Kerlinger and Lee. 2000:11). It was also added on the importance of theories, which specify how and why the variables and relational statements are interrelated. The theory would supply the explanation or prediction. This study, demonstrates the use of socio-ecological systems theory to identify mechanisms contributing to the development of strategies to promote students’ positive mental and to illustrate the dynamic interplay between micro-level and macro-level factors contributing to positive mental health and discuss implications for the promotion of mental health of the learners in the campus setting.

The researcher adopted WHO’s approach to health promotion, which is fundamentally concerned with action and advocacy to address the full range of potentially modifiable determinants of health for the development of mental health promotion strategies. “Mental

health promotion endorses a competence enhancement perspective and seeks to address the broader determinants of mental health, which fundamental principles of health promotion" are as articulated in the Ottawa Charter (WHO 1986:4).

1.6. Significance of the study

Mental well-being is an important part of one's being, but it is not always seen as important by clinicians as we are taught to deal with illness (Department of Health. 2001). The intervention strategies focusing on reducing mental health morbidity, identifying, and strengthening the protective factors across life's span may give an optimistic hope for the prevention of mental health morbidity and promotion of positive mental health (Arumugam. 2019:165).

This study came up with a new strategy for the mental health promotion of learners in higher education institutions. This will enable policymakers, planners, and higher education institutions to implement and evaluate the strategy to maintain the positive mental health well-being of students during their stay on campus. It also helps care providers in designing mental health promotion programs and activities of care for the mental health and well-being of students in higher education institutions.

1.7. Definition of key concepts

Key terms used in this study are defined under this section.

Health is “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO 2001:1).

Health promotion is “the process of enabling people to increase control over and improve their health” (WHO 1986:5).

Mental Health is “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively, and is able to make a contribution to his or her community” (WHO 2001:1).

Mental health promotion is “a process of enabling people to increase control over the determinants of their mental well-being and to improve it” (WHO 2005a:14).

Determinant of health is a factor or characteristic that brings about a change in health, either for the better or for the worse (Reidpath 2004).

Prevention of mental disorders “concerns itself primarily with specific disorders and aims to reduce the incidence, prevalence, or seriousness of targeted problems: mortality, morbidity, and risk behaviour outcomes” (Barry 2001:26).

Mental health literacy is knowledge and beliefs about mental disorders which aid their recognition, management, or prevention (AMSA 2013:3).

Positive mental health is “superior functioning in a wide range of activities, life’s problems never seem to get out of hand, is sought out by others for his or her many positive qualities” (Vaillant GE. 2003:1380)

Protective factors are those factors that modify, ameliorate, or alter a person’s response to some environmental hazard that predisposes to a maladaptive outcome (Rutter 1985).

Resilience means being able to bounce back from difficult times and cope well with challenges (Werner 1995:81).

Stigma is a mark of shame, disgrace, or disapproval which results in an individual being rejected, discriminated against and excluded from participating in a number of different areas of society (WHO 2001:16).

1.8. Purpose, objectives, and research questions

1.8.1. Purpose

The purpose of this study is to develop and describe strategies for the promotion of mental health among students in higher education in Ethiopia.

1.8.2. Research objectives

In order for the researcher to achieve the above aim of research, the study dealt with in three phase and addressed specific objectives listed below.

- To assess the level of positive mental health among students in higher education
- To identify associated factors to positive mental health among students in higher education
- To explore approaches or mechanisms for promoting students' mental health in higher education.
- To develop and describe strategies for the promotion of mental health among students in higher education

1.8.3. Research Question

Qualitative phase research question

- What are suggested approaches for strategies of mental health promotion of students in higher education institutions in Ethiopia?
- How could mental health of students in higher education be promoted?

Quantitative phase research question

This quantitative phase study is aimed to answer the following questions

- What are the current students' positive mental health status in higher education institutions in Ethiopia?
- What are the factors associated with positive mental health of students in higher education institutions in Ethiopia?

Mixed phase research question

- How does the qualitative data on students' mental health promotion further explain how social, academic and environmental factors enhance the positive mental health of learners?

1.9. Research design and methods

A three-phased exploratory sequential mixed method was used in this study. In phase I qualitative data is sought on strategies to promote the mental health of students in higher education institutions, in phase 2 the researcher collects descriptive data in the form of questionnaires, and finally, in phase 3 the researcher utilised inductive reasoning approach to develop the strategies to promote the positive mental health of students in higher education institutions from the data both from qualitative and quantitative phases and literature reviewed. Details of methodology are discussed in chapter 3.

1.10. Structure of the thesis

The current thesis is divided into eight chapters as follows:

Chapter 1: Orientation of the study

Chapter 2: Literature review

Chapter 3: Research Design and Methodology

Chapter 4: Discussion of qualitative result and literature control

Chapter 5: Discussion of Quantitative findings

Chapter 6: Integrating of quantitative and qualitative findings of the mixed method

Chapter 7: Mental health promotion strategies among students in higher education institutions in Ethiopia

Chapter 8: Conclusion, limitation, recommendations and research's reflection

1.11. Conclusion

This chapter introduced the study and the processes through to conduct a mixed-method research design. Mental health problems of students in higher institutions are rising and well understood that there are no campus mental health programs to promote the psychological well-being of learners in higher education institutions in developing countries like Ethiopia. In the next chapter detailed information from the review of related works of literature is presented.

CHAPTER 2: LITERATURE REVIEW

2.1. Introduction

Numerous researchers and institutions have demonstrarated that there are many definitions for literature reviews. A literature review is a critical evaluation of a specific area of body of published informations that includes summarizing, categorizing, and comparing earlier research projects, reviewing the literature, and considering theoretical publications (University of Wisconsin 2013:1). University of Guelph (2013:1) also defined literature review as both a summary and explanation of the complete and current state of knowledge on a specific topic. All works included in the review must be read, evaluated, and analyzed. Relationships between the kinds of literature must also be identified and articulated, in relation to your field of research (CQ University Australia 2017). A literature review must do these things: be organized around and related directly to the thesis or research question you are developing, synthesize results into a summary of what is and is not known, identify areas of controversy in the literature and formulate questions that need further research (University of Toronto 2018).

The primary purpose of a literature review is to help researchers become familiar with the work that has already been conducted in their selected topic areas (Markczyk, DeMatteo & Festinger 2005**:** 32-33). The purpose is to convey to the reader what knowledge and ideas have been established on a topic, and what their strengths and weaknesses are (CQ University Australia 2017 and University of Toronto 2018)**.**

In the previous chapter orientation to the study was discussed. This chapter focuses on a literature review related to concepts of mental health and the mental health status of students in higher education: a global, sub-Saharan Africa and Ethiopian perspectives, common mental health problems of students in the higher education institution, and mental health promotion among students of higher education institutions were by what mechanism and by whom it could be done are presented.

2.2. Clarifying and conceptualizing concepts

2.2.1. Mental health

World Health Organization (WHO) defined mental health as “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community” (WHO, 2004:12). There are three core components in this definition: well-being, effective functioning in individual life, and effective functioning in community life, which together make up mental health. Nowadays, mental health is not only regarded as the absence of psychopathology, but also as the presence of positive feelings and positive functioning in both individual and social life (Lamers 2012:73).

2.2.2. Positive mental health

Positive mental health has been conceptualized as “a positive emotion or affects such as a subjective sense of well-being and feelings of happiness, a personality trait encompassing concepts of self-esteem and sense of control, and resilience in the face of adversity, and the capacity to cope with life stressors” (WHO 2004b). It is a component of overall health and is shaped by individual, physical, environmental, social, cultural, and socio-economic characteristics. Fostering the development of positive mental health by supporting individual resilience, creating supportive environments, and addressing the influence of the broader determinants of mental health, are key components of promoting mental health (CIHI. 2002:2).

Emotional, psychological, and social well-being together make up the definition of positive mental health, and a person is considered to be mentally healthy when he or she experiences all three components. In line with these findings, emotional, psychological, and social well-being together form an individuals’ positive mental health (Keyes 2005), hence taking both traditions in well-being research into consideration. In other words, to fully understand an individual’s positive mental health, their emotional, psychological, as well as social well-being should be measured (Lamers 2012:16). Therefore, it could be concluded that positive mental health is the central for promotion of mental health and wellbeing starts with assessing needs (Shircore 2009**:**6) like the status of positive mental health and its determinants.

2.2.3. Risk factors of mental health problems

There are a number of factors that may be contributing to increasing levels of mental health problems in college students (Mowbray, Mandiberg & Stein et al, 2006:227). Different bodies have generated evidence showing that preventive interventions and mental health promotion can influence risk and protective factors and reduce the incidence and prevalence of some mental disorders (WHO Resource Book 2005:7). The determinants of health are listed by the World Health Organisation as the social and economic environment, physical environment, and person's individual characteristics and behaviours (Shircore 2009**:**46-47).

A study conducted in Hacettepe University, one of the largest universities in Turkey indicates the strong impact of two factors; *academic achievement and the presence of a negative event in the last year* on the mental health of students (Uner, Ozcebe, Telatar & Tezcan 2008:437). Increasing the availability of different recreational activities for students on university campuses is very important for the student's social development. Therefore, students should be given the option and their participation in such social programs facilitated as early as possible (Uner, Ozcebe, Telatar, & Tezcan 2008:445).

The age at which most young people are in tertiary education is also the age of peak onset for mental illness, with mental and substance use disorders having their first onset before age 24 in 75% of cases (Reavley, Ross, Killacheckey, and Jorm. 2013:2). The transition from one academic system to another can be unexpectedly confusing and can lead to high levels of anxiety, as well as to overwork and isolation. Students may be reluctant to discuss such difficulties with academic staff, for fear of appearing weak (YoungMinds, 2006:1). Although it is intuitive that contextual factors such as peer support, residential settings, and the supportiveness of academic personnel would affect student mental health. In addition, the evidence on interventions, programs, and policies is especially lacking.

Learning more about the role of these risk factors in mental health will be useful for informing efforts to create campus environments that promote better mental health (Hunt & Eisenberg 2010:4-7). Factors perceived as contributing to poor mental health include the transition from school to college, bullying, drug, and alcohol misuse, and family relationship breakdowns (Warwick, Maxwell, Simon, Statham, & Aggleton 2006:1-4). According to Bíró, Ádány and Kósa (2011:871) social support is also potentially amenable determinant of mental health

during higher education. About 29% of the students lacked social support from their student peers. Psychological distress was greater among female public health students than in the same age female group of the general population; whereas the lack of social support was a more prevalent problem among male students (Bíró, Ádány & Kósa 2011:871).

In addition to demographic determinants, social support and exposures to stressful life events are two areas that, because of their documented association with mental health, should be measured. Various types of evidence suggest that mental health and its determinants can be improved in association with planned or unplanned changes in the social and physical environment (WHO 2005a:161).

Stressors in the post-secondary environment identified include academic overload, pressure to succeed, competition with peers, financial burdens, social challenges, cultural and language diversity on campuses, and concern for the future (MacKean, 2011:17; Mental Health Report 2012:4). A study at PayameNoor University, Tehran, Iran showed that there is a negative correlation between stress and mental health in university students (Mostafaei 2012:3468). The study revealed that lower family connectedness and having a living arrangement separate from both biological parents were associated with increased odds of having a depressive symptom (Shiferaw, Fantahun, & Bekele, 2006).

Mental health literacy is typically defined as knowledge and beliefs about mental disorders coupled with the ability to access, understand, and use the information to recognize and manage disorders (Lauber, Nordt, Falcato, & Rossler 2003:248). In addition, little research has been conducted to date on mental health literacy among student groups of higher institutions. Some noted that students who experience mental health problems tend to be labeled as not mentally ill, but as having behavioural problems such as truanting, being violent, or being withdrawn and not engaging with their studies (Warwick, Maxwell, Simon, Statham, & Aggleton 2006:1-4).

As stated in Gelmessa, Mohamed, Mengistu, Temesgen and Baraki, (2003:8) religion and culture have a great influence on the perception of the causation and the remedies of mental illnesses in Ethiopia. The majority of Ethiopians believe that all diseases, particularly mental illnesses are afflictions caused by supernatural evil factors that can affect their help-seeking behaviour.

Health promotion interventions can have an important role in improving mental health literacy by helping people to recognize problems or illnesses, improving their knowledge about the causes of disorders and their treatment, and informing them about where to go to get help (WHO & World Organization of Family Doctors 2008:19). It is also expected that programs aimed at improving literacy, in particular targeting adults, may have tangible benefits in reducing psychological strain and promoting mental health (WHO 2004a:24).

2.2.4. Protective factors of mental health problems

Protective factors include integration of ethnic minorities, empowerment, social participation, social services, and social support, and community networks (WHO 2004b). Similarly, Royal College Psychiatrists (2003:47) stated that induction sessions also give information on support services, peer-run services such as Nightline and other health-promoting activities are protective factors for students of higher institutions. Clubs and associations associated with healthy lifestyles (e.g. sports clubs, entertainment clubs, religious and cultural societies) should be promoted actively. Assertiveness training, training for emotional literacy/intelligence, and other self-help activities may also be offered to promote mental health of the students at higher institutions (Royal College Psychiatrists 2003:47).

2.3. The mental health status of students: A global perspective

College students are often viewed as a privileged population, but they are not immune to the suffering and disability associated with mental illness. The epidemiological data summarized by Hunt and Eisenberg (2010:5-7) clearly indicate that mental health problems are highly prevalent among college students. A basic understanding of the prevalence and correlates of mental disorders among college students is emerging, but less is done on approaches that go beyond the clinical level to improve mental health in this population. With respect to common mental health problems, in Canada about 53% and 36% of students indicated they felt overwhelmed by anxiety and felt so depressed it's difficult to function respectively (MacKean 2011:6).

Mental health problems are highly prevalent among college students, according to several data sources. Turkish University students by using Depression, anxiety, and stress scale shows; depression, anxiety, and stress levels of moderate to severe were found in 27.1%, 47.1%, and 27% of respondents respectively (Bayram & Bilgel, 2008:667). Mental health problems included anxiety (25%), coping difficulties (19.7%), and diagnosed depression

(8%) reported among first-year undergraduate students (Hussain, Guppy, Robertson & Temple, 2013:848). Blanco, Okuda, and Wright (2008) found that almost half of college students met the DSM-IV criteria for at least one mental disorder in the previous year, including 18% for a personality disorder, 12% for an anxiety disorder, and 11% for a mood disorder.

No statistically significant differences were observed between men and women in relation to age, physical activity, alcohol consumption, or smoking. No significant differences in WEMWBS score were observed by area of study, alcohol, smoking, or drug use (Davoren, Fitzgerald, Shiely & Perry 2013:1). College students had a higher prevalence of alcohol use disorders than their same-age peers (Blanco, Okuda & Wright 2008). Finding from study at London University respondents stated that they and their colleagues were increasingly aware of mental health problems among younger students, including depression, eating disorders, self-harm, and obsessive-compulsive disorder (Warwick, Maxwell, Simon, Statham, & Aggleton 2006:1-4). In another report, almost half of the college students had a psychiatric disorder in the past year *(*Blanco, Okuda & Wright 2008:1429). May be due to university students spanning an age range in which a wide spectrum of mental illness is seen and in many cases, young people with serious mental illnesses are also able to enter higher education (RCP 2011:22).

2.4. The mental health status of students: Sub-Saharan Africa perspective

The status of mental health conditions of students in higher education in sub-Saharan African countries is not different from elsewhere. The study conducted at Tanzanian University shows that mental health problems among students were common in terms of loneliness/depression and suicidal behaviour. Overall, 6.0% (5.1-7.0) of students most of the time or always felt lonely, 3.8% (2.9-4.8) felt so worried about something that they lacked sleep at night, and 23.6% (21.4-25.9) felt sad or hopeless, almost daily. Some 11.2% (9.8-12.7) of students had considered attempting suicide, 6.8% (5.5-8.1) had even planned how they would attempt it. Some 8.3% (7.1-9.5) reported they had no close friends (Nyandindi 2008:26). The study in the University of Hargeisa, Somaliland: a cross-sectional study, also shows that the overall point prevalence of mental distress was 19.8% (95% CI 16.6–22.9%). The 12-month prevalence of Khat use, smoking, and drinking were 18.6, 9.1, and 1.8%, respectively. After adjusting for confounders, being female, lower monthly income, not

having close friends, a non-satisfying relationship with friends or families, and use of Khat were associated with mental distress (Hersi et al.2017:39).

According to Agwu, Draper, Croix, and De (2017:269), one-third of the total sample of students reported depression in selected Nigerian Universities the result showed that 41.33% of the students scored above the cut-off point of 10 on the CES-D 10 scale, with 35.71% having moderate symptoms and 5.62% having severe depressive symptoms (Othieno, Okoth, Peltzer, Pengpid and Malla 2015). Hersi et al (2017:39) concluded the presence of significant proportion of the students at the University of Hargeisa suffer from mental distress which might have a detrimental negative impact on their academic performance and the needs of addressing mental health University students. Similarly in Nyandindi (2008:25) it was emphasized the need to strengthen mental health promotion through regular mental health check-ups and education to keep students stable, and creating school health clubs, to reduce depression and suicidal behaviour, increase kindness and helpfulness, and reduce loneliness, worries, sadness, hopelessness, or suicide attempts.

2.5. The mental health status of students: Ethiopian perspective

About one-fifth of the students in higher education in Ethiopia were found to be mentally distressed (Dessie, Ebrahim & Awoke 2013:1). A study in Addis Ababa University reveals the one-month prevalence of mental distress and suicidal ideation was found to be 32.6% and 6.0% respectively (Alem, Araya, Melaku, Wendimagegn & Abdulahi 2005:159). Similarly, 27.3% and 6% of the study reported feelings of sadness which made them stop performing some regular activities and have attempted suicide during the year before the study respectively. The findings on the preparatory school students in Ethiopia indicate that the burden of psychosocial concerns including depressive symptoms, suicidal thoughts, and suicide attempts are high (Shiferaw, Fantahun & Bekele 2006:47).

On the other hand, there is a rapid growth of higher education institutions in the country and the enrolment of students is increasing from year to year (Wencheko & Taddesse, 2012**:**38). During the ESDP III period (2004/05 to 2008/2009) the overall enrolments, as well as the intake capacity of the higher education institutions, significantly increased, Total enrolment in undergraduate higher education (regular government program) will increase

from 185,788 in 2009/10 to 467,445 in 2014/15 EC (Education Sector Development Program IV ESDP IV, 2010:68).

2.6. Common mental health problems of students in the higher education institutions

One of the most challenging issues post-secondary campuses face today is mental health (Mental Health Report 2012:1). Universities and colleges are dealing with substantial challenges posed by the changing mental health needs of today's college students (Kitzrow, 2003). The growing mental health needs of students at colleges and universities continue to garner considerable attention as well as challenges institutions of higher education (IHEs) regarding how to respond. Providing access to mental health services on campus is one key component to responding to these issues, however, it is not sufficient. An effective response requires a broader public health approach that focuses on reducing the risk of suicide and promoting mental health for the entire student population (Eells, Marchell, Corson-Rikert & Dittman, 2012:3).

College student mental illness represents a significant public health issue in the United States. Almost half of the college-age individuals have a psychiatric disorder, and the prevalence of psychiatric disorders is equally high among young adults who attend college and those who do not (Blanco et al., 2008). According to Hunt and Eisenberg (2010), the number of college students with mental illness is increasing. Furthermore, each year 10% of college students seriously consider suicide; 1.5% attempt suicide; and 1,100 commit suicide, making it the second leading cause of death among college students (American College Health Association, 2008; Hayes et al 2011:106).

The current prevalence of khat chewing, alcohol drinking, and cigarette smoking was 27.9%, 32.8%, and 9.3% respectively. The commonest reasons for khat, alcohol and cigarette use were to keep alert while reading 40.6%, for relaxation 65.5%, and to relieve stress 37.7% respectively (Gebreslassie, Feleke & Melese, 2013:696).

Across the country, millions of college students navigate a path through their college years, experiencing the ups and downs associated with the transitions of late adolescence and early adulthood. In the majority of these students, college life is bound to include temporary distress over academic failures, financial pressures, roommate disputes, worries about a post-collegiate future, or an acutely painful break-up. College officials indicate that the

number of students with serious mental illnesses has risen significantly. In the past, many students with serious mental illness diagnoses had to interrupt or terminate their studies because of their symptoms (Mowbray, Mandiberg, Stein, et al 2006:226-8). Mental health is worse among public health students compared to their non-student peers. Coping with the challenges they face during their studies, helping services targeted at those with the highest risk, and developing training to improve coping skills (Bíró, Ádány & Kósa, 2011:2).

The numerous stresses of college life, including academic stress, meeting new people, living away from home, experiencing life as an adult, and others, present exactly the kinds of stresses that could trigger psychiatric symptoms in a vulnerable individual. Thus, postsecondary institutions will probably continue to see ever-increasing numbers of students who have mental health service needs and these students legitimately will continue to pursue their educational goals rather than be forced out of school and relegated to life in an institution (Mowbray, Mandiberg, Stein, et al 2006:230). So, designing preventions and treatments programs addressing the identified factors of mental distress among university students is important (Dessie, Ebrahim, & Awoke, 2013:1). Similarly, Alem, Araya, Melaku, Wendimagegn, and Abdulahi (2005:159) also recommended further studies and support services for the students at the higher institutions in Ethiopia.

2.7. Health promotion

Health promotion is defined by the World Health Organization as “a process of enabling people to increase control over, and to improve, their health” (WHO, 1986:1). It is about improving quality of life by acting on the causes of illness and by addressing the determinants of health. It has three intertwining strands: education about the illness, prevention of illness using self-help and other measures, and the promotion of healthy lifestyles (Royal College Psychiatrists 2003). Similarly, according to Shircore (2009**:**8), health promotion is about giving people information and tools to improve their own health and it is also about improving the environments in which people live that often determine their choices. It focuses upstream, beyond individual behaviour change, to influence the context in which people make their health choices**.** Shircore (2009**:**46-47) also emphasized that health promotion interventions focus not only on individual behaviour, but on the social, economic, and physical environments of an individual. There is a strong evidence base linking people’s participation in networks and social structures with positive mental and physical health.

2.8. Mental health promotion

Mental health promotion is concerned with achieving positive mental health and well-being in the general population and addressing the needs of those at risk from, or experiencing, mental health problems (Barry & Jenkins, 2007).

According to Jané-Llopis *et al*, (2005:7) emphasis should be placed on encouraging positive mental health by eliminating individual, socioeconomic and environmental risk factors and by promoting protective factors. Mental health promotion focuses on enhancing the social, structural, spiritual, and psychological resources that enable one to cope, experience the positive quality of life, and contribute to the social, economic, and environmental dimensions of society. Promoting mental health provides the capacity to realize abilities, take control of one's life, and make a contribution to society (Mental Health Promotion in Ontario 2008:1).

Mental health promotion focuses on the whole person, their physical, mental, emotional, and spiritual health. It involves individuals, families, communities, and the broader environment, with the goal of increasing capacity to improve mental health (Centre for Addiction and Mental Health [CAMH]**,** 2007:1). It targets the whole population and focuses on promoting and obtaining mental well-being (Jané-Lopis, Barry, Hosman, Patel, 2005:9). The Ottawa Charter for Health Promotion (WHO, 1986:1) defined five key health promotion strategies: building healthy public policy, creating a supportive environment, strengthening community action, developing personal skills, and reorienting services toward promotion, prevention, and early intervention. Similarly, mental health promotion promotes positive mental health by increasing social and psychological well-being, competence, resilience, and creating supportive living conditions and environments while mental disorder prevention has as its target the reduction of symptoms and ultimately of mental disorders (WHO 2004a:17). The aim of mental health promotion is to enhance competence, self-esteem, and a sense of wellbeing at the individual level and to address the broader structures and environments that have negative mental health impacts (WHO 2005a:47).

The shift in positive health, from illness towards wellness, aims to build health literacy and the capacity of individuals to make decisions conducive to health, and thereby make more effective the use of healthcare services (Wand, 2013:116). As stated by Royal College Psychiatrists (2003:47) increasing knowledge and disseminating information related to

health may be disseminated by lectures, student handbooks, leaflets, and material on student union and university websites.

MacKean (2011:8) concluded that from literature and environmental scan to make the case for post-secondary institutions as an important setting for promoting mental health and well-being; because many young people attending colleges/universities are experiencing mental health problems and/or are living with a mental illness and post-secondary institutions are often high-stress environments. Peer support programmes have an important place in promoting the nurturing environment of universities. These may involve training in recognizing and responding to mental health problems for student volunteers or those with official responsibilities, such as welfare and union officers (Royal College Psychiatrists 2003:48). Community and school are two common setups for the promotion of mental health.

2.8.1. In the community

According to MacKean (2011:15) more recently there has been a shift from focusing primarily on improving services for people living with mental health issues to promoting mental and well-being for all. There are positive consequences of addressing mental health issues for individual students, their friends, and families, in the present and into the future. In addition, mental health and well-being is an important factor influencing student learning and academic success.

WHO (2005:182) conclude that well-designed interventions can contribute to better mental health and well-being of the population. In addition, growing evidence is available that mental health promotion also generates a variety of social and economic benefits. According to Whitlock, Wyman, and Barreira, (2010:12) the primary ways to promote life skills and develop resilience in the face of environmental stressors are to focus on training and experiential programs that enhance social connectedness, developing study, time and stress management, and leadership skills.

As stated by McHenry & Donovan (2013:9) good mental health not only enhances the quality of life and wellbeing but also ensures greater resilience when individuals and communities are faced with stressors. It, therefore, makes good economic sense to build individual and community mental health and wellbeing from an early age and across the lifespan. According to Barry (2001:25) current frameworks must adapt to this change in

emphasis when moving from a disorder prevention to a competence improvement strategy in order to situate the promotion of positive mental health within the wider range of intervention activities.

2.8.2. In the school

Schools are often where students' mental health needs are discovered and where support is provided. It is through creating whole-school environments that are conducive to wellbeing and connecting with communities that schools will become the key to addressing the mental health of all young people, across all dimensions of their lives (Wyn, Cahill, Holdsworth, Rowling, & Carson, 2000**:**601). An essential advantage of school programming is the opportunity to promote the positive mental health of all students rather than focusing solely on those identified as having mental health problems (Graham, Killoran and Parekh. 2017). Effective, comprehensive school mental health: promotes the development of coping skills and resiliency among all students, creates a more positive school environment, which ultimately leads to fewer students requiring resource-intensive high-level mental health treatment and helps students learn, and lays the foundation for them to become healthy and productive members of their families, the community, and society at large (Towvim et al 2013:3). Leabharlainne and Oireachtais (2012:2) report the whole-school approach is the most effective approach to mental health promotion from different studies. School-based programs can have positive effects for students in terms of behaviour and self-control; social and emotional skills; ability to learn and achieve academically; and problem-solving in social settings (Leabharlainne & an Oireachtais, 2012:2). Similarly, Jané-Lopis, Barry, Hosman, and Patel (2005:91) stated that school-based methods of promoting healthy behaviours are amongst the most successful ways of tackling some major problems of adolescence: like violence and substance abuse. Achieving positive behavioural change can promote the educational achievement of youth, and contribute to social capital.

Within health-promoting schools, addressing mental health issues requires the designing of policies and programs that are based on: awareness of the mental health needs of student populations; the will to advocate for change in attitudes and understanding and targeted solutions, and results-focused program evaluation activities (Morrison, and Peterson. 2013). Although specific types of support such as counselling and the provision of personal mentors had been found useful by students with mental health problems, just as important to them

was the overall ethos of the schools or college as a welcoming and supportive place (Warwick, Maxwell, Simon, Statham, & Aggleton 2006:1-4).

2.9. Mental health promotion among students in higher institution

There is a perception among some health professionals that students are privileged young people and that their demands for mental health services should therefore be lower. However, young adults between the ages of 18 and 25 are at high risk of developing serious mental illnesses such as schizophrenia and bipolar disorder. The social environment of higher education institutions is unique in many important ways that are relevant to mental disorders in students (Royal College of Psychiatrists 2011:11-20).

Mental health promotion should be incorporated throughout the lifespan via activities in pre-school nurseries and settings, schools, colleges/universities, workplaces, other social institutions, and community organizations (McHenry & Donovan, 2013**:**9). There is robust evidence that mental health is a crucial element of overall health and well-being and that a University-wide commitment to promoting mental health will produce a wide range of benefits.

Mental health promotion for students in higher education requires coordinated, collaborative, and integrated strategy and action. According to WHO cited in Royal College Psychiatrists (2003:46), young people need access to appropriate health services (student health centres and counselling services), development of an environment conducive to health (dealing with any personal, economic, or cultural problems through student council/student union), strengthening of social networks and social support a (fresher's induction week to smooth the transition to university life, to provide information about clubs and activities and provide an arena for social networks to form). There is recognition that there must be more focus on addressing the factors at multiple levels (i.e., individual, group, college, community, society) that promote mental health and well-being for all students, including students living with mental illness (MacKean, 2011:17).

Xiangyang, Lan, Xueping, Tao, Yuzhen, and Jagusztyn (2003:107-108) conclude that the university has a responsibility to work towards emphasizing and increasing the students' capacity to gain control over and improve their health, and to reorient the focus of health services from merely addressing illness to prioritizing illness prevention and health promotion. Because the student population is in some ways more vulnerable than other

young people. Especially first-year students have to adapt to new environments and ways of learning (RCP 2011:21).

The promotion of positive mental health for all students was often closely tied to the provisions of student support in general; formed part of overall college provision to extend students' capacities both academically and emotionally (Warwick, Maxwell, Simon, Statham, & Aggleton, 2006:1-4). According to WHO (2010:44), the impact of school-based mental-health programs is broad and long-term. They can prevent the onset or worsening of mental health conditions into adulthood and help ensure that the number of people completing education is maximized. This leads to increased productivity and economic development for society as a whole.

School-based programmes to promote better mental health show clear evidence of achieving higher literacy levels and reductions in drop-out rates; there are additional health benefits with success in smoking cessation, reductions in substance abuse, and reduce stress levels (Shircore, 2009**:**20). Failure to provide an environment that support mental health can lead to low rates of student success. At the other extreme, lack of a mental health framework can contribute to crises such as student suicides. Both are damaging to institutional reputation. Lack of action also presents risks to the health, well-being, and safety of the entire university community (Hanlon 2012:2). Because specific, targeted interventions provided within a whole-school framework, only address the needs of the minority of students who require additional support (Wyn, Cahill, Holdsworth, Rowling, & Carson, 2000**:**594).

A study at a South Australian university shows a significant positive relationship existed between the quality of mental health promotion implementation and academic performance (Dix, Slee, Lawson, & Keeves, 2012:45). Similarly, they have been shown to be effective in improving mental well-being, coping strategies, social skills, and school achievement, and in decreasing anxiety, depressive symptoms, aggression, and bullying (WHO 2004b:9; Gigantesco, Del Re & Cascavilla, 2013:88).

Universities Collaborate interviewees remarked on broad cultural changes that were taking place across campuses, increasing faculty and staff understanding about and skills with students in distress, promoting student well-being, and reducing stigma associated with mental illness (Woodbridge, Goldweber, Yu, Golan, Stein, 2014:3). As cited on MacKean,

(2011:18) The Centre for Collegiate Mental Health Annual Report (2010) stated that there is general consensus amongst colleges and college counselling centres that the prevalence and severity of college student mental health are on the rise. Historically, counselling services are often not well connected to medical health services and these, in turn, are often not coordinated with health promotion services (MacKean, 2011:30).

Through the implementation of the Health Promoting Universities project, health services were reoriented to health promotion and improving health knowledge or behaviour among college students. As an intervention setting, the university community can benefit greatly from implementing health promotion campaigns based on the principles of the Ottawa Charter for Health Promotion **(**Xiangyang, Lan, Xueping, Tao, Yuzhen & Jagusztyn, 2003:113).

WHO (2005**:**12), recognizes that besides the vital need for expanding services to those who currently receive none, prevention of mental disorders and vigorous promotion of healthy behaviours are critical for decreasing the international burden of mental illnesses and for helping people to realize their full potential. Based on the strength of current evidence a case is put forward for focusing on the enhancement of protective factors with the explicit goal of promoting positive mental health and wellbeing across populations (Barry, 2001:25); because mental health and well-being are issues of everyday life: in families, in schools, on streets, and in workplaces (WHO, 2005**:**43).

So, considerable bodies of practice inform the development and use of indicators in mental health and mental health promotion (WHO, 2005**:**148). Issues concerning mental health should be given due attention since an individual needs to deal with various kinds of stressors in his life, perform daily tasks with ease, and fulfil responsibilities to his family and the nation at large. Students with high levels of emotional, psychological, and social well-being have better educational outcomes, as well as improved long-term outcomes for health, employment, and relationships (Barry & Jenkins, 2007).

Weare and Nind (2011: i54) summarize the author's conclusion as short-term, class based mental illness prevention programs are less likely to be successful than long-term, universal school mental health promotion programs that aim to promote the good mental health of all students and incorporate alterations to the school climate. Effective practice in promoting mental health involves reducing risk factors and strengthening protective factors

(Department of Health and Children, 2006; Barry & Jenkins, 2007) and adopting a whole University approach, e.g. the health-promoting university model (WHO, 2004).

Though recommendations are made that researchers need to continue to focus on the promotion and protection of students' positive mental health, (LaBelle. 2023.). Hosman and Llopis (2000) report that there is abundant proof that mental health promotion programs minimize the likelihood of mental disorders while also enhancing mental health and quality of life. Additionally, programs that explicitly aim to build competence to enhance wellbeing by improving protective variables are more effective than those that focus on delaying the onset of diseases or preventing their symptoms (Barry 2001:25). An early intervention like mental health promotion is especially important in students to diminish the risk that mental illness will lead to drop-out from university (RCP 2011:10). Additionally, the number of cases documenting mental health problems among university students is on the increase each year (Zivin, Eisenberg, Gollust & Golberstein, 2009).

The studies have also called for serious attention to be given in terms of specific interventions to be undertaken by university authorities. This is important as mental health problems will lead to poor academic performance (Talib, Nordin, Yaacob, & Sabran, 2010:105). Mental health is essential to students' academic success as well as their ability to participate fully and meaningfully throughout all aspects of their lives and throughout their lifespan (Canadian Association of College & University Student Services and Canadian Mental Health Association (CACUSS & CMHA), 2013:6).

2.9.1. The role of faculty and teachers

The role of faculty and staff in promoting mental health and well-being is described as important by a number of key informants. Ensuring faculty are familiar with their institution's accommodation policy is important, and how and where to refer students for help is important (MacKean, 2011:30). Promoting the mental health and wellbeing of all young people is a vital part of the core business of teachers by creating a supportive school environment that is conducive to learning (Wyn, Cahill, Holdsworth, Rowling, & Carson, 2000**:**594). Educators have an important role in promoting positive mental health at school, identifying students who may have mental health problems, and connecting those students with appropriate services, through creating a positive classroom environment, and reducing stigma (Supporting Minds, 2013:6-17).

Academicians can also become an integral part of the risk assessment of students through an established counselling system. After the social or life risks of the students have been identified, academicians can take an active role in interventions aimed at developing healthy behaviours among students and in the referral of those students at risk to the appropriate health centres (Uner, Ozcebe, Telatar, & Tezcan, 2008:445).

As stated by Wyn, Cahill, Holdsworth, Rowling, and Carson (2000**:**595) promoting the mental health and wellbeing of all young people is a vital part of the core business of teachers by creating a supportive school environment that is conducive to learning. It is important for administrators, faculty, and staff to understand the profound impact that mental health problems can have on all aspects of campus life, and to treat mental health issues as an institutional responsibility and priority (Kitzrow, 2003:178).

2.9.2. Counselling service providers role

Counselling service providers continue to play an important role in supporting the mission of higher education institutions by providing counselling for students who are experiencing problems and assisting them in achieving their educational and personal goals (Kitzrow, 2003:176). In order to discover solutions for these students' mental health problems, counselling services should be readily available and attainable in the students' health centres (Uner, Ozcebe, Telatar & Tezcan, 2008:437).

2.9.3. School health service

Cavioni, Grazzani and Ornaghi (2020) urges the need to include mental health components in the school health services which currently focus on physical illness only. School health services could help the schools in promoting mental health and coping skills among the students. The issue of mental health among students must be addressed with a sense of urgency (Azizan, Razali, & Pillai, 2013:79). Students often benefit significantly by being able to gain access to dedicated student health services (RCP 2011:12**).**

2.9.4. Student services/affairs

Student services have a role in promoting positive student mental health at a more systemic level (MacKean, 2011:30). School or community-based programs can teach problem-solving and social skills that can improve resilience among adolescents (Murphey, Barry, & Vaughn, 2013:6**).** Study skills and language support providers may be the first to identify students who are experiencing difficulty (YoungMinds, 2006:1).

2.10. Help-seeking behaviours of students of higher education

The prevalence of mental or substance use disorder Rates of College students rises, however, the majority fail to seek professional help or do not receive treatment (Eisenberg, Hunt, & Speer, 2012:230). Among college students aged 19 to 25 with an apparent mental disorder, only 18% received any mental health treatment compared to 21% of same-aged non–college students (Blanco et al, 2008:6).

Despite their high burden of disease, youth are less likely to access services for mental health problems compared to other age groups (Australian Medical Students' Association (AMSA) (2013:2)). Stigma associated with using mental health services (30%) is one of the most frequently cited barriers to using these services (Givens & Tjia, 2002: 918)**.** As concluded by the Sainsbury Centre for Mental Health (SCMH), (2006:17) to achieve genuine change on stigma, increased investment in mental health promotion will be vital.

A number of factors affect help-seeking, including mental health literacy, which has been defined as knowledge and beliefs about mental disorders which aid their recognition, management, or prevention. Current intervention approaches help-seeking in the college setting emphasize knowledge and attitudes about mental illnesses and treatment options (Eisenberg, Hunt, & Speer, 2012:230).

The transition to higher education can be a stressful time, with students entering a completely new environment. Students reported feeling ill-equipped emotionally and academically, with no immediate friendships or support available, and being uncertain where to look for help. They also reported difficulty in identifying or recognizing their experiences as mental health difficulties, and in admitting to themselves and others that they were struggling. Students often saw their problems as a personal inability to cope, and so were unsure what sort of help to look for (Soto-Chodiman, Pooley, Cohen, and Taylor. 2012).

The 2007 Australian National Survey of Mental Health and Wellbeing estimated that mental illness affects as many as one in four people aged 16 to 24 in any 12-month period (Reavley et al, 2013:2). Some college students are unwilling to seek psychological help because of the perceived stigma associated with disclosure of mental health problems (Blacklock, Benson, Johnson, & Bloomberg, 2003), but others claim that the lack of availability of mental

health services keeps them from getting the help they need (Mowbray, Mandiberg, & Stein, et al 2006:230).

The stigma surrounding mental health problems and mental illness causes distress to those with a mental illness, inhibits help-seeking by those in need, leads to discrimination against those with mental illness, impedes recovery, and obstructs communication and education about the positive messages of mental health promotion (McHenry & Donovan 2013**:**10).

2.11. Conclusion

In this chapter, the review of related literature showed that the students' mental health problems are increasing and that the care needed is beyond clinical care. Different researchers also recommend the design and implementation of school-based mental health promotion strategies both globally and locally. So, the need for the promotion of mental health among university students in Ethiopia is therefore imperative. In this review of related literature, a few seminal references were used to take definitions of basic concepts. In the next chapter, the study designs and approaches used; the study setting, populations, and sampling methods as well as the data collection and analysis will be described in detail.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1. Introduction

In the previous chapter the researcher analysed, compared, and synthesized prior study's findings related to the topic, thereby identifying gaps. In this chapter concepts related to employed specific research design and methods are presented. Population and specific sample selection, data collection, analysis procedures, trustworthiness, and ethical consideration followed in this study were also discussed.

3.2. Theoretical framework

Theoretical frameworks offer flexible guidance for applying the abstract concepts of theory to a vast array of real circumstances. Kerlinger and Lee (2000:11) defined a theory as "a set of interrelated constructs (variables), definitions, and propositions that presents a systematic view of phenomena by specifying relations among variables, with the purpose of explaining natural phenomena". It was also added to this definition the idea of a theoretical rationale, which they defined as specifying how and why the variables and relational statements are interrelated. The theory would provide the explanation for this expectation or prediction. The researcher has adopted WHO's approach to health promotion, which is fundamentally concerned with action and advocacy to address the full range of potentially modifiable determinants of health. Ottawa Charter's essential principles for health promotion which support a competence development perspective and aim to address the larger factors of mental health, are supported by mental health promotion (WHO 1986:4).

This study is underpinned with the theoretical framework of modified Socio-Ecological systems theory. Studies show that using Bronfenbrenner's ecological system concepts by clearly considering interactions between and within these systems can result in recommendations that are most useful for guiding public mental health policy and practice (Eriksson, Ghazinour, and Hammarstro¨m, 2018:414).

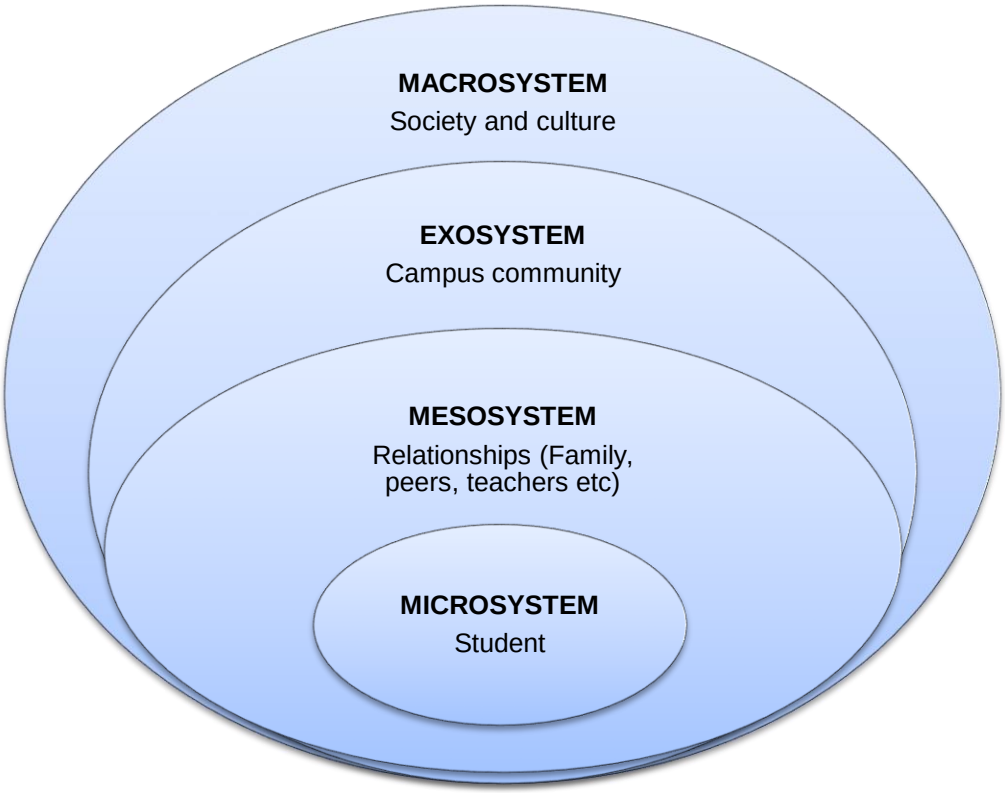

Figure 1: Socio-ecological model

Socio-ecological model adopted from Bronfenbrenner's ecological model of human development (Bronfenbrenner, 1994)

The mental health promotion approach is rooted in the Ottawa Charter for Health Promotion, which stated that 'health is created and lived by people within the settings of their everyday life; where they learn, work, play, and love' (WHO 1986:3). Mental health promotion targets the whole population and focuses on enabling and achieving positive mental health (Jané-Llopis, Barry, Hosman & Patel 2005a:9).Thus, establishing and strengthening campus mental health program, strengthening support from other significant others (peer, family, teachers), creating safe and secure campus environment, and fulfilling required resources and support (peer and self) strategies are significant for the promotion of students' mental wellbeing in higher education institutions. The designing of mental health promotion strategies tailered in the integaration of Ottawa charater of health promotion principle and Bronfenbrenner's ecological model of human development. Halsall, Manion and Henderson.

(2018:8) concluded that using the bioecological model, practice and policy can be expanded to better support the holistic promotion of youth well-being.

3.3. Purpose of the study

The purpose of this study is to develop and describe strategies for the promotion of mental health among students in higher education in Ethiopia.

3.4. Study objectives, and research questions

3.4.1. Study objectives

In order for the researcher to achieve the above purpose of the study, the study dealt with in three phases and addressed specific objectives listed below.

- To explore students' mental health promotion approaches in higher education.
- To assess the level of positive mental health among students in higher education
- To identify associated factors to positive mental health among students in higher education
- To develop and describe strategies for the promotion of mental health among the students in higher education

3.4.2. Research questions

Qualitative phase research question

- How could the mental health of students in higher education be promoted?
- What are suggested strategic approaches for the mental health promotion of students in higher education institutions in Ethiopia?

Quantitative phase research questions

The quantitative phase study is aimed to answer the following questions

- What is the current students' positive mental health status in higher education institutions in Ethiopia?
- What are the factors associated with the positive mental health of students in higher education institutions in Ethiopia?

Mixed phase research question

How does the qualitative interview data on students' mental health promotion further explain how social, academic, and environmental factors enhance the positive mental health of learners measured on the MHC SF scale?

3.5. Research Approach

The research approach utilized for this study was exploratory, descriptive and contextual in nature.

3.5.1. Exploratory

An exploratory study is a small-scale study of relatively short duration, which is carried out when little is known about a situation or a problem. It may include a description as well as a comparison (Creswell, 2009). The intent of the two-phase exploratory design is the results of the first method (qualitative) can help develop or inform the second (quantitative) (Green et al., 1989), especially to identify important variables to study quantitatively when the variables are unknown or to explore a phenomenon in-depth and then measure its prevalence (Creswell, 2006). Hence this study employed a sequential exploratory mixed method in this study.

3.5.2. Descriptive

A descriptive study is an observational study that simply describes the distribution of a characteristic. In a descriptive study design, the researcher may describe responses to the independent, mediating, or dependent variables (Creswell, 2014). A descriptive study analysis should indicate the means, standard deviations, and range of scores for these variables. The main characteristic of this method is that the researcher has no control over the variables; he can only report what has happened or what is happening (Kotari, 2004:3-4). Different socio-demographic, university, and field of study-related characteristics were described in the quantitative analysis part of this mixed-method study.

3.5.3. Contextual

The intention of analyzing qualitative materials was to contextualize our interviewees' general statements to specific topics. Qualitative research is highly contextual, being collected in a natural ‘real-life' setting, often over long periods of time (Gray, 2004). In this study data collected in qualitative approach contextualized so as to use for variable generation for further quantitative study and mental health promotion strategy development.

3.6. Research Design

Procedures for gathering, analysing, interpretaing, and reporting data in research investigation are known as research design. Rigorous research designs are important because they guide the methods decisions that researchers must make during their studies and set the logic by which they make interpretations at the end of studies. Research designs are types of inquiry within qualitative, quantitative, and mixed methods approaches that provides specific direction for procedures in a research study (Creswell, 2014). Once a researcher has selected a mixed-methods approach for a study, the next step is to decide on the specific design that best addresses the research problem. This study utilized a mixed study design with a three-phased approach which is sequential exploratory, descriptive and contextual methods.

A mixed method research is defined as “employing rigorous quantitative research assessing the magnitude and frequency of constructs and rigorous qualitative research exploring the meaning and understanding of constructs” (Creswell and Plano-Clark. 2018.). It is popular in the social, behavioural, and health sciences, in which researchers collect, analyze, and integrate both quantitative and qualitative data in a single study or in a sustained long-term program of inquiry to address their research questions (Creswell, 2013:4).

In this study, a sequential mixed method design was used. In the first phase, information related to approaches of mental health promotion was explored and used for tool development used in the second phase quantitative study. In the second quantitative phase of the study level of positive mental health and associated factors among students at five selected public Universities in Ethiopia were addressed where data from both approaches were used to develop strategies for the promotion of mental health among students in the higher institutions in the country. A sequential mixed methods design is a type of design in which first quantitative, then qualitative data are collected sequentially with greater weight for qualitative data, analyzed separately, and then data connected at the interpretation stage. Connected in mixed methods research means mixing of the quantitative and qualitative research are connected between a data analysis of the first phase of research and the data collection of the second phase of research (Creswell, 2009:208).

The sequential exploratory strategy involves the first phase of qualitative data collection and analysis, followed by the second phase of quantitative data collection and analysis that

builds on the results of the first qualitative phase. Weight is generally placed on the first phase and the data are mixed through being connected between the qualitative data analysis and the quantitative data collection (Creswell, 2009:209). Varkevisser, Pathmanathan and Brownlee (2003:133) strongly advised not to start with a big survey when knowledge of the situation and problem(s) is superficial, rather always starting with exploratory study. And as stated by Creswell (2014:269) a sequential mixed-methods approach is probably the most familiar of the basic and advanced mixed methods strategies.

Creswell (2009:209) stated that the sequential explanatory strategy is a popular strategy for a mixed-methods design that often appeals to researchers with strong qualitative leanings. It is characterized by the collection and analysis of qualitative data in the first phase of research followed by the collection and analysis of quantitative data in a second phase that builds on the results of the initial qualitative results. Weight typically is given to the qualitative data, and the mixing of the data occurs when the initial qualitative results inform the secondary quantitative data collection; where the two forms of data are separate but connected (Creswell, 2009:209).

Hence, for this study, a mixed research design with exploratory sequential design has been chosen to explore participant views with the intent of building on these views with quantitative research so that they can be explored with a large sample of a population. In this particular study, the sequential exploratory strategy was selected for its various advantages over other strategies. The straightforward nature of this design is one of its main strengths. It is easy to implement because the steps fall into clear, separate stages. In addition, this design feature makes it easy to describe and to report (Creswell, 2009:211). The steps of this strategy are described and pictured in figure 2.

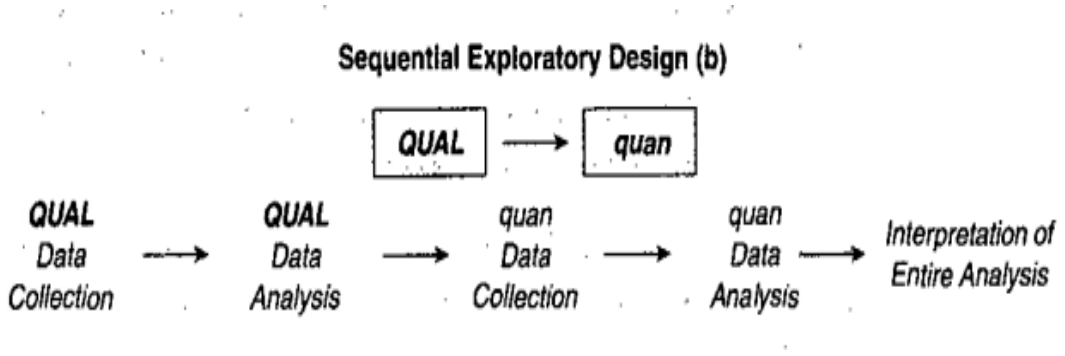

Figure 2: Sequential exploratory designs

Source: Adapted from (Creswell JW, 2009:209).

Phase 1: Qualitative phase

In phase one, a qualitative interview were conducted to probe to explore aspects of the views, opinions and experiences on approaches of promoting with students and key persons at one purposefully selected University. These qualitative aspects of the study were only determined at one University for the purpose of conceptualization of the constructs. The reason for collecting qualitative data initially is that variables are not known and instruments are inadequate to assess factors that affect positive mental health and on the conceptualization of strategies for the promotion of mental health of the students in the higher education institutions.

Phase 2: Quantitative phase

In a mixed study, the design researcher may choose to start with a qualitative phase followed by a quantitative phase, or vice versa. Some studies use both quantitative and qualitative methods concurrently. Again, the choice of when to use each method is largely dependent on the research question (Tariq and Woodman 2010:4). Tariq and Woodman (2010:7) also concluded that many of the areas we explore in health are complex and multifaceted and mixed methods research is an innovative and increasingly popular way of addressing these complexities. Hence this study used quantitative approach in the second phase where tools developed from first phase qualitative data was used to measure the level of positive mental health and associated factors among students at five selected public Universities and finally used as an input the mental health promotion strategy formulation.

Phase 3: Strategy Development

In phase three of this study strategy for promoting mental health of students in higher education in Ethiopia were developed and described based on connection and contextualization of the data from above mentioned qualitative and quantitative phases. These proposed strategies were shared with experts in the field of mental health, who subsequently gave valuable input. Their inputs were incorporated in the final draft of the strategies, and they were eventually endorsed by these experts.

3.7. Research Methods

According to Neuman (2014:2), a method refers to the collection of specific techniques we use in a study to select cases, measure and observe social life, gather and refine data, analyze data, and report on results. Research methodology means understanding the entire research process including its social-organizational context, philosophical assumptions, ethical principles, and the political impact of new knowledge from the research enterprise (Neuman 2014:4).

3.7.1. Study setting

The physical, social, and cultural location where the study is being conducted might be considered the research setting (Bhattacharya 2008:788). In order to meet the research objectives, the study was conducted at five selected public universities in Ethiopia where students and faculties of the Universities were considered as the study populations.

3.7.2. Population

- ***Qualitative phase***

The mixed-method researcher sometimes chooses procedures that focus on generating representative samples, especially when addressing a quantitative strand of a study. On the other hand, when addressing a qualitative strand of a study, the mixed-method researcher typically utilizes sampling techniques that yield information-rich cases. Combining the two orientations allows the mixed-method researcher to generate complementary databases that include information that has both depth and breadth regarding the phenomenon under study (Teddlie and Yu 2007:87). When using qualitative research approaches or exploratory studies which aim at getting a rough impression of how certain variables manifest themselves in a study population or at identifying and exploring thus far unknown variables, you may try to select study units that give you the richest possible information and representativeness of the sample is not a primary concern (Varkevisser, Pathmanathan and Brownlee 2003:199).

The population is the conceptualized term for a sizable collection of numerous cases from which a researcher selects a sample and to which sample results are generalized (Neuman 2014:247). A classroom representative student, student counsellors, students' service affair or student dean, health care providers, and teachers who were selected purposefully with intention of more exposure to students in distress from mental health problems around the

classroom and students' service areas to explore knowledge claims and possible opinions on ways of mental health promotion among the students were study population in the qualitative phase.

- ***Quantitative phase***

The survey is gathering large-scale and statistically manipulable data in order to make generalizations. Cross-sectional research gathers data at a one-time point and creates a kind of snapshot of social life (Kim, 2021).). Undergraduate students enrolled for regular programs in five selected public universities in the country were the study population in a quantitative approach.

3.7.3. Samples, sample size determination, and sampling procedures

Qualitative phase

Researchers are typically unable to study the entire population for obvious reasons; so, they typically study a subset of the population, and that subset is called a sample (Marczyk, DeMatteo and Festinger, 2005:18). As stated by Onwuegbuzie and Collins (2007:287) if the goal is not to generalize to a population but to obtain insights into a phenomenon, individuals, or events that areas will often be the case in the qualitative component of a mixed-methods study, then the researcher purposefully selects individuals, groups, and settings for this phase that maximize understanding of the underlying phenomenon. A purposive sample is typically designed to pick a small number of cases that will yield the most information about a particular phenomenon (Teddlie and Yu 2007:83). Purposive sampling differs from stratified random sampling in that the actual selection of the units to be included in the sample in each group is done purposively rather than by random method (Prabhat and Meenu 2015:56). It is a valuable sampling type for special situations used in exploratory research or infield research. It uses the judgment of an expert in selecting cases, or it selects cases with a specific purpose in mind. In purposive sampling get all possible cases that fit particular criteria, using various methods (Neuman 2014:274). Hence it leads to a greater depth of information from a smaller number of carefully selected cases, whereas probability sampling leads to a greater breadth of information from a larger number of units selected to be representative of the population (Patton, 2002). The researcher considered the purposive sampling technique to select sample participants of students and key persons working with the students at one of five Universities selected for the survey phase. Parallel relationship

sample selection criteria specify that the samples for the qualitative and quantitative components of the research are different but are drawn from the same population of interest (Onwuegbuzie and Collins, 2007:292). Accordingly, twenty-eight classroom representative students and key informants (student counsellors, students' service affair or student dean, health care providers, and teachers) who were selected purposefully in samples in this exploratory phase of the study and interviewed with intention of more exposure of these groups to students in distress from mental health problems around the classroom and residence to explore knowledge claim and possible opinions on ways of mental health promotion among the students. In this phase, idea saturation was used to determine the number of interview participants.

- ***Quantitative phase***

The sample is a small set of cases a researcher selects from a large pool and generalizes to the population (Neuman 2014:246). According to Prabhat and Meenu (2015: 42 -43) sample is a set of units or portion of an aggregate of material that has been selected in the belief that it is representative of the whole aggregate and by observing the characteristics of the sample, one can make certain inferences about characteristics of the population from which it is drawn.

In the quantitative phase of this particular study sample size was determined by single population formula (Cochran, 1963); considering 95% CI, *50% proportion of the level of positive mental health of the students, margin of error (0.05), 10% of possible none response rate during the survey and design effect of 2 the final sample size was 844.*

Sampling is the process of choosing a predermined number of individuals to represent a specific population. It works with the objective to obtain accurate and reliable information about the universe with a minimum cost, time, and energy and to set out the limits of accuracy of such estimates (Prabhat and Meenu 2015:40-43). Random samples yield samples most likely to truly represent the entire population. Random sample a sample using a mathematically random method such as a random-number table or computer program, so that each sampling element of a population has an equal probability of being selected into the sample (Neuman 2014:248). Sampling procedures used in this study are detailed below with respect to particular approaches or phases of the study.

Stratified sampling is a random sample in which the researcher first identifies a set of mutually exclusive and exhaustive categories, divides the sampling frame by the categories, and then uses random selection to select cases from each category. In general, if the stratum information is accurate, stratified sampling produces samples that are more representative of the population than those of simple random sampling (Neuman 2014:262). Hence, stratified sampling techniques were used in this particular study. After Universities were stratified into their generation; two universities from first-generation, two universities from the second generation, and one from the third generation, and a total of five public Universities were selected from 33 total Universities in the country. The second step of stratified sampling is identifying stratification variables and determining the number of strata to be used. The stratification variables should relate to the purposes of the study (Daniel 2012:171). Hence, universities' generation which implies their age, capacity, and student intake are used as a stratification variable to see whether there is a difference in students' mental health status across them. First generations universities are old, capacitated, and with a large number of students and programs. Second generations are those established about ten years back (at sampling time) and at the middle level with all aspects. Regarding the third generation are newly emerged Universities with the age of not more than two years at the sampling time. Again, five colleges were also selected from each sample university by simple random sampling.

When we use stratified sampling, we first divide the population into subpopulations or strata on the basis of supplementary information. After dividing the population into strata, we draw a random sample from each subpopulation (Neuman 2014:262). The technique of stratified sampling is creating a sampling frame for each of several categories of cases, drawing a random sample from each category, and then combining the several samples (Neuman 2014:278). To achieve a national student's representative sample, this study sampled students from each of these three university categories. It is one in which each element of the population has an equal and independent chance of being included in the sample i.e. a sample selected by randomization method is known as a simple random sample and this technique is simple randomizing (Prabhat and Meenu 2015:47). The reason we draw probability samples is to make inferences from the sample to the population (Neuman 2014:271). Researchers often use the three basic probability sampling techniques in conjunction with one another to generate more complex samples (Teddlie and Yu

2007). The technique of simple random sampling is creating a sampling frame for all cases and then selecting cases using a purely random process (e.g., random-number table or computer program) (Neuman 2014:278).

- ***Eligibility criteria***

The characteristics for inclusion criteria for the survey phase of this study were enrolment in regular and undergraduate programs, and students with age more than 18 years old. The key persons from different service areas or departments who worked for more than six months at the selected university were included in the study. Classroom representative students purposefully considered for the qualitative aspect. Having a critical medical illness or mental illness (like psychosis), hearing, and visual impairments were considered as characteristics for exclusion.

3.7.4. Study Variables

Variable is a concept that can take on different quantitative values and which can vary from one individual to another. The main focus of the scientific study is to analyze the functional relationship of the variables (Prabhat and Meenu 2015:10-24). There are three types of variables: dependent variables, independent variables, and intervening variables.

Dependent variables

A dependent variable is the effect, outcome, or result that is caused by an independent variable in a causal hypothesis (Neuman 2014:181). If one variable depends or is a consequence of another, it is termed a dependent variable (Prabhat and Meenu 2015:29). Other names for dependent variables are criterion, outcome, effect, and response variables (Creswell 2014:84). In this study, the positive mental health of students was a dependent variable.

Independent variables

The variable that is antecedent to the dependent variable is termed as an independent variable (Prabhat and Meenu. 2015:29). It is a type of variable that produces an effect or results on a dependent variable in a causal hypothesis. The cause variable, or the force or condition that acts on something else, is the independent variable (Neuman 2014:181). They are those that (probably) cause, influence, or affect outcomes and are also

called treatment, manipulated, antecedent, or predictor variables (Creswell, 2014:84). In this study socio-demographic characteristics, mental health literacy, coping style, daily spiritual experiences, and perceived social support of the students were considered as independent variables.

3.7.5. Operational definition and definition of terms

Operationalization is the process of moving from a construct's conceptual definition to specific activities or measures that allows a researcher to observe it empirically. An operational definition is a variable in terms of the specific actions to measure or indicate it in the empirical world (Neuman 2014:181). Operational definitions of variables measured in this study based on psychometric properties of measuring tools include:

Positive mental health: there are three categories of positive mental health status: Flourishing (high level of wellbeing): if they feel 1 of the 3 hedonic well-being symptoms "every day" or "almost every day" and feel 6 of the 11 positive functioning symptoms "every day" or "almost every day" in the past month.

Languishing (absence of mental wellbeing) or not flourishing: 1 of the 3 hedonic well-being symptoms are perceived as "never" or "once or twice a month" and 6 of the 11 positive functioning symptoms are perceived as "never" or "once or twice a month".

Moderate mental health wellbeing (located between these two extremes): Individuals who are neither "languishing" nor "flourishing" are categorized as "moderately mentally healthy" (Keyes, 2014).

Mental Health Literacy is multifaceted and includes: (a) the ability to recognize symptoms of mental illness, (b) knowledge of causes of mental disorders, (c) beliefs that promote recognition and seeking appropriate help, and knowledge of (d) lay sources of help and (e) professional sources of help (Jorm, Korten, Jacomb, Christensen, Rodgers, and Pollitt, 1997).

Good mental health literacy: operationalized for the purpose of this study as participants giving at least one favourable response on three vignettes (depression, anxiety, and psychosis according to Diagnostic statistical manual of mental disorder four TR), knowledge of causes on mental illness, knowledge on appropriate help, sources of help for mental illnesses and knowledge on professional sources of help on mental health literacy tool.

Coping style: participants are considered as having a good coping style if the coping scale score is greater than the mean score.

Daily spiritual experiences: participants were considered as having good daily spiritual experiences when the Daily Spiritual Experience Scale score is greater than the mean score.

Perceived social support of the students: participants were considered as having good perceived social support if the Multidimensional Scale of Perceived Social Support score is greater than the mean score and vice versa for poor perceived social support.

3.7.6. Data collection

Data collection involves the collection of both qualitative and quantitative data in response to research questions or hypotheses. The procedures for both qualitative and quantitative data collection and analysis need to be conducted rigorously (e.g., adequate sampling, sources of information, data analysis steps) (Creswell, 2014).

Qualitative phase

In the interview, method data is gathered directly, and a skilful interviewer is needed. An interview is a two-way method that permits an exchange of ideas and information. There is face-to-face contact between interviewer and interviewee. Some confidential information can also be obtained (Prabhat and Meenu 2015:61). An unstructured open-ended interview guide was carefully developed and used for face-to-face interviews in the qualitative phase of this study; because the more open-ended the questioning, the better, as the researcher listens carefully to what people say or do in their life settings (Creswell 2003:8). The questions used for this purpose were broad and general; so that it helps students and key persons to give their opinions on possible approaches to promote the positive mental health of students in higher education. The strength of unstructured interviews is the almost complete freedom they provide in terms of content and structure (Kumar 2013).

Twenty-eight in-depth interviews were conducted by two data collectors among selected key persons and students by recruited and trained interviewers on the objective of the study; because researchers can conduct interviews face to face or by telephone with selected participants (Creswell 2003:10). The number of interviews was determined idea saturation suffices and this is when each additional interviewee adds little to nothing to what is

acquired. Two Master of Public Health recruited and trained on interview technique conducted the interview. One of them was an interviewer and the other was a tape recorder and note taker. One supervisor with qualification Master of Public Health recruited to supervise the overall qualitative data collection process. The research was also part of the study; where mainly conducted possible arrangements and observations on situations and environments of interview and discussion. This is because qualitative researchers look for the involvement of their participants in data collection and seek to build rapport and credibility with the individuals in the study. This phase of the study was conducted at one of five Universities selected for the survey phase of this study, and data were collected on the approved duration by the college of health studies of UNISA following ethical approval and completion of needed chapters from November to December 2018. The duration for each interview was 25-45 minutes. Saturation was reached while there is no new ideas emerging on the topic of interest and repeatition of previous ideas occurred and finally decided to stop the interview.

Quantitative phase

In the quantitative phase of this study, self-administered questionnaire constructed from emerged themes of qualitative data analysis was used to collect survey data. According to Prabhat and Meenu (2015:57) sometimes it may happen that existing research tools do not suit the purpose in some situations, so the researcher should modify them or construct his own. A questionnaire is a form prepared and distributed to secure responses to certain questions. It is a device for securing answers to questions by using a form that the respondent will fill by himself (Kabir 2016.). It is a systematic compilation of questions and an important instrument being used to gather information from widely scattered sources and where one cannot see personally all of the people from whom he desires responses or where there is no particular reason to see them personally (Prabhat and Meenu 2015:58). A questionnaire is a written list of questions, the answers to which are recorded by respondents. In a questionnaire, respondents read the questions, interpret what is expected, and then write down the answers (Kumar. 2013:138).

Structured and standardized tools such as **Mental Health Continuum Short Form** (MHC SF) developed and validated by Keyes (2002) were used to measure positive mental health. The mental health literacy tool developed by O'Connor and Casey (2015) was used to measure student mental health literacy. The **coping scale** developed by Folkman, &

Lazarus, (1988) was used to measure the coping styles of the students. Out of eight items used to measure coping style five of them were reverse coded to get overall score and to calculate mean score. Greater than and equals to 14 score was taken as the cut off point for good coping while less than 14 poor coping style.

The **Daily Spiritual Experience Scale** which was developed and tested for validity by (Underwood, 2011) used to measure the spirituality and religiousness of the students which protect individuals from different psychological problems. A **Multidimensional Scale of Perceived Social Support** developed by Zimet, Dahlem & Walker (1991) was utilized to assess the perceived social support of the students. A tool for assessing socio-demographic characteristics was also included. All these tools use a Likert scale. Likert scaling is widely used in survey research. They were developed in the 1930s by Rensis Likert to provide an ordinal-level measure of a person's attitude. Likert scales are called summated-rating or additive scales because a person's score on the scale is computed by summing the number of responses he or she gives. Likert scales usually ask people to indicate whether they agree or disagree with a statement or might be asked whether they approve or disapprove or whether they believe something is "almost always true". It is usually better to use four to eight categories, which can be combined or collapsed categories after the data have been collected, the number of categories at the end of a scale can be increased by adding "strongly agree," "somewhat agree," "very strongly agree," and so forth (Neuman 2014: 230-32).

The pretested tools in the pilot study on 10% of the sample students at higher education other than study areas were used in local language after checking for consistency by translation and translating back from original language to local languages (Amharic and Afan Oromo) and vice versa by bilingual language experts.

Two BSc nurse professionals (supervisors) and ten diploma nurse professionals (data collectors) who have had experience in quantitative data collections were recruited and trained prior to data collection for two days on objectives, sample selection procedures, tools, data collection techniques, and ethical issues of the study. Then they were assigned to selected schools/colleges of respective universities to facilitate data collection in a classroom-based approach. Collective administration is one of the best ways of administering a questionnaire is to obtain a captive audience such as students in a

classroom, people attending a function, participants in a program, or people assembled in one place. It is the quickest way of collecting data and ensures a very high response rate as you will find few people refuse to participate in your study. Also, as there is personal contact with the study population, the purpose, relevance, and importance of the study explained and any questions that respondents may have can be clarified, and it also saves money on postage (Kumar 2013:140). In addition Kumar (2013:138) indicated that if the study is about issues that respondents may feel reluctant to discuss with an investigator, a questionnaire may be the better choice as it ensures anonymity questionnaire is preferred than an interview. It is also less expensive and it offers greater anonymity.

3.7.7. Quality control measures

Training of data collectors, pre-testing of the study instrument and pilot study with some adjustments, close monitoring of data collection, and carrying out pertinent statistical analysis as suggested, were employed to ensure the quality of data.

3.7.8. Pilot study

It is important that test out a constructed research instrument before using it for actual data collection. Pre-testing a research instrument entails a critical examination of the understanding of each question and its meaning as understood by a respondent. It should be carried out under actual field conditions on a group of people similar to your study population. The purpose is not to collect data but to identify problems that the potential respondents might have in either understanding the way a question has been worded, the appropriateness of the meaning it communicates, whether different respondents interpret a question differently, and to establish whether their interpretation is different to what you were trying to convey. If there are problems, you need to re-examine the wording to make it clearer and unambiguous (Kumar 2013:64). For this particular study, a pilot study was conducted among 84 (10%) of the sample at Addis Ababa University (out sample universities for actual study) and an ample amount of lessons were gained and utilized for tool modifications on clarity and sequences. The result of the pilot study was not included in the actual study result.

3.7.9. Data processing and analysis

- Qualitative phase

Coding is a method that enables to organization and group similarly coded data into categories or families because they share some characteristic, the beginning of a pattern. Simply understand that coding is the transitional process between data collection and more extensive data analysis (Saldana. 2009:3). Audio taped interviews are transcribed and translated to English starting from the data collection period by the investigator and interviewer because data analysis in a qualitative study is an ongoing process during the research (Creswell, 2014:261). Open electronic coding was employed by Microsoft word comment. Both first cycle and second cycle coding approaches were used. In vivo coding, which is appropriate for all qualitative studies, but particularly for beginning researchers learning how to code data and studies that prioritize and honor the participant's voice (Saldana. 2009:74) was used in first cycle coding. Focused coding is used as a second cycle coding method. It categorizes coded data based on thematic or conceptual similarity and searches for the most frequent or significant Initial Codes to develop the most salient categories in the data corpus and requires decisions about which initial codes make the most analytic sense (Charmaz 2006:46-57). The goal of this method is to develop categories without distracted attention at this time to their properties and dimensions (Saldana. 2009:74).

Codes, categories, sub-themes, and themes developed and finally made illumination and illustration of the ideas or opinions by thematic analysis. Thematic data analysis in qualitative study was inductive and establishes patterns or themes (Creswell 2007:37). Its primarly objective is to simplify and organize complex data into understandable and manageable codes, categories and topics (Peel 2020:7). It is a method for determining, analyzing, and reporting themes within the text and a widely used technique for qualitative analysis. Through its theoretical freedom, the thematic analysis provides a flexible and useful research tool, which can potentially provide a rich and detailed (King, 2004; Braun, & Clarke, 2006). A theme captures something important about the data in relation to the research question and represents some level of patterned response or meaning within the data set (King, 2004; Braun, & Clarke, 2006).

- Quantitative phase

Data analysis embraces a whole range of activities of both the qualitative and quantitative types. It is a usual tendency in behavioural research that much use of quantitative analysis is made and statistical methods and techniques are employed. The statistical methods and techniques are employed. The statistical methods and techniques have got a special position in research because they provide answers to the problems (Prabhat and Meenu 2015:70).

The collected data were checked for completeness on daily basis, coded and cleaned manually, entered into EPI Info 2005 software, and then exported for analysis to the SPSS (statistical package of social science) software version 22. It was also be cleaned again by checking frequency and sorting in ascending and descending procedures. Frequency and percentage were used to check the prevalence and level of variables. Odds ratio with 95% confidence interval and p-value were used to determine the association between dependent and independent variables. Binary logistic regression is used to find out the individual effect of explanatory variables and suppress the confounding effect of variables. Those variables were observed to have a p-value <0.2 during bivariate analysis selected for multivariate analysis. Finally, the results were interpreted as a statistically significant association if p<0.05 and CI does not include unitary points.

3.7.10. Rigor

- ***Qualitative phase: Trustworthiness***

Trustworthiness or rigor of a study refers to “the degree of confidence in data, interpretation, and methods used to ensure the quality of a study” (Pilot & Beck, 2014). Lincoln and Guba (1985) suggest that qualitative studies should achieve trustworthiness in a study that represents as closely as possible the perspectives of the research participants. The other most common criteria used to evaluate qualitative research studies are credibility, dependability, transferability, confirmability, and authenticity (Stenfors, Kajamaa and Bennett. 2020) all adhered at all stages of this study. In this specific study, the researcher also used reflexivity (a thoughtful consideration of how a researcher’s standpoint can influence the research) and peer debriefing, meeting with supervisors or other research assistants engaged in qualitative research to dialogue regarding research decisions to maintain the quality of the study.

Credibility

Lincoln and Guba (1985) suggested five outline strategies for increasing the credibility of qualitative research: prolonged engagement and persistent observation of the researcher in the field, peer debriefing, the analysis of negative cases in the sense of analytic induction, appropriateness of the terms of reference of interpretations and their assessment and member checks in the sense of communicative validation of data and interpretations with members of the fields under study. It is also assured with the use of persistent observations; triangulation and member checks (where data and interpretations are tested with research participants) (Lincoln and Guba (1985). Lincoln and Guba (1985) also argue that credibility can be strengthened through the researcher making a conscious effort to establish confidence in the accuracy of interpretation, and the fit between description and explanation. In this study credibility was ensured by engagement and observation of the researcher in the field activities, peer debriefing every day and double checking of the data and interpretation with members of field activities.

Dependability

Dependability is checked through a process of auditing, based on the procedure of audits in the domain of financing. Thus, an auditing trail is outlined in order to check procedural dependability in the following areas: the raw data, their collection, and recording; data reduction and results of syntheses by summarizing, theoretical notes, memos, and so on. Summaries, short descriptions of cases, reconstruction of data and results of syntheses according to the structure of developed and used categories, findings, and the reports produced with their integration of concepts and links to the existing literature; process notes and materials concerning intentions and dispositions like the concepts of research, personal notes, and expectations of the participants; information about the development of the instruments including the pilot version and preliminary plans (Lincoln and Guba 1985). In this study, dependability was ensured by auditing the quality of raw data, their collection and audio-recordings, data reduction and results of syntheses by summarizing notes and memos.

Transferability

External validity or transferability or fittingness; but in terms of the transferability of findings from one context to another and fittingness as to the degree of comparability of different contexts, they outline criteria and ways for judging the generalization of findings beyond a

given context. Lincoln and Guba (1985) also suggested that it is assured with purposive sampling to illustrate pertinent issues and factors when comparing two contexts for similarity, and thick descriptions to provide evidence for making judgments about similarities between cases. To ensure transferability in this study, the researcher selected a representative samples for quantitative part and purposefully selected key informants and students' representatives to get adequate and best fitting opinions on the issue under study.

Confirmability

Confirmability is considered as a criterion for the quality of qualitative research and assured with the audit showing the connections between data and the researcher's interpretations (Lincoln and Gubba, 1985). To ensure the confirmability in this study, the researcher double checked the connection and interpretation of data by second qualitative research expert, following consensus discussions.

Authenticity

Authenticity means offering a fair, honest, and balanced account of social life from the viewpoint of the people who live it every day (Neuman 2014:213-14). Competent insider performance is an action that field researchers use to demonstrate the authenticity and trustworthiness of a study by having the researcher pass as a member of the group under study (Neuman 2014:218). To ensure the authenticity in this study, the researcher used his previous experiences campus life during undergraduate study and prolonged exposure with the students from his career experience as academic.

- ***Quantitative phase: Reliability and Validity***

Reliability and validity are concepts that aid in determing the veracity, trustworthiness, or acceptability of the findings (Neuman. 2014:213-14).

Reliability

Reliability refers to the consistency or dependability of a measurement technique, and it is concerned with the consistency or stability of the score obtained from a measure or assessment over time and across settings or conditions. If the measurement is reliable, then there is less chance that the obtained score is due to random factors and measurement error (Marczyk et al. 2005:103). So, the researcher should frame the items in a questionnaire in such a way that it provides consistency (Prabhat and Meenu 2015:10-24). According to Creswell (2009) reliability refers to whether scores to items on an instrument are internally

consistent, stable over time, and whether there was consistency in test administration and scoring. Measurement reliability means that the numerical results an indicator produces do not vary because of the characteristics of the measurement process or measurement instrument itself. Generally, it is the dependability or consistency of the measure of a variable and can be improved by clearly conceptualized constructs, use of precise level of measurement, use of multiple indicators, and use of pilot tests (Neuman 2014:213-14). In this study, all these mechanisms were utilized to ensure the reliability of the study.

Validity

Measurement validity is how well an empirical indicator and the conceptual definition of the construct that the indicator is supposed to measure fit together (Neuman 2014:213-14). Establishing the validity of the scores in a survey helps to identify whether an instrument might be a good one to use in survey research (Cress 2014:295). In more recent studies, construct validity has become the overriding objective invalidity, and it has focused on whether the scores serve a useful purpose and have positive consequences when they are used in practice (Humbley & Zumbo, 1996).

Construct validity: A type of measurement validity that uses multiple indicators and has two subtypes: how well the indicators of one construct converge or how well the indicators of different constructs diverge (Neuman 2014:213-14). Any measuring device or instrument is said to be valid when it measures what it is expected to measure and the questionnaire shall be framed accordingly (Prabhat and Meenu 2015:10-24). Indicate the major content sections in the instrument, such as the cover letter providing a useful list of items to include in cover letters), the items (e.g., demographics, attitudinal items, behavioral items, factual items), and the closing instructions. Also mention the type of scales used to measure the items on the instrument, such as continuous scales and categorical scales to increase the validity of the tool (Cress 2014:295). The pilot test and the above approaches were maintained throughout the study to ensure reliability and validity. Reliability and validity checked for Mental Health Continuum Short Form, mental health literacy tool, and other tools used in the quantitative phase of this study.

Generalizability

It means how best the data collected from the samples can be utilized for drawing certain generalizations applicable to a large group from which the sample is drawn. Thus a research

design helps an investigator to generalize his findings provided he has taken due care in defining the population, selecting the sample, deriving appropriate statistical analysis, etc. while preparing the research design. Thus a good research design is one that is methodologically prepared and should ensure that generalization is possible (Prabhat and Meenu 2015:10-24). Hence, to ensure generalizability the researcher emphasized clearly formulating the research problem, defining the population, used appropriate sample selection and statistical analysis.

3.8. Strategy Development and Description

In the third phase, data from the findings of the two phases of this study, as well as literature were used for the development and description of strategies to promote the mental health of students in higher education. Deductive impressions and descriptions were used to develop and describe strategies for the promotion of mental health of students in higher education by connecting data from phase one and two study results. Because connecting data is one approach of integrating different (e.g. a quantitative survey and qualitative interview dataset) forms of data integration (Creswell, and Plano-Clark. 2018.) and also data from the literature review were utilized. This phase dealt with development and description of strategies to promote the mental health of students in higher education. Data from phase one and phase two were connected and data from literature were used as the main resources for this work. The detail is presented in chapter seven. Mental health promotion strategies adapted (Jackson, Perkins, Khandor, Cordwell, Hamann & Buasai 2007:77) are depicted in tables 9-13.

3.9. Ethical considerations

3.9.1. Protecting the rights of the respondents

Autonomy, justice, benevolence, and non-maleficence of the study were ensured in this study. Participation in the study was fully voluntary and at any stage of the study, the participant has a right to give up. No respondent was coerced into answering any question that an informant does not want to answer. Informed oral consent was obtained prior to data collection in the survey phase of this research project; while written consent was sought from face-to-face interview participants. Each respondent was informed about the objective and benefits of the study. Remuneration is paid after the completion of data collection but only for daily basic consumption in a way that might not benefit beyond and result in bias.

All information was treated confidentially and no names and other identifiers were mentioned in the report. Collected data were kept locked up by the researcher to which only the researcher will have access. Each respondent was assigned a code number for data processing purposes.

3.9.2. Protecting the rights of the institution

The ethical approval and clearance (REC-012714-039 and HSHDC/348/2014) were obtained from the Department of Health studies, UNISA Ethical Review Committee. Authorities of selected Universities and concerned college or school directors were contacted and gate keeping permission certificate (Ref: Aca/Pro/0088/07) secured at all levels and attached to the departments from which participants were selected.

3.9.3. Informed consent

In order to give their informed consent, participants must be fully informed about the study, understand the material, and have the power of free choice, enabling them to consent to or decline participation voluntarily. Researchers usually document the informed consent process by having participants sign a consent form (Polit and Beck, 2010:132). Informed verbal and written consent secured from the study participant in the survey phase and qualitative part of this study respectively.

3.9.4. Confidentiality and anonymity

Confidentiality means that although researchers know who has provided the information or are able to identify participants from the information given, they will in no way make the connection known publicly; the boundaries surrounding the shared secret will be protected. The essence of the matter is the extent to which investigators keep faith with those who have helped them. It is generally at the access stage or at the point where researchers collect their data that they make their position clear to the hosts and/or subjects (Kim, 2021).

The essence of anonymity is that information provided by participants should in no way reveal their identity. A participant or subject is therefore considered anonymous when the researcher or another person cannot identify the participant or subject from the information provided. Where this situation holds, a participant's privacy is guaranteed, no matter how personal or sensitive the information is. Thus a respondent completing a questionnaire that bears absolutely no identifying marks names, addresses, occupational details, or coding

symbols is ensured complete and total anonymity (Kim, 2021). Hence anonymity was maintained in this study by omitting identifiers of the participants.

3.10. Scientific integrity

The researcher's integrity must be absolute. It is often the case that researchers will negotiate publication rights with the sponsor in advance of the research and what confidentiality the researcher must respect (Cohen, Manion, and Morrison 2007:64). In this study the researcher abide by the standards of honesty and integrity in science. All sources were duly acknowledged.

3.11. Conclusion

In this chapter concepts related to a specific research design and methods used in this study were presented. Population and specific sample selection, data collection, and analysis procedures were also articulated. Trustworthiness and ethical considerations followed in this study were discussed. In the next chapter study findings from the qualitative phase will be presented in detail and tools for the quantitative phase will be developed.

CHAPTER 4: DISCUSSION OF QUALITATIVE RESULTS AND LITERATURE CONTROL

4.1. Introduction

In the preceding chapter, concepts related to employed specific theoretical models, preferred research design, phases of the study, and followed specific research methods were discussed in detail. Population and specific sample selection, data collection, analysis procedures, trustworthiness, and ethical considerations followed in this study were also discussed. In this chapter, findings of the qualitative phase study were presented and discussed in detail and literature control was done to validate or refute the findings of this study.

This chapter addressed the first objective, stated as;

- To explore students' mental health promotion strategies or approaches in higher education institutions.

4.2. Summary of data collection and analysis methods

4.2.1. Data collection

In-depth interviews were carried out by two recruited and trained data collectors in one university for the purpose of conceptualization. The chosen university was preferred for being middle or a second-generation university in the country which is also an ideal in representing others. After written consents was obtained from all study participants, interviews were conducted and audio-taped.

All twenty-eight participants were contacted and interviewed after getting permission from their university official. All participants received a summary of the study and then signed an informed consent form before the interview takes place. Interviews were conducted at the natural settings of the students and workplace for other key informants where privacy and confidentiality were ensured. Data were collected from November to December 2018. The duration for individual in-depth interviews was 25-45 minutes. Data were collected until idea saturations were reached.

4.2.2. Data analysis

Data were analyzed using the six-phase framework for doing a thematic analysis following verbatim transcription of audio file and coding of the data corpus. Open electronic coding was employed using Microsoft word comment. Both first cycle (Vivo coding) and second cycle (focused coding) coding approaches were used (Saldana. 2009:74). The coding and findings were validated by two co-coders who are qualitative research experts that independently coded each line of text according to its meaning and content. Finally, the researcher and independent coders reached consensus on the themes and sub-themes generated from the analysis.

4.3. Result of the in-depth-interview

The research results presented in two sections: the profile of participants and the actual research findings.

4.3.1. Profile of participants

The researcher used study participants both male and female gender inclusion and all other categories were considered purposefully. The total number of participants were twenty-eight (28). This number was divided into two categories namely, *students* and *key informants*. The number of participating students was ten (10) (table 2) and the key informants entailed:

- four university officials/students' services officers,
- seven teachers,
- two counsellors, and
- five students' health care providers (table 1).

Table 1: Participants' (key informant) demographic profile

Participant's code	Age	Gender	Work experience in years	Office	Educational status
T1F	43	Female	18	Department staff office	MSs
T2M	32	Male	8	Department staff office	MSc
T3M	24	Male	1	Department staff office	BSc
T4M	36	Male	10	Department staff office	MSc
T5M	38	Male	9	Department staff office	MSc
T6M	26	Male	2	Department staff office	BSc
T7F	30	Female	5	Department staff office	MSc
HCP1M	48	Male	22	Student clinic	MSc
HCP2M	38	Male	12	Student clinic	MSc
HCP3M	30	Male	6	Student clinic	BSc
HCP4F	35	Female	9	Student clinic	BSc
HCP5F	32	Female	7	Student clinic	BSc
C1M	36	Male	12	Counselling centre	MSc
C2M	34	Male	10	Counselling centre	MSc
SSP1M	34	Male	9	Student service centre	MSc
SSP2M	48	Male	19	Student service centre	PhD
SSP3M	30	Male	5	Student service centre	BSc
SSP4F	32	Female	6	Student service centre	BSc

Ten students' representatives from different departments and years of study were included in the study (Table 2).

Table 2: Participants' (students') demographic profile

Participant's code	Age	Gender	Year of the study	Department	Remarks
S1MMW2018	25	M	4th	Midwife	
S2FA	24	F	4th	Accounting	
S3FL	20	F	3rd	Law	
S4FP	22	F	3rd	Pharmacy	
S5MN	19	M	2nd	Nursing	
S6ME	25	M	4th	Economics	
S7MM	26	M	5th	Medicine	
S8MN	23	M	4th	Nursing	
S9ML	20	M	2nd	Language	
S10M	22	M	4th	Marketing	

4.3.2. Thematic presentation of research findings

Thematic analysis is "the process of identifying patterns or themes within qualitative data" (Maguire & Delahunt 2017:3353). Braun & Clarke (2006) provide a six-phase guide which is a very useful framework for conducting this kind of analysis. This six-phased guide for thematic analysis was adhered to in the analysis of interview transcripts of this study. These six phases include;

- Becoming familiar with data,
- Generating initial codes,
- Searching for themes,
- Reviewing themes,

- Defining themes, and
- Writing up followed (Maguire & Delahunt 2017).

Overall interrelated and connected forty-four (44) codes, nineteen (19) sub-themes or categories, and five (5) themes were generated from coding of all transcripts and thematic analysis. These themes included mental health problem experiences and potential causes, mental health problem effects on students, the need for mental health promotion programs or strategies, suggested approaches for mental health promotion strategies, and needed resources and services (table 3). For purposes of this study, only the themes and sub-themes will be discussed in detail. Furthermore, each theme stated, was described, and supported with quotes derived from the transcripts.

The findings were shared with a researcher who is an expert in qualitative studies. Following discussions with the experts, consensus was reached regarding the findings and analysis of the data. The results of this qualitative phase study was not only used for the development of a questionnaire for the quantitative phase, but also used as an input for the development of the mental health promotion strategies for students in higher education in Ethiopia.

Table 3: Summary of themes and sub-themes or categories

S.N	Themes	Sub-themes or Categories
1.	Mental health problems and contributing factors	Behaviours
		Perceived causes
2.	Mental health effect	Effects on academic performance
		Effects on their life
		Substance abuse
3.	Mental health programs	Self-support
		Help from others
4.	*Suggested support for the promotion of students' mental health*	Social support
		Financial support
		Academic support
		Material support
5.	Required resources and services	Interest-based university and field of study
		Supportive campus services
		Infrastructure
		Socialization activities
		Secure and safe campus

		Substance free campus environment
		Substance control and prevention
		Collaboration

The themes and sub-themes in table 3 are discussed next in detail.

4.3.2.1. Theme 1: Mental health problems experiences and contributing factors

Sub-theme 1: Students' behaviours (mental health problems)

In this first theme of analysis, mental health problem experiences among students in higher education institutions and potential factors that contribute to these mental health challenges are presented. All participants reported having had experiences of coming across students with minor to severe psychological and mental health problems on the campus. The participants' experiences in this study supported findings by Spear, Morey & van Steen (2020) that nearly all respondents had encountered students with mental health problems.

A female teacher participant shared her experiences as follows:

> "… *I had lots of experiences. Many students are likely to have stress on the campus at different times*".

A male counsellor added on this with the statement below:

> *"… Since my job area is related to such issues, I have been in touch with such students who have mental illness cases although the severities of their cases are different".*

This finding is supported by different survey studies on mental health problem amongst students in higher institutions in Ethiopia; One study found that more than one-third of college/university students suffered from common mental disorder (Mekuriaw, et al, 2020:8) and more than half of the students reported to have mental distress (Kelemu, Kahsay, and Ahmed. 2020:1). Taking a life-course perspective implies the recognition that mental health at each stage of life is influenced by both unique and common factors at different stages of life (World Health Organization and Calouste Gulbenkian Foundation, 2014:40). van Agteren, Woodyatt, Lasiello, Rayner, Kyrios, (2019:1) provided evidence of high levels of psychological distress and low levels of mental wellbeing and resilience among the tertiary

students' population. Looking at scores for students displaying moderate or above symptoms of psychological distress, it was found that 65% of the student population met the requirements for at least one of the three types of distress (anxiety, depression, and stress).

Sub-theme 2: Perceived causes

Based on the reports of study participants, potential contributors of mental health problems of students in the higher education institutions can be categorized into two; those played a role before joining university (non-campus related factors) and after joining university (campus-related factors).

A number of students were diagnosed with a mental illness and struggle with mental health and addictions problems while they are pursuing their post-secondary education due to a variety of reasons (MacKean. 201135). A number of specific risk factors contribute to poor mental health among university students (Deasy, Coughlan, Pironom, Jourdan, & Mannix-McNamara, 2014).

Non-campus-related factors

Auerbach, Alonso, Axinn, et al. (2016:1) concluded that mental disorders are common among college students, have onsets that mostly occur prior to college entry, in the case of pre-matriculation disorders are associated with college attrition and are typically untreated. Students are sometimes overwhelmed by the workload and their previous academic experiences may not have fully prepared them for independent study. Instilling good academic skills right from the start is vital for student success and their wellbeing (GuildHE. 2018:6).

Mofatteh (2020:36) identified risk factors associated with stress, depression, and anxiety among university students that should be identified early upon entry into university to provide them with additional mental health support and prevent exacerbation of risk factors (six different themes of risk factors were identified: psychological, academic, biological, lifestyle, social and financial). Some of the mentioned factors before joining university are poor family upbringing, substance use, genetics, economic problems of family and culture of their community.

A male teacher stated the possible contributor as:

> "… *The society they came from plays a role; they came from a community of similar culture and social constructs which are completely different from culture and socialization on campus. It may be from a family background where they grow up that may be inherited biologically and behaviourally*".

It was also added by another senior male teacher that:

> "… *commonly, such problems emerge from problems during an adolescent stage like child-rearing condition, substance abuse, and having friends with bad behaviour. But the main cause for their mental health problem is from financial support problem".*

Being a female student was more likely to contribute to being mentally distressed compared to male students (Kelemu, Kahsay, and Ahmed. 2020:1; Dachew, et al, 2015:1). Financial pressures and low socio-economic status are also associated with higher levels of psychological distress and mental disorders among university students (Cvetkovski et al., 2012; Eisenberg et al., 2013). Individuals with a previous mental health problem experienced significantly lower levels of well-being than those with no previous mental health problems (Gorczynski, Sims-schouten, Hill and Wilson. 2017:118).

Campus-related factors

It is certainly a widely-held perception that colleges and universities can be high-stress environments (MacKean 2011:35). Good mental health is integral to human health and well-being. A person's mental health and many common mental disorders are shaped by various social, economic, and physical environments operating at different stages of life (World Health Organization and Calouste Gulbenkian Foundation, 2014:08). Students in different years of studies deal with different risk factors from the time that they enter the university until they graduate (Mofatteh 2020:61).

Those factors contributing to mental and psychological problems after joining university are regarded as campus-related causes. Some of these campus-related factors include academic pressure, interrupted services like electricity, water, and internet access, poor students' services, poor socialization, insecure and unsafe living condition and insufficient support given from different bodies.

An experienced male teacher explains this issue as:

> *"… in the context of our campus, what I think as a major cause for the psychological problem of the student is [students do not have] … personal or academic advisors and [academic advisors] … who are assigned for students are not doing what is expected from them."*

Another teacher stated campus related factors as follows:

> "*Most of the students get out from their family for the first time, and far from their family to join university, a new environment where nobody knows them. This by itself has a great effect on their mental health status. Because adjusting self to such environment in the short time is difficult and there is also home-sickness and longing for family and friends at home town or village*".

Another participant stated the potential cause as:

> "*The [other] … cause is our approaches especially the teachers' approach plays a great role [where] … some teachers intentionally induce stress on students. They coerce students if they do not participate in class. The other cause of stress is a lack of adequate information on campus life challenges and how to manage them. So, the majority of causes for psychological disturbance of the students are from campus problems. Inability to address issues that should be addressed on students' arrival results in unnecessary sacrifices by the students. The inability of concerned bodies for not fulfilling what is expected from them resulted in such problems*."

Another potential contributor was stated as:

> "*Inconsistent and under-qualified services like food and dormitory contribute to students' complaints and are sources of stress. Again, security of their living environment by itself has a great role on students' psychological wellbeing*".

Another participant added that:

> "…*by the way, students can get in stress from an exam or academic load they have because there is no atmosphere that helps them to be stable and focus only on their academic work*".

A male counsellor added on this with the statement of:

> *“ … I have been encountering those students whose mental case is mainly related to academic stress”.*

The participants’ understanding on campus related contributing factors is supported by Dachew, et al, (2015:1) study in one Ethiopian University report that never attending religious programs, having financial distress, lack of interest towards their field of study, low social support, and having a family history of mental illness were significantly associated with mental distress. Academic pressures and performance expectations are significant issues facing students (Deasy, Coughlan, Pironom, Jourdan, & Mannix-McNamara, 2014; Kruisselbrink, 2013). Student expectations of university life are often inaccurate and can lead to issues of poor mental health. Research pieces of evidence in Ethiopian Universities and a systematic review and meta-analysis reported that khat chewers were found to be more vulnerable to developing the common mental disorders and psychological distress than non-chewers university students (Mekuriaw, et al, 2020:8; Dachew, et al, 2015:1; Kelemu, Kahsay, and Ahmed 2020:1). An important area that emerged from the research was anxiety around finances and living costs. In particular, students with higher course costs found an inability to concentrate on their studies (GuildHE 2018:31).

Sub-theme 3: Behaviours of students with mental health problems

Common signs and symptoms of students with mental health problems mainly considered as behavioural problems were explored and mentioned in this study.

One female teacher described behaviour of students with mental health problems on the campus as:

> “ … *he used to leave a class whilst a teacher is teaching; getting in conflict with a teacher; late coming for an exam or even absenteeism from exam talking alone on the street, he came to the department office, again and again, requesting his missed exams to be graded without taking the remedial exam*”.

Another young male teacher described his experiences on students’ behaviours as:

"Yeah, the one I know is not as good as others on their activity and participation, he is really shy, does not have confidence, seems unhappy, depressed, and feel discomfort in the situations".

On another side, undiagnosed or untreated mentally ill students are at high risk of harming themselves or others (Mekuriaw, et al, 2020:8).

4.3.2.2. Theme 2: Effects of students' poor mental health

Study participants identified academic and non-academic consequences among the students as being due to mental health problems in higher education institutions. Because signs and symptoms of the mental health problem are considered as a maladaptive behaviour of the student, it's likely left unrecognized and untreated which may end in severe mental disorders and maltreatments like discipline measures and avoidance. Different risk factor groups can have different degrees of impact on students' stress, anxiety, and depression (Mofatteh 2020:36). When compared with complete or flourishing mental health, moderately mentally healthy and languishing adults exhibited substantial impairment. Languishing and moderate mental health are associated with high limitations of daily living, more reductions in work productivity due to cutbacks and lost days of work, more chronic physical disease, and poorer psychosocial functioning. Thus, the mental health continuum also distinguishes the level of impairment within the category of the mentally ill (Keyes 2007:100).

Sub-theme 1: Academic-related consequences

As agreed by all study participants, one of the major effects of students' mental health problems is low academic performance or academic dismissal. They do not attend and complete their courses and they were finished their course many delays if any.
One study participant stated this as:

"*Compared to other students their academic performance is very low. This is due to one they do not have good interaction with their classmates and teachers. So they miss information and lack understanding of the subject matter*".

GuildHE (2018:5) supported this finding by asserting that students with good mental wellbeing will thrive in higher education. They are more likely to stay in a provider, academically successful, and enjoy themselves. Student survey data from both the U.S. and Canada certainly indicate that many students describe experiencing stress, anxiety, and sleep difficulties and that these have a negative impact on their learning and academic performance (MacKean 201135).

Sub-theme 2: Other consequences

Among the effects of mental health problems on students in higher education is discipline measures taken on students because misbehaviours emerged due to illness.

A senior female teacher described the experience of such student as:

"I came across a student who was [disciplined] … because of her misbehaviours from her mental health problem; we understand she had a mental health problem and the need for mental health care and academic support rather than disciple action. We were agued on that for a long time and finally because she had repeated disciple records and became a treat for her classmate and friends sharing a dormitory; we decided to penalize her for one-year punishment".

In addition, the risk of causing harm on self and others causing injury to students having mental health problems was described by a senior male teacher as:

> *"Commonly they are impulsive and proactive; sometimes they get in conflict with teachers or other students; even I know a student who tried to harm herself".*

Stigmatization is also likely among students with mental health problems on campus.

A senior teacher participant noted as:

> *"In addition, they may be isolated because of their strange behaviour".*

Aldiabat, Matani, and Navenec (2014: 213) supported the participants' description of consequences of mental health problems by confirming that mental illness among university student leads to negative consequences on individuals, families, and community.

Undiagnosed or untreated mentally ill students are also at high risk of harming themselves or dropping their educational programs, raising the unemployment rate, leading to extra burden on the families and society. A systematic review and meta-analysis stated that great risk of years lived with a disability could hinder the learning and creative potentials of the students. This can be easily understood from the high prevalence of CMD among Ethiopian university students and it can also have a great impact on the country's future economic, social, and overall developments (Mekuriaw, et al, 2020:8).

4.3.2.3. Theme 3: Campus mental health programs

Sub-theme 1: The need for students' mental health promotion

As one component of health, mental health needs to be promoted among the entire population and it is much needed particularly among the young age group of students in higher education institutions.

All of the participants strongly agree that something has to be done with the mental health or psychological wellbeing of students in higher institutions.

One participant justified the need for students' mental health promotion on the campus as:

> "*yeah [it has to be promoted] … because of the campus-related contributing factors [of students' mental health problems] … in campus environment".*

Another study participant added:

> "*There is no question on its importance; because even if they feel minor problem there has to be somebody and systems to address their concern and they also do not expose to different risky behaviours like substance abuse".*

Another participant pinpointed and suggested the following:

> *"Most of the students are for the first time away from their family to join university, so they get into different psychological disturbances during adaptation. So, establishing mental health program has great importance in higher education but is currently neglected in our country".*

The absence of campus mental health programs for the students to seek help from, and feel comfortable to attain mental wellbeing was well-articulated by study participants.

A male senior teacher reiterated the same view*:*

> ***"****The other one is there are no functional mental health programs and counselling centres for students in our campus where the students know and use to share and discuss all aspects of their problem. I think these are some of the factors."*

The identified need for mental health promotion is supported by Pacheco et al, (2017:369) where evidence-based interventions and psychosocial support are needed to promote mental health among Brazilian medical students. In Paula de, Breguez, Machado, & Meireles (2020:8739) it was also stated that the high prevalence of mental disorders in university students highlights the importance of strategies for prevention, diagnosis, and treatment in this population. In another Systematic Review and Meta-Analysis Study, it was found that depression is common in University students and strongly recommended the importance of screening of this vulnerable population and taking appropriate interventional measures to prevent the complications of depression (Sarokhani, et al 2013:7). A Systematic Review and Meta-Analysis (Mekuriaw, et al 2020:8) concluded that although lots of attempts have been made to reduce the highly prevalent CMD among youths and students, a more holistic and integrated effort is required to minimize its burden and future impacts. Intervening drug abuse like kchat chewing is also highly recommended. These findings highlight the need to address mental health problems among university students and to initiate interventions (Wörfel, et al 2016:125).

Browne, Munro and Cass (2017:56) support the participants' view that at present there is no high-level government direction provided to Australian universities regarding their role: broadly, in promoting and enhancing good mental health and wellbeing across the institution and specifically, in supporting of students who may be experiencing distress or mental health difficulties. Knowledge about the prevalence and determinants of mental health is important for informing promotion and intervention programs (Gilmour 2014:3).

Sub-theme 2: The need for students' mental health promotion

All study participants agreed on the need for students' mental health promotion in higher education institutions with its short and long-term impacts. There are positive consequences of addressing mental health issues for individual students, their friends, and families, the broader campus community in the present and into the future. There is mounting evidence that taking a systemic approach to promote mental health and well-being is likely to have the greatest impact on all students (MacKean 2011:36).

A 24 years old male care provider stated this as:

> *"The mental state of the … students in higher education should be promoted; because one; they are the future generation that will take country responsibility so we need to keep their mental health optimal and the strategies should be there to promote their mental health to the optimum or higher state, so it should be*".

A male teacher of 38 years old also described the need and importance of students' mental health promotion as:

> "*Yeah, it is very important but what was neglected in the campus is students' mental health issue. For example, from the definition one component of human health is mental health, not only physical it also needs mental wellbeing. One of the causes of their psychological disturbance is poor social and environmental on-campus arrival or enrolment. There is no question on its importance; because even if they feel minor problem there has to be somebody and a system to address their concern and they also do not expose to different risky behaviours like substance use and unexpected pregnancy".*

The participants' descriptions on the need for mental health promotion among the students in higher education institutions is congruent with the World Health Organization and Calouste Gulbenkian Foundation, (2014) that a significant gap still exists in research to measure the problem, and in strategies, policies, and programs to prevent mental disorders. There is a considerable need to raise the priority given to the prevention of mental disorders and to the promotion of mental health through action on the social determinants of health. There is a need for evidence-based interventional strategies that would be helpful to reduce the burden of mental distress of students (Kelemu, Kahsay, and Ahmed 2020:1). The literature demonstrates that policy change is necessary to fully support students with

psychiatric disabilities and mental health concerns (Goodman 2017:31). Actions that prevent mental disorders and promote mental health are an essential part of efforts to improve health and to reduce health inequities (World Health Organization and Calouste Gulbenkian Foundation, 2014). These groups with a higher level of distress may require different approaches to mental healthcare than has previously been provided (Gorczynski, Sims-schouten, Hill and Wilson 2017:118).

Sub-theme 3: Role of Self-support and help from others

Currently, universities are failing to meet the needs of students with mental health concerns. With a majority of students with mental illness dropping out, it is incontestable that the current structure of service provision is insufficient (Kreider et al., 2015:6).

A 38 year old female teacher participant described this as:

> *"To start from a student; first it is the student who has to expose himself/herself to different conditions which are sources of the stress. Rather they have to focus only on their course work despite some minor problems might face. You know they are out of family supervision and support from prominent others on campus".*

4.3.2.4. Theme 4: Approaches suggested for the promotion of students' mental health

One major supportive approach suggested for the mental health wellbeing of students regardless of the presence or absence of their mental health problems in higher education institutions, was mental health-promoting activities. In addition for the achievement of this consistent assistance from teachers and relevant others, resources and supports needed, and the role of different bodies and approaches for increasing help-seeking intentions among the students were suggested.

Widespread educational campaigns need to be implemented across the college and students to increase knowledge about mental illness and reduce stigma towards mental illness and mentally ill persons by educational interventions and training which will benefit

the community at large (Lakdawala and Vankar 2016:473). In a review by Colizzi, Lasalvia, and Ruggeri (2020:1) it was concluded that it would be unrealistic to consider promotion and prevention in the mental health responsibility of mental health professionals alone. Integrated and multidisciplinary services are needed to increase the range of possible interventions and limit the risk of poor long-term outcomes, with also potential benefits in terms of healthcare system costs.

In the next sections the need for mental health promotion among the learners, suggested approaches, required resources, and inputs, needed support and roles to be played by different bodies that were suggested by the study participants are described.

Sub-theme 1: Suggested approaches for mental health promotion

The participants suggested approaches to promote the mental wellbeing of the students in the higher education institutions through a wide range of support, well-established services, and different individuals and institutions playing their respective roles. These facts have several implications and can be taken into consideration by administrators, educators, and healthcare providers in academic institutions to prevent mental illness or promote mental health among their students (Aldiabat, Matani, and Navenec 2014: 213).

Administrators, educators, and healthcare providers can play a significant role in developing collaborative, multidimensional, and culturally sensitive preventive mental health programs to create a supportive academic context that promotes students' psychosocial wellbeing, improves their productivity, enhances their success, saves their souls, and money, and protects families and communities (Aldiabat, Matani, and Navenec 2014: 213). It has been clearly demonstrated that more comprehensive services will be needed to support students with mental health concerns to succeed in higher education institutions, and innovative institutional, curricular and service developments will be instrumental in cultivating healthy academic communities (Manthey et al, 2015).

In the next sections, these approaches are presented in detail.

Sub-theme 2: Supports needed for mental health promotion

As identified from the in-depth interviews of this study a wide range of support were identified as one approach for mental health promotion of students in higher education institutions. There is also increasing evidence that students with mental health problems who receive appropriate support are: successful in postsecondary education; experience decreased hospitalization rates; and have increased levels of self-confidence, self-efficiency, and empowerment (Martin, 2010:272). While it is important to note that all students are at risk of poor wellbeing, some cohorts of students might need targeted support in order to thrive in higher education (GuildHE. 2018:27).

Social support

Socialization in the campus environment has a great role for students to share their difficulties with friends and help in making them free from any kind of stress. The students by themselves could be the best sources of social support for each other.

There were two different opinions among the study participants on the role of families in maintaining the mental wellbeing of the students in higher education institutions. Majority of the participants stress the importance of strong family in the mental health of students in higher education institutions.

A male teacher who strongly suggested this, said:

> *"Students' family has a major role and responsibility in promoting students' mental health in the campus. The family has to follow the condition of their children at campus timely in a special approach. Rather than enjoying their children's joining university, they have to also worry about what they are doing at the campus; about his/her health; overall living conditions at campus? A family should follow their children at the campus for such cases".*

He also stated on the current loose follow-up of family on their children at the campus this way:

"In our context family only visit their children on entry and on exit, and there is no visit of their children in between these times. The family follows up will benefit students to address their social, academically and health problems that might result in psychological and mental health problems in campus early and eventually I think these protect students from different stress".

A female teacher added on this as follows:

"There has to be close following up from their family, they have to have friends' phone number and should cross-check because their children likely to cheat them. At least they have to call the department head and ask about the performance of their child. But to our context, there is no such trend in reality. Strict family follow up has played a great role in protecting students from risk behaviours and in promoting the positive mental health of the students on campus"

Another senior teacher stated the following:

"*Family has a major role in this and there has to be a mechanism by which a family follows-up their children in campus".*

On the other hand, some study participants did not agree with the importance of strong family follow-up at the campus to maintain mental wellbeing of students in higher education institutions. They believe that once they reach campus, it is the university's responsibility to take every measure to promote their mental health and create a healthy campus environment.

One male teacher describes this follows as:

"To me, families do not have any roles rather university should play this in place of the family. Once a family sends their children to university; it is up to the university to cultivate in all aspects and finally grant them a profession. Maybe the family's role is on raising them with discipline and supporting that student financially but cannot closely follow because of distance. But it is the role of the university to shape and sharpen towards the profession that he/she should be. University already handover all the responsibility from family and the student is also responsible to the university".

Mofatteh (2020:61) supported this idea by stating that Universities need to continue to de-stigmatize mental health in university campuses to enable students to receive more in-campus support by providing designated time for positive mental health activities such as group exercise, physical activities, and counselling services. Another study in Ethiopian University also supported this that problem in adjustment with a roommate, being alone, lack of family support, and inability to socialize with peers associated with students' stress on campus (Suleyiman and Zewdu 2018:29).

Financial support

All the study participants mentioned the need for financial support for students in higher education institutions because the majority of the students came from a family with low incomes. It was also reported that students especially females are being suffered from financial problems and are also being exposed to different risk behaviours to get money for their living expenses.

One senior male teacher stated the issue as follows:

> "*The other information I heard is that female students are getting out for dating during night-time to get money and overcome their financial problem and to fulfill all things dressing and cosmetics like their friends who getting adequate support from their family*".

GuildHE (2018:31) support this participants' view as when asked about the impact of bursaries, students have generally found them a useful contribution to their studies particularly when there has been no parental support. Some providers also noted that they had an impact on attainment and retention. Providers identified budgeting help as one of the more important factors in student wellbeing, and students themselves raised it as a fundamental issue in the survey and interviews.

Academic support

One of the areas that is possibly a source of stress and psychological distress to students was identified as the absence of academic support to students with special needs. Almost all participating teachers and students witnessed no implementation of academic advising by assigned academic advisors for students who were notified about the availability of advisors at the beginning of each year for newly enrolled students.

As stated by all participants, teachers have crucial roles in promoting the mental wellbeing of the students because they have close contact and relationship with the students, and have a chance to identify, support, and link students with mental health problems to relevant services.

A teacher participant suggested discharging teachers' role as:

> *"Teachers have their own role in causing or in reducing stress among students because it is we teachers who hand over (probably meaning receive) these students from their parents. So, students are our children; so, we have to guide them, teach them, approach them as a family and teach them not only academic we have to advise them on all aspects of life all the time because the student who got advice is not the same to those who did not".*

Another teacher also stated a teachers' role as:

> *"Teachers' role is also high in returning students from risky behaviours. Again teachers are able to trace students who are economically challenged and link them to the concerned body. Teachers have to try their best not to put students under stress just by encouraging and motivating them to struggle for better and avoiding any bullying behaviour. We have to approach them sisterly and brotherly; [so that] … they can consult us on everything. Even they consult us about their family problems".*

Assistance given for students with psychological or mental health problems from teachers on campus is very low. The majority of the participants witnessed that they did not received the support they deserve from them.

A senior teacher who encountered a student with signs and symptoms of anxiety shared his experiences as follows:

> *"At that time I did not help her but what I did was I advised her to do her exam feeling relaxed; even I did not counsel her after the exam. But I think such conditions are*

stresses that need minor support. I did not [recognized] … what was happened and I thought it would be good if I linked her to counselling centres".

A statement from another participant was:

"It has to be worked on teachers' awareness on how to handle their students because every teacher has a responsibility to address their students' concern early not only academic but also other issues. So, academic advising should be well emphasized by the departments and better awareness given on this topic to all teachers".

Baik, Larcombe & Brooker (2019) highlight the importance of academic teachers and their teaching practices play in supporting student wellbeing. On three categorized or themes: the first one is implementing empirically supported interventions into the classroom and/or curriculum that support student health and well-being. The second is adapting the pedagogical approach to support student health and well-being. And the third is supporting student health and well-being by promoting faculty understanding and knowledge of mental health. But, students often required support services that were specific to the assessment method of their course. For example, one performance-based provider described students who were experiencing performance-related anxiety, and therefore would not complete their assessments. In order to try and mitigate this, the provider works with counsellors who specialize in performance anxiety (GuildHE 2018:16).

Besides academic support teachers have a role to identify and support students with mental health problems. Knowledge and skills gaps were mentioned among teachers and others on how to identify and support or link psychologically disturbed, depressed, or stressed students.

Material support

It was suggested to include material support besides financial support.

A female teacher stated as:

"Even financial support by itself is not enough; for example at another campus of our university female students get sanitary cloths (modes) every month. Hence, better if it reached all included pocket money and additional support like a pen, exercise book,

paper and especially photocopy services should be provided which help them in coping with financial problems".

The need of giving special attention to female students was described by the study participants as:

"[Support in items such as clothes also needed] … because there are such a needy female students who unable to change their clothes from year to year".

4.3.2.5. Theme 5: Required resources and services

In the context of Ethiopian higher education institutions students placed to universities and universities are fulfill all needed services like food and dormitory for the students where students sign cost-sharing to pay back the services and tuition fee utilized in campus after graduation through services obligations or cash payments. Interest-based university and field of study assignment or placement is one activity in place to promote mental wellbeing of the learners. Required resources and inputs imply to all institutional services being provided to the students and need to be in place for the better mental wellbeing of the students. Besides wide ranges of support by different bodies these institutional students' services such as recreational areas, socialization activities, food services, facilities, and safe and secure campus environments to be fulfilled by the university were suggested to be included as required resources and inputs for the promotion of students' mental wellbeing. Here different individuals and offices can play a great role in availing and maintaining these support and services in order to promote and maintain the psychological wellbeing of the students in higher education institutions. Next these needed services are recommended by the study participants and roles presented in detail.

Sub-theme 1: Interest-based University and field of study

In the context of Ethiopia, after high school completion and earning passing grades to higher education institutions; students are placed in the university and field of study either with their choice or without their preferences.

The majority of the participants agreed on the negative impact of being assigned at university and field of study against their choice on the mental health of the students in higher education institutions.

A statement of one participant on this is:

> "*I think one cause of stress to the student is the placement of the students at university and field without their choice".*

The university at which they are placed may be far or near to their family home. Some of the participants were argued on the impact of family home distance from the university on the mental health of the students in higher education institutions.

One student' services personnel stated this as follows:

> "S*pecially during holydays, we have to make them feel home by fulfilling needed facilities because students remember home and family on these days. So, the campus must do its best in preparing all needed foods and pass with them as the family is very important; hence there is no significant difference on far and nearby placement*".

While other participants agreed on the impact of family home distance from the campus on the mental health of the students in higher education institutions.

As stated by a male student who is a student council member:

> *"Attending school from home and attending class here being away from the family is too different and have lots of challenges. At this time students were struggling to cope with these challenges because they have been getting lots of support from their family at high school and miss that support here".*

Sub-theme 2: Campus recreational areas

Recreational areas are where the students use for their enjoyment in their spare time especially for post-exam tension releasing. The benefit for their physical and mental health is incalculable. It also prevents students from passing time on risky behaviour like chewing khat or using other substances and helps them not get out of the compound to look for such areas. The types and needs of recreational activities on the campus for students were emphasized.

A senior teacher stated it as:

"Recreational areas for students, teachers, and staff should be there to maintain their psychological wellbeing. Regarding the recreation area and play station; almost there is no such service on our campus. Football, volley ball, and table tennis should be available for students".

The participant's view was in line with (GuildHE 2018:21) that sport not only has a positive impact on physical health but also on mental wellbeing. Team sports also enable students to develop friendships and facilitate interaction with others There is no shortage of athletic and group activities in form of clubs and social classes in most universities in developed and developing countries; however, more incentives such as athletic bursaries and prizes should be provided to students to encourage their participation in such activities which can act as protective factors against SAD development (Mofatteh 2020:61).

Sub-theme 3: Socialization activities on the campus

Different types of socialization activities are needed for students on the campus. These include the orientation for newly arriving students, life skill training, extracurricular activities, or students' clubs. The importance of developing a community where every student feels valued cannot be overstated. Clubs, societies, social events, and academic groups all support students' feeling of belonging, which is vital in them seeking help when they need it most (GuildHE 2018:5).

On this students' service personnel stated as:

"… *Awareness creation among students on their arrival especially filling a gap on life skill and orientations are significant*".

Others also stressed its inconsistency and perceived importance of orientation and life skill training. Orientations and life skill training help them on how to select their friends and protect them from unnecessary peer pressure.

Other participant stated as:

"It was started but it is not enough and satisfactory; even students did not know its purpose and did not attend fully".

Availability of students' clubs on campus helps students to be free from stress and makes them relax post-exam time. Hence, establishing and encouraging the students to participate in extracurricular activities or clubs have great importance.

One student's representatives describe this as:

> *"The role of extracurricular activities is high in maintaining their psychological wellbeing and social interactions, but as to our campus, there is no functional students' club. If it had been there and students [engaged] … they get lots of things like life experience sharing and they learn from each other and they also refrain from going to other health risky area".*

The role of the students in promoting their mental wellbeing was also emphasized and suggested by the majority of the participants.

A senior teacher asserts:

> *"Students themselves especially senior students as they have been doing earlier they have to play their part by socializing and attachment of new students and approach them closely and share their campus experiences".*

A suggestion for students from female senior teacher was;

> *"I advise students to focus on their goal and not to look on [their friends'] … dressing or style. By the way, any political situation in countrywide or campus causes stress to the students. So, they have to focus only on their course work despite some minor problems might face and every student has to have assigned academic advisor and use them consistently".*

In the context of Ethiopia, after high school completion and earning passing grades to higher education institutions; students are placed in the university and field of study either based on their choice or without their preferences. The university at which they are placed may be

far or near to their family home. Some of the participants lamented the impact of family home distance from the university as impacting on the mental health of the students in higher education institutions.

One student' services personnel member stated the following:

> "*Especially during holy days, we have to make them feel home by fulfilling needed facilities because students remember (miss) home and family on these days. So, the campus must do its best in preparing all needed foods and pass with them as a family is very important; hence there is no significant difference on far away and nearby placement*".

Other participants agreed on the impact of distance between family home and the campus as impacting on the mental health of the students in higher education institutions.

A male student who is a student council member stated the following:

> *"Attending school from home and attending class here being away from the family is too difficult and have lots of challenges. At this time (here in campus) students were struggling to cope with these challenges because they have been getting lots of support from their family at high school and miss that support here".*

One of the ways to achieve long-lasting wellbeing is through development and enjoying a positive relationships with friends (GuildHE 2018:21). Therefore, universities need to allocate more resources for sporting and social activities which can impact the mental health of students. Furthermore, an increase in mental health problems in universities has created a huge burden on university counselling services to meet the demands of students. More novel approaches, such as online counselling services can help universities to meet those increased demands (Mofatteh 2020:61). Being a member of society was seen as particularly important by students' union officers, as students who were engaged in societies were more likely to be a part of the campus community, and therefore less vulnerable to being lost in the system. In order to ensure that this is effective, students' unions and providers can work jointly to track student participation in these activities and the impact this may have on their wellbeing and academic progress (GuildHE 2018:22).

Sub-theme 4: Food and accommodation services

Food services for students, lounge, shop, and other needed services were stressed by the study participants to be availed in a campus environment where the students can find nearby. It is challenging to create the right living environment for students if universities did not own their accommodation. Institutionally appointed safety and wellbeing officers can support students whilst living in halls, but all providers can do more to support those who live in the local areas (GuildHE 2018:6).

The issue of non-café students was described as:

> *"I consider this allowing all students to be non-cafe as one problem. Even I got a chance to visit their café foods; it is good. I do not know why they prefer to be the non-café users. I think it is better to work on the quality of food being provided to students at students' café or lounge to [reduce] … this problem".*

This participant's view was supported by GuildHE (2018:27) that students who experience stress or isolation could have these feelings exacerbated in an accommodation environment, and it is important that they are able to access support.

Private accommodation can also have an impact on student finances, where students are either at risk of a lack of regulation in the private rental sector, or expensive plush accommodation blocks if they want to live in a halls-style environment in order to make friends.

The needs of other services were also recommended as:

> *"Like other universities if possible making everything available on the campus at affordable prices helps the students not to get out of campus to risky areas. It would be better if shops, beauty salons, and affordable lounge services are available".*

The recommendation of the study by MacKean (2011:36) is congruent with participants understanding that evidence show that access to high-quality student services can help young people improve their learning and academic performance, stay in school and complete their degree/diploma. Research indicates that student services, when accessed by students, can help them to succeed in their college/university education. In contrary to these facts residing off-campus reduced the odds of mental distress while students with a

family history of mental distress (Mboya, John, Kibopile, Mhando, George and Ngocho 2020).

Sub-theme 5: Facilities

Facilities such as adequate living rooms, electricity, water, internet, toilet, and shower are some of the services needed with consistent availability to the students in higher education institutions.

One participant witnessed the condition as:

> *"[Students'] … living condition is overcrowded. They complain all the time because there are no facilities like electricity and water supply that may interrupt for many days, washing places and toilets not available at all in some areas".*

A senior male teacher also stated as:

> *"Interruption services like water supply and electricity; sometimes during exam time while students are being prepared for the exam so they get in stress. Even they cannot afford to buy a candle at this time. So, students may be developing psychological distress from fear of exam fail".*

One students' representative stated this as:

> *"After joining this university personally what I perceived is as the living condition of university students is uncomfortable. Our community believes as we are privileged and living in the high standard setup. Even still some call university as a paradise on earth, but the reality is far from this [but on the ground] … there is no conducive and comfortable condition for living".*

Sub-theme 6: Safe and secure campus

Safety of living environment and campus securities were also mentioned as needed conditions on the campus. Where students live can be just as important to their well-being as their academic commitments (GuildHE 2018:6).

One representative student expresses as:

"The other thing that should be improved is creating a conducive and comfortable living environment and rooms. Our current living condition is really difficult to explain very uncomfortable and stressful; which is even exposed to different hazards and security problems".

A male teacher participant stated the issue of students living conditions as:

"As to our university there is no dormitory fulfilling all needed facilities, their living environment is even not secure and even sometimes students leave class to take care of their property like laptops and other expensive materials".

University can be a very stressful time for students and providers must support students through their experience. Creating a supportive and positive community is the backbone of many students' success. Students will come to university with a background or characteristics which can influence how they can succeed in their studies (GuildHE 2018:7). This was also supported by study results by Reta, Samuel, and Mekonnen (2020:99) that unresolved conflict with a roommate were significant predictors of mental distress and about two times more likely to develop mental distress compared to those do not have unresolved conflict with a roommate. Cultivating environments and communities that are supportive of positive mental health are vital steps for providers of all sizes to have successful proactive well-beings (GuildHE 2018:6).

Sub-theme 7: Accessible and functional healthcare and counselling and guidance centre

Inorder to treat mental health issues and promote positive mental health, primary healthcare is crucial. In the majority of countries across the world, the initial point of interation between the people and health care services, helping to achieve early identification of mental disorders and prevent future episodes, but also promoting good mental health through direct provision and referrals to other more specialized services (Barry, 2007). Different coping strategies are required for students at different levels. Universities should be aware of these risk factors and implement measures to minimize those factors while providing mental health treatments to students (Mofatteh. 2020:61). The availability and access to centres where they can get help also matter. Even the gender composition of counsellors is also stressed. All participants witnessed the absence of counselling and guidance centre for students on

their particular campus. The university management wrongly recommended to strength academic counselling preventive mental health services for the students so to provide a conducive learning environment (Suleyiman and Zewdu 2018:29).

It was stated by one participant:

> "*The big thing that support students' mental health is having functional counselling and guidance centres at each campus. It has no question".*

But regarding availability another participant described as:

> *"There are no functional counselling and guidance centres for students in our campus where the students know and use to share and discuss all aspects of their problem".*

The importance and role of campus counsellors and care providers are significant. But the majority of the participants reported the absence and inaccessibility of counselling and guidance services to the students and weak collaboration between the two.

A male teacher stated as follows:

> *"Counsellors should also advise or counsel students on their academic performance, financial and social problems they faced, on behaviours and substances that can result in addiction".*

The counsellor can play their role through a close relationship to students and hearing their concerns.

A statement from a female student was:

> *"Better if all students in general and female students approached and asked about their problems in living environment, teaching and learning and overall their expectation about the university and real experiences of the campus life; because I have not seen any campus activity that encourages female students".*

Student participant recommends this as:

"University should give attention to the implementation and successfulness of academic advising, counselling, and guidance programs in all campuses. Especially these programs were not done successfully in our campus".

In contrary to the study participants' views on counselling services have traditionally been seen as the conduit for supporting students' wellbeing, while GuildHE (2018:6) recommended and emphasized the need for many other activities which are important to foster a supportive environment including training for academic and professional staff, specific wellbeing events, and teaching students key skills to support them through university life and beyond (GuildHE 2018:6). Detection and effective treatment of these disorders early in the college career might reduce attrition and improve educational and psychosocial functioning (Auerbach, Alonso, Axinn, et al 2016:1). Many students also cited problems with waiting lists for external support, such as counselling (GuildHE 2018:6).

Sub-theme 8: Substance free campus

The extracts below attest to the participants' beliefs on substance access, use, and their psychological problem. The majority of the participants reported that substance use among higher education institutions is the major issue among the students and likely related to their mental health problems.

A senior teacher addressed this issue as:

"Students may have bad behaviours like substance abuse like kchat, cigarette or alcohol even before joining university. Because of repeated and frequent use of these substances, they become addicted and their academic performance drops. In addition, their personality and self-care intention is very become poor; again they need more money to get the substance. Especially medical students were commonly affected by this behaviour and consequences".

A male senior teacher described as:

"To get out of psychological disturbance the options [students] … have may be hiding in substance abuse or addiction or different problems like being addicted to social media. So, students' mental health programs like anti-substance movements in the higher education institutions have major roles in resolving such problems".

Study participants also suggested collaborative activities with local town administration in decreasing substance access of the students.

A senior teacher expressed this as follows:

> *"the other one is open substance use like kchat, shisha and alcohol houses nearby campuses that contributes for easy access and exposure of students to these substances and having addiction which finally leads to low academic performance and mental health problems".*

Sub-theme 9: Substance control and prevention

One of the areas stressed by the participants as the source for mental health problems among the students was inconsistency and problems related to services to students and different guidelines that the students are expected to abide in the campus. Hence, it was suggested that the university has to play its part in needed support, socialization, fulfilling needed services and facilities helping the students not engage in substance.

> *"I think the most important thing is the university community should have a close and friendly relationship to students especially those joining the university for the first time on their arrival and replacing their family here in the campus and make students feel home; this help students in sharing their problems and free from psychological difficulties".*

Sub-theme 10: Collaboration

Different bodies can play a great role in promoting and maintaining the psychological wellbeing of the students in higher education institutions.

As evidenced by: Mental health promotion is based on empowering, engaging, and public participation (Barry 2007:4).

The need for inter-departmental and inter-institutional collaboration on the activities of mental health promotion was well addressed.

A senior teacher expressed this as follows:

> "*The other one is related to stakeholders such as religious institutions and town administration should welcome new students on their arrival. I have not seen any welcoming ceremonies for newly arriving students on our campus. Such activities make students feel as they are their home and town. I think government officials around campus have their own role on this issue*".

Training staff and students to recognize the signs of a student who is struggling with their mental health is vital. This includes cleaners, estates teams, and security staff as they are likely to be working out of hours and may witness students in particularly vulnerable moments (GuildHE 2018:6). Experiences support students to undertake professionally rooted education, and prepare graduates with the skills they need to succeed in their chosen profession skills should also include tools for positive well-being which can be used throughout their life (GuildHE 2018:6). The findings from study by Baik, Larcombe & Brooker (2019:1) offer important insight to university educators and administrators about the role they can play in better supporting student wellbeing and preventing the high rates of psychological distress.

We argue that the process of seeking and acting on students' suggestions fosters students' sense of inclusion and empowerment, and this is critical given that the goal of improving student mental wellbeing can only be achieved through an effective partnership between students and institutional actors (Baik, Larcombe & Brooker 2019:1).

Family

Students' family has a major role and responsibility in promoting students mental health in the campus. The family has to follow the condition of their children at campus timely in especial approach. Family follow-up will benefit students to address their social, academically and health problems that might result in psychological and mental health problems on campus early and eventually, these protect students from different stress. They have to have their child's close friend's phone number and should cross-check because their children are likely to cheat them. Calling the department head and asking about the performance of their child could also be another approach to follow. But in our context, there is no such trend in reality.

Strict family follow-up has played a great role in protecting students from risk behaviours and in promoting the positive mental health of the students on the campus. The family has a major role in this and there has to be a mechanism by which a family follows their children on the campus.

Some study respondents did not agree with the importance of strong family follow at the campus to maintain mental wellbeing students in higher education institutions. They believe that once they reach campus it is the university to take every measure to promote their mental health and create a healthy campus environment.

The family role is on raising them with discipline and supporting that student financially but cannot closely follow because of distance. Studies found that peer and family support, in combination with an individual's capacity to accept and utilize these resources, is critical for protecting individuals against poor mental health (Eriksson, Ghazinour, and Hammarstro¨m. 2018:428).

4.4. Conclusion

This chapter has illustrated the qualitative findings supported with literature control of the phase and helped in identifying variables to be measured in quantitative phase, and then finally contribute to the development of mental health promotion strategies for students in higher education institutions. Based on the findings of qualitative phase socio-demographic characteristics, university and field assignment, psychological and academic counselling, extra-curricular activities involvement, substance use, sources of the stress, coping strategies, religious experiences, perceived social support, mental health literacy, and level of positive mental health among the students were identified as variables to be measured in the quantitative phase. The next chapter deals with a discussion of quantitative findings of the study.

CHAPTER 5: DISCUSSION OF QUANTITATIVE FINDINGS

5.1. Introduction

In the previous chapter qualitative findings and variables to be measured in the quantitative phase and themes that contributed to the development of mental health promotion strategies for students in higher education, were identified. Based on these variables such as socio-demographic characteristics, university and field assignment, psychological and academic counselling, extra-curricular activities involvement, substance use history, sources of the stress, coping strategies, religious experiences, perceived social support, mental health literacy, and level of positive mental health among the students were identified and measured in the quantitative phase. This chapter presents a discussion of findings of the quantitative strand of the study.

5.2. Summary of data collection and analysis method

The aim of this study was to assess the level of positive mental health and associated factors among students in higher education institutions. In this quantitative strand of the study, data were collected by using a self-administered questionnaire to measure predictors and outcome variables identified from the qualitative phase study among randomly selected

samples from five public Universities in Ethiopia. Data entry was done by Epi Data 3.1 software and analysis was done by SPSS version 26. Descriptive and inferential analysis was conducted to show frequency and association between variables, respectively. The results were mainly presented by text, tables, and graphs.

5.3. Research finding

In next the section, findings of the quantitative strand, categorized in ten sub-sections are presented in detail. The sub-sections consist of socio-demographic characteristics, university and field of study related characteristics, alcohol and other substance-related factors, sources of stress, coping styles and self-control, daily spiritual experiences, perceived social support, mental health literacy, level of positive mental health, and its associated factors. To validate the finding data were double entred in to the software and close discussion and cross-checking of analysis out put was done.

5.3.1. Socio-demographic characteristics

A total of 805 respondents filled the self-administered questionnaire out of 844 samples, giving a response rate of 95.4%. Gender wise majority of the respondents 512 (63.6%) were male, while the remaining 293(36.4%) were female. Regarding their marital status 55 (6.8%) married and never married 750(93.2%). Most of the respondents were in an age group of 18-23 which was 615(76.8%). Regarding the marital condition of the students' biological family; majority of 576 (71.6%) were living together while the remaining 229 (28.4%) were indifferent marital breakage conditions (table 4).

Table 4: Socio-demographic characteristics among the respondents, March 2019 (n=805)

Items		Number (n)	Percent (%)
Age group			
	18-23	615	76.4
	24-27	163	20.2
	28-32	27	3.4
University			
	Adama Science and Technology university	120	14.9
	Arsi university	62	7.7
	Madda Walabu university	122	15.2
	Hawasa University	310	38.5
	Wolaita Sodo university	191	23.7
College			
	College of Business and Economics	150	18.6
	College of Engineering and technology	197	24.5
	College of Medicine and health sciences	127	15.8
	College of natural and computational sciences	221	27.5

College of social sciences and humanity		110	13.7
Year of the study			
	Year 1	236	29.3
	Year 2	216	26.8
	Year 3	160	19.9
	Year 4	112	13.9
	Year 5 and above	81	10.1
Ethnicity			
	Oromo	324	40.2
	Amhara	182	22.6
	Tigre	59	7.3
	Sidama	56	7.0
	Wolaita	54	6.7
	Somale	27	3.4
	Guragie	44	5.5
	Hadiya	32	4.0
	Others	27	3.4
Parents' marital status			
	Living together	576	71.6
	Separated in conflict	77	9.6
	Divorced	51	6.3
	Widowed	87	10.8
	Both lost in death	14	1.7
Distance of hometown from university			
	Less than 500 km	543	67.5
	501-1000 km	227	28.2
	1001 and above km	35	4.3

Regarding religious sect followed most of the respondents were Christian Orthodox religion sect followers followed by Muslim (figure 3).

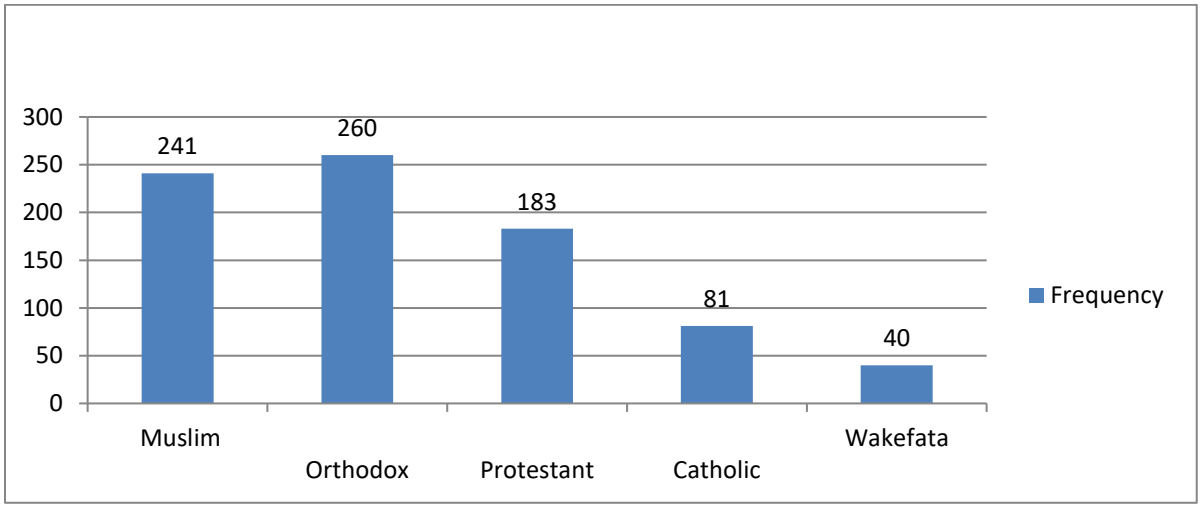

Figure 3: Distribution of respondents by their religion March 2019 (n=805)

Most of the students 542(67.3%) get less than 500 ETB financial support from significant others on campus and 106 (13.2%) report that they did not get any financial support monthly (figure 4).

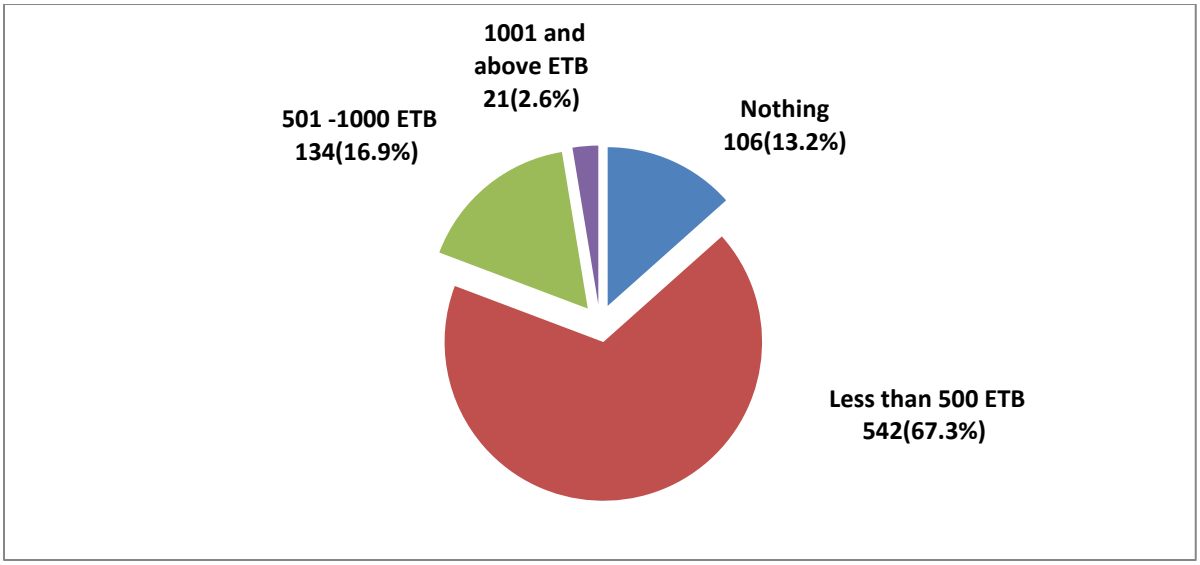

Figure 4: Financial support students getting from significant others, March 2019 (n=805)

5.3.2. University and field related characteristics

A substantial number of the respondents 262 (32.5%) and 268 (33.3%) got placement in their university and department without their choice, respectively. About one out of three students got placement of their university and field of the study without their choice. This implies students are being placed to university and department not only by their choice but also placed to university and fields that are not their first choice. This is also likely a sources of their campus related stress as supported by the evidence that lack of personal interest in their department frequently reported causes of stress in the university (Suleyiman & Zewdu. 2018:29). Two studies in Ethiopian university also shows that lack of interest towards their field of study about two times more likely to cause mental distress among the students (Dachew, 2015:1; Reta, Samuel & Mekonnen, 2020:99).

Regarding psychological counselling support majority of the students 575 (71.4%) reported never get. Majority of the students 547 (68%) reported not take part in extracurricular activities (table 5).

Table 5: University and field related characteristics among respondents, March 2019 (n=805).

Items	Number (n)	Percent (%)
Mechanism of joining university		
My own choice	543	67.5
Not my own choice	262	32.5
Mechanism of joining department		
My own choice	537	66.7
Not my own choice	268	33.3

Psychological counselling support		
Never	575	71.4
Sometimes	183	22.7
Often	47	5.8
Having assigned academic advisor		
No	460	57.2
Yes	344	42.8
Academic assistance or counselling from advisor (n=344)		
Never	142	43.1
Sometimes	146	42.4
Often	56	16.3
Involvements in extracurricular activities		
No	547	68.0
Yes	258	32.0
Type of extracurricular or clubs involved (n=257)		
Anti-HIV/AIDS	55	21.4
Sport club	88	34.2
Art/literature club	25	9.7
Peace and security	60	23.3
Culture development club	24	9.3
Other	5	1.9
Frequency of extracurricular participation (n=257)		
Never	38	14.8
Sometimes	132	51.4
Often	87	33.9

Out of all respondents, only 344 (42.8%) have assigned academic advisors out of which only 146 (43.1%) and 56 (16.3%) get academic assistance or counselling from their assigned academic advisor with a frequency of sometimes and often respectively. This result is supported with other study result where students used faculty members for support less frequently than they used their peers, spouse/significant other or parents (Reeve, Shumaker, Yearwood, Crowell, and Riley, 2013:421). This implies that students may be struggling with their poor mental health other than getting support from their teachers which are accessible during course delivery.

Two out of three students not involved in the campus extracurricular activities and only one out of three students involved in the extracurricular activities. One out of five never participated and only one out of three participated in the campus extracurricular activities.

5.3.3. Alcohol and other substances related characteristics

Two hundred eighty-seven (35.7%) students have reported a history of at least one substance use in the last 12 months. While 518 (64.3%) have not used any substance in the

last 12 months. 155 (42.57%) of students were reported to use more than one substance. Alcohol was reported to be the most substance used with 209 (26.0%).

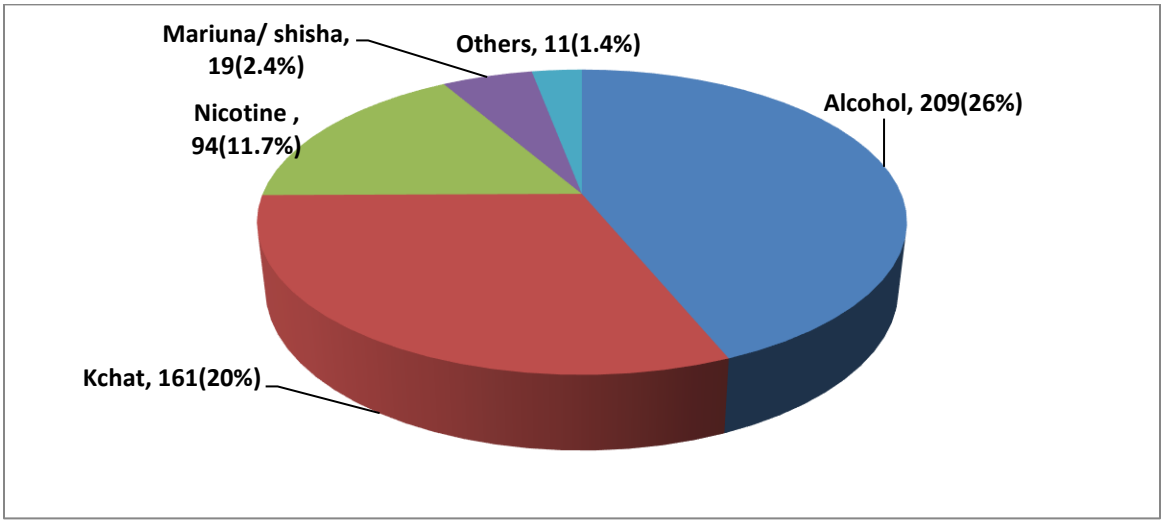

Figure 5: Distribution of substance use among respondents March 2019 (n=805)

The second commonly used substance is kchat; 161 (20.0%) respondents reported chewing kchat in the last 12 months (figure 3). This finding is supported by meta-analysis of 24 studies revealed that the pooled prevalence of khat chewing among university students in Ethiopia was 23.22% (95% CI: 19.5, 27.0) (Gebrie, Alebel, Zegeye & Tesfaye, 2018:1).

5.3.4. Sources of stresses to the students

As reported from this study majority of the students 551(68.4%) reported having at least one source of stress on campus while the remaining 254 (31.6%) did not. The major sources of stress reported by the students in higher education are academic pressure 323 (40.1%) followed by negative events 193 (24.0%) and insecure and unsafe dormitory environment 12.4%. A reported least source of stress includes childhood neglect 56 (7.0%), family breakage 69(8.6%), poor early attachment 57 (7.1%), family diagnosed with psychiatric disorder 29 (3.6%), personally diagnosed having medical disorder 28 (3.5%) and personally diagnosed with psychiatric disorder 19 (2.4%). The present study brought into light that academic stress continues to be a devastating problem affecting a student's mental health and well-being (Reddy, Karishmarajanmenon and Anjanathattil, 2018:536). Academic overload, political situation of country, financial strain, and family problems were frequently reported causes of stress in the university (Suleyiman and Zewdu 2018).

5.3.5. Coping styles or self-control mechanisms of the students

Out of eight items used to measure coping style, five of them were reverse coded to get an overall score and to calculate mean score. A score of greater than and equal to the mean score 14 was taken as the cut off point for good coping while less than 14 score judged to be poor coping style.

Most of the respondents were reported coping by trying to sort things out 47.5% and trying not to think about what was worrying them 35.7%; while only 14.0% of them coped by talking to someone often (table 6).

Table 6: Coping styles among respondents, March 2019 (n=805).

Coping styles		Frequency (n)	Percent (%)
Talked to someone	Never	120	14.9
	Sometimes	572	71.1
	Often	113	14.0
Blamed yourself for getting into the mess	Never	293	36.4
	Sometimes	406	50.4
	Often	106	13.2
Got angry	Never	177	22.0
	Sometimes	477	59.3
	Often	151	18.8
Stayed in your room	Never	319	39.6
	Sometimes	400	49.7
	Often	86	10.7
Thought about how you had dealt with similar situations			
	Never	149	18.5
	Sometimes	443	55.0
	Often	213	26.5
Had an alcohol drink	Never	529	65.7
	Sometimes	211	26.2
	Often	65	8.1
Tried not to think about what was worrying you			
	Never	114	14.2
	Sometimes	404	50.2
	Often	287	35.7
Tried to sort things out	Never	90	11.2
	Sometimes	334	41.5
	Often	381	47.3

5.3.6. Daily spiritual experiences of the respondents

Out of all respondents, the majority 557 (69.2%) were at the level of low daily spiritual experiences while the remaining 147(18.3%) and 101(12.5%) were at the level of medium and high daily spiritual experiences, respectively. This implies that considerable number of

the students were in poor social connection gain from daily spiritual experiences. In this study daily spiritual experiences were also showed statistically a significant association to flourishing positive mental health among the students, where being in low daily spiritual experiences (high score) decrease 86% odds of flourished positive mental health among the students. This finding is similar with others evidence that never attend religious programs increases about two times the likelihood of mental distress among university students (Dachew, 2015:1). Other study report also shows that being more spiritual/religious or strength of religious faith was positively related to positive mental health of the students (Peter, Roberts and Dengate 2011).

5.3.7. Perceived social support of the respondents

Regarding perceived social support most of the respondents 346 (43.0%) were at the high level of perceived social support. One hundred seventy (21.1%) were at a low level and 289 (35.9%) were at a moderate level of perceived social support. In this study having low perceived social support shows reduced odds of having flourished positive mental health with (AOR=0.14; 95% CI: [0.03, 0.61]) p=0.009. One quarter of the students were in the category of low level perceived social support and about one third were in the category of moderate level perceived social support. In this study having low perceived social support shows reduced odds of having flourished positive mental health by 86% compared to their counterparts. This implies that perceived social support contributes for low students' positive mental health. This is supported by others study where students perceived social support university students had a significant effect on stress (Suleyiman & Zewdu, 2018:29) and low social support (AOR = 2.58; 95% CI 1.58–4.22) were significantly associated with mental distress (Dachew, 2015:1). On the other hand, perceived availability of social support (OR = 0.22, 95%CI 0.11–0.45) reduced the odds of mental distress among the students (Mboya, John, Kibopile, Mhando, George and Ngocho 2020). Poor social support was significant predictors of mental distress (Reta, Samuel and Mekonnen, 2020:99).

5.3.8. Mental health literacy

Participants were presented with three vignettes, describing individuals with depression, anxiety, and psychosis based on the Diagnostic and Statistical Manual of Mental Health Disorders IV-TR criteria [American Psychiatric Association, 2000]. Respondents were also asked several questions about the helpfulness of various interventions for the mental illness described in each vignette. Respondents scored one

point for each intervention they rated as helpful for positive items and harmful for negative items (not attribute as a cause), believed cause and place suggested to seek for help. Most of the respondents gave incorrect answers for the case scenarios of psychosis, anxiety, and depression; 547(66.7%), 537(68%), and 549 (68.2%) (Figure 4). This study finding shows that more than two out of three students responded incorrectly for the case scenarios of psychosis, anxiety, and depression. About one third of the students get mental health information from non-printed materials followed by mainstream media such as TV and or Radio. Only near to two of third of the students recommend going health facilities to seek help for mental health problem; while the remaining ratio recommend going to religious and traditional healer to seek help for mental health problems. Regarding the belief on the treatments of mental health problems by professional help, nearly one third of the student were in the categories of "No" and "Do not know." In contrary to this result many students (90.3%) have intermediate mental health literacy (Mahfouz, *et al*. 2016:6806).

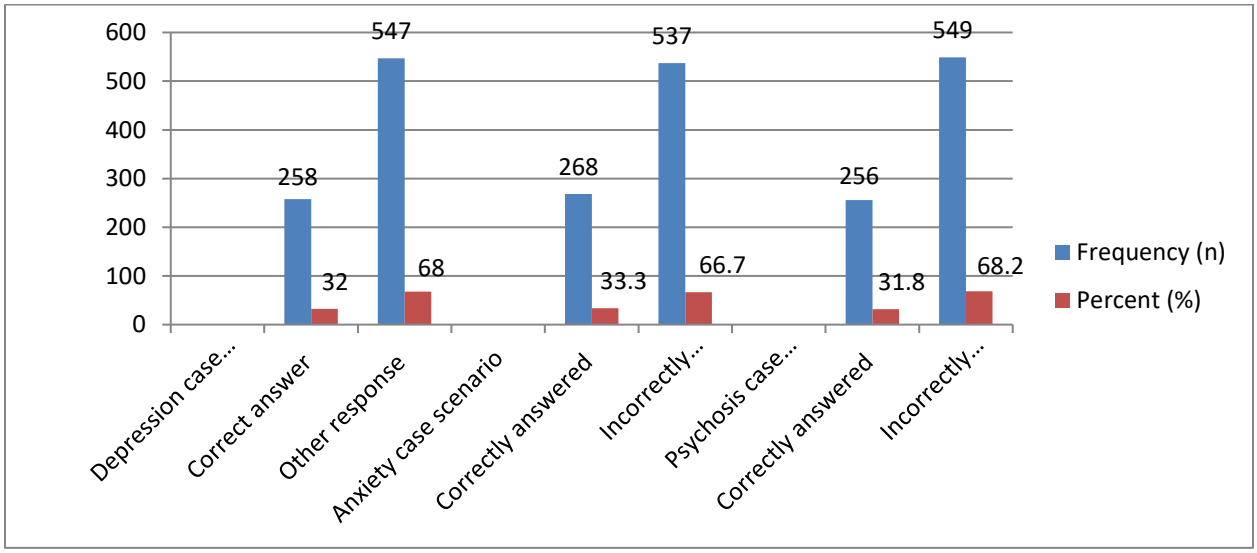

Figure 4: Distribution of knowledge on mental illness symptom identification **March 2019 (n=805).**

Most of the respondents 227(28.2%) get mental health information from non-printed materials followed by mainstream media such as TV and or Radio which is 202 (25.1%). 487 (60.5%) of them recommend going to health facilities to seek help for a mental health problem (table 7).

Table 7: Sources and level of information related to mental health

Items	Response option	Frequency (n)	Percent (%)
Sources of mental health information	Printed materials	85	10.6
	Non printed material	227	28.2
	Mainstream media (TV/Radio)	202	25.1
	Family/friends	162	20.1
	Health professionals	119	14.8
	Others	10	1.2
Believe mental problems can be treated by professional help	Yes	350	43.5
	No	307	38.1
	Do not know	148	18.4
Recommend places to seek help for mental problems	Health facilities	487	60.5
	Holy water	132	16.4
	Priest /Sheik	122	15.2
	Traditional healers	64	8.0
Reasons for recommending the person with mental health problem should go other than health facility	Shall get improvement there	146	45.9
	Because it is found nearby	75	23.6
	They know the exact cause	83	26.1
	Others	14	4.4

5.3.9. Level of positive mental health of the students

The level of positive mental health was measured by a short-form mental health continuum. The psychometric properties of the MHC-SF used in this study were also evaluated and found the instrument be valid and reliable in assessing positive mental health among university students in Ethiopia. In this study, 303 (37.6%) of the respondents have not flourished positive mental health (languishing) with a confidence interval of CI (34.2, 41.0). This implies that only about two third of the students reported flourishing positive mental health; while the remaining ration are in the category of languishing positive mental health.

This finding is higher than the study conducted elsewhere nearly a quarter; 23.8% of students were flourishing (high on mental health) and did not exhibit depressive symptoms (low on mental illness) (Peter, Roberts & Dengate, 2011). But low compared to the study conducted elsewhere reported that 89.91% of students had high and moderate mental wellbeing (van Agteren, Woodyatt, Iasiello, Rayner, & Kyrios, 2019:6). This finding is also

lower than other study where only about a quarter (24.2%) of the students were flourishing positive metal health (Peter, Roberts & Dengate, 2011).

In this study 303 (37.6%) of the respondents has not flourishing positive mental health (languishing) with confidence interval of CI (34.2, 41.0). This implies considerable number of students in higher education institutions are being affected by poor mental health or languishing positive mental health. Languishing positive mental health in this study is supported by the study in Ethiopian universities showed that the pooled prevalence of common mental disorder and mental distress among students was 37.73% and 40.9% (Mekuriaw, 2020:8; Dachew, 2015:1).

Languishing positive mental health in this study is higher than the study conducted among Canadian University students which was 8.7% (Peter, Roberts & Dengate, 2011), study among undergraduate university students which was 14% screened positive for mental distress (Mboya, John, Kibopile, Mhando, George & Ngocho, 2020), about 9.08% were languishing positive mental health (van Agteren, Woodyatt, Lasiello, Rayner, Kyrios, 2019:6). The prevalence of depression and mental distress among the students was 28.2% and 28.7% (Ahmed, Negash, Kerebih, Alemu and Tesfaye 2020:1; Reta, Samuel and Mekonnen, 2020: 99). Also high compared to the pooled prevalence of depression among university student was 33% (Sarokhani, 2013:7).

The level of languishing positive mental health in this study is low compared to the study conducted elsewhere reported that languishing positive mental health (poor mental health) where the proportion of students with mental distress was found to be 53.2% (Kelemu, Kahsay, and Ahmed. 2020:3) and study conducted elsewhere reported that 65% of the student population met the requirements for at least one of the three types of distress (anxiety, depression, and stress) (van Agteren, Woodyatt, Iasiello, Rayner, and Kyrios, 2019:6). The overall prevalence of depressive symptoms among university students in Pakistan was 42.66% (Khan, Akhtar, Ijaz and Waqas. 2021).

5.3.10. Factors associated to positive mental health

Predictor variables of positive mental health among students in higher education institutions were assessed by logistic regression model of bivariate and multivariate analysis and discussed next under sub-sections.

5.3.10.1. Bivariate analysis result

After the model was tested for fitness, all variables were checked for having correlation with flourishing positive mental health. Variables such as type of university, college of study, religion and ethnicity of the respondents does not show effects on flourishing positive mental health. Students' marital status, assigned academic advisor, type of extra-curricular activities involved also did not show any association with the outcome variable.

Socio-demographic characteristics such as age group and sex of the students showed association in bivariate logistic regression analysis with dependent variables, but later unable to maintain that association with multiple logistic regression. Similarly, being in the 2nd year of study, being assigned to the university and department without their choice were associated with the outcome variable but later lacks this effect after adjusted for other variables in multiple logistic regressions. Students' marital status, assigned academic advisor, type of extra-curricular activities involved did not show any association with outcome variable.

Frequency of getting psychological counselling, academic assistant, being not involved in any extracurricular activities, and having at least one sources of stress and scoring poor mental health literacy also associated with outcome variable (table 8). Mofatteh (2020:36) identified six different themes of risk factors for poor mental health consisting psychological, academic, biological, lifestyle, social and financial. Out of the tested risk factors some have no differences while others show significant differences on the status of positive mental health of the students in higher education institutions.

Out of tested variables with multiple logistic regression, the differences of university, college of study, religion and ethnicity of the study respondents does not show effects on students' flourishing positive mental health. This finding is supported with the result other study where there was no significant relationship with ethnic identity and levels of positive mental health among university students (Peter, Roberts and Dengate, 2011). The differences on sex of the students not showed significant differences on students' positive mental health. This implies that both male and female students equally predisposed to positive mental health (male and female). This is also supported with other study finding that there was no significant relationship sexual orientation and levels of positive mental health among university students (Peter, Roberts and Dengate, 2011). In contrary to this, other findings of

the studies conducted elsewhere reported that females were more likely to have higher levels of positive mental health (Peter, Roberts and Dengate 2011). Female students were about three times more likely to have mental distress as compared to male students (Reta Y, Samuel T, and Mekonnen 2020: 99). Female students were more likely to have a range of mental health and behavioural problems (McLafferty, Lapsley, Ennis, Armour, Murphy, Bunting, 2017:1). In contrary to the facts that female sex (AOR =1.65; 95% CI 1.17–2.30) (Dachew, 2015:1). Other studies conducted elsewhere also reported that female students were more likely to be mentally distressed compared to male students (Kelemu, Kahsay, and Ahmed, 2020:3), and students who scored higher on positive mental health tended to be female (Peter, Roberts & Dengate, 2011).

Majority, two third of the students get less than 500 ETB financial support from significant others in campus and about one out of seven students report that they did not get any financial support monthly. This implies significant number of students in higher education have financial challenged besides their academic, environmental, and social difficulties.

Having no or low monthly financial support from significant others reduces the odds of having languished positive mental health by 88% compared to their counterparts. This implies that financial constraint among the students plays a role for students' poor mental health. This finding is supported by other study results that having financial distress (Dachew, 2015:1) and students from a lower socio-economic background were more likely to have a range of mental health and behavioural problems (McLafferty, Lapsley, Ennis, Armour, Murphy, Bunting, 2017:1). Facing financial problem was significant predictors of mental distress (Reta, Samuel and Mekonnen 2020: 99).

On the other hand, study in University in Ethiopia also reported that having monthly pocket money in the range of 500-999 ETB reduces the odds of having depression among university students by 55% (Ahmed, Negash, Kerebih, Alemu and Tesfaye, 2020:1). Similar report also shows students from higher socioeconomic backgrounds were more likely to have higher levels of positive mental health (Peter, Roberts and Dengate 2011).

5.3.10.2. Multiple logistic regression analysis

All these variables which showed association with the outcome variable (flourishing mental health) fulfilled a criterion ($p<0.05$ and confidence interval not including unitary) finally adjusted to multiple logistic regression analysis. Out of all predictor variables that showed

association in binary logistic regression, only six of them were able to maintain explaining the outcome variable and had a statistically significant association.

Current family breakage of students' biological parental marital condition showed a statistically significant association with outcome variable with AOR of 0.17, with CI (95%CI: [0.06, 0.48]) and p=0.001 compared to their counterparts. In other words, current breakage of students' biological family's marital status reduces the likelihood of having flourished positive mental health by about 83%; this implies having family breakage results in poor mental health among students in higher education institutions.

Being from distances of 500-1000km hometown distance to university significantly associated with positive mental health with AOR=0.13; 95%CI: [0.02, 0.96]) and p=0.001. This implies as the distance to students' hometown to campus increases it reduces the likelihood of having flourished positive mental health with about 87%.
In this study having low perceived social support shows reduced odds of having flourished positive mental health with (AOR=0.14; 95% CI: [0.03, 0.61]) p=0.042. Having monthly financial support received from significant others showed statistically a significant association to flourishing positive mental health among the students with (AOR=0.12; 95%CI: [0.02, 0.96]) and p=0.046.

Substance use history was also showed statistically a significant association to flourishing positive mental health among the students with 0.20(0.09, 0.44) and p= 0.001. Having had history of substance use in the last 12 months showed statistically significant association, and p=0.001, and (AOR=0.20; 95%CI: [0.09, 0.44]) and p=0.001. Ever use of Khat (AOR = 1.71; 95% CI 1.12–2.59), (Dachew, 2015:1). Ever khat were significantly associated with mental distress of students (Kelemu, Kahsay and Ahmed. 2020:3). Khat chewers were found to be two folds more vulnerable to develop common mental disorder than non-chewers (Mekuriaw B, 2020:8). In multivariate analysis no significant differences in WEMWBS score were observed by area of study, alcohol, smoking or drug use (Davoren, Fitzgerald, Shiely and Perry 2013).

Daily spiritual experiences were also showed statistically a significant association to flourishing positive mental health among the students with 0.14(0.03, 0.61) and p= 0.009 (table 8).

Table 8: Positive mental health in relation to predictor variables of respondents (n=805), Ethiopia March 2019

Independent variables	Frequency (n)	Positive mental health		COR (95% CI)	AOR (95% CI)
		Flourishing	Not flourishing		
Age category 18-22	618	391	224	2.54(1.16, 5.57)	6.15(0.91,41.36)
23-27	163	100	63	2.31(1.01,5.29)	5.32(0.73,39.07)
28 and above	24	11	16	1	1
Sex Female	293	130	163	0.30(0.22,0.41)	0.54(0.24,1.20)
Male	512	372	140	1	
Year of study					
Year 1	236	150	86	1.62(0.97,2.69)	0.91(0.19,3.47)
Year 2	216	156	60	2.41(1.42,4.09)	1.27(0.30,5.29)
Year 3	160	97	63	1.43(0.83,2.45)	0.61(0.14,2.66))
Year 4	112	57	55	0.96(0.54,1.71)	1.11(0.22,5.55)
Year 5 and above	81	42	39	1	1
Current students' biological parents' marital condition					
Living together	643	452	191	1	1
Not living together	162	50	112	0.19(0.13,0.27)	0.17(0.06,0.48) *
Distance of university from family home					
<500 km	543	411	132	1	1
501-1000km	227	80	145	0.18(0.13,0.24)	0.19(0.07,0.47) **
>1001km	35	11	26	0.14(0.07,0.28)	0.13(0.02,0.96) *
Mechanisms of joining University					
With my first choice	543	377	166	1	1
Placed without my choice	262	125	137	0.40(0.29,0.54)	0.67(0.27,1.64)
Mechanisms of joining department					
My choice	537	355	182	1	1
Placed without my choice	268	147	121	0.62(0.46,0.84)	0.77(0.31,1.89)

Table 8: Positive mental health in relation to predictor variables of respondents (n=805), Ethiopia March 2019 (Continued).

Frequency of psychological counselling received in the campus					
Never	575	314	261	0.03(0.01,0.19)	0.19(0.03,1.28)
Once or twice	183	151	32	0.08(0.01,0.62)	0.50(0.07,3.72)
Three or above	47	37	10	1	1
Frequency of academic counselling or assistant (n=289)					
Never	142	75	67	0.24(0.11,0.52)	0.40(0.11,1.39)
Once or twice	146	103	43	0.52(0.24,1.13)	0.44(0.12,1.59)
Three or above	56	46	10	1	1
Participation in extracurricular activities					
No	547	299	248	0.33(0.23,0.46)	0.57(0.23,1.42)
Yes	258	203	55	1	1
Substance use history in the last 12 months					
No	518	393	125	1	1
Yes	287	109	178	0.20(0.14,0.27)	0.20(0.09,0.44) **
Perceived social support					
Low	170	54	116	0.08(0.05,0.13)	0.12(0.04,0.34) **
Moderate	289	153	136	0.20(0.13,0.28)	0.19(0.07,0.48) **
High	346	295	51	1	1
Daily spiritual experiences					
Low score	558	420	138	1	1
Medium score	148	61	87	0.23(0.16,0.34)	0.37(0.14,0.97) *
High score	99	21	78	0.08(0.05,0.15)	0.14(0.03,0.61) **
Sources of stress					
No	254	213	41	1	1
Yes	551	289	262	0.21(0.15,0.31)	0.44(0.18,1.05)
Financial support received per month					
Nothing	108	32	76	0.19(0.08,0.45)	0.12(0.02,0.96) *
Less than 500 ETB	527	329	198	0.76(0.35,1.63)	0.41(0.07,2.42)
500-1000 ETB	138	119	19	2.84(1.17,6.94)	1.56(0.22,11.37)
More than 1000 ETB	32	22	10	1	1
Mental health literacy					
Poor	356	201	155	0.64(0.48,0.85)	0.65(0.30,1.42)
Good	449	301	148	1	1

- * Implies p<0.05, ** implies p<0.01 *** implies p<0.001

5.4. Conclusion

This chapter presented the findings and discussion of the quantitative strand of the study as per the research question. The findings were presented in the form text, tables, and figures. According to the study findings, the level of positive mental health and associated factors were emphasized. Discussion and interpretation of the findings were done comparing with the previous studies. The next chapter deals with integration of quantitative and qualitative findings of the mixed method study.

CHAPTER 6: INTEGRATING THE QUALITATIVE AND QUANTITATIVE FINDINGS OF THE MIXED METHODS STUDY

6.1. Introduction

The qualitative findings in chapter 4, explored primary data and generated essential themes for the further quantitative study and that contributed for the development of mental health promotion of the students. In the preceding chapter, chapter 5, discussion and interpretation of quantitative finding were presented with pieces of evidence by comparing similarity or discrepancy and in relationship to the research questions. In this chapter, the integration of finding in qualitative and quantitative strands were articulated before strategies for mental health promotion in higher education institutions are developed.

This study sought to answer the following research questions:

- How could the mental health of students in higher education institutions be promoted?
- What are suggested strategic approaches for the mental health promotion of students in higher education institutions in Ethiopia?
- What are the current students' positive mental health status in higher education institutions in Ethiopia?
- What are the factors associated with the positive mental health of students in higher education institutions in Ethiopia?
- How does the qualitative interview data on students' mental health promotion further explain how social, academic, and environmental factors enhance the positive mental health of learners measured on the MHC SF scale?

6.2. Research design and methods

Creswell and Plano-Clark (2018:5) define mixed method research as “a philosophical assumption and methods of inquiry that guide the direction of the collection and analysis and the mixture of qualitative and quantitative data within a study”. Procedures for gathering, analysing, interoperating, and reporting data in research investigations are known as research designs (Creswell and Plano-Clark 2018:51).

In this study, a sequential mixed method design was used. In the first phase, information related to approaches of mental health promotion was explored and used for tool development used in the second phase quantitative study. In the second quantitative phase of the study level of positive mental health and associated factors among students at five selected public Universities in Ethiopia were addressed where data from both approaches were used to develop strategies for the promotion of mental health among students in the higher education institutions in the country. A sequential mixed methods design is a type of design in which first quantitative, then qualitative data are collected sequentially with greater weight for qualitative data, analyzed separately, and then data connected at this interpretation stage.

6.3. Mixed methods and its advantages

6.3.1. Mixed methods

Mixed methods originated in the social sciences and have later expanded to nursing, family medicine, social work, mental health and pharmacy, allied health and other fields. These techniques have been also able created and enhanced to address a wide range of research questions over the past few decades (Creswell and Plano-Clark, 2011:127). This methodology’s core concepts are that such integration allows data to be used more completely and synergically than separate quantitative and qualitative data gathering and analysis do.

Evaluation of positive mental health of the students with its contributing factors and development of mental health promotion strategies is a good opportunity for mixed-method research to contribute to learn about the best experiences of risk and protective factors for positive mental health of the learners. The level of positive mental health among higher education institution students is significantly insufficient and varied factors also identified as

contributors for this problem. It also presented evidences related to the need and related concepts that help in the development of students' mental health promotion strategies.

6.3.2. Advantages of mixed method study

Using the analysis of mixed methods has many benefits which we will discuss below.

- *Compares both the quantitative and qualitative figures*

Mixed approaches are especially useful for explaining the inconsistencies between quantitative and qualitative results.

- *Reflects the experiences of the participants*

Mixed approaches give the participants a voice to research and ensure that the study results are focused on the experiences of participants.

- *Foster students contact*

Such studies add breath to multidisciplinary team research by promoting interaction between scholars of quantitative, qualitative and mixed methods.

- *Provide versatility on methods*

Mixed approaches are extremely versatile and can be adapted to multiple designs of the study, such as observation experiments and randomized trails, to elucidate more knowledge than can be gathered through quantitative research alone.

- *Gathers details, rich information*

Mixed approaches are often reflecting the way individuals collect information naturally by combining both quantitative and qualitative data. Sports stories, for example combines quantitative data (scores or number of errors) with qualitative data (descriptions and highlight images) to provide a more complete story than either approach alone would (Hanson, Creswell, Plano-Clark, and Petska, 2005:105).

6.4. Level of integration in mixed method study

6.4.1. Integrating at design level

Mixed methods may be an appropriate technique for evaluating complex interventions such as modified Socio ecological model of prevention of maternal common mental disorders researcher chooses from five primary mixed-method designs based on the research questions they want to address and available resources for assessment (Ramlo, 2016:618;

Creswell and Plano-Clark, 2011:134). In this study no integration occurred on the design level.

6.4.2. Integrating at method

At the methodological level, four techniques are used. When linking, one database joins to another by sampling. When it comes to constructing, one database informs the approach to data collecting of the other. When two databases are merged, they are brought together for analysis. Data gathering and analysis can be linked at numerous places via embedding (Mertens, 2013:49). In this study no integration occurred on the methodological level.

6.4.3. Integrating at interpretation and reporting level

Integration at interpretation and reporting level occurs through narrative, data transformation and joint display. The fits of integration described the extent of the qualitative and quantitative findings cohere. Understanding these principles and practices of integration can help health services researchers use the strengths of mixed methods (Fetters, Curry, and Creswell 2013:2134). Even though the stages of this study were carried out sequentially, data in phase one was collected and examined qualitatively, while data in phase two was gathered and evaluated statistically. The two data sets were then combined at the level of interpretation. Diagram below depicts the mixed method procedure.

6.5. Discussion of key findings from both strands

6.5.1. Prevalence of positive mental health among the students

In qualitative study, all participants reported having had experiences of coming across students with minor to severe psychological and mental health problems on the campus.

A female teacher participant shared her experiences as follows:

"… *I had lots of experiences. Many, students are likely to have stress on the campus at various times*".

A male counsellor added on this with the statement of:

"… Since my job area is related to such issues, I have been in touch with such students who have mental illness cases although the severities of their cases are different".

Inline to this the evidences generated from quantitative strand analysis also shows that; the level of positive mental health among students in higher education institutions observed to be significantly insufficient in Ethiopia.

In this study, 303 (37.6%) of the respondents have not flourished positive mental health (languishing) with a confidence interval of CI (34.2, 41.0). This implies that only about two third of the students reported flourishing positive mental health, while the remaining ration are in the category of languishing positive mental health.

In this study 303 (37.6%) of the respondents has not flourishing positive mental health (languishing). This implies considerable number of students in higher education institutions are being affected by poor mental health or languishing positive mental health. As agreed by all study participants one of the major effects of students' mental health problems is low academic performance or academic dismissal. They do not critically attend and complete their course with many delays if any.

One study participant stated this as:

"*Compared to other students their academic performance is extremely low. This is due to one they do not have good interaction with their classmates and teachers. So, they miss information and lack understanding of the subject matter*".

In addition, the risk of causing harm on self and others causing injury to students having mental health problems was described by a senior male teacher as:

"Commonly they are impulsive and proactive; sometimes they get in conflict with teachers or other students; even I know a student who tried to harm herself".

Stigmatization is also likely among students with mental health problems on campus.

A senior teacher participant as:

"In addition, they may be isolated because of their strange behaviour".

6.5.2. Socio-ecological factors of positive mental health among the students

Several contributing factors for languished (poor) positive mental health university students were identified from both qualitative and quantitative findings. Evidences from qualitative findings substantiate this fact.

A senior teacher mentioned on campus related factors as follows:

"*Because most of the students get out from their family for the first time, and far from their family to join university, an unfamiliar environment where nobody knows them. This by itself has a significant effect on their mental health status. Because adjusting self to such environment in the brief time it is difficult and there is also homesickness and longing of family and friends at hometown or village*".

A male teacher of 38 years old also described the need for and importance of students' mental health promotion as:

"*One of the causes of their psychological disturbance is poor social and environmental conditions faced on their first-time campus arrival."*

Some of the mentioned factors before joining university are poor family upbringing and genetics. Current family breakage of students' biological parental was among the variables observed had statistically significant association with flourishing positive mental health of the students in higher education institutions. Participants on qualitative finding also support this finding.

A male teacher stated the possible contributor as:

"… *It may be from a family background where they grow up that may be inherited biologically and behaviourally*".

A senior male teacher stated that:

"… *commonly, such problems emerge from problems during an adolescent stage like child-rearing condition, substance abuse, and having friends with bad behaviour. But the main cause for their mental health problem is from financial support problem".*

This was also supported by quantitative results were having low perceived social support and low daily spiritual experiences were among the variables observed had statistically significant association with flourishing positive mental health of the students in higher education institutions.

Frequency of getting psychological counselling, academic assistant, being not involved in any extracurricular activities, and having at least one sources of stress and scoring poor

mental health literacy also associated with the status of positive mental health among the students.

Substance use and economic problems of family and culture of their community. Having no or low monthly financial support from significant others reduces the odds of having languished positive mental health by 88% compared to their counterparts. This implies that financial constraint among the students plays a role for students' poor mental health. Majority, two third of the students get less than 500 ETB financial support from significant others in campus and about one out of seven students report that they did not get any financial support monthly. This implies substantial number of students in higher education have financial challenged besides their academic, environmental, and social difficulties.

6.5.3. Availability of mental health promotion strategies

The needs and approaches of mental health promotion strategies for students in higher education institutions explored in qualitative phase. As one part of health, something needs to be worked on to promote mental health among the entire population and it is much needed particularly among the early age group of students in higher education institutions. Although the need for such programs in the higher education institutions emphasised by the study participants; the finding confirms that currently not available.

The absence of campus mental health programs for the students to seek help and feel comfortable to attain mental wellbeing was mentioned well by study participants.

A male senior teacher stated this as*:*

"*The other one is there are no functional mental health programs and counselling centres for students in our campus where the students know and use to share and discuss all aspects of their problem. I think these are some of the* factors*."*

This evidence also supported by quantitative results where only 146 (43.1%) and 56 (16.3%) get academic assistance or counselling from their assigned academic advisor with a frequency of sometimes and often respectively. This implies that students may be struggling with their poor mental health other than getting support from their teachers which are accessible during course delivery.

6.5.4. The need for campus mental health promotion and strategies

The need for the promotion of mental health among students in higher education institutions and potential strategies were well emphasized.

One participant stated the need for students' mental health promotion on the campus as:

"*Yeah [it has to be promoted] … because of the campus-related contributing factors [of students' mental health problems] … in campus environment".*

Another study participant added as:

"*There is no question on its importance; because even if they feel minor problem there has to be somebody and systems to address their concern and they also do not expose to different risky behaviours like substance abuse".*

Another participant pinpointed and suggested:

"Most of the students are for the first time away from their family to join university, so they get into different psychological disturbances during adaptation. So, setting up mental health program has significant importance in higher education but is currently neglected in our country".

A 24 male care provider stated this as:

"The mental state of the … students in higher education should be promoted; because one; they are the future generation that will take country responsibility so we need to keep their mental health optimum and the strategies should be there to promote their mental health to the optimum or higher state, so it should be".

A male teacher of 38 years old also described the need for and importance of students' mental health promotion as:

"*Yeah, it very important but which was neglected in the campus is students' mental health issue…there is no question on its importance; because even if they feel minor problem there has to be somebody and a system to address their concern and they also do not expose to different risky behaviours like substance use and unexpected pregnancy".*

6.5.4. Suggested promotion approaches and requirements

- *Suggested promotion approaches*

The participants were suggested approaches to promote the mental wellbeing of the students in the higher education institutions through a wide range of support, well-established services, and different individuals and institutions playing their role.

One major supportive approach suggested for the mental health wellbeing of students regardless of the presence or absence of their mental health problems in higher education institutions was mental health-promoting activities. In addition, for the achievement of this consistent assistance from teachers and relevant others, resources and support needed, and the role of different bodies and approaches for increasing help-seeking intentions among the students were suggested.

As found from the in-depth interviews of this study wide range of support were identified as one approach for mental health promotion of students in higher education institutions. One of the emerged themes from qualitative strand supported by other different evidence; suggested promotion approaches, and requirements were presented as follows:

- *Social support*

Socialization in the campus environment has a great role for students to share their difficulties with friends and help in making them free from any kind of stress. The students by themselves could be the best sources of social support for each other.

A male teacher who strongly suggested this, said:

"Students' family has a major role and responsibility in promoting students' mental health in the campus. The family has to follow the condition of their children at campus timely in a special approach. Rather than enjoying their children's joining university, they have to also worry about what they are doing at the campus; about his/her health; overall living conditions at campus. A family should follow their children at the campus for such cases".

Other participants also stated on the current loose follow up of family on their children at the campus as:

"The family follows up benefits students to address their social, academically and health problems that might result in psychological and mental health problems in campus early and eventually I think these protect students from different stress".

A female teacher added on this as follows:

"There has to be close following up from their family, they have to have friends' phone number and should cross-check because their children likely to cheat them. At least they have to call the department head and ask about the performance of their child. But to our context, there is no such trend in reality. Strict family follow up has played a great role in protecting students from risk behaviours and in promoting the positive mental health of the students on campus"

Another senior teacher stated as;

"*Family has a major role on this and there has to be a mechanism by which a family follows their children in campus".*

Out of all respondents, the majority 557 (69.2%) were at the level of low daily spiritual experiences while the remaining 147(18.3%) and 101(12.5%) were at the level of medium and high daily spiritual experiences, respectively. This implies that considerable number of the students were in poor social connection gain from daily spiritual experiences.

The quantitative survey result revels that one quarter of the students were in the category of low level perceived social support and about one third were in the category of moderate level perceived social support. In addition to that having low perceived social support shows reduced odds of having flourished positive mental health by 86% compared to their counterparts. This implies that perceived social support contributes for low students' positive mental health.

- *Financial support*

All the study participants mentioned the need for financial support for students in higher education institutions because the majority of the students came from a family with low incomes. It was also reported that students especially females are being suffered from financial problems and are also being exposed to different risk behaviours to get money for their living expenses.

One senior male teacher stated the issue as follows:

"*The other information I heard is that female students are getting out for dating during night-time to get money and overcome their financial problem and to fulfill all things dressing and cosmetics like their friends who getting adequate support from their family*".

- *Academic support*

One of the areas that is possibly a source of stress and psychological distress to students was identified as the absence of academic support to students with special needs. Almost all participating teachers and students witnessed no implementation of academic advising by assigned academic advisors for students who were notified about the availability of advisors at the beginning of each year for newly enrolled students.

As stated by all participants, teachers have crucial roles in promoting the mental wellbeing of the students because they have close contact and relationship with the students, and have a chance to identify, support, and link students with mental health problems to relevant services.

A teacher participant suggested discharging teachers' role as:

"Teachers have their own role in causing or in reducing stress among students because it is we teachers who hand over (probably meaning receive) these students from their parents. So, students are our children; so, we have to guide them, teach them, approach them as parent and teach them not only academic we have to advise them on all aspects of life because the student who got advice is not the same to those who did not".

Another teacher also stated a teachers' role as:

"Teachers' role is also high in returning students from risky behaviours. Again teachers are able to trace students who are economically challenged and link them to the concerned body. Teachers have to try their best not to put students under stress just by encouraging and motivating them to struggle for better and avoiding any bullying behaviour. We have to approach them sisterly and brotherly; [so that] … they can consult us on everything. Even they consult us about their family problems".

Assistance given for students with psychological or mental health problems from teachers on campus is very low. The majority of the participants witnessed that they did not deliver the support they deserve from them.

A senior teacher who encountered a student with signs and symptoms of anxiety shared his experiences as follows:

"At that time I did not help her but what I did was I advised her to do her exam feeling relaxed; even I did not counsel her after the exam. But I think such conditions are stresses that need minor support. I did not [recognized] … what was happened and I thought it would be good if I linked her to counselling centres".

A statement from another participant was:

"It has to be worked on teachers' awareness on how to handle their students because every teacher has a responsibility to address their students' concern early not only academic but also other issues. So, academic advising should be well emphasized by the departments and better awareness given on this topic to all teachers".

As reported from quantitative study majority of the students 551(68.4%) reported having at least one source of stress on campus while; the leading source stress is academic pressure reported by 323 (40.1%) the students. This implies that there should be academic support for the students in higher education institutions to halt the stress. Besides academic support teachers have a role to identify and support students with mental health problems. Knowledge and skills gaps were mentioned among teachers and others on how to identify and support or link psychologically disturbed, depressed, or stressed students.

- *Material support*

It was strongly suggested that besides financial support importance of material support was emphasised.

A female teacher stated as:

"Even financial support by itself is not enough; for example, at another campus of our university female students were getting sanitary cloths every month. Hence, better if it reached all included pocket money and additionally support like a pen, exercise book, paper

and especially free photocopy services should be provided for students that have financial problems".

The need of giving special attention to female students was described by the study participants as:

"[Support in items such as clothes also needed] … because there are such a needy female student who unable to change their clothes from year to year".

- *Needed resources and services*

In the context of Ethiopian higher education institutions students placed to universities and universities are fulfill all needed services like food and dormitory for the students where students sign cost-sharing to pay back the services and tuition fee utilized in campus after graduation through services obligations or cash payments.

Interest-based university and field of study assignment or placement is one activity in place to promote mental wellbeing of the learners. Required resources and inputs imply to all institutional services being provided to the students and need to be in place for the better mental wellbeing of the students. Besides wide ranges of support by different bodies these institutional students' services such as recreational areas, socialization activities, food services, facilities, and safe and secure campus environments to be fulfilled by the university were suggested to be included as required resources and inputs for the promotion of students' mental wellbeing. Here different individuals and offices can play a great role in availing and maintaining these support and services in order to promote and maintain the psychological wellbeing of the students in higher education institutions. Next these needed services were recommended by the study participants and roles presented in detail.

- *Interest-based university and field of study*

In the context of Ethiopia, after high school completion and earning passing grades to higher education institutions; students placed to the university and field of study either with their choice or without their preferences. Most of the study participants agreed on the negative impact of being assigned at university and field of study against their choice on the mental health of the students in higher education institutions.

A statement of one participant on this is:

"*I think one cause of stress to the student is the placement of the students at university and field without their choice".*

The university at which they are placed may be far or near to their family home. Some of the participants were argued on the impact of family home distance from the university on the mental health of the students in higher education institutions.

One student' services personnel stated this as follows:

"S*pecially, during holydays, we must make them (students) feel home by fulfilling needed facilities because students remember home and family on these days. So, the campus must do its best in preparing all needed foods and pass with them as the family is particularly important*".

The participants agreed on the impact of family home distance from the campus on the mental health of the students in higher education institutions.

As stated by a male student who is a student council member:

"At this time students were struggling to cope with these challenges because they have been getting lots of support from their family at high school and miss that support here".

The quantitative finding also support this evidence where the family hometown distance from university associated with positive mental health of the students.

- *Campus recreational areas*

Recreational areas are where the students use for their enjoyment in their spare time especially for post-exam tension releasing. The benefit for their physical and mental health is incalculable. It also prevents students from passing time on risky behaviour like chewing khat or using other substances and helps them not get out of the compound to look for such areas. The types and needs of recreational activities on the campus for students were emphasized.

A senior teacher stated it as:

"Recreational areas for students, teachers, and staff should be there to maintain their psychological wellbeing. Regarding the recreation area and play station; almost there is no such service on our campus. Football, volleyball, and table tennis should be available for students".

- *Socialization activities on the campus*

Different types of socialization activities are needed for students on the campus. These include the orientation for newly arriving students, life skill training, extracurricular activities, or students' clubs.

On this students' service personnel stated as:

"… *Awareness creation among students on their arrival especially filling a gap on life skill and orientations are significant*".

Other participant stated as:

"It was started but it is not enough and satisfactory; even students did not know its purpose and did not attend fully".

Availability of students' clubs on campus helps students to be free from stress and makes them relax post-exam time. Hence, establishing and encouraging the students to participate in extracurricular activities or clubs have great importance.

One student's representatives describe this as:

"The role of extracurricular activities is high in maintaining their psychological wellbeing and social interactions, but as to our campus, there is no functional students' club. If it had been there and students [engaged] … they get lots of things like life experience sharing and they learn from each other and they also refrain from going to other health risky area".

In the context of Ethiopia, after high school completion and earning passing grades to higher education institutions; students are placed in the university and field of study either with their choice or without their preferences. The university at which they are placed may be far or near to their family home. Some of the participants lamented the impact of family home

distance from the university as affecting on the mental health of the students in higher education institutions.

Other participants agreed on the impact of family home distance from the campus as impacting on the mental health of the students in higher education institutions.

A male student who is a student council member stated:

"Attending school from home and attending class here being away from the family is too difficult and have lots of challenges. Currently (here in campus) students were struggling to cope with these challenges because they have been getting lots of support from their family at high school and miss that support here".

- *Food and accommodation services*

Food services for students, lounge, shop, and other needed services were stressed by the study participants to be availed in a campus environment where the students can find nearby.

Private accommodation can also have an impact on student finances, where students are either at risk of a lack of regulation in the private rental sector, or expensive plush accommodation blocks if they want to live in a halls-style environment in order to make friends.

The needs of other services were also recommended as:

"Like other universities if possible making everything available on the campus at affordable prices helps the students not to get out of campus to risky areas. It would be better if shops, beauty salons, and affordable lounge services are available".

- *Facilities*

Facilities such as adequate living rooms, electricity, water, internet, toilet, and shower are among the services needed with consistent availability to the students in higher education institutions.

One students' representative stated this as:

"After joining this university personally what I perceived is as the living condition of university students is uncomfortable. Our community believes as we are privileged and living in the

high standard setup. Even still call university as a paradise on earth, but the reality is far from this [but on the ground] … there is no conducive and comfortable condition for living".

- *Safe and secure campus*

Safety of living environment and campus securities also mentioned as something needed conditions on the campus.

One representative student expresses as:

"The other thing that should be is creating a conducive and comfortable living environment and rooms. Our current living condition is difficult to explain very uncomfortable and stressful, which is even exposed to different hazards and security problems".

A male teacher participant stated the issue of students living conditions as:

"As to our university there is no dormitory fulfilling all needed facilities, their living environment is even not secure and even sometimes students leave class to take care of their property like laptops and other expensive materials".

As reported from this study majority of the students 551(68.4%) reported having at least one source of stress on campus while insecure and unsafe dormitory environment one of the major sources of stress reported by 12.4% students in higher education institutions.

- *Accessible and functional healthcare and counselling and guidance centre*

Primary health care has a significant role in addressing mental health needs and promoting positive mental health. The importance and role of campus counsellors and care providers are significant. But most of the participants reported the absence and inaccessibility of counselling and guidance services to the students and weak collaboration between the two.

It was stated by one participant as:

"*The big thing that support students' mental health is having functional counselling and guidance centres at each campus. It has no question".*

But regarding availability another participant described as:

"There are no functional counselling and guidance centres for students in our campus where the students know and use to share and discuss all aspects of their problem".

A statement from a female student was:

“Better if all students in general and female students approached and asked about their problems in living environment, teaching and learning and overall their expectation about the university and real experiences of the campus life; because I have not seen any campus activity that encourages female students”.

Student participant recommends this as:

“University should give attention to the implementation and successfulness of academic advising, counselling, and guidance programs in all campuses. Especially these programs were not done successfully in our campus”.

One of the areas stressed by the participants as the source for mental health problems among the students was inconsistency and problems related to services to students and different guidelines that the students are expected to abide in the campus. Hence, it was suggested that the university must play its part in needed support, socialization, fulfilling needed services and facilities helping the students not engage in substance.

- *Substance free campus*

The extracts below attest to the participants' beliefs on substance access, use, and their psychological problem. In qualitative results of this study substance use history was also showed statistically a significant association to flourishing positive mental health among the students with 0.20(0.09, 0.44) and p= 0.001. This implies using substance reduces the chance of having flourishing positive mental health by 80%.

In qualitative strand the same findings were reported. Many of the participants reported that substance use among higher education institutions is the major issue among the students and are related to their mental health problems.

A senior teacher addressed this issue as:

“Students may have bad behaviours like substance abuse like kchat, cigarette or alcohol even before joining university. Because of repeated and frequent use of these substances, they become addicted and their academic performance drops. In addition, their personality and self-care intention are very become poor; again they need more money to get the

substance. Especially medical students were commonly affected by this behaviour and consequences".

A male senior teacher described as:

"To get out of psychological disturbance the options [students] … have may be hiding in substance abuse or addiction or different problems like being addicted to social media. So, students' mental health programs like anti-substance movements in the higher education institutions have major roles in resolving such problems".

Study participants also suggested collaborative activities with local town administration in decreasing substance access of the students.

A senior teacher expressed this as follows:

" … open substance use like kchat, shisha and alcohol houses nearby campuses that contributes for easy access and exposure of students to these substances and having addiction which finally leads to low academic performance and mental health problems".

Two hundred eighty-seven (35.7%) students have reported a history of at least one substance use in the last 12 months. While 155 (42.57%) of students were reported to use more than one substance. Alcohol was reported to be the most substance used with 209 (26.0%).

- *Collaboration with concerned stakeholders*

Different bodies can play a great role in promoting and maintaining the psychological wellbeing of the students in higher education institutions. As evidenced by: Mental health promotion is based on empowering, engaging, and public participation (Barry 2007:4).

Training staff and students to recognize the signs of a student who is struggling with their mental health is vital (GuildHE 2018:6). The process of seeking and acting on students' suggestions fosters students' sense of inclusion and empowerment, and this is critical given that the goal of improving student mental wellbeing can only be achieved through an effective partnership between students and institutional actors (Baik, Larcombe & Brooker. 2019:1).

- *Engaging family*

Students' family has a major role and responsibility in promoting students mental health in the campus. The family has to follow the condition of their children at campus timely in especial approach. Family follow-up will benefit students to address their social, academically and health problems that might result in psychological and mental health problems on campus early and eventually I think these protect students from different stress. Strict family follow-up has played a great role in protecting students from risk behaviours and in promoting the positive mental health of the students on the campus.

This is also supported by the result of quantitative study that being from distances of 500-1000km hometown distance to university significantly associated with positive mental health of the students with AOR=0.13; 95%CI: [0.02, 0.96]) and p=0.001. This implies as the distance to students' hometown to campus increases it reduces the likelihood of having flourished positive mental health with about 87%.

6.6. Conclusion

This chapter presented the integration of quantitative and qualitative findings of the mixed method study. Major findings of qualitative and quantitative strands presented and discussed its burden and implications for the need of development of mental health promotion strategies. Next chapter deals with formulated mental health promotion strategies of the students' higher education institutions.

CHAPTER 7: MENTAL HEALTH PROMOTION STRATEGIES IN HIGHER EDUCATIONAL INSTITUTIONS

7.1. Introduction

In the earlier chapter integration of quantitative and qualitative findings of the mixed methods study were presented. Major findings of qualitative and quantitative strands discussed the burden of mental ill-health amongst students in higher education institutions, their implications, as well as the need for development of mental health promotion strategies. This chapter proposes strategies that will serve as a framework for the higher education institutions to create healthy campus environments, and mentally enhanced students. The assumptions, relationship statements, structure and process of the strategies are also described. Details of the framework, structure, and process of the strategies for promotion of students' mental health were discussed. The chapter conclude with the guideline for operationalizing the strategies in the higher education institutions in Ethiopia.

7.2. Overview of the strategies

The strategies for promoting mental health of students in higher education institutions are based on the findings of this mixed methods descriptive phenomenological study, which indicate that there is high languishing or low positive mental health status among the students and there were no designed mental health programs on campus that enhance the mental health of the students. Academic, social, financial, and environment-related stresses among the students were seen to affect their academic performance and even can lead to severe mental health problems, substance abuse, and suicide. However, there has been a sharp increase in focus on support services working with students when they are at a critical stage of mental health, and not on preventative strategies which promote positive student mental wellbeing before they become ill. The strategies recommended are for the improvement of students' positive mental health status and prevention of campus-related stress among the students. As coined in themes of the qualitative phase of this study the strategies should mainly be grounded on creating a supportive environment, enhanced and integrated access and utilization of services and support needed for the students in higher education institutions. Students with good mental health or well-being will thrive in higher education institutions and become productive in their future career. Hence, students are more likely to stay, academically succeed, and enjoy themselves in campus life. Mental

health promotion strategies are crucial to maintaining healthy and happy student populations. They are likely to be better for the students and less burdensome for mental health services. Therefore, the researcher has chosen to focus his work in this area of wellbeing, as opposed to ill-mental health.

The strategies offer providers some reflective questions for improving practices, which may lead to students feeling that they are better able to cope with their daily stresses in higher education institutions. It is important to note that this project found examples across the student lifecycle and academic and campus services that can better support positive student wellbeing. It should not be left to the student services team to develop and implement a wellbeing strategy, but activities should be owned and enacted in every part of institutional life, from security and estates to the academic curriculum. Because mental health promotion involves any action to enhance the mental well-being of individuals, families, organisations, or communities (Department of Health, 2001).

These interventional activities or initiatives in the strategies are designed to encourage health and social service practitioners of the university and others who work with students in higher education institutions to include mental health promotion principles in overall interdisciplinary existing services as well as to assist them in developing specific programs for its implementation.

This evidence based mental health promotion strategies developed to fill the gaps in the area and based on mental health and health promotion principles identified through critical analysis of literature reviews. The approaches also explored needs from qualitative phase of this study and associated factors for poor positive mental health identified through quantitative phase of the study.

7.3. Scope of the strategies

Regarding the scope of the strategies, it will be applied in specific setting which is a higher education institution in Ethiopia. Overall, it is new in its type and offers a unique and original contribution to the researcher’s discipline.

7.4. Purpose of the strategies

The purpose of mental health promotion is to help people focus on their strengths and potential in maintaining good mental health through increasing protective factors and reducing risk factors (CAMH 2014:36).

These strategies are therefore specific to mental health promotion of students in higher education institutions in Ethiopia. They are aimed at enhancing positive mental health of students, thereby ensuring that the following objectives are achieved:

- To reintroduce the availability and accessibility of counselling and mental health services in campus
- To ensure academic and social services promote mental health and reduce the discrimination and social exclusion associated with mental health problems.
- To enhance help-seeking behaviours among the students from counsellors, teachers, as well as significant others in the campus

These strategies will serve as a mental health program that assists counsellors, health care providers, teachers, and student's service personnel in specific and higher education institutions in general in promoting mental wellbeing of the students.

The strategies will also provide practical guideline in improvement of students' positive mental health status and prevention of campus related stress among the students, in creating supportive environment, enhanced and integrated access and utilization of services and support needed for the students in higher education institutions. Barry (2009:9) concluded that promotion of mental health overlaps with prevention in many aspects, yet both are also distinct in that the emphasis in mental health promotion is on positive mental health (what can be done to keep people healthy or to become even healthier) rather than illness prevention (what can be done to avoid illness). Mental well-being is an important part of one is being.

The goals of mental health promotion are to: increase resilience and protective factors, decrease risk factors, and reduce inequities. Mental health promotion aims to reduce the factors that place individuals, families, and communities at risk of diminishing mental health and to strengthen the ability of individuals, families, and communities to cope with stressful events that happen in their everyday lives (CAMH, 2014:22).

7.5. Assumptions of the strategies

Chinn and Kramer (2011:245) defined assumptions as the basic givens or accepted truths that are fundamental to theoretical reasoning. They are a structural component of theory that is taken for granted or thought to be true without systematically generated empiric evidence and assumed to be true within the strategy because they are reasonable. Based on this assumption an ecological model adapted as theory and model for the development of students' mental health promotion strategy. The ecological model particularly Bronfenbrenner's framework (1994), conceives individual, interpersonal, and institutional level factors within an existing system to explain human development and behaviour (Byrd and McKinney, 2012). The ecological model can be employed to explain the mental health and academic outcomes of university students, addressing impact from all system levels. The individual level, a part of microsystems encompasses a student's "physical, cognitive and emotional health" (Byrd and McKinney, 2012:186). The interpersonal level, as both a microsystems and mesosystem addresses performance in the social domain, such as success and satisfaction with social interactions. The institutional level, in both the exo-system and macrosystem, encompasses factors of the university setting, including the curricula, provided services, teaching methods and overall climate of the university. Overall, the model outlines the factors identified in the literature that facilitate and challenge mental health and student success. Subscribing to an ecological model of student mental health provides a multifaceted understanding of the connections among health, learning, productivity, and campus structure (American College Health Association, 2016). Children and youth spend a lot of time at school, so it is not surprising that school-related experiences can have a considerable influence on their mental health. Schools provide a critical context for shaping children's self-esteem, self-efficacy, and sense of control over their lives (Stewart as cited in Klinger, 2011:47).

7.6. Context of the strategies

Chinn and Kramer (2011:179) emphasise that for the models or strategies to be useful for practice, it must be placed within a context. The context of this strategies is the concept of health promotion defined by the principles of health promotion in Ottawa Charter (WHO, 1986) to promote mental health of students in higher educational institutions in Ethiopia for the purpose of achieving mental wellbeing and enhanced productivity. Similarly, strategies used in mental health promotion many of which are also used in the substance use field are

also parallel to health promotion strategies. Mental health status is determined by a complex interplay of individual characteristics, along with cultural, social, economic, and family circumstances at both the macro level (society) and the micro level (community and family) (Commonwealth Department of Health and Aged Care [CDHAC], 2000).

In summary, both health promotion and mental health promotion: focus on the enhancement of well-being, address the population, are oriented toward acting on the determinants of health, focus on including protective factors, include a wide range of strategies such as communication, community development and local activities acknowledge and reinforce the competencies of the population, encompass the health and social fields, as well as medical services (Joubert, Taylor and Williams, 1996).

Because everyone has mental health needs, the need for mental health promotion is universal and of relevance to everyone. Mental health promotion does have a role in preventing mental health problems, notably anxiety, depression, drug and alcohol dependence and suicide. It assists recovery from mental health problems and has a wider range of health and social benefits: improved physical health, increased emotional resilience, greater social inclusion and participation and higher productivity. It can also contribute significantly to the health and well-being of people with mental health problems and has a crucial part to play in challenging discrimination and increasing understanding of mental health issues (Department of Health, 2001:28).

7.7. Settings of the strategies

A mental health promotion strategy needs to address ways of strengthening protective factors and working to reduce risk factors at an individual, community and structural or policy level (Department of Health, 2001:28). Regarding the setting for these strategies, it was acceptable that schools, including post-secondary institutions, be recognized as crucial environment for fostering mental wellness and well-being. There has also been increasing attention paid in recent years to post-secondary student mental health, with reports of more students experiencing mental health problems and mental illness, more students coming forward to seek help for these, and increasing complexity of the issues that students are presenting with (MacKean, 2011:5).

There are wide related trends such as a strong and growing awareness that mental health is a key dimension of university life and that it affects learning and academic success. An

increasing realization that there needs to be much more attention paid to upstream efforts to promote the mental health and well-being of all students, realizing that the diversity of the student population is increasing. Student mental health, then, is a high priority for colleges and universities (MacKean, 2011:5).

There is increasing realization in the university sector that taking an approach to student mental health that primarily focuses on treating individuals experiencing mental health problems, is neither the most effective way to go nor is it sustainable in the long term (MacKean, 2011:5). This resonates with international trends in mental health and addictions more broadly, where there is increasing emphasis on promoting positive mental health at a population level which includes focusing on environmental factors and creating an inclusive society that fosters the self-esteem and coping abilities of individuals and communities (MacKean, 2011:5).

There is an increasingly convincing evidence base supporting the recognition of the centrality of student mental health and well-being to good learning and academic success, and hence the importance of designing post-secondary institutional settings that truly promote mental well-being for all (MacKean, 2011:5). Promotion of mental well-being is distinct from programs on treatment of mental illness. Whereas programs to address mental illness will benefit only those affected, every person in the community benefits from effective program on promotion of mental well-being **(**World Health Organization, 2013).

Schools are valuable settings for several activities and interventions delivered by teachers, school health workers (including school nurses and counsellors) and local youth workers. Schools are good locations for mental health promotional activities focused on healthy lifestyles and life skills, as well as for early identification of mental health conditions and activities that support children and adolescents who develop such conditions (Eisenberg, Hunt, and Speer, 2013).

7.8. **Theoretical definitions of the concepts**

Walker and Avant (2011:196) further state that a theoretical definition uses other theoretical terms to define a concept and places it within the context of the theory, but it does not specify operational rules for classifying or measuring it. This definition may provide the researcher with a way of expressing the richness of the concept within the theory.

Concepts and definitions related to strategy

By looking for words or groups of words that represent things, qualities, or occurrences in the theory, concepts can be found. This can begin by describing concepts through listing key ideas and attentively identifying how they seem to interrelate (Chin and Kramer, 2015:191). When the question of theory's concepts addressed, the concepts within it must be examined carefully for quantity, character, emerging relationships, and structure. The description of concepts is crucial because the quantity and character of those concepts form an understanding of the purpose of the theory, the structure and nature of theoretic relationships, the definition, and the assumptions (Chin and Kramer, 2015:191).

A definition is an explicit meaning that is conveyed for a concept. Definitions exist to clarify the nature of the abstraction constructed by the theorist in a way that others can comprehend. Definitions suggest how words representations of an idea (concepts) are expressed in experience. Concepts may be defined in a list of definitions or in narrative form in the text, but not labelled as definition (Chin and Kramer, 2015:191).

Concept definition can also be implied by how the theorist uses the conceptual terms in the context (Chin and Kramer, 2015:192). Next conceptual terms used in the strategies presented.

Mental health: Mental health conditions account for a considerable proportion of the global disease burden during adolescence and are the leading cause of disability in young people (United Nations 2015).

Positive mental health: it has been conceptualised as "a positive emotion or affect such as subjective sense of well-being and feelings of happiness, a personality trait encompassing concepts of self-esteem and sense of control, and resilience in the face of adversity and the capacity to cope with life stressors" (WHO, 2004a).

Mental health promotion is a process of enhancing the capacity of individuals, families, and communities to take control over their lives and improve their mental health. This process may take many forms, such as those outlined in the Ottawa Charter for Health

Promotion: building healthy public policy, creating supportive environments for health, strengthening community action for health, developing personal skills, and re-orienting health services (WHO, 1986).

Initiatives/programs: Include a broad range of mental health activities, including services, information, campaigns, strategies, research, and evaluation (CAMH, 2014:101).

Mental health literacy: An increase in mental health literacy across all sectors, among both the public, and health professionals, is an important goal in terms of reducing stigma, enabling people to seek help, improving services, and increasing the capacity of communities to include and support people with mental health problems. It may also help to reduce the stigma attached to working in mental health and enhance the status of mental health as a positive career choice, particularly among young people (Department of Health, 2001:62).

Social capital refers to the resources available to people and to society that are provided through social relationships and networks. This fosters a sense of neighbourliness, mutual trust, shared values, and cooperation amongst network members. These resources can be cultural in nature such as libraries, schools, and community centres as well as resources that provide support such as after-school programs, youth centres and youth-friendly health centres (CMHA Ontario, 2012).

Participation means taking part in social and recreation opportunities, such as sports teams, cultural programs, faith-based groups, and youth groups (CMHA Ontario, 2012).

Risk factors are variables or characteristics associated with an individual that make it more likely that the person will develop a problem (Mrazek and Haggerty, as cited in CDHAC, 2000).

Protective factors buffer a person “in the face of adversity and moderate the impact of stress on social and emotional well-being, thereby reducing the likelihood that disorders will develop” (CDHAC, 2000:13). Protective factors may be internal (e.g., temperament, cognitive abilities) or external (e.g., social, economic, or environmental support). They enable a person to protect his or her emotional and social well-being and cope with everyday life events (whether positive or negative) (CDHAC, 2000:14).

7.9. Relationship statements of the strategies

Based on the health promotion framework stated in Barry (2007:5) here are some guidelines for promoting mental wellness: rather than concentrating on those who are at risk of developing a particular mental condition, mental health promotion incorporates the population in the context of their daily lives the whole university approach strategy is preferred and designed to promote mental health of the whole student population in the University. It also tackles the social, physical, and socioeconomic settings that affect students' mentl health and emphasizes protective factors for improving wellness and quality of life of student as population and individual. In addition. It uses integrated strategies and complementary approaches that operate at all scales, from the individual to the socio-enviromental, as well as cross-sectoral action that goes beyond the health sector. It is also based on empowering, engaging, and public participation. Hence these strategies also attempted to adhere with these principles.

Relationships are the linkages among and between concepts. The nature of relationships in theory may take several forms (Chin and Kramer, 2015:192). Relationship statements structurally inter-relate the concepts of the strategies. These statements declare a relationship between two or more concepts. The process of designing relationship statements requires specific attention to the substance, direction, strength, and quality of the interrelationships that occur among concepts (Chinn and Kramer 2011:180). Relational statements describe, explain, or predict the nature of interactions between the concepts (Chinn and Kramer 2011:191). Walker and Avant (2011:60) provide two kinds of relational statements: association or casualty. Association statements are those that state which concept occur together; they may even state the direction of the association between concepts. Casual statements demonstrate a cause-and-effect relationship. The concept that causes the change in the other concept may be referred to as the independent variable and the concept that is changed or affected as the dependent variable.

Based on the definitions, the following concept relationships are proposed:

- Positive mental health and well-being can be achieved when people live in communities that value diversity communities where they feel physically safe and have access to the determinants that support good mental health and well-being.
- Experience violence, such as bullying, child abuse and neglect, and intimate partner violence. These experiences can be a factor in poor mental health.

Youth with positive interpersonal relationships tend to enjoy better mental health (CDHAC, 2000:27).

Positive school environments and higher levels of teacher support are associated with more positive levels of mental health and lower levels of behavioural problems. Most young people feel supported by their schools and have a sense of belonging (Klinger et al., 2011).

Strategies need to be devised and investigated that reach these students with psychological distress and offer mental health support in ways that will be accessed and used (Gorczynski, Sims-schouten, Hill and Wilson. 2017:118). Mental health promotion may be conceptualized as an empowering, participative, and collaborative process which enables people to increase control over their mental health and its determinants. An emphasis on enabling positive mental health focuses attention clearly on the principles and process of programme delivery. Based on the adoption of a health promotion framework, the key principles that support the implementation of programs for mental health promotion now be examined (Barry, 2007:5). Evidence of the studies suggest that widespread educational campaigns need to be implemented across the college students to increase knowledge about mental illness and reduce stigma towards mental illness and mentally ill persons (Lakdawala and Vankar, 2016:473).

Details of the framework, structure, and process of the strategy for promotion of students' mental health is discussed next.

7.10. Framework, structure, and process of the strategies

7.10.1. Framework of the strategies

- *Agreeing on a vision and setting aims and objectives*

Department of Health, (2001:78) provides a framework for a strategy for mental health promotion that can be applied to different settings and target groups. It outlines the key stages and tasks in developing strategies. An effective framework will outline the roles of agencies, the responsibility of individuals, the resources made available and the process of review.

It is essential for effective strategies to have the commitment of key organizations who will be tasked with delivery, therefore consultation and ownership of a vision, aims and

objectives must be the first step. The strategies hoped to achieve a promoted positive mental health of students in higher education institutions. The detail of framework and stages in developing mental health promotion strategies discussed next.

- *Mapping existing initiatives*

There are no well-organized mental health programs and initiatives to foster mental wellbeing of students in higher education institutions.

- *Identifying key settings and target groups*

It was identified that community which is higher education institutions are best settings to plan and implement mental health promotion strategies for the young people joining university each year. The total population of students enrolled to higher education institutions and particularly those at risk can be a target group for the implementation of the strategy.

- *Making the links with policy initiatives with supporting goals*

This strategy is hoped to support each other if linked with national mental health strategy and pre-existing campus initiatives.

- *Identifying key Stakeholders*

Different university departments working directly on students such as campus students' services, counselling centres, healthcare providers, gender officers, academic affairs and university management bodies are among the internal stakeholders that can take part on the implementation of the strategy. Externally local administrative, community members, religious/faith-based society members and students' family also among the stakeholders to take part in the implementation of the strategy. The students' services directorate office holds essential commitment in implementing this strategy. The federal minister of health and education of the country can also be consulted for the support and evaluation of the program. Stepwise approach used to reach all users, careers and local communities where starting familiarization of the strategy and capacity building for relevant individuals taking part on implementation of the strategy.

- *Selecting Interventions*

Chosen interventions are coping skills, problem-solving skills, social skills, healthy life skills, healthy and secure campus community, social, financial, academic support, food and accommodation services, decreasing risk factors, integrated campus mental and medical healthcare**,** accessible mental health services, campus mental health program for at-risk

groups, placement of the students, accessible and functional healthcare and counselling and guidance services, substance use control and prevention, university and field of study placement, reduce inequality, a collaboration of concerned sectors, establishing linkage, wellbeing initiatives, tackling the stigma and discrimination, availing required resources, adequate and equitable students' services, self-help and support group, social support system, participation in decision making, access to flexible health matters and information and learning opportunities. These interventional initiatives are implemented by targeting the whole student community at campus or university environments as appropriate settings where they live, learn, and grow.

- *Finding the evidence to support the approach taken*

What strength of evidence is available to support the interventions selected?

These interventions were preferred and became effective in promoting positive mental health of the students and young people in different settings and different countries.

- *Establishing indicators of progress*

Common indicators of the strategy were reduced stigma, increased resilience, coping to adversity, enhanced positive mental health, increased participation in social and self-help group activities, improved academic performance, increased help seeking behaviour, social inclusion, increased feeling of connected and sense of belongingness among the students in the University.

- *Building in evaluation*

Different interventional components evaluated by the specific personal, behavioural, and social characteristics of the students brought by the specific interventional initiatives, whereas the whole strategy is evaluated by overall influence and effects of the specific interventions on the mental wellbeing or level of positive mental health among the students.

- *Identifying staffing and resource implications*

The human resources working in university especially those working at departments related to students such as campus students' services, counselling centres, healthcare providers, gender officers, academic affairs and university management bodies are among the staffs to implement the strategy. This implies that strategy application is does not need specialized and new employment rather it only needs, commitment, collaboration, and capacity building of these bodies on the initiatives and programs taken from the strategy.

7.10.2 Strategy structure, process, and indicator

The strategies are structured embedded and based on the principles of the Ottawa Health promotion Charter.

- *Strategy structure*

A model structure assists in understanding the central relationships, their directions, strengths, and their quality. It emerges from the relationship statements of the model and provides the overall form of the conceptual relationship within it (Chinn and Kramer 2011:194). The concepts of the mental health promotion approach identified in the thematic form on qualitative phase study analysis and described in chapter 4 are now given structural form to clarify their relationships by means of a graphic representation.

- *Strategy process*

An increased sense of power and resilience among the students is important not only as an outcome but also as an integral part of the mental health promotion process where the person truly feels that he or she is part of the process. Levels, settings, and at-risk and vulnerable groups are among the things that need to be considered while developing mental health promotion strategy at each stage. In the context of this mental health promotion strategy development; the considered level is the community level that is implemented for individuals who are students. Higher education institutions or schools are the settings of the strategy. At-risk and vulnerable groups are students in higher education institutions in general and those having pre-existing mental health problems, poor coping skills, stressful life events and use of substances.

The university facilitates the process of designing, planning, and implementing specific mental health programs and initiatives in this strategy to enable them in promoting the mental well-being of the students. It also encompasses creating fostering campus environment and improving the knowledge and skills of the students. The campus also facilitates learning and improves mental health literacy for the purpose of supporting reducing stigma and increasing help-seeking behaviour among the students for their mental and psychological challenges. Raising the awareness of students needing to protect their mental health is an important system which positively impacts well-being both directly and indirectly and is also crucial to students' well-being.

- *Strategy indicators*

Two types of indicators are described, namely: Process indicators and Outcome indicators. These indicators are tools organizations can be to gauge the success of their work in implementing the strategy.

Process indicators: measure how well you are running your activities. They track how much you are doing and how well people like the activity (CAMH, 2014:50). The detail of the strategy structure is presented in tabular form integrating this framework and health promotion principles of the Ottawa Charter (table 9-13). Outcome indicators: measure how well initiatives are accomplishing their intended results. They compare the results of an initiative to the situation beforehand (CAMH, 2014:50).

7.10.3 Description of the strategies

Willinsky and Anderson (2003) found that successful mental health promotion initiatives include the following characteristics: clearly stated outcome targets, comprehensive support systems with multiple approaches including emotional, physical and social support, together with tangible assistance, interventions in multiple settings, screening and early interventions for mental health problems, involvement of relevant parts of the social network of the specified population, intervention over an extended period and long-term investment in program planning, development and evaluation.

The discussion paper, Mental Health for Canadians: Striking a Balance (Health and Welfare Canada, 1988) supported the notion that promoting mental health is consistent with the health promotion process of “enabling people to increase control over, and improve their health” (WHO 1986:1). The Ottawa Charter for Health Promotion defines five key health promotion strategies:

- building healthy public policy,
- creating supportive environments,
- strengthening community action,
- developing personal skills, and
- reorienting services toward promotion, prevention, and early intervention.

These five key health promotion strategies are articulated in the tables below:

Table 9: Higher education institutions students' mental health promotion strategies embedded in the Ottawa health promotion principle: Developing personal skills

Mental health promotion approaches	Interventional initiative or activities of the strategies	Target outcomes among the beneficiaries	Indicators of the strategies
Increasing resilience and protective factors	Coping skills Problem-solving skills	Developed skills and coping strategies Improved self-management Reach out, identify, and refer at risk students	Sense of power and resilience Psychological wellbeing Positive mental health
Socialization skills	Social skills Healthy life skills Mental and physical hygiene	Increasing knowledge and attitude among the students and all community members Reduced fear and misconceptions about mental illness	Exercise more control over their own health and environment
Staff and faculty training	Teaches and other skills of detecting and supporting students with mental health problems Capacitating counsellors and care providers	Increasing understanding of the needs and availability of appropriate mental healthcare	Make choices conducive to health Enable students to learn Enable students prepare themselves Stress coping

Mental health literacy	Campus wide awareness program using a variety of modalities	Reducing stigma, enabling people to seek help, improving services, and increasing the capacity of communities to include and support people with mental health problems.	Knowledge and belief systems about mental health and problems Attitudes towards causes and treatments Reduced stigma, Improve seeking behaviour Increased capacity to support people with mental health problems

Table 10: Higher education institutions students' mental health promotion strategies embedded in the Ottawa health promotion principle: Creating a supportive environment

Mental health promotion approaches	Interventional initiative or activities of the strategies	Target outcomes among the beneficiaries	Indicators of the strategies
Healthy and secure campus community	Campus recreational areas Creating safe campus	Skills development resources embedded into faculty resources Healthy physical settings created	Students who share several classes to help
Social, Financial Academic Support	Social network creation Academic support for all students Involvement in extra-curricular activities	Healthy learning and work environments created Social and cultural environment with social justice inclusion	Students feel connected, encouraged and engaged in activities Number of students in socialization activities in campus Success in the academic program
Food and accommodation services	Support for needy students Healthy feeding, healthy living and learning area	Student services, including student mental health services are central to academic missions	Information on opportunities to become involved made readily available
Encouraging faith community participation		Decreased risk factors and enhanced coping for the stress	Number of students taking part in faith activities

Table 11: Higher education institutions students' mental health promotion strategies embedded in the Ottawa health promotion principle: Reorienting health services

Mental health promotion approaches	Interventional initiative or activities of the strategies	Target outcomes among the beneficiaries	Indicators of the strategies
Integrated campus mental and medical healthcare	Seamless continuum of high-quality counselling, medical care Accommodation policies support a rights-based approach	Increased professional help seeking behaviours for poor mental health	Students have timely access to appropriate services Students with psychosocial disabilities accommodated in a responsive manner
Adequate and accessible mental health services	Role of mental health promotion in health services is shared among campus community, health professionals, health service institutions and governments Reorienting health services by training health care providers to refocuses on the total needs of the individual as a whole person Peer-based support programs	Decreased stigma from integrated medical and mental health services	Support the needs of individuals and communities for a healthier life

Table 12: Higher education institutions students' mental health promotion strategies embedded in the Ottawa health promotion principles: Building healthy public policy

Mental health promotion approaches	Interventional initiative or activities of the strategies	Target outcomes among the beneficiaries	Indicators of the strategies
Campus mental health program for at risk groups	Mental health programs that enhance mental wellbeing of the students who are at risk	Inclusive curriculum	Number of students accessing integrated mental health and counselling services
Designing curriculum	Implementing curriculum that is conducive for learners	Improving access mental healthcare and counselling	Activities accessible for
Placement of the students	Health care and counselling services that is reachable and available all the time	centres	students on prevention of substance and harassment Number students
Accessible and functional healthcare and counselling and guidance services		Networking, partnership, and referral linkages between relevant departments	Number of linkages working on students' mental health activities
Substance control and prevention Interest based university and field of study	Creating substance free campus and environment Anti-substance clubs in each campus Anti-bullying activities		Reduce inequality

Collaboration of concerned sectors Establishing linkage	Interest and choice-based university and field placements Implementing diversity and equity policies Creating transitional programs for first-year students Promoting anti-stigma initiatives or campaigns Family or community involvement Establishing links to relevant departments, e.g., social services, students' services, gender office, academic and employment or industry		

Table 13: Higher education institutions students' mental health promotion strategies embedded in the Ottawa health promotion principle: Strengthening community action

Mental health promotion approaches	Interventional initiative or activities of the strategies	Target outcomes among the beneficiaries	Indicators of the strategies
Wellbeing initiatives	Mental health awareness creating events or programs	Improve student's knowledge and attitudes about mental health and illness	Number wellbeing initiatives
Tackling the stigma and discrimination	Campaign aimed at tackling the stigma and discrimination faced by students with mental health issues and at supporting their social inclusion	Improve student's help-seeking behaviour	Reduces stigma and discrimination of students with poor mental health
Availing required resources Adequate and equitable	Integration and life skill trainings Establish self-help and support group		

students' services	Empower the students in healthy lifestyle, socialization, and health matters	Enhance ownership and control of their	Satisfaction of the students with services available in
Self-help and support group	Develop website or social media platform for mental health promotion	own endeavours and destinies	campus
Social support system	Initiatives to increase access to online and other media information	Ensure that a range of written materials and online information available for students	Number of self-support group
Participation in decision making	Information on how to look after their own mental health and mental health promotion		Number of students benefited from self-support group
Information and learning opportunities			Full and continuous access to on formation and learning opportunities Access to flexible health matters

7.10.4 Operationalization of the strategies

Brief and comprehensive guidelines are developed to simplify the operationalization of the strategies.

Setting: The setting for the implementation of this strategy is higher education institutions.

Time: the time for implementation should be from enrolment to graduation where the effect of the strategies is expected to be beyond that.

Targets: All students enrolled for regular undergraduate programs could be the target population or direct beneficiaries of the strategies. While post graduate and students joining university or college for continuing, evening and summer programs could benefit but need some considerations to be considered or modified because the nature campus services for these is limited.

Responsible bodies: for the implementation of the strategy university authorities and implements of different level have a responsibility to put the strategies in place.

7.10.5 Critique of the strategies

These strategies were critiqued and finally endorsed by experts in the fields of mental health, have experience of teaching in higher education institutions in the country and have conducted various mental health related problem-solving research activities. All are in the academic rank of Assistant Professor and above. These scholars contributed a lot of valuable information in generating scientific evidence and improving mental health care in the country. See Annex 9 for a summary of their profile.

The critique offered by these experts was incorporated in the final set of strategies, sent back to them for confirmation, and finally agreement reached on the final structure and contents of the strategies.

7.10.5.1 Clarity of the strategies

Clarity, in general refers to how well the theory can be understood and how consistently the ideas are conceptualized (Chin & Kramer, 2015:200). The strategies presented separately here for the sake of clarity. Tabular presentation of the strategies enhanced structural clarity of the concepts within the strategies.

- *Semantic clarity and consistency of the strategies*

Semantic clarity and semantic consistency primarily refer to understanding the intended theoretic meaning of the concepts (Chin & Kramer, 2015:200). Semantic clarity refers to how clearly the concepts within the boxes are implicitly or explicitly defined, usually within the narrative explanations. Semantic consistency on the other hand, examines if the meaning proposed for those concepts is used the same way throughout the explanation or description provided with the figure (Chin & Kramer, 2015:200). Hence, efforts made at all levels to adhere with both semantic clarity and consistency of the strategies.

- *Structural clarity and consistency of the strategies*

Structural clarity and structural consistency reflect an understanding of the intended connections between concepts within the theory as well as the whole of the theory. The strategy designed structurally as clear as possible and consistent in its presentation.

7.10.5.2. *Simplicity of the strategy*

Simplicity means that the number of elements within a descriptive category, especially concepts and their interrelationships, is minimal (Chinn & Kramer 2011:201). In this strategy, simplicity is evident in that only essential and related criteria are used; no unimportant concepts have been introduced to create unnecessary complexity. The strategy for students' mental health promotion in higher education institutions is simplified in such a way that it can be understand and implemented at all level and settings of universities in the country.

7.10.5.3. Generality of the strategy

The strategy designed as it is easy to generalize to all public higher education institutions in Ethiopia.

7.10.5.4. Accessibility of the strategy

The strategies designed to be acceptable with all cultural, social, political, and environmental considerations. It will also be presented to Ministry of Education and all public universities in the country for accessibility and use.

7.10.5.5. Importance of the strategies

These strategies are important in empowering the students and enhancing environment and social aspects of the learners so that their positive mental health and wellbeing achieved

and maintained to be protected from poor mental health related to campus and non-campuses related factors.

7.10.5.6. Evaluation of the effectiveness of the strategies

Effectiveness of the strategies and performance can be assessed institutionally by improvements in the level of positive mental health status or mental wellbeing level of the student's population and by a reduction in suicide rates and stigma among the students in higher education institutions after the full implementation of the strategies.

7.11 Conclusion

This chapter dealt with a comprehensive description of the framework, structure, and process of the proposed mental health promotion strategies of students in higher education institutions in Ethiopia. Tabular representation of the strategies enhanced the structural clarity of the concepts within the strategies. The researcher also described the guidelines for the operationalization of the strategies in higher education institutions, following endorsement by experts in the field of Mental Health.

The chapter that follows concludes the study, identifies limitations, makes recommendations for mental health promotion strategies practice and further research, and also describes the researcher's reflection.

CHAPTER 8: CONCLUSIONS, LIMITATIONS, RECOMMENDATIONS AND RESEARCHER'S REFLECTIONS

8.1 Introduction

In the preceding chapter, developed strategies on approaches to promote the positive mental health of students in higher education institutions were and presented including the construction and description of the structural process of the strategies, as well as practical and detailed guidelines for its operationalization. In this chapter, the researcher presents conclusions drawn from the findings of the study in relation to the research purpose, objectives, and questions. The conclusions will ascertain whether the objectives of the study were met or not. The chapter will also highlight limitations of the study and recommendations regarding on whom and how the strategies will be utilized in higher education institutions while responding to, or dealing with the mental well-being of the learners. It will conclude with the researcher's reflections, focusing on his journey while conducting the study.

8.2 Summary of the Research design and methods

This study utilized a mixed study design with a three-phased approach which is sequential exploratory, descriptive, and contextual methods. In the first phase, information related to approaches to mental health promotion was explored from purposefully selected key informants and used for tool development used in the second phase of quantitative study and designing strategies. In the second quantitative phase of the study level of positive mental health and associated factors among students at five selected public universities in Ethiopia were addressed from systematically selected students where data from both approaches were used to develop strategies for the promotion of mental health among students in the higher education institutions in the country.

8.3 Summary and interpretation of the research findings

The needs and approaches of mental health promotion strategies for students in higher education institutions explored in qualitative phase. Substantial number of the university students have languished (poor) positive mental health and several contributing factors were identified. Current family breakage of students' biological parental, distance of university from family hometown being in the range of 500-1000km and having had history of substance use in the last 12 months, low perceived social support, having low daily spiritual experiences, and not having any monthly financial support received were among the

variables observed had statistically significant association with flourishing positive mental health of the students in higher education institutions. Finally, strategies formulated based on the evidence from both phases of the study.

8.4 Conclusions

The main purpose of this study was to develop and describe strategies to promote students' mental health in higher education institutions in Ethiopia. These strategies were based on the findings of the two empirical phases of the study. This purpose was achieved by using two-phased, mixed research design which was exploratory, descriptive, and contextual. These phases of the study include:

- **Phase 1: Qualitative phase**: This involved conducting descriptive, explorative, and contextual qualitative research which was based on phenomenological philosophy and symbolic interactionism assumptions. Therefore, the researcher used reasoning strategies inductive and deductive analysis, and synthesis to generate knowledge on approaches to mental health promotion among students in higher education institutions and to identify variables to be used for the succeeding quantitative phase of the study. The key respondents for this in-depth interview were students, teachers, campus care providers, counsellors, university administrators and students' service personnel. Purposive sampling of site and study participants, data collection using a designed interview guide, and finally thematic analysis was done. Ethical principles were maintained throughout the research process and trustworthiness of the findings secured.
- **Phase 2: Quantitative phase**: a survey used to assess the status of positive mental health and associated factors among the students in higher education institution in the country by using a tool design from the insight gained from qualitative study. The participants were students selected systematically those fulfilling inclusion criteria from five universities in the country. Cluster random sampling used to select the five universities and study participants. Data collected through self-administered questionnaires and entered to Epi data version 3.1 and analyses through SPSS version 26. Binary and multiple logistic regression models employed to identify factors with statistically significant association with flourishing mental health status with p-value less than 0.05.
- **Phase 3: Developing strategies**: Finally, mental health promotion strategies were developed from the concepts deducted from the qualitative and quantitative phases of

the study. The researcher utilised Chinn and Kramer's (2011:176-180) approaches of structuring and contextualising theory for the development of the mental health promotion strategies. The four steps entailed: (i) concept identification and definition, (ii) construction of relationship statement, (iii) strategies development and description, and (iv) strategies evaluation.

The subsections that follow present conclusions derived from the study, by examining whether objectives of the study were met.

Objective 1: To explore the need and approaches of students' mental health promotion in higher education institutions in Ethiopia.

- Theme 1: Mental health problems and contributing factors
- Theme 2: Effects of poor mental health
- Theme 3: Campus mental health programs
- Theme 4: Suggested support for the promotion
- Theme 5: Required resources and services

Objective 2: To assess the level of positive mental health among students in higher education institutions

The level of positive mental health among students in higher education institutions was observed to be significantly insufficient in Ethiopia

Objective 3: To identify associated factors to positive mental health among students in higher education institutions

Different campus and non-campus related factors associated to positive mental health of the students were identified. Current family breakage of students' biological parental, distance of university from family hometown being in the range of 500-1000km and having had history of substance use in the last 12 months, low perceived social support, having low daily spiritual experiences, and not having any monthly financial support received were among the variables observed had statistically significant association with flourishing positive mental health of the students in higher education institutions.

Objective 4: To develop and describe strategies for the promotion of mental health among the students in higher education institutions

Strategies on approaches to promote positive mental health of the students in higher education institutions developed from the findings of qualitative and quantitative studies and review of related literatures.

8.5 Contributions of the study

This study contributed to the scientific community evidence on the impact positive mental health and associated factors have on the well-being and performance of university students in general and also offered mental health promotion strategies for higher education institutions in Ethiopia in particular.

8.6 Limitations of the study

Methodological and design related limitations of this study are presented next.

Site – the study was conducted in five universities out of thirty-three public universities where private universities were also excluded because they do not use campus-based students' enrolment and settlements as public universities; hence different in characteristics in student handling and services provided. Technical and Vocational Educational and Training College were also excluded for their varying nature in students' enrolment to public universities.

Population – students and other key informants from private universities and Public Technical and Vocational Educational and Training College were excluded from the study. Students enrolled for Continuing educational program (distance, weekend, summer, and winter in-services) were also excluded from the study because this group of students do not get any services from university and not reside in dormitory.

Method - observation of the status of campuses conditions during the period of data collection not incorporated because the availability of services like recreational activities of the students is not uniform throughout the universities.

Time boundary - the study was time bounded and reflects only what was presents at the time of the study and not show long time pictures of the situation.

Design – the nature of cross-sectional study design used to identify associated factors to positive mental health unable to determine the cause-and-effect relationship of the outcome and predictor variables.

Strategy operationalization - the strategies and its guideline not operationalized and evaluated for the purpose of this study. Therefore, the developed strategies need operationalizing and testing in other universities. There are limited local and international literatures on the status of positive mental health and associated factors among students because most of the researchers are interested in assessing the pathological aspects such as distress, anxiety, depression, and other common mental disorders than assessing the status of positive mental health or mental well-being.

8.7 Recommendations of the study

Taking the strengths and limitations of this study into account; the following recommendations are made:

- Universities

As observed from the study findings majorities of the factors related to the positive mental health of the students were campus-related and due to the absence of clear and scientifically developed campus mental health programs. Hence, universities are recommended to adapt and implement these mental health promotion strategies for students in higher education institutions in Ethiopia.

- Ministry of education

As a policy-making body and public university students' placement handler; Ministry of education of Ethiopia recommended to modify students' placement policy, re-evaluate curriculums and assess the higher educational institutions for their implementation of mental health programs such as mental health promotions strategies in campuses.

- Research

As it is the first of its type; researchers are urged to operationalize and test the effectiveness of these students' positive mental health promotion strategies in higher education institutions in Ethiopia. Furthermore, researchers outside Ethiopia are encouraged to replicate this study in their respective countries to validate or refute the findings of this study.

8.8 Researcher's reflections and experiences

Mental health promotion activities and programs are not well known in the context of higher education institutions in Ethiopia. Students in higher education institutions are suffering from varying types and degrees of mental health problems, substance abuse and suicide. The findings of this studies affirm the need for mental health promotion strategies for students in

higher education institutions. The researcher as a mental health professional specialist and academic had his own experiences of observing and caring for students being challenged with mental health difficulties and could relate to the topic. This required the researcher to bracket his experiences and feelings before commencing with the study, in order to avoid influencing the participants and findings of the research in any direction.

The researcher's journey in mental health, his keen interest in studying "adjustment problem among first year University student" started in 2011 when he was doing his master's degree. The study was focused on the degree of adjustment problems of first year students in higher education institutions and its associated factors. The study found that about one third of students developed adjustment problems on joining University and a variety of factors were statistically associated to the problem. As a mental health educator at the time, the researcher was challenged by the findings that mental health problems on campus are rising. The researcher did not come across any designed program for promotion of mental health and prevention of mental health problems among students in higher education institutions. Noting the gap, he took up the challenge and enrolled in a doctoral programme with UNISA in 2014, with the aim of developing strategies to assist the higher education institutions to have clear strategies, guidelines, and programs to promote mental wellbeing of the students and enhance students' academic achievement in the country.

This was a long and tiresome journey for the researcher; there were moments of doubt and confusion. Indeed, conducting this study was challenging. At times, the researcher doubted his own abilities to successfully complete the program as there were a time of hopelessness and complete loss of motivation on the journey brought about by personal challenges. Amidst all this, the study still empowered the researcher personally and professionally. The study enriched the researcher's knowledge on promotion of mental wellbeing among learners as well as personal resilience. The researcher slowly understood the art of strategy development and is today proud of the outcome of challenging work and dedication.

The role of supervisor in this journey was highly significant where she went the extra miles to motivate the researcher, correct language and grammar as the researcher made progress with the chapters, besides the main contribution of guiding content and the overall flow of the study.

The researcher also had to meet the demands of being a student, a father, and a full-time employee and sometimes discharging the responsibility given by the home university as a leader from college Registrar Coordinator to the level of teaching hospital college Academic and Research Director Positions; he frequently felt overwhelmed with no time for social life and other additional institutional duties. Completing this study and developing the strategy is a big milestone and achievement. It has also developed the researcher into a better scholar and expert in the field of mental health promotion.

8.9 Conclusion

In this chapter conclusions, limitations, strengths, and recommendations as well as the researcher's reflections were presented and discussed in detail. In the next section of this thesis, references utilized and cited in the three phases of the study and strategies development presented.

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ANNEXURES

Annexe 1: Information sheet and consent form

IRB Research approval number: REC-012714-039

Title of the research: Mental Health Promotion Strategies for Students in Higher Education in Ethiopia

Name(s) and affiliation(s) of researcher(s) of applicant(s): This study is being conducted by Adem Esmael Roba, a Doctoral student of the University of South Africa, Pretoria

Sponsor(s) of research: This study is sponsored by Madda Walabu University/Ministry of Science and Higher Education, Ethiopia

Purpose(s) of research: The purpose of the study is to develop and describe strategies for the promotion of mental health among students in higher education in Ethiopia. The study seeks to answer the broad question: "how mental health of students in higher education in Ethiopia could be promoted?"

Procedure of the research, what shall be required of each participant and approximate total number of participants that would be involved in the research:

Today, I would like to request that you participate in in-depth interview discussion, which will take approximately 30-40 minutes. I will be asking you questions about your experiences and views regarding approaches in promoting mental health of students in higher education. I would like to ask for your consent to audio record this interview. The purpose of the audio record is to ensure I have complete documentation of the in-depth interview and to assist me in my analysis and write up.

Your participation is completely voluntary. If you do not wish to participate, you may stop the interview at any time. Your refusal to participate, to answer some questions or to withdraw during the course of the interview will not involve any penalty, affect your ability to receiving services in the institution or affect you in any other way. You are expected to speak freely to the issues I'll be bringing forward, except you do not wish to speak to any particular issue.

Your responses are completely anonymous, I will not record your name in any of my transcripts or notes and your name will not appear anywhere in the final write up. The original responses that I gather from the interview will only be available to me. In total I expect to discuss with 32 participants, representing students and key persons working with the students in Madda Walabu University.

Expected duration of research and of participant(s)' involvement:
In total, the study may be conducted over four weeks duration but your participation in this interview will last no more than 50 minutes, and that will be all about your involvement.

Risk(s): I do not foresee any risk to you as a result of your participation in this study, or any time following this study.

Costs to the participants, if any, of joining the research: Your participation in this research will not cost you anything.

Benefit(s): Because the purpose of this study is to develop and describe strategies for the promotion of mental health among students in higher education in Ethiopia; the information you provide will therefore be used to inform policy changes and development of strategy and program for intervention of mental health problem of students in higher education.

Confidentiality: All information collected in this study analysed and no name or other identifiers recorded. No part of the final report can be linked to you in anyway and your name or any identifier will not be used in any publication or reports from this study.

Voluntariness: Your participation in this research is entirely voluntary.

Alternatives to participation: If you choose not to participate, this will not affect you in any way.
Due inducement(s): You will be compensated for lost wages; but you will not be paid any fees for participating in this research.

Consequences of participants' decision to withdraw from research and procedure for orderly termination of participation: You can also choose to withdraw from the research at any time. Please note that some of the information that has been obtained about you before you chose to withdraw may have been modified or used in reports and publications. These cannot be removed anymore. However the researcher promise to make good faith effort to comply with your wishes as much as is practicable.

Modality of providing treatments and action(s) to be taken in case of injury or adverse event(s): Should there be any injury as a result of your participation in this research, you

will be treated at any public health facility within your locality and the research will bear the cost of this treatment.

What happens to research participants and communities when the research is over: The researcher will inform you and the University community of the outcome of the research through presentation on research symposium or submitting hard copy of study report.

Statement about sharing of benefits among researchers and whether this includes or exclude research participants: If this research leads to commercial services, the University of South Africa and Adem Esmael Roba shall jointly own it. There is no plan to contact any participant now or in future about such commercial benefits.

Any apparent or potential conflict of interest: The researcher is a University academic staff as a lecturer and sponsored by same university thus, not aware of any information that may cause him not to do the work with fear or favour.

Statement of person obtaining informed consent:

I have fully explained this research to _____ and have given sufficient information, including about risks and benefits, to make an informed decision.

Name: _____

Signature: _____ Date: _____

Statement of person giving consent:

I have read the description of the research or have had it translated into language I understand. I have also talked it over with the researcher to my satisfaction. I understand that my participation is voluntary. I know enough about the purpose, methods, risks and benefits of the research study to judge that I want to take part in it. I understand that I may freely stop being part of this study at any time. I have received a copy of this consent form and additional information sheet to keep for myself.

Name: _____

Signature: _____

Date: _____

Witness' Name (if applicable): _____
Witness' Signature (if applicable): _____

Detailed contact information including contact address, telephone, e-mail and any other contact information of researcher:

This research will be approved by the Health Studies Research and Ethics Committee (HSREC), Faculty of Human Sciences, University of South Africa. If you have any question about your participation in this research or regarding your rights as a research participant or have concern that your rights have been violated in the course of your participation in this study, please contact the Researcher using the following:

Name of researcher: Adem Esmael Roba (55777929)
Institution: Madda Walabu University, Goba Referral Hospital, Goba Campus,
e-mail:ademesmael@gmail.com,
Cell phone number: +251912303971.

Informed consent for survey

Dear students! My name is _____. I'm working as data collection facilitator in a survey conducted by the Doctoral student at UNISA to assess Positive Mental Health among and associated factors Learners in Higher Education. In the case of mental health promotion and service among the young educated people in the Higher learning institute understanding the level of positive mental health and it determinants found to be evidence based and why this study is needed.

Here under are the questionnaires you to complete and may last about 15-20 minutes. The questions include various private and personal lives. Your name and any identifier will not written anywhere on this paper. Your responses are completely anonymous and there is no need of writing your name or id number on the questionnaire. Any information collected in this study will be kept in a locked file and will be available only to the researcher and used for the only for the research purpose.

I do not foresee any risk to you as a result of your participation in this study, or any time following this study. In addition your participation in this research will not cost you anything and you will not be paid any fees for participating in this research.

You have full right to participate or not to participate and also have the right to discontinue the study at any time and not to answer any questions that you do not want to answer. If you choose not to participate, this will not affect you in any way and you can put the questionnaire in the table upside.

Because your participation and honest responses will have contribution to generate valid information that can be used for intervention designs; I strongly invite you take part and answer these questions. If there is anything that require clarification please don't hesitate to ask the facilitators for clarification.

Do you wish to participate in the study?

Yes, I want to participate. ☐ proceed to next page.

No, I don't want to participate. ☐ Thank you, turn the questionnaire upside and leave on the table.

Annexe 2: Questionnaire for survey

Part 1: Read the following questions related to socio demographic characteristics carefully and respond accordingly.

Code	Socio-demographic items	Response categories	Code
Q101	How old are you?	On the last birth date _____ years	
Q102	Sex	Male Female	1 2
Q103	Which University from?	Adama Science and technology Uni Arsi University Hawasa University Madda Walabu University Walaita Sodo University	1 2 3 4 5
Q104	From which School /Institute/ College you are?	_____	
Q105	Year of the study	Year 1 Year 2 Year 3 Year 4 Year 5	1 2 3 4 5
Q106	What is your religion?	Muslim Orthodox Protestant Catholic Others (specify ……)	1 2 3 4 5
Q107	What is your ethnicity?	Oromo Amhara Tigre Sidama Wolaita Somale Guragie Others (specify ……)	1 2 3 4 5 6 7 8
Q108	What is your current marital status?	Single Married Others (specify ……)	1 2 3
Q109	What is current marital status of your parent you born to?	Living together Separated in conflict Divorced Widowed/ one lost in death/ Both lost in death	1 2 3 4 5
Q110	What is the estimate income from your family or other sources? (excluding non café payment if any)	_____ ETB	
Q111	What is the estimate distance of your University from kebele your family living?	_____Kms	

Q112	How did you join this University?	With my own choice I have assigned without my choice Other if any ----------	1 2 3
Q113	Generally how did you feel about your University?	I'm fully comfortable Somewhat comfortable Neutral Somewhat uncomfortable I'm not comfortable at all	1 2 3 4 5
Q114	How did you join your department/profession attending now?	With my own choice I have assigned without my choice Other if any _____	1 2 3
Q115	Generally how did you feel about your department/ profession joined?	I'm fully comfortable Somewhat comfortable Neutral Somewhat uncomfortable I'm not comfortable at all	1 2 3 4 5
Q116	How often you received any psychological counseling in the last 12 months from a counselor?	Never Once or twice Severa times	**1** 2 3
Q117	Do you have assigned academic advisor?	Yes 1 No 2 Do not know 3	If "No" or "Do not Know" Skip to Q119
Q118	How often you received any academic assistance or study counseling from your academic advisor?	Never Once/twice Several times	1 2 3
Code	Participation in Extracurricular activities	Yes	No / Skip pattern
Q119	After joining this University have you been a member of different clubs (Anti HIV/AIDS, sport club, art/literature club, GAO and others)?	1	2 / If "No" skip to Q122
Q120	If "Yes" to Q119, encircle on code in front of different clubs you are a member in the last 12 months? *(More than one answers are possible)*	Anti HIV/AIDS Sport club Art/literature club Afan oromo club (GAO) Other _____	1 2 3 4 5
Q121	If "Yes" to Q119, how often do you participate in this/these extracurricular clubs?	Never / Sometimes / Always 1 / 2 / 3	
Code	Have ever used any of the following substances in the last 12 months?	Yes	No / Skip Pattern
Q122	Alcohol	Yes	No / If "No" to all items skip to Q301 or Part 3
Q123	Khat	Yes	No
Q124	Nicotine/cigarette	Yes	No
Q125	Marijuana/Hashish/Ganja	Yes	No
Q126	Other type specify _____	Yes	No

Part 2: Read the following questions related to alcohol and other substance use and use problems carefully and respond accordingly. *(Be aware that if you are not used any abovementioned substances in the last 12 months skip/jump to Q301/Part 3)*

Q Code	Items	Strongly dis agree	Somewhat dis agree	Dis Agree	Neutral	Agree	Some what agree	Strongly agree
Q201	I want to drink/ use drugs so much I can taste it	1	2	3	4	5	6	7
Q202	My desire to drink/ use drugs now seems overwhelming	1	2	3	4	5	6	7
Q203	I would do almost anything to have a drink/ take some drugs right now	1	2	3	4	5	6	7
Q204	I would feel as if all the bad things in my life had disappeared if I drank/ used drugs now	1	2	3	4	5	6	7
Q205	Even major problems in my life would not bother me if I drank/ used drugs now	1	2	3	4	5	6	7
Q206	I would feel less worried about my daily problems if I drank/ used drugs now	1	2	3	4	5	6	7

Part 3: The following questions are related to sources of stresses to the students. Please read carefully and respond by circling the option that applies to you the most.

Code	Do you have a stress due to……..?	Yes	No
Q301	Academic pressure	1	2
Q302	Negative life events	1	2
Q303	History of childhood abuse or neglect	1	2
Q304	Family breakdowns	1	2
Q305	Poor early attachment, warm and affectionate parenting	1	2
Q306	Insecure and unsafe home/dormitory	1	2
Q307	Family member having any psychiatric problem	1	2
Q308	You have diagnosed medical problem	1	2
Q309	You have diagnosed psychiatric problem	1	2

Part 4: Read the following questions related to coping style or self-control mechanisms of the students carefully and respond by circling on the options that describes your experiences the best.

Q Code	How often did you do the following when you were worried or upset?	Never	Sometimes	Often
Q401	Talked to someone	1	2	3
Q402	Blamed yourself for getting into the mess	1	2	3
Q403	Got angry	1	2	3
Q404	Stayed in your room	1	2	3
Q405	Thought about how you had dealt with similar situations	1	2	3
Q406	Had an alcohol drink	1	2	3
Q407	Tried not to think about what was worrying you	1	2	3
Q408	Tried to sort things out	1	2	3

Part 5: Read the following questions related to your daily spiritual experiences carefully and respond by circling on the options best describes your experiences. The list that follows includes items you may or may not experience. Please consider how often you directly have this experience. A number of items use the word 'God.' If this word is not a comfortable one for you, please substitute another word that calls to mind the divine or holy or creator for you.

Code	Items	Many times a day	Every Day	Most days	Some days	Once in a while	Never or almost never
Q501	I feel God's presence.	1	2	3	4	5	6
Q502	I experience a connection to all of life.	1	2	3	4	5	6
Q503	During worship/at other times when connecting with God, I feel joy which lifts me out of my daily concerns.	1	2	3	4	5	6
Q504	I find strength in my religion or Spirituality	1	2	3	4	5	6
Q505	I find comfort in my religion or spirituality.	1	2	3	4	5	6
Q506	I feel deep inner peace or harmony.	1	2	3	4	5	6
Q507	I ask for God's help in the midst of daily activities.	1	2	3	4	5	6
Q508	I feel guided by God in the midst of daily activities.	1	2	3	4	5	6
Q509	I feel God's love for me directly	1	2	3	4	5	6
Q510	I feel God's love for me through others.	1	2	3	4	5	6
Q511	I am spiritually touched by the beauty of creation.	1	2	3	4	5	6
Q512	I feel thankful for my blessings.	1	2	3	4	5	6
Q513	I feel a selfless caring for others.	1	2	3	4	5	6
Q514	I accept others even when they do things I think are wrong.	1	2	3	4	5	6
Q515	I desire to be closer to God	1	2	3	4	5	6
Q516	In general, how close do you feel to God?	Not close	Somewhat close	Very close	As close as Possible		Do not know
		1	2	3	4		5

Part 6: We are interested to know how you feel about the following statements related to perceived social support. Please, read each statement carefully and indicate (circle on the options) how you feel about each statement.

Code	Items	Very Strongly Disagree	Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree	Strongly Agree	Very Strongly Agree
Q601	There is a special person who is around when I am in need	1	2	3	4	5	6	7

Q602	There is a special person with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
Q603	My family really tries to help me.	1	2	3	4	5	6	7
Q604	I get the emotional help and support I need from my family.	1	2	3	4	5	6	7
Q605	I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7
Q606	My friends really try to help me.	1	2	3	4	5	6	7
Q607	I can count on my friends when things go wrong.	1	2	3	4	5	6	7
Q608	I can talk about my problems with my family.	1	2	3	4	5	6	7
Q609	I have friends with whom I can share my joys and sorrows	1	2	3	4	5	6	7
Q610	There is a special person in my life who cares about my feelings.	1	2	3	4	5	6	7
Q611	My family is willing to help me make decisions.	1	2	3	4	5	6	7
Q612	I can talk about my problems with my friends.	1	2	3	4	5	6	7

Part 7: Now we are interested to know your level of understanding on mental health problems. So, please read the following questions carefully and respond accordingly.

Code	Select the mental health problem characterized by;	Response options	code
Q701	Lack of energy, problems concentrating and making decision, lack of initiative, unusually sad, miserable and withdrawal from social activities, poor appetite and weight loss	Depression Anxiety Psychosis/schizophrenia Stress Nothing Other _____	1 2 3 4 5 6
Q702	Feeling of uneasiness, feeling of panic, excessive worry, fear and rapid heart-beat	Depression Anxiety Psychosis/schizophrenia Stress Nothing Other _____	1 2 3 4 5 6
Q703	Delusions (a belief inconsistent with reality) disturbed thoughts and strange sensual experiences (seeing or hearing that not actually present), neglecting self care, talking alone as if someone else is there	Depression Anxiety Psychosis/schizophrenia Stress Nothing Other _____	1 2 3 4 5 6

Code	How much the following treatment options do you think help individuals with the above problems?	Helpful	Neither	Harmful	Do not know
Q704	Deal with the problem by his/her own	3	2	1	0
Q705	Talk over with friends/family	3	2	1	0
Q706	See a health professional/doctors	3	2	1	0
Q707	See a mental health professional/psychiarist	3	2	1	0

Q708	See a psychologist	3	2	1	0
Q709	Take medication from pharmacist	3	2	1	0
Q710	See a counsellor	3	2	1	0
Q711	See herbalist/traditional healers	3	2	1	0
Q712	Go to holy water	3	2	1	0
Q713	See a clergy or religious fathers like priest or sheik	3	2	1	0
Q714	Other (Specify)	3	2	1	0

code	There are many people in the community who suffer from problems like mentioned above.The next few questions are about possible causes of this sort of problem developing in ANYBODY. How likely do you think each of the following is to be a reason for such problems?	Very likely	Likely	Not likely	Do not know
Q715	Due to virus or other infection CNS	3	2	1	0
Q716	Due to an allergy or reaction	3	2	1	0
Q717	Due to day-to-day problems such as stress, family arguments, difficulties at work or financial difficulties	3	2	1	0
Q718	Due to the recent death of a close friend or relative	3	2	1	0
Q719	Due to some recent traumatic event such as bushfires threatening your home, a severe traffic accident or being mugged	3	2	1	0
Q720	Due to losing one or both parents when young or coming from a broken home	3	2	1	0
Q721	Due to problems from childhood such as being badly treated or abused	3	2	1	0
Q722	These sorts of problems are inherited or genetic	3	2	1	0
Q723	Due to chemical imbalance in the brain	3	2	1	0
Q724	Is being a nervous person likely to be a reason	3	2	1	0
Q725	Could having weakness of character be a cause	3	2	1	0
Q726	Due to possession by evil spirit	3	2	1	0
Q727	Due to curse	3	2	1	0
Q728	Due to punishment from God due to the sins	3	2	1	0

Code	Items	Response	code
Q728	How do you seek mental health information for mental health?	Reading printed/non printed material Listening from media From family/friends/neighbor From health professionals None Others specify _____	1 2 3 4 5 6
Q729	What kind of self-treatments help to recover from mental health problems?	1. _____ 2. Do not know	
Q730	Imagine a person with the above problem is your friend and care about. You want to help him/her, what would you do?	1. _____ 2. Do not know	
Q731	Do you know such problems can be treated by professional help?	Yes No Do not know	1 2 3

Q732	Where do you recommend going for a person with mental health problem to seek help?	Health facilities Holy water Priest /Sheik Traditional healers Other specify _____	1 2 3 4 5
Q733	If answer for **Q732** Holy water, Priest /Sheik Or Traditional healers Why do you recommend person with mental health problem to go there?	1. Shall get improvement there 2. b/c found near by 3. they know the exact cause 4. Do not know 5. other	

Part 8: Now we are interested to know the level of positive mental health of the students. So, please read the following questions and respond accordingly.

Code	During the past month, how often did you feel……..?	Never	Once/ twice a month	About once a week	Two or three times week	Almost every day	Every day
Q801	Happy	1	2	3	4	5	6
Q802	Interested in life	1	2	3	4	5	6
Q803	Satisfied in life	1	2	3	4	5	6
Q804	That you had something important to contribute to the society	1	2	3	4	5	6
Q805	That you belonged to a community (like a social group)	1	2	3	4	5	6
Q806	That our society is becoming a better place for people like you	1	2	3	4	5	6
Q807	That people are basically good	1	2	3	4	5	6
Q808	That the way our society works makes sense to you	1	2	3	4	5	6
Q809	That you liked most parts of your personality	1	2	3	4	5	6
Q810	Good at managing the responsibilities of your daily life	1	2	3	4	5	6
Q811	That you had warm and trusting relationships with others	1	2	3	4	5	6
Q812	That you had experiences that challenged you to grow and become a better person	1	2	3	4	5	6
Q813	Confident to think or express your own ideas and opinions	1	2	3	4	5	6
Q814	That your life has a sense of direction or meaning to it	1	2	3	4	5	6

Thank you so much for your time and contribution to this work.

Annexe 3: Survey tool Afan Oromo version

Barattoota Yuunivarsiitii filatamniin kan guutamu

Kaayyoon qorannaa kanaa Haala Fayyaa sammuu barattoota fi wantoota isaan wal qabate Dhaabbilee barnoota ol'anoo Itoophiyaa keessa jiranii qo'achuuf yemmuu ta'u, isinins irratti hirmaachuuf carraadhaan filatamtanii jirtan. Qoranichi fayyida qabeessa akka ta'u tokkoon tokkoon gaafiilee of eggannaan guutamuu qaban. Deebiin nuuf keennitan iccitiidhaan kan eegaman yemuu ta'u, maqaas ta'ee lakkofsi eenyummaa asirratti hin barraa'u. Gaafilee kuniin qormaata miti, deebii sirrii fi dogongora jedhamu hin jiru. Ta'ullee tokkon tokkoo gaafii sirritti erga dubbiftan booda kan qajeelatti isin ibsu ykn sirrii kan isinitti fakkate deebisa.

Qo'annaa irratti hirmaachuuf heeyyamamoodha?

Eyyeen ☐ **Itti fufii**

Miti ☐ **Galatoomaa.**

Kutaa 1: Gaafilleen armaan gadii dhimmoota hawaasumma kan wal qabatan yemmuu ta'an sirritti erga dubbifte booda kan si ibsu lakkoofsa fuula dura jiru irra maruun deebisi.

Kood	Gaafilee dhimma hawaasummaa	Gosa deebii	Koodii
Q101	Umriin kee meeqa?	Waggaa/Ganna _____	
Q102	Saala	Dhiira Dubartii	1 2
Q103	Yuniversitii kamitti baratta?	Yuniivarsiitii Saaynisii fi Technology Aadamaa Yuniivarsiitii Arsii Yuniivarsiitii Hawaasaa Yuniivarsiitii Madda Walaabuu Yuniivarsiitii Walaaytaa soodoo	1 2 3 4 5
Q104	Manabarnootaa/kollejjii/Instiitiyuutii kamitti baratta? Barressi	Mana barnootaa/kollejjii/Instiitiyuutii _____	
Q105	Waggaa meeqaffaa baratta?	Waggaa 1ffaa Waggaa 2ffaa Waggaa 3ffaa Waggaa 4ffaa Waggaa 5ffaa	1 1 3 4 5
Q106	Amantii kee maali?	Muslima Ortodoksii Pirootestantii Kaatolikii Kan biraa (ibsi ……)	1 2 3 4 5
Q107	Sabni kee maali?	Oromoo Amaara Tigiree	1 2 3

		Sidaamaa Walaayytaa Somaalee Guraagee Kan biraa (ibsi ……)	4 5 6 7 8
Q108	Yeroo ammaa kana haalli gaa'éla keetii maali?	Kan hin fuudhiin/hin heerumni Kan fuudhe/heerume Kan biraa yoo ta'e (ibsi……..)	1 2 3
Q109	Yeroo ammaa haalli gaa'ela maatii kee irraa dhalattee maali?	Lamaanuu waliin jiraatan Wal dhabiinsaan adda bayanii jiru Wal hiikanii jiran Tokkon isaanii lubbuun hin jiran Lamaan isaaniituu lubbuun hin jiran	1 2 3 4 5
Q110	Galiin ati maatii kee ykn nama biraa irraa argattu ji'aan hangam ta'a? (*kafaltii warra kaaffee hin fayyadamne yoo jiraate otuu hin dabalatin*).		_____ EBR
Q111	Iddoon jireenya maatii keetii asirraa km hangam fagaata?		_____ kms

Q112	Yuniivarsiitii kana akkamitti galuu dandeette?	Filannoo kiyyaan	1
		Otuu hin filatin ramadameeti	2
		Kan biraa _____	3
Q113	Walumaagalatti Yuniivarsiitii kanatti maaltu sitti dhagahama?	Guutumaan guututti natti tolee jira	1
		Hanga tokko natti tolee jira	2
		Bilisa	3
		Hanga tokko na rakkisee jira	4
		Guutumaan guututti natti hin tolle	5
Q114	Muummee ykn ogummaaa barataa jirtu kana haala kamiin galte?	Filannoo kiyyaan	1
		Otuu hin filatin ramadameeti	2
		Kan biraa _____	3
Q115	Walumaagalattti ogummaa amma barataa jirtutti maaltu sitti dhagaham?	Guutumaan guututti natti tolee jira	1
		Hanga tokko natti tolee jira	2
		Bilisa	3
		Hanga tokko na rakkisee jira	4
		Guutumaan guututti natti hin tolle	5
Q116	Ji'oota 12n darban keessatti yeroo hangam gargaarsa xiin-sammuu ogeessa gorsaa irraa argatte?	Gonkumaa hin arganne	1
		Yeroo tokko/lama qofa	2
		Yeroo hedduu	3
Q117	Gorsaa barnoota/academic advisor/ siif ramadame qabdaa?	Eyyee 1 Hin qabu 2 Hin beeku 3	**Hin qabu** ykn **hin beeku** yoo ta'e **Q119**
Q118	Ji'oota 12n darban keessatti yeroo hangam gargaarsa barnootaa gorsaa-barnootaa /academic advisor kee irra argatte?	Gonkumaa	1
		Yeroo tokko/lama qofa	2
		Yeroo hedduu	3

Q119	Erga Yuniivarsiitii kana galtee kaasee barnoota idileen ala gumiiwwan (gumii farra HIV/AIDS, gumii ispoortii, gumii artii/barruu, gumii Afaan Oromoo, fi kkf) keessaatti miseensa taatee beektaa?	Eyyee 1	Miti 2	Yoo **"Miti"** ta'e gara gaafii **Q222** darbi

Q120	Yoo Q119 “**Eyye**” yoo ta’e, ji’oota 12n darban keessatti gumiiwwan kam fa’atti miseensa taate?	Gumii farra HIV/AIDS Gumii ispoortii, Gumii artii/barruu, Gumii Afaan Oromoo Kan biraa yoo jiraate ibsi_____			1 2 3 4 5
Q121	Yoo Q119 “**Eyyee**” ta’e gumii/gumiiwwan kaniin keessatti yeroo hammam hirmaatte?	Konkumaa	darbeedarbee		Yeroo hundaa
		1	2		3
Koodii	Ji’oota 12n darban keessa wantoota asii gaditti tarreeffaman keessa kami fayyadamtee beeytaa?	Eyyee	Miti		Haala irra itiin darban
Q122	Dhugaatii alkoolii	Eyyee	Miti		Yoo deebiin hundaaatuu “**miti**” ta’e gara gaafii **Q310** tti **darbi**
Q123	Caaatii yookaan Jimaa	Eyyee	Miti		
Q124	Sigaaraa yookaan tamboo xuuxuu	Eyyee	Miti		
Q125	Maarjuwaanaa/Haashishii/gaanjaa	Eyyee	Miti		
Q126	Kan biraa yoo jiraate ibsi _____	Eyyee	Miti		

Kutaa 2**: **Gaafileen itti aanu dhugaatii alkoolii fi fayyadama baala sammuu nama hadoochan fi rakkoolee isaaniin wal qabatan ilaala. Qajeelatti dubbisiitii lakkofsa dura jiru irra maruudhaan deebisaa. (Hubadha: Ji’oota 12n darban keessatti kan asii olitti tarreefaman kaniin kan hin fayyadamnee yoo ta’e gara Q301/Kutaa 3 tti darbaa.

Q Code	Gaafilee	Baay’ee cimsee itti walii hin galu	Cimsee itti walii hin galu	Itti walii hin galu	Hund arrayyuu bilisa	Itti walii gala	Hanga tokko itti walii gala	Baay’ee cimsee itti walii gala
Q201	Alkoolii ykn baala sammuu nama hadoochu hanga akka gaariitti itti gammadutti nin dhuga/itti fayyadama	1	2	3	4	5	6	7
Q202	Feedhiin ani dhugaatii/fayyadama alkooliitiif/baala sammu nama hadoochuuf qabu baay’ee ol’aanaadha	1	2	3	4	5	6	7
Q203	Yeroo amma kana dhugaatii alkoolii/baala sammu nama hadoochu argachuuf wanta hunduma nan godha	1	2	3	4	5	6	7
Q204	Yeroo amma kana wantoonni gadhee ta’an jiruu keesssatii na mudatan yeroo dhugaatii alkoolii /baala sana fayyadamu narraa waan badu natti fakkaata	1	2	3	4	5	6	7
Q205	Rakkooleen ciccimoon jiruu koo keessatti na mudatan osoo hin	1	2	3	4	5	6	7

	hafin yoon dhugaatii alkoolii dhugu/ baala fayyadamu heddu na hin cinqan							
Q206	Rakkooleen guyyaa guyyaan na mudatan yoon alkoolii dhuge/baala sana fayyadame baay'ee na hin yaaddessan	1	2	3	4	5	6	7

Kutaa 3: Gaafileen itti aanan wantoota baratootatti dhiphachuu fiduu danda'aniin wal qabata. Sirritti dubbisaatii filannoo isin ibsu irra maruun deebisaa.

koodii	Kanii armaan gadii keessaa kan madda dhippachuu/cinqii sitti ta'e kami?	Eeyye	Miti
Q301	Dhiibbaa barnootaa irrra kan ka'e	1	2
Q302	Wanti nama rifachiisu fi miidhu jiruu keessatti nama mudachuu	1	2
Q303	Seenaa yeroo daa'imummaa miidhamuu ykn kuununsaa fi jaalala barbaachisu argachuu dhabuu	1	2
Q304	Bittinaa'uu yookaan wal hiikuu maatii	1	2
Q306	Yeroo daa'imummaa walitti dhufeenyaa fi jalaala ho'aa maatii irraa dhabuu	1	2
Q307	Dhabamuu nageenya iddoo jireenya	1	2
Q310	Maatii keessaa namni tokko dhibee sammuu qabaachuu	1	2
Q311	Dhibee qamaa beekamaa ta'e qabaachuu	1	2
Q312	Dhibee sammu beekama ta'e qabachuu	1	2

Kutaa 4: Mee amma ammoo yeroo aartu akkamitiin akka of tasgabbeesitu kan gaatan yemmuu ta'u sirritti dubbisaatii kan muxxannoo keessan sirritti ibsuu danda'u irra maraa.

Q Code	Yoo akka tasaa aarte/yaaddofte kanneen armaan gadii hamam raawwatta?	Gonkumaa	Darbee darbee	Yeroo hunda
Q401	Nama ta'etti yaada koo qoodadha	1	2	3
Q402	Waan gocha sana raawwatteef of abaaruu	1	2	3
Q403	Akka malee dalanuu/aaruu	1	2	3
Q404	Otuu gadi hin bayin Mana keessaa turuu	1	2	3
Q405	Rakko wal fakkataa yeroo darbe haala ittiin dabarse yaadachuu	1	2	3
Q406	Dhugaatii alkoolii dhuguu	1	2	3
Q407	Maaltu akka na yaaddesse tasgabbiin yaaduu yaaluu	1	2	3
Q408	Tasgabbiidhaan wantoota addan baafachuu	1	2	3

Kutaa 5: kan armaan gadiitti tarraa'an muuxannoo kee guyyaa guyyatti amantiif rawwattu ibsuu danda'u. Mee yeroo hammam gochoota kaniin akka si mudatanii fi si ibsuu danda'an lakkofsa irra marii deebsi.Gaafileen hedduun jecha Goofta/Waaqayyo/Rabbi jedhu baay'inaa fayyadaman, inni kun yoo sitti hin tolin, maaloo jecha uumaa kee sii ibsuu danda'u bakka buusii itti fayyadami.

Koodii	Gaafilee	Many times a day	Every Day	Most days	Some days	Once in a while	Never or almost never
Q501	Waaqayyoo/Rabbi akka jiru nan beeka	1	2	3	4	5	6
Q502	Waaqayyoo/Rabbi jiruu kiyya waliin akka dhiyeenna qabu nan hubadha	1	2	3	4	5	6
Q503	Yeroon sagadus ta'ee yeroo biraa waaqayyoon/Rabbiin waliin yoo jiru, gammachuu waan na yaadeessu hundaa keessaa na baaasuutu natti dhagahama	1	2	3	4	5	6
Q504	Amantii koo keessaatti humna argadha	1	2	3	4	5	6
Q505	Amantii koo keessatti mijaa'ina argadha	1	2	3	4	5	6
Q506	Amantii koo keessatti tasgabbiituu keessa kooti dhagahama	1	2	3	4	5	6
Q507	Dalagaa koo yeroo hundaa keessatti gargaarsa waaqayyoo/Rabbii naan gaafadha	1	2	3	4	5	6
Q508	Dalagaa guyyaa guyaan dalagu keessatti akka waaqayyoo/rabbiin na cinaa dhaabbate na qajeelchu natti dhagahama	1	2	3	4	5	6
Q509	Waaqayyoo/ Rabbiin kallattiin akka na jaalatu natti dhagahama	1	2	3	4	5	6
Q510	Kara namoota biraatiin waqayyoo/rabbiin akka jaalala ofii na ibsu natti dhagahama	1	2	3	4	5	6
Q511	Amantii kootiin bareedinni uumamaa na ajaa'iba	1	2	3	4	5	6
Q512	Eebbifamu kootitti galateeffachuu akka qabu natti dhagahama.	1	2	3	4	5	6
Q513	Namoota biro kunuunsuu irratti akka of hin jaalanne natti dhagahama.	1	2	3	4	5	6
Q514	Namoota waan ani sirrii miti jedhu dalaganillee ofitti qaba	1	2	3	4	5	6
Q515	Fedhiin kiyyaa yeroo hunda waaqayyootti/rabbiitti dhiyaachuudha	1	2	3	4	5	6
Q516	Walumaa galatti hammam rabbitti/waaqayyotti dhiyaadhee jettee yaadda?	Dhiyoo miti	Hanga tokko dhiyoodha	Baay'e dhiyoodha	Hanga dhiyaachu danda'een dhiyoodha	Hin beeku	
		1	2	3	4	5	

Kutaa 6: Amma ammoo deegarsa hawaasummaa ilaalchisee maaltu akka sitti dhagahamu beekuun barbaada. Gaafii hundaa sirritti erga dubbiftee booda tokkoon tokkoo isaa irratti maaltu akka sitti dhaghamu lakkofsa dura jiru irra maruudhaan filadhu.

Q code	Gaafilee	Baay'ee cimsee itti walii hin galu	Cimsee itti walii hin galu	Hanga tokko itti walii hin galu	Hundarra yuu bilisa	Hanga tokko itti walii gala	Cimsee itti walii gala	Baay'ee cimsee itti walii gala
Q601	Yeroo gargaarsii na barbaachiseetti nama naa dhaqabu naannoo kana nin qaba	1	2	3	4	5	6	7
Q602	Nama addaa gaddaa fi gammachuu koo itti qoodadhu nana qaba	1	2	3	4	5	6	7
Q603	Dhugumatti maatiin koo yeroo hunda na gargaaruuf ni yaalu	1	2	3	4	5	6	7
Q604	Maatii koo irraa gargaarsa na barbaarchisu hundaa nan argadha	1	2	3	4	5	6	7
Q605	Nama addaa madda mijaaína jiruu kiyya kan ta'u nan qaba	1	2	3	4	5	6	7
Q606	Dhugumatti hiriyyoonni koo na gargaaruuf ni yaalu	1	2	3	4	5	6	7
Q607	Yeroo wantoonni natti faalla ta'an hiriyoota na gargaaran jedhee abdadhu nan qaba	1	2	3	4	5	6	7
Q608	Rakkina na mudate maatii koo waliiin mar'achuu nan danda'a	1	2	3	4	5	6	7
Q609	Hiriyoota gaddaa fi gammachuu ittiin qoodadhu nan qaba	1	2	3	4	5	6	7
Q610	Nama jiruu koo keessatti dhiphina fi yaada koo naa hubatee na bira dhaabbatu nan qaba	1	2	3	4	5	6	7
Q611	Murtii dabrsu hunda keessattti maatiin koo na cinaa dhaabbachuuf fedhii qabu	1	2	3	4	5	6	7
Q612	Rakkoo na mudate hiriyoota kootiin mari'achuu nan danda'a	1	2	3	4	5	6	7

Kutaa 7: Amma ammo rakkolee fayyaa sammuu irratti hubannaa isin qabdan beekuu barbaadna. Himoota armaan gadii sirritti dubbisaatii deebii keessan lakkofsa fuldura jiru irra butuun deebisaa.

Code	Dhibee ykn rakkoo fayyaa sammuu mallattoolee kanaan beekkamu filadhaa	Filannowwan deebii	code
Q701	Human dhabuu, yaada sassaabachuu fi murtii irra ga'uu dadhabuu, kakka'uumsa dhabuu, gadda hin baratamin keessa seenuu, gammachuu dhabuu fi walitti dhufeenya hawaasummaa irraa fagaachu, feedhii dhabuu, fi ulfaatinni qaamaa hir'achuu	Gadda cimaa (Depression) Yaaddo cimaa (Anxiety) Maraatuu (Psychosis) Dhippachuu (Stress) Homaa rakko hin qabu Kan biraa _____	1 2 3 4 5 6
Q702	Waan hundaa namatti cinqamuu, rifachuu/dammaquu, sodaa fi dhahannaan onnee dabaluu	Gadda cimaa (Depression) Yaaddo cimaa (Anxiety) Maraatuu (Psychosis) Dhippachuu (Stress) Homaa rakko hin qabu Kan biraa _____	1 2 3 4 5 6
Q703	Amantaa namonni biroo hubachuu hin dandeenye qabaachuu, dandeettiin yaaduu gaaga'amuu, wanta namoota birootti hin dhagahamne fi hin mul'anne dhagahuu fi arguu, qulqullina ofii eegachuu dadhabuu, akka waan namni bira jiruutti kophaa isaa haasa'uu fi kolfuu	Gadda cimaa (Depression) Yaaddo cimaa (Anxiety) Maraatuu (Psychosis) Dhippachuu (Stress) Homaa rakko hin qabu Kan biraa _____	1 2 3 4 5 6

Koodii	Namooni rakkolee akka armaan olii qaban filanno yaalaa armaan gadii irraa hangam gargaaramu danda'an jettee yaadda?	Ni fayyadaan	Hin fayyadus hin miidhus	Ni midhaan	Hin beeku
Q704	Rakkoo ofii ofuumaan hiikuu	3	2	1	0
Q705	Rakkoo jiruu maatii fi hiriyoota ofii waliin mari'achuu	3	2	1	0
Q706	Ogeessa fayyaa/haakima bira deemuu	3	2	1	0
Q707	Ogeeyyi fayyaa sammu/haakimoota fayyaa sammuu bira deemuu	3	2	1	0
Q708	Ogeessa xiin-sammuu bira deemuu	3	2	1	0
Q709	Dawaa faarmaasii fudhachuu	3	2	1	0
Q710	Ogeessaa tajaajila gorsaa bira deemuu	3	2	1	0
Q711	Ogeessa aadaa bira deemuu	3	2	1	0
Q712	Xabala deemuu	3	2	1	0
Q713	Abbootii amnatii (Qeesii/sheeka) bira deemuu	3	2	1	0
Q714	Kan bira ibsi	3	2	1	0

koodii	Hawaasa keessa namooni rakkoo fayyaa asii olitti ibsaman qaban heddutu jiru. Gaafilleen asii gadii murasin sababiilee rakkoolee kunii ittiin nama qabuu danda'aniin kan wal qabatanii dha. Wantoonin kuniin rakkoolee fayyaa kana nama qabsiisuuf hangam sababa ta'uu danda'an jettee yaadda?	Baay'ee ta'u dand a'a	Ta'uu danda'a	Ta'uu hin danda'u	Hin beek u
Q715	Sammuun yemmuu vayrasiin ykn jarmii biraatiin miidhamuun	3	2	1	0
Q716	Sababa allarjikiitii yookaan dallansuu qaamaatiin	3	2	1	0
Q717	Rakkolee guyyaa guyyaan nama mudatan kan akka cinqaa, waliigaltee dhabuu maatii, cinqaa naannoo hojiitiin dhufuu ykn hiyyumman dhufu	3	2	1	0
Q718	Du'a firaa ykn hiriyyaa dhihoo	3	2	1	0
Q719	Balaa tasaa lubbu fi qabeenya gagaga'u kan akka ibidaa, balaa tiraafikaa ykn saamichaa	3	2	1	0
Q720	Rakkina yeroo daa'imummaa fknf maatiin reebamuu;	3	2	1	0
Q721	Yeroo daa' imummaa maatii keessaa tokko ykn lamaanuu dau'aan dhabuu ykn maatii wal hiikerraa bayu				
Q722	Rakkoleen fayyaa akkanaa kuniin maatii irraa gara daa'imaatti darbuun (Genetics)	3	2	1	0
Q723	Sababa sammuu keessatti madaallin keemikaalaa gaaga'amuun	3	2	1	0
Q724	Ummamaan namoonni aarii guddachuu	3	2	1	0
Q725	Ummamaan dadhabaa ta'anii dhalachuu	3	2	1	0
Q726	Hafuura sheeyxanaantiin qabamuu	3	2	1	0
Q727	Sababa abaarsaatiin	3	2	1	0
Q728	Sababa cubbuu dalaganii waaqni namatti dheekamuutiin	3	2	1	0

Code	Items	Response	code
Q729	Waa'ee fayyaa sammuu irratti maddi odeeffannoo keetii maali?	Barrulee maxansaa fi maxxansaa hin ta'in dubbisuun Meeshaalee sub-qunnamitii dhageeffachuudhaan Maatii/hiriyoota/ollaa Ogeeyyii fayyaa irraa Essaayyuu hin argadhu Kan biraa yoo jiraate ibsi_____	1 2 3 4 5 6
Q730	Namoonni rakkoo fayyaa asii olii kana qaban yaala akkamii ofiif kennu?	3. _____ 4. Hin beeku	
Q731	Haa jennu, namni rakkoo fayyaa sammuu qabu kun hiriyaa kee ati kunuunsitu haa jennu, yoo isa/ishii gargaaruu barbaadde maal gootaaf?	3. _____ 4. Hin beeku	
Q732	Rakkooleen fayyaa sammuu gubbatti ibsaman kunniin gargaarsa ogeeyyii fayyaatiin akka fayyuu danda'an beektaa?	Eyyee Lakki Hin beeku	1 2 3

Q733	Namoota rakkoo fayyaa sammuu qaban essa deemanii gargaarsa argatan eertaaf/gorsitaan?	Dhaabillee fayyaa Xabala Abbootii amantii qeesii ykn sheeka Ogeessa aadaa Kan biraa yoo jiraate ibsi ____	1 2 3 4 5
Q734	Deebiin kee **Q732 Xabala**, **Abbootii amantii qeesii ykn sheeka yookaan Ogeessa aadaa** eeruu yoo ta'e Waan maal ta'eef akka achi deeman jajjabeesite?	Fooyyee achitti argatan waan ta'ef Dhiyeennatti waan argamaniif Waan irraa nama qabe waan beekaniif Hin beeku Kan biraa_____	1 2 3

Kutaa 8: **Amma ammo sadarkaa cimna fayyaa sammuu baratootaa beekuu barbaadna. Kanaaf, ammas sirritti erga dubbiftan booda tokko tokkoon gaafileetiif kan isin ibsuu danda'u lakkoofsarra maruun deebisa**.

	Ji'ota 12n darban keessa yeeroo hammam _____sitti dhagahame?	konkuma a	Ji''atti yeroo tokko/ lama	Torbaanitti yeroo tokko kan ta'u	Torbaanitti yeroo lamaa - sadii kan ta'u	Guyyaa hundatti kan dhiyaatu	Guyya a hundaa
Q801	Gammachuun	1	2	3	4	5	6
Q802	Jiruu keetitti haalaan hawwatamuun	1	2	3	4	5	6
Q803	Jiruu keetitti quufuun	1	2	3	4	5	6
Q804	Akka waan faayyidaa qabu tokko ummataaf gumaachuu dandeettu	1	2	3	4	5	6
Q805	Akka hawaasa tokko keessatti meseensa taatetti	1	2	3	4	5	6
Q806	Namoota akka keetiif hawaassin keessa jiraattu mijaa'aa ta'uu	1	2	3	4	5	6
Q807	Namoni hawaasa keessa walumaa galatti gaarii ta'un	1	2	3	4	5	6
Q808	Haalli hawaasni naanno keetii hojii itiin hojjatu sitti toluun	1	2	3	4	5	6
Q809	Hedduu namummaa keetii jaalachuun	1	2	3	4	5	6
Q810	Ga'ee jiruu guyya guyyaa akka gaaritti bayu danda'uun kee	1	2	3	4	5	6
Q811	Namoota walitti dhufeenya hoo'aa fi amanamummaa qabu qabaachuun	1	2	3	4	5	6
Q812	Tattaffii kee nama fooyyee fi guddinaa ta'uuf gooturratti muddannowaan qormaata sitti ta'an	1	2	3	4	5	6
Q813	Yaada kee fi ilaalcha kee ibsachuuf ofitti amanamummaa qabaachuu	1	2	3	4	5	6
Q814	Jiruun kee kallattii qabachuu ykn hiikkaa qabachuun	1	2	3	4	5	6

Yeroo keessan fudhattanii waan guuttaniif baay'ee Galatoomaa

Annexe 4: Survey tool Amharic version

በተመረጡት የዩኒቨርሲቲ ተማሪዎች የሚሞላ መጠይቅ

የጥናቱ የመረጃ ፅሁፍ እና የተሳታፊዎች ስምምነት ፎርም

የተከበራቹ ተማሪዎች፤

ስሜ---------- ይባላል ፡፡ በዚህ ጥናት እንደ መረጃ ሰብሳቢነት እሰራለሁ፡፡ ጥናቱ በUNISA የPhD ተማሪ በአቶ አደም እስማኤል የሚሰራ ሲሆን በኢትዮጵያ ከፍተኛ ተቋማት ተማሪዎች የአእምሮ ጤና እና ተዛማጅ ምክንያቶችን ዳሰሳ ለማድረግ የታለመ ሲሆን እናንተም በዚህ ጥናት ላይ እንድትሳተፉ በእጣ ተመርጣችዋል፡፡

የተማረዉን ሀይል በተለይ በከፍተኛ የትምህርት ተቋማት የምገኘዉን ወጣት ሀይል የአእምሮ ጤናን ለማጠናካር እና የተለያዩ አገልግሎቶችን ለማስፋፋት የቸግሩ ስርጭት በተለይም የተለያዩ የአእምሮ ጤና፣ ተዛመጅ ምክንያቶች እና የመሳሰሉት በመረጃ የተደገፉ መሆን የግድ ይላል፡፡

ጥናቱ የታለመዉን ግብ እንድ ደርስ መልካም ትብብርዎትን እንጠይቃለን፡፡ ከዚህ በታች የሚመልሱት መጠይቅ የተዘረዘረ ሲሆን ስሞዎትንም ሆነ የመለያ ቁጥርዎትን መፀፍ አይጠበቅብዎትም፡፡ ጥያቄዉ የተለያዩ የግል እና ሚስጢራዊ ጉዳዮችን ይዳስሳል፡፡ በዚህ ጥናት ላይ የምሰጡት ማንኛዉም አስታያት ሆነ መልስ በኮድ ስርዓት ምስጢራዊነቱም በጥብቅ የምጠበቅ ሲሆን በጥናቱም መሳተፍም ሆነ አለመሳተፍ ሙሉ መብት አልዎት፡፡በጥናቱ በመሳተፍምም ሆነ ባለመሳተፍ የምደርስብዎት ምንም ዓይነት ጉዳት የለም፡፡ በጥናቱ ላለመሳተፍ ከወሰኑ ቅጹን በጀርባዉ ጠረጴዛዎ ላይ ያስቀምጡት፡፡ ነገር ግን የእረስዎ በታማኝነት መሳተፍና በእዉነታ ላይ የተመሰረተ መልስ መስጠት ለችግሩ መፍትሄ ለማስቀመጥ ከፍተኛ ጠቀሜታ አለዉ፡፡ ስለዚህ እባክዎን ይህን መጠይቅ ወስደዉ ጥያቄዎቹን ይመልሱት፡፡ ግልፅ ያልሆነ ጥያቄ ካለ ያለማመንታት ማብራርያ መጠየቅ ይችላሉ፡፡

ጥናቱ ላይ ለመሳተፍ ፍቃደኛ ነዎት?

አዎ ፍቃደኛ ነኝ፡፡ ☐ ወደ ምቀጥለዉ ገፅ ይለፉ

ፍቃደኛ አይደለሁም፡፡ ☐

አመሰግናለሁ፡፡

ክፍል አንድ፡ ከዚህ በታች ያሉትን ስለ እርስዎ ማህበራዊ እና ድሞግራፊያዊ ሁኔታ የሚጠይቁ ጥያቄዎችን በጥንቃቄ በማንበብ ለእያንዳንዱ መልስ ይስጡ፡፡

ኮድ	የመህበራዊ እና ድሞግራፊያዊ ሁናቴዎችየሚደደስሱ ጥያቄዎች	የመልሶች ክፍፍሎች	ኮድ
Q101	ዕድሜ	በበለፈዉ ልደት ቀን _____ ዐመት	
Q102	ጸታ	ወንድ ሴት	1 2
Q103	በየትኛዉ ዩኒቨርሲቲ እየተማርክ/ሽ ነዉ?	አዳማ ሳይንስ እና ቴክኖሎጂ ዩኒቨርሲቲ አርሲ ዩኒቨርሲቲ ሀዋሳ ዩኒቨርሲቲ መደ ወላቡ ዩኒቨርሲቲ ወላይታ ሶዶ ዩኒቨርሲቲ	1 2 3 4 5

Q104	በየትኛዉ ኮሌጅ/እንስቲቱት/ትምህርት ቤት የምትማረዉ/ሪዉ?	ኮሌጅ/እንስቲቱት/ትምህርት ቤት _____ _____	
Q105	የስንተኛ ዐመት ተማሪ ነህ/ሽ?	አንደኛ ዐመት ሁለተኛ ዐመት ሶስተኛ ዐመት አራተኛ ዐመት አምስተኛ ዐመት	1 2 3 4 5
Q106	ሀይማኖት	ሙስሊም ኦርቶዶክስ ፕሮቴስታንት ካቶልክ ሌላ (ይግለፁ ……)	1 2 3 4 5
Q107	ብሄረሰብ	ኦሮሞ አማራ ትግሬ ስዳማ ወላይታ ሱማሌ ጉራጌ ሌላ (ይግለፁ ……)	1 2 3 4 5 6 7 8
Q108	በአሁኑ ሰዓት የትዳር ሁኔታ	ያላገባ/ች ያገባ/ች **ሌላ (ይግለፁ** ……)	1 2 3
Q109	በአሁኑ ሰዓት የወላጆችህ/ሽ የትዳር ሁኔታ?	አብረዉ ይኖራሉ ባለመግባባት ተለየይተዋል ተፋተዋል አንዳቸዉ በሞት ተለይተዋል ሁለቱም ሞተዋል	1 2 3 4 5
Q110	ከወላጆች ወይም ሌላ ሰዉ የምታገኘዉ/ኝው ገቢ በወር ስተመን ስንት ይሆናል (ካፌ ለመይጠቀሙት የምከፈለዉን ክፍያ ካላ ሳያካትት)	_____የኢትዮ ብር	
Q111	የቤተሰብዎ መኖሪያ ቦታ አሁን ከሚማመሩበት ዩኒቨርሲቲ ርቀት በኪሎ ሜትር ስንት ይሆናል?	_____ ኪሎ ሜትር	
Q112	አሁን የሚማሩበት ዩኒቨርሲቲ እንዴት ተቀላቀልክ/ሽ?	በእረሴ ፤ምርጫ ሳልመርጥ ተመድቤ ሌላ----------	1 2 3
Q113	በአጠቃላይ አሁን ስለሚማርበት ዩኒቨርሲቲ ምን ይሰመዎታል?	ሙሉ በሙሉ ተመችቶኛል በተወሰነ መልኩ ተመችቶኛል ገለልታኛ ብዙም አልተመቸኝም ሙለ በሙሉ አልተመቸኝም	1 2 3 4 5
Q114	አሁን የሚማሩትን ት/ት/ ሙያ እንዴት የተቀለቀሉ?	በእራሴ ምርጫ ሳይመርጡ ተመድቤ ሌላ ----------	1 2 3
Q115	በአጠቃላይ አሁን የሚማሩበት ት/ት ቄም ሙያ ምን ይሰመዎታል?	ሙሉ በሙሉ ተመችቶኛል በተወሰነ መልኩ ተመችቶኛል ገለልታኛ ብዙም አልተመቸኝም ሙለ በሙሉ አልተመቸኝም	1 2 3 4 5
Q116	ባለፉት 12 ወራት ዉስጥ ምን የህል ግዜ የስነልቦና ወይም የህክምና ምክር ከባለሙየዉ አግኝተዉ ያዉቃሉ?	ፊጽሞ	1
		አንዴ/ሁለቴ	2
		ብዙን ጊዜ	3

Q117	የተመበደልህ/ሽ የትምህርት አማካሪ (academic advisor) አለህ/አለሽ?	አዎ	1	መልሱ **የለኝም /አለውቅም** ከሆነ ወደ **Q119**
		የለኝም	2	
		አለውቅም	3	
Q118	የQ117 መልስ **አዎ** ከሆነ ባለፉት 12 ወራት ዉስጥ ምን ያህል ግዜ የጥናት ወይም የአካዳሚክ ምክር ከአማካሪ መምህር አግኝተዉ ያዉቃሉ?	ፊጽሞ	1	
		አንዴ/ሁለቴ	2	
		ብዙን ጊዜ	3	
Q119	እዚህ ዩኒቨርሲቲ ከገቡ በኃላ ከመደበኛ ት/ት ጎን ለጎን በዩኒቨርሲቲዉ ያሉት ከበቦች (ፀረ HIV/AIDS, ስፖርት ክበብ፤ ኣርት/ስነ ፅሁፍ ክበብ፤ ጉሚ አፋን ኦሮሞ ወዘተ) አባል ሆነህ/ሆነሽ ታቃለህ/ሽ	አዎ	1	**የመዝለያ ሁኔታ**
		አይ	2	መልሱ **አይ** ከሆነ ወደ **Q122** ይዝለሉ
Q120	ለ**Q119** መልሱ **አዎ** ከሆነ ባለፉት 12 ወራት ዉስጥ ከመደበኛ ት/ት ጎን ለጎን በዩኒቨርሲቲዉ በምገኙት ክበቦች የተሳተፉበትን ከፊለፊቱ ያለዉን ኮድ ያክብቡ፡፡	ፀረ HIV/AIDS	1	
		ስፖርት ክበብ	2	
		ኣርት/ስነ ፅሁፍ ክበብ	3	
		ጉሚ አፋን ኦሮሞ	4	
		ሌላ ካለ ይግለጹ_____	5	
Q121	ከሆነ ባለፉት 12 ወራት ዉስጥ ከመደበኛ ት/ት ጎን ለጎን በዩኒቨርሲቲዉ በምገኙት አባል በሆኑበት ክበባት ዉስጥ ምን ያህል ጊዜ ይሳተፋሉ	አንድም ጊዜ ተሳትፌ አለውቅም	1	
		አንዳንዴ አሳተፋለሁ	2	
		ሁሌ እሳተፋለሁ	3	

	በለፉት አስራ ሁለት ወራት ዉስጥ ከተዘረዘሩት አደንዛዥ ዕፅ ዉስጥ የትኛዉን ተጠቅመዉ ያዉቃሉ?	**አዎ**	**አይ**	**የመዝለያ ሁኔታ**
Q122	አልኮል	1	2	መልሱ **አይ** ከሆነ ወደ **Q301** ወይም **ክፍል 3** ይዝለሉ
Q123	ጫት	1	2	
Q124	ስጋራ	1	2	
Q125	ማረጃአና/ሀሽሽ/ጋንጃ	1	2	
Q126	ሌላ ካለ ይግለጹ _____	1	2	

ክፍል 2፡ ከታች የተዘረዘሩትን ስለ አልኮል እና ሌሎች አደንዛዥ ዕፅ በደንብ በማንበብ ለእርሶ የምቀርበዉን በምርጫዉ መሰረት ከፊለፊት ያለዉን ቁጥር ላይ በማክበብ ይመልሱ፡፡ ነገር ግን ከላይ የተዘረዘሩት አንዱንም ተጠቅመዉ የማየውቁ ከሆነ ወደ ***Q301/ክፍል 3*** ይዝለሉ

ኮድ	ጥያቄዎች	እጅግ በጣም እቃወማለሁ	በጣም እቃወ ማለሁ	የተወሰ እቃወ ማለሁ	ገለል ተኛ ነኝ	የተወሰነ እስማማ ሉ	በጣም እስማማ ለሁ	እጅግ በጣም እስማማለሁ
Q201	የምጠጣዉን/የምጠቀመዉን ነገር የምሰጠኝን ደስታ እስካገኘዉ ድረስ እጠጣለሁ/እጠቀማለሁ	1	2	3	4	5	6	7
Q202	የመጠጡ/የምጠቀመዉ ነገር ፍላጎቴ አሁን እስቸጋር እየሆነ ነዉ	1	2	3	4	5	6	7
Q203	በአሁኑ ሰዓት መጠጡን/ነገሩን ለማግኘት ማንኛዉንም ነገር አደርጋለሁ	1	2	3	4	5	6	7
Q204	በህይወቴ የምያጋጥሙኝ መጥፎ ነገሮች ሁሉ አልኮሉን/ዕፁን ስወስድ የሚወገዱልኝ ይመስለኛል	1	2	3	4	5	6	7
Q205	በጣም ከባድ የምባሉ በህይወቴ የምያጋጥሙኝ ችግሮች ሁሉ አልኮሉን/ዕፁን ስወስድ አያስጨንቁኝም	1	2	3	4	5	6	7
Q206	አልኮሉን/ዕፁን ከወስድኩ በየቀኑ የሚያጋጥሙኝ ችግሮች ብዙም አያስጨንቁኝ	1	2	3	4	5	6	7

ክፍል 3፡ ቀጥሎ ሉት ጥያቄዎች ደግሞ ለተማሪዎች የጭንቀት ምንጭ ልሆኑ የምችሉ ነገሮች የየዘ ስሆን በደንብ በማንበብ ለእርሶ አግባብነት ያለዉን ከፊለፊቱ ባለዉ ቁጥር ላይ በማክበብ የመልሱ፡፡

ኮድ	---------- ምክንያት ጭንቀት አለብህ/ሽ?	አዎ	አይደለም
Q301	በትምህርት ጫና	1	2
Q302	አሉታዊ የህይወት ክስተቶች	1	2
Q303	በህፃንነት በቂ ትኩረት አለማግኘት ወይም የጉልበት መበዝበዝ	1	2
Q304	የወላጅ ትዳር መፍረስ	1	2
Q305	በልጅነት ከወላጆች በቂ ፍቅር፤ ግንኙነት አለማግኘት	1	2
Q306	ደህንነቱ ያልተጠበቀ እና ለአደጋ ተጋላጭ የሆነ መኖሪያ ቤት/ዶረሚታሪ	1	2
Q307	የቤተሰብ አባል የአእምሮ ህመም ስላለዉ	1	2
Q308	የታወቀ አከላዊ በሽታ ስላለብህ/ሽ	1	2
Q309	የታወቀ የአእምሮ ህመም ስላለብህ/ሽ	1	2

ክፍል 4፡ ቀጥሎ ያሉት ጥያቄዎች ደግሞ በተለያዩ ሁኔታዎች ራስህ/ሽን የመቆጣጠር ዘዴ ላይ የጠነጠኑ ናቸዉ፡፡ በጥሞና አንብበዉ የእርስዎን ተሞክሮ የምገልጸዉን ከፊለፊቱ ባለዉ ቁጥር ላይ በማክበብ የመልሱ፡፡

QCode	በጭቀት/ንዴት ወቅት የምከተሉትን በምን ያህል ጊዜ ያከናዉናሉ?	እንደዉም አልፎ አልፎ		ሁሌ
Q401	ስለ ሁኔታዉ ለሆነ ሰዉ አወራለሁ	1	2	3
Q402	በእንደዝያ ሁኔታ ዉስጥ በመግባቴ ራሴን እወቅሳለሁ	1	2	3
Q403	በጣም እነደዳለሁ	1	2	3
Q404	ክፍሌ ዉስጥ እቆያለሁ	1	2	3
Q405	ተመሳሳይ ሁኔታዎችን እንዴት እንዳሳለፍኩ አስባለሁ	1	2	3
Q406	አልኮል እጠጣለሁ	1	2	3
Q407	ስለሁኔታዉ ደግሜ ላለማሰብ እሞክራለሁ	1	2	3
Q408	ነገሮቹን ለመለየት እሞክራለሁ	1	2	3

ክፍል 5፡ የምከተሉት ጥያቄዎች በየቀኑ የምነከነዉናቸዉ የመንፈሳዊ ተግባራቶች ናቸዉ፡፡ እያንዳንዱን ዐረፍተ ነገር በደንብ ከነበባችሁ በኋላ የእናንተ ተሞክሮ የምገልጸዉን ቁጥር በማክበብ መልሱ፡፡ የተዘረአሩትን ልምዶች/ስሜቶች ልኖብህ/ሽ ላየኖርብህም/ሽም ይችላሉ፡፡ እንደዚህ ዓይነት ልምዶች ወይም ስሜቶች ምን ያህል ጊዜ እነደተሰሙህ/ሽ አስብ፡፡ ብዙ ዐረፍተ ነገሮች እግዝአብሄር የምል ቃል አላቸዉ፡፡ ምናልባት ህይ ቃል የማይመች ከሆነ ለአንተ/አንቺ ቅዱስ ወይም ፈጣሪ ብለህ የምት ጠራዉን ቃል ተክተህ/ሽ ተጠቀም/ሚ፡፡

Code	ጥያቄዎች	በቀን ብዙ ጊዜ	በየ ቀኑ	አብዛኛዉን ቀናቶች	የተወሰኑ ቀናት	በሆነ ጊዜ አንዴ	እንደ ዉም
Q501	የእግዝአብሄር/ፈጣሪ/አላህ መኖር የሰማኛል	1	2	3	4	5	6

Q502	የኔ መኖር ከሁሉም ህይወት ከለቸዉ ነገሮች ጋር ግንኙነት እንዳለዉ ይሰማኛል	1	2	3	4	5	6
Q503	በሚጸልይበት/በሚሰግድበት ግዜ/ ሌላም ግዜ የእግዝአብሄር/ፈጣሪ/አላህ ጋር ስሆን በየቀኑ ከሚያጋጥሙኝ ችግሮች ነፃ የምየደርገኝ የደስታ ስሜት አገኛለሁ	1	2	3	4	5	6
Q504	በእምነቴ ዉስጥ ጥንካሬን አገኛለሁ	1	2	3	4	5	6
Q505	በእምነቴ/መንፈሳዊ ህይወቴ ዉስጥ ምቾትን አገኛለሁ	1	2	3	4	5	6
Q506	በእምነቴ ዉስጥ ጥልቅ የሆነ የዉስጥ ደስታ/ሰላምን አገኛለሁ	1	2	3	4	5	6
Q507	ቀን ተቀን በማከናዉናቸዉ ድርግቶች ዉስጥ የፈጣሪዬን እገዛ እጠይቃለሁ	1	2	3	4	5	6
Q508	ቀን ተቀን በማከናዉናቸዉ ድርግቶች ዉስጥ ፈጣሪዬ እነደ ምመራኝ ይሰማኛል	1	2	3	4	5	6
Q509	የእግዝአብሄር/ፈጣሪ/አላህ ፍቅር በቀጥታ እንዳለብኝ ይሰማኛል	1	2	3	4	5	6
Q510	የእግዝአብሄር/ፈጣሪ/አላህ ፍቅር በሌሎች በኩል እንዳለብኝ ይሰማኛል	1	2	3	4	5	6
Q511	መንፈሴ በተፈጥሮ ዉበት በጣም ይደመማል	1	2	3	4	5	6
Q512	በተሰጠኝ ጸጋ አመስጋኝ እንደሆንኩ ይሰማኛል	1	2	3	4	5	6
Q513	ከራሴ አብልጬ ለሌሎች ተንከባካቢ እንደሆንኩ ይሰማኛል	1	2	3	4	5	6
Q514	ሌሎች በእኔ አመለካከት ስህተት የምለዉን ብሰሩ እንኳን አለርቃቸዉም	1	2	3	4	5	6
Q515	የእኔ ፍላጎት ወደ የእግዝአብሄር/ፈጣሪ/አለህ መቅረብ ነዉ	1	2	3	4	5	6
		የልቀረብኩ	የተወሰነ የቀረብኩ	በጣም የቀረብኩ	መቅረብ ያለብኝን የህል የቀረብኩ		አለ ውቅም
Q516	በአጠቃላይ ለእግዝአብሄር/ፈጣሪ/አላህ ምን ያህል እንደ ቀረብክ ይሰማሃል?	1	2	3	4		5

ክፍል 6፡ አሁን ደግሞ ስለሚከተሉት ከማህበራዊ እገዛ ጋር ተያያዝነት ስላላቸዉ አረፍተ ነገሮች ምን እንደሚሰማህ/ሽ ማወቅ እንፈልጋለን፡፡እባክዎትን እያንዳንዱን ዐረፍተ ነገር በፅሞና ያንብቡና ስለእያንዳንዱ ዐረፍተ ነገር የሚሰማዎትን ከፊለፊቱ ይምረጡ፡፡

Code	Items	እጅግ በጣም እቃወማለሁ	በጣም እቃወማለሁ	የተወሰ እቃወማለሁ	ገለል ተኛ ነኝ	የተወሰነ እስማማለሁ	በጣም እስማማለሁ	እጅግ በጣም እስማማለሁ
Q601	ባስፈለገኝ ጊዜ ላገኛዉ የምችል ሰዉ በቅርበት አለኝ	1	2	3	4	5	6	7
Q602	በህይወቴ ዉስጥ ለሚየጋጥመኝን ደስታና ሀዘን የማጋራዉ ልዩ ሰዉ አለኝ	1	2	3	4	5	6	7
Q603	በርግጥ ወላጆቼ እኔን ለመርዳት ይጥራሉ	1	2	3	4	5	6	7
Q604	የምያስፈልገኝን የስነ ልቦና እርዳታ ከወላጆቼ አገኘለሁ	1	2	3	4	5	6	7
Q605	ለህይወቴ የደስታ/የምቾት ምነጭ የሆነ ልዩ ሰዉ አለኝ	1	2	3	4	5	6	7

Q606	በእርግጥ ጓደኞቼ ችግር ባጋጠመኝ ጊዜ ሊረዱኝ ይሞክራሉ	1	2	3	4	5	6	7
Q607	ነገሮች በልተሰቡ ሁኔታ ግራ ሲሆኑብኝ በጓደኞቼ እተማመነለሁ	1	2	3	4	5	6	7
Q608	የጋጠመኝን ችግር ለወላጆቼ መናገር/ማወያየት እችላለሁ	1	2	3	4	5	6	7
Q609	ደስታዬን እና ሀዘኔን የማጋራቸዉ/የምጋሩኝ ጓደኞች አሉኝ	1	2	3	4	5	6	7
Q610	በህይወቴ ዉስጥ ለስሜቴ የምጠነቀቅልኝ ልዩ ሰዉ አለኝ	1	2	3	4	5	6	7
Q611	ዉሳኔዎችን እንድ ወስን እኔን ለመርዳት ወላጆቼ ፍቃደኞች ናቸዉ	1	2	3	4	5	6	7
Q612	ያጋጠሙኝን ችግሮች ለጓደኞቼ ማወያየት እችላለሁ	1	2	3	4	5	6	7

ክፍል 7፡ አሁን ደግሞ የተማሪዎች በአእምሮ ጤና ችግሮ ላይ ያለቸዉን ግንዛቤ ለማወቅ እንፈልጋለን፡፡ እባክዎትን የሚከተሉትን በፅሞና ከነበቡ በኋላ የእርስዎን ምርጫ ከፊለፊቱ ያለዉን ቁጥር በማክበብ ይስጡ፡፡

ኮድ	ቀጥሎ በተዘረዘሩት ምልክቶች የሚገለጠዉን የአእምሮ ችግር ይምረጡ	የመልስ አማራጮች	ኮድ
Q701	አቅም ማጣት፣ሀሳብ መሰብሰብና ዉሳኔ መስጠት አለመቻል፣ ተነሳሽነት ማጣት፤ያልተለመደ የሀዘን ስሜት፣ ደስታ ማጣት እና ከመህበራዊ ኑሮ መራቅ፣የፍላጎት እና የሰዉነት ክብደት መቀነስ	ድብርት (Depression) ጭንቀት (Anxiety) እብደት/ Psychosis Stress (የስነልቦና ጫና) ምንም የለበትም ሌላ ከሆነ ይግለጹ _____	1 2 3 4 5 6
Q702	የመጨነቅ እና የመደንገጥ ስሜት፤ የሀሳብ መብዛት ወይም ለሁሉም ነገር መጨነቅ እና ማሰብ፡ የፍራቻ እና የልብ ምት መጨመር	ድብርት (Depression) ጭንቀት (Anxiety) እብደት/ Psychosis Stress (የስነልቦና ጫና) ምንም የለበትም ሌላ ከሆነ ይግለጹ _____	1 2 3 4 5 6
Q703	መዘላበድ (ልሆን የማይችለዉን እንደ ሆነ ኡድርገዉ ማማን)፣ የአስተሳሰብ ሁኔታ መዛባት፡	ድብርት (Depression) ጭንቀት (Anxiety) እብደት/ Psychosis Stress (የስነልቦና ጫና) ምንም የለበትም ሌላ ከሆነ ይግለጹ _____	1 2 3 4 5 6

	እንደዚህ አይነት የአእምሮ ችግር ላለባቸዉ ሰዎችን ለመርዳት የተዘረዘሩት አማራጮች ልጠቅሙት ይችላሉ ወይስ አይችሉም?	ይጠቅማል	አይጠቅምም አይጎዳምም	ይጎዳል	አለዉቅም

Q704	የራሱን ችግር በራሱ እንድፈታ	3	2	1	0
Q705	በችግሩ ላይ ከጓደኞች ወይም ወላጆች ጋር መዉራት	3	2	1	0
Q706	የጤና ባለሙያ ወይም ሃኪምን ማማከር	3	2	1	0
Q707	የአእምሮ ጤና ባለ ሙያ ወይም የአእምሮ ጤና ሃኪም ማማከር	3	2	1	0
Q708	የስነ ልቦና ባለ ሙያ ማማከር	3	2	1	0
Q709	ከፋርማሲ መድሃንት መዉሰድ	3	2	1	0
Q710	የምክር አገልግሎት ባለ ሙያ ማማከር	3	2	1	0
Q711	የባህላዊ ሃኪም ጋር መሄድ	3	2	1	0
Q712	ጠበል መሄድ	3	2	1	0
Q713	የሀይመኖት አባት (ቄስ ወይም ሼክ) ጋር መሄድ	3	2	1	0
Q714	ሌላ ካለ የግለ ይግለጹ	3	2	1	0

ኮድ	በህብረተሰብ ዉስጥ ከላይ በተገለጹት የጤና ችግር የሚጎዱት ብዙ ሰዎች አሉ፡፡ ቀጥሎ ያሉት ጥያቄዎች መንስኤ ልሆኑ የምችሉትን ሁኔታዎች የዳስሳል፡፡ እያንዳንዱን ሁኔታዎች ለእንደዚህ ዐይነት የጤና ችግር ምን የህል ልስከትሉ እንደምችሉ ብሎ ያስባሉ?	በጣም ልሆን ይችላል	ልሆን ይችላል	ልሆን አይችል ም	አለውቅ ም
Q715	አንጎል በቨይረስ ወይም በሌላ ጀርም መያዝ/መታወክ	3	2	1	0
Q716	በአለርጂክ ወይም በስዉነት መቆጣት	3	2	1	0
Q717	የእለት ተእለት ችግሮች ለምሳሌ እንደ ጫና ፤ የወላጆች አለመግባባት፤ የስራ ጫና እና የኢኮኖሚ ችግር	3	2	1	0
Q718	የቅርብ ዘመድ ወይም ጓደኛ ሞት	3	2	1	0
Q719	ድነገተኛ የሆነ በስዉ እና በንብረት ላይ ጉዳት የሚየደርሱ ክስተቶች ለምሰሌ የእሳት አደጋ፤ የመኪና አደጋ፤ ንብራት መዘረፍ	3	2	1	0
Q720	በልጅነት ጊዜ በወላጆች ፤ በልጅነት አንደኛዉን ወይም ሁለቱንም ወላጆች በሞት ማጣት፤ ከተበተነ ወላጅ መዉጣት	3	2	1	0
Q721	ከወላጆች ወደ ልጅ በዘረመል አማካኝነት መተላለፍ	3	2	1	0
Q722	በአንጎል ዉስጥ በሚገኙት ኬሚካል መዛባት ምክንያት	3	2	1	0
Q723	በተፈጥሮ ንዴት የሚየበዙ ሰዎች ላይ ምክንየት	3	2	1	0
Q724	በተፈጥሮ ደካማ ሆኖ መወለድ	3	2	1	0

ኮድ	ጥያቄዎች	የመልስ አማራጮች	code
Q725	ስለ አእምሮ ጤና የመረጃ ምንጮች ምንድን ናቸዉ	የታተሙ እና ያልታተሙ ጽሁፎች መገነኛ ብዙሃንን ማዳመጥ ከወላጆች/ጓደኞች/ነረቤቶች ከጤና ባለ ሙያ ከዬትም አላገኝም ሌላ ካለ ግለጽ	1 2 3 4 5 6
Q729	ከላይ የተገለጸዉን የአእምሮ ጤና ችግር ያለበት ሰዉ በምን መልኩ ራሱን ልረዳ ይችላል	5. _____ 6. አለውቅም	
Q730	እንበል ከላይ የተጠቃዉን የአእምሮ ጤና ችግር ያለበት ሰዉ የሚታስቢለት ጓደኛህ/ሽ ብሆን እና ለመርዳት ብትፈልግ/ጊ ምንታደርጋለህ/ሽ	5. _____ 6. አለዉቅም	
Q731	እነደዚህ አይነቶቹ የጤና ችግሮች በጤና ባለ ሙያ እገዛ ልድኑ እንደምችሉ ታቃለህ/ሽ	አዎ አይ አለውቅም	1 2 3
Q732	የአእምሮ ጤና ችግር ያለባቸዉ ሰዎች ህክምና እንዲያገኙ /እንዲረዱ ወዴት እንድሄዱ ትመራችወልህ/ለሽ	የጤና ተቋማት ጠበል የሀይማኖት አባት ቄስ/ሼክ የባህል ሃኪም ሌላ_ካለ ይግለጹ_____	1 2 3 4 5
Q733	የ Q732 ጠበል፣ የሀይማኖት አባት ቄስ/ሼክ ወይም የባህል ሃኪም ከሆነ ለምንድን ነዉ ወደ እዝያ እነዲሄዱ የመረሃቸሁ/ሽሁ	የተሸለ እርዳታ እዛ ስለምያገኙ በቅርበት ስለሚያገኙ መንስኤዉን ጠንቅቀዉ ስለሚየዉቁ አለዉቅም ሌላ ካለ----------	1 2 3 4 5

ክፍል 8፡ አሁን ደግሞ የተማሪዎች አጠቃላይ የአእምሮ ጤና ደህንነት ለማወቅ እንፈልጋለን፡፡ የተዘረዘሩት ዐረፍተ ነገሮች በደንብ ከነበባችሁ በኋላ በደንብ እናንተን የምገልጸዉ ቁጥር ላይ ማክበብ መልሱ

Code	ባለፉት 12 ወራት ዉስጥ ምን ያህል ..... ተሰምትዎታል?	መቼም	በወር አንዴ / ሁለቴ	አንዴ በሳምነት	በሳምት ሁለቴ/ ሶስቴ	በየቀኑ ማለት የምቸለዉን	በየቀኑ
Q801	የደስታ ስሜት	1	2	3	4	5	6
Q802	በህይወት ከፍተኛ የሆነ ፍላጎት	1	2	3	4	5	6
Q803	በህይወት መርካት	1	2	3	4	5	6
Q804	ህብረተሰብን የሚጠቅምን ነገር ማበርከት እንደለብህ	1	2	3	4	5	6
Q805	በመህበረሰብ (እንደ መህበራዊ ትስስሮች/ኑሮ) የታቀፍክ/ሽ መሆኑን	1	2	3	4	5	6

Q806	መህበረሰባችን ለእንደ አንተ/ች ያሉ ሰዎች የተሸለ ቦታ እየሆነ መምጣቱ	1	2	3	4	5	6
Q807	በመሰረቱ ሰዎች ጥሩ መሆናቸዉ	1	2	3	4	5	6
Q808	መህበረሰቡ ስራን የምሰራበት መንገድ ለአንተ/ች ስሜት የምሰጠ መሆኑ	1	2	3	4	5	6
Q809	የአብዛኛዉን ስብዕናህን/ሽን መዉደድ	1	2	3	4	5	6
Q810	የዕለት ተዕለት የሎብህን/ሽን የስራ ድርሻዎችን በጥሩ ሁኔታ ማከናወን መቻል	1	2	3	4	5	6
Q811	ከሌሎች ሰዎች ጋር በፍቅር እና በመተማመን የተመሰረተ ግንኙነት የላህ/ሽ መሆኑ	1	2	3	4	5	6
Q812	የበለጠ ለማደግና የተሸለ ሰዉ ለመሆን በምታደርገዉ ጥረት ዉስጥ አሉታዊ ሁኔታዎች ያጋጠሙ/ሽ መሆኑ	1	2	3	4	5	6
Q813	በማሰብ ወይም የራስህን/ሽን ሀሳብ እና አመለካከት ለመግለጽ ጥሩ የራስ መተማመን የምሰማህ/ሽ መሆኑ	1	2	3	4	5	6
Q814	ህይወትህ/ሽ አቅጣጫ ወይም ትርጉም ያለት መሆኑ	1	2	3	4	5	6

ጊዜዎትን ወሰደዉ ስለ ሞሉ በጣም እናመሰግናለን::

Annexe 5: Interview guide for students and key persons

5.1. Interview guide for key persons (care providers, counselors, teachers and student dean/service)

Target population: student counselors, students service affair/student dean, health care providers, and teachers

Interviewer: Thank you so much for participating in this interview. My name is _____ , a doctoral student at UNISA and I will be conducting the interview. The purpose of the interview is to know your opinion on students' mental wellbeing and mental health promotion in higher education. With your permission, I would like to audio-record our conversation so that I can focus on the discussion and still have an accurate record. Only the research team and my supervisor at UNISA will have access to the audio-recording. The audiotape is used only for the research purpose and identifiable information such as your name, ID no.,

telephone no, will not be used. This is not an evaluation of your work, and your responses will not be shared with your friends, academic/other staff, or anyone outside the research team. If there are any questions that you do not wish to answer, please let me know and we will move to the next question. Do you have any questions before we begin?

Section one: Introduction

1. *To start our interview would you tell me your* age, highest educational attainment, your role and experience?

Section two: Mental health problem experiences among students

2. Please tell me all about mentally ill students (their behavior and academic performance) you have come across in your career and how you have assisted him/her? What do you think the causes of these mental/psychological problems of the students?

Section three: Opinions on student mental health promotion

3. In your opinion do you think students mental health is something that need to be promoted, enhanced or restored? If **"Yes**", Please suggest strategies that include resources (financial and human power/psychologist) and other inputs required.
4. Kindly explain what you think the contribution of the counselor/teacher/student Dean/care providers will be in promoting, enhancing or restoring mental health of the students.

Section four: Conclusion: That is the end of my question.

5. Is there anything to say in general regarding student mental health promotion approaches in higher education?

End of interview **Thank you very much**

5.2. Interview guide for students

Target population: **Students' representatives**

Interviewer: Thank you so much for participating in this interview. My name is _____ and I will be conducting the interview. The purpose of this interview is to know your opinions on students' mental wellbeing and mental health promotion in higher institution. With your permission, I would like to audio-record our conversation so that I can focus on the discussion and still have an accurate record. Only the research team and my supervisor at UNISA will have access to the audio-recording. The audiotape is used only for the research purpose and identifiable information such as your name, ID no., telephone no., etc. will not be used. This is not test and your responses will not be shared with your friends, academic/other staff, or anyone outside the research team. If there are any questions that

you do not wish to answer, please let me know and we will move to the next question. Do you have any questions before we begin?

Section one: Introduction

1. *To start our interview would you tell me your* age, role, class year and department?

Section two: Mental health problem experiences

2. Please tell me all about mentally ill students (their behavior and academic performance) you have come across in class environment and how you have assisted him/her?

What do you think the causes of these mental/psychological problems such the students?

Section three: Opinions on student mental health promotion

3. In your opinion do you think students mental health is something that need to be promoted, enhanced or restored? If **"Yes**", Please suggest strategies that include resources (financial and human power/psychologist) and other inputs required
4. Kindly explain what you think the contribution of the students/counselor/teacher/student Dean/care providers and university managements will be in promoting, enhancing or restoring mental health of the students

Section four: Conclusion

That is the end of my question.

5. Is there anything to say in general regarding student mental health promotion approaches in higher education?

End of interview

Thank you very much

Annexe 6: Ethical clearance

UNISA university of south africa

UNIVERSITY OF SOUTH AFRICA
Health Studies Higher Degrees Committee
College of Human Sciences
ETHICAL CLEARANCE CERTIFICATE

REC-012714-039

HSHDC/348/2014

Date:	26 November 2014	Student No:	5577-792-9
Project Title:	Strategies for promotion of mental health of students in higher education in Ethiopia.		
Researcher:	Adem Esmael Roba		
Degree:	D Litt et Phil	Code:	DPCHS04
Supervisor:	Dr TS Mokoboto-Zwane		
Qualification:	PhD		
Joint Supervisor:	-		

DECISION OF COMMITTEE

Approved [√] **Conditionally Approved** [ ]

for **Prof L Roets**
CHAIRPERSON: HEALTH STUDIES HIGHER DEGREES COMMITTEE

L.A. Roets (Prof)

Prof MM Moleki
ACADEMIC CHAIRPERSON: DEPARTMENT OF HEALTH STUDIES

PLEASE QUOTE THE PROJECT NUMBER IN ALL ENQUIRES

Open Rubric

Annexe 7: Curriculum vitae

PERSONAL INFORMATION: ADEM ESMAEL ROBA
Institution: MADDA WALABU UNIVERSITY, Goba Referral Hospital, Ethiopia **Position : Assistant Professor in Mental Health**
Telephone: +251 (0)912303971 alternative: +251(0)922159525
ademesmael@gmail.com or 55777929@mylife.unisa.ac or adem@mwu.edu.et
Skype: adem.esmael1
Sex: Male Date of birth: 15/10/1984 GC Nationality: Ethiopian

WORK EXPERIENCE

Dec 7, 2018 to present	• Position: **Assistant Professor in Mental Health** • Organization: **Madda Walabu University Goba Referral Hospital** • Duty station: Bale Goba, Ethiopia • Type of organization: Public University • Major duties and responsibilities: • Providing courses, advising, conducting research, counseling students with psychological problems, evaluating staff proposal at college level. • Supervising students at clinical and community practical attachment sites • Assessing, diagnosing and treating psychiatric patients at Goba Referral hospital
Dec 5, 2017 – Dec 6, 2018	Position: **Lecturer and Academic and Research Director** • Organization: **Madda Walabu University, Goba Referral Hospital.** www.mwu.edu.et.org • Major duties and responsibilities: ✓ Delivering courses, advising, conducting research, overseeing all schools, department activities, discharging responsibilities given as different University and hospital level committee member and member of executive hospital management ✓ Supervising students at clinical and community practical attachment sites ✓ Designing and undertaking community service projects ✓ Participating and chairing research proposal evaluation at Hospital level ✓ Assessing, diagnosing and treating psychiatric patients at university teaching hospital
Feb 02, 2016– Dec 06, 2017)	• **Position**: **Lecturer and College Registrar and Alumni Coordinator** • **Organization**: **Madda Walabu University, Goba Referral Hospital** Major duties and responsibilities: ✓Plan, coordinate and oversee all activities, supervise program and staffs in the Registrar office, participate on college Academic Commission representing the office ✓Manage, monitor and track program activities in the registrar office ✓Write and submit monthly and quarterly plan and report as per the standard ✓Providing courses, advising students' research projects and conducting research ✓Supervising students at clinical and community practical attachment sites ✓Preparing student manual and delivering orientation for new coming students every year ✓Assessing, diagnosing and treating psychiatric patients at Goba referral hospital on consultation base.

EDUCATION AND TRAINING

January, 2014 –Current	PhD fellow at UNISA, COLLEGE OF HUMAN SCIENCES Student number: 55777929
Oct, 2009 – Aug, 2011	▪ **Qualification**: **MSc in Integrated Clinical and Community Mental Health**
Training organization	**University of Gondar**, Gondar- Ethiopia CGPA: 3.57 out of 4.00 ▪ Master's thesis: Prevalence of Adjustment Problem and associated factors among regular undergraduate Madda Walabu University students
Oct, 2003 – Jul, 2006	▪ **Qualification**: **BSc in Nursing**
Training organization	**Haramaya University**, Harar, Ethiopia Research title: Assessment Expanded Program Immunization coverage among under five children in Galamso town, west Hararghe, Ethiopia. ▪ CGPA: 3.39 out of 4.00

Nov 1, 2011 – Feb 1, 2015	• **Position**: **Lecturer** • **Organization**: **Madda Walabu University College Medicine and Health Sciences** • **Major duties and responsibilities**: Delivering course, student advisee and counselor, engage in title selection for as department level **research committee member** graduating students acting • Supervising students at clinical and community practical attachment sites • Managing mental illness at Psychiatric Unit of Goba Referral Hospital on consultation base.
Oct 10,2006 – Oct 30, 2011	• Position: **Instructor** (**Assistant Lecturer**) • Organization: Goba College of Health Sciences • Type of Organization: Regional College • Duty station/location: Bale Goba, Ethiopia Major duties and responsibilities: Delivering courses, student advisee and conducting research

PERSONAL SKILLS

Mother tongue	**Afan Oromo**				
Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
Amharic	C2	C2	C2	C2	C2
English	C1	C2	C1	C1	C2
Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user					

Communication skills	▪ I have very direct forwarded and clear verbal communication with listening talent with the student, staff, community and partners made me proficient in selling organization's mission, vision and values as well defend the community's interest by far. I also strived to produce high quality written materials in content and structure, which exemplify my written communication skills.

Organizational or Managerial skills	▪ During Academic and Research Director position, I got the chance of managing more than 200 academic and administrative staffs at MWU Goba Referral Hospital. I have been also working as College Registrar and Alumni coordinator at Goba Referral Hospital. ▪ Organized different community based program events such as campaigns, symposiums, trainings, meetings, Overseeing, budget, supply chain management and other incidental duties were clear evidences of my stamina to work under pressure and diverse work environment.
Computer skills **Job-related skills** **Other skills** **Symposium or Conferences presentations** **Chairing Symposium /Conferences**	▪ Good command of office suite (Word, Excel, Outlook, Power Point) ▪ Good command of statistical software (Nvivo, epi info, Epi-data, SPSS, Endnote, Medley) ▪ Work process skills such as situational assessment, planning, implementing, coordination, mentoring and monitoring of health researches, projects and programs developed through teamwork with colleagues and partners/stakeholders. ▪Thoughtful during discussions and capable of decisively analyzing project documents, assessment findings, implementation reports, guidelines and health data were some of the insights of my analytical competencies. Developed over time through the rigorous academic and professional functions; strongly facilitates my evidence based decision making. • Organize and manage activities of National symposium at Hospital level with the position of Deputy chairman. • October 8-10, 2011 GC: 1st International Mental Health Conference organized at University of Gondar with the main theme of Treating the threat of Mental and Psychosocial problems. • April 2-4, 2018 GC: 1st National Mental Health symposium on the theme "Mental illness and substance Related Problems" organized by Amanuel Mental Specialized Hospital. • April 20-21, 2017. 2ndNational Research symposium with main theme of "Towards health equity: Opportunities and Challenges" By Madda Walabu University Goba Referral Hospital • April 22-23, 2018. 3rd National Research symposium with main theme of "Towards health equity: Opportunities and Challenges" By Madda Walabu University Goba Referral Hospital • April 2-4, 2018 GC: 1st National Mental Health symposium on the theme "Mental illness and substance Related Problems" organized by Amanuel Mental Specialized Hospital.

Projects as community services	▪ Undergone different community project and research activities granted by University ▪ Effective teaching and clinical coaching skills for preceptors working at hospitals in the university catchment area. ▪ Solid and liquid waste management in Adaba kela, wash kebeles in 2017. ▪ Communal latrine construction for households in Goba town, 2017. ▪ Improving the Skills of Academic Staffs on Systematic Review and Meta-Analysis, and Statistical Packages at Madda Walabu University Goba Referral Hospital.

Training service delivered	▪ August 5-8, 2018: Training on Detecting and Managing Common child and Adult mental health problems in HIV care organized by Nekemte Health Science College IST center and Oromia Regional Health Bureau. ▪ August 21-25, 2010 EC: Training on Detecting and Managing Common child and Adult mental health problems in HIV care organized by Arsi University IST center and Oromia Regional Health Bureau. ▪ October 10-15, 2004 EC: Training on Nursing standards for Goba Referral Hospital Nursing staffs ▪ 6 August to October 6, 2007GC: **Teaching Methodology training** for college instructors held at Asela Health Science College Organized by Oromia Health Bureau and Ethio-Italian Corporation.
Certifications	▪ 15, October 2012 to May 15, 2013: **Higher Diploma Program** Certificate from Madda Walabu University attended. ▪ 10 September, 2009 to 15 February, 2010: **Diploma** in Basic Computer Skill from Dot net Computer Technology Goba Campus. ▪ December 12-17, 2013: Qualitative In-depth Interview Training organized by WAAS and ORB International. ▪ May 23-25/2016: Objective structured Clinical Examination (OSCE) training, organized by MWU GRH Nursing Department. September 4-6, 2017:
Consultancy services	Internal Examiner for MSc thesis MWU GRH department of Public •□April 15-17, 2019: Qualitative data analysis and Nvivo training organized by MERQ consultancy. • Data collection, supervision of research activities, training service evaluation.
Certificates on ToT	• ToT on ETS with ModCal organized by MCHIP in Collaboration with MOH from April 2-7, 2012. • ToT on mhGAP for Psychiatry Professionals organized by Amanuel Mental Specialized Hospital January 9-13, 2018. • ToT on Detecting and Managing Common child and adult mental health problems in HIV care; Organized By Addis Ababa City Administration Health Bureau in Collaboration with CDC-E, July 6-19, 2015. • ToT on Pediatrics and Adolescent Psychosocial Care and Support Organized by Federal Ministry of Health and ICAP-Colombia University Program in Ethiopia 21-23, 2016

Committee tasks	• Madda Walabu University Goba Referral Hospital **Academic Staff recruitment and promotion committee: Chair**. • Madda Walabu University Goba Referral Hospital **Procurement Approval committee**: **Chair** • January 2 - December 30, 2010 EC: Madda Walabu University; **University Graduate Committee (UGC): Member** • January 2, 2009 - December 30, 2010 EC: Madda Walabu University Goba Referral Hospital with the rank of **College Research/Project Proposal Evaluating Committee: Secretary** • A member **of various committees** emerged on different events (symposium preparation, graduation committee, Hospital etc) member and various meetings. Since April 2016: Founder and Vice President of Ethiopian Mental Health Association.
Membership	Since November 2011: Member of Ethiopian Public Health Association.
Publications	**Esmael A**, Ebrahim J, Misganew E. (2018). Adjustment Problem among First Year University Students in Ethiopia: Across Sectional Survey. J Psychiatry 21: 455. doi:10.4172/2378-5756.1000455 Woldemichael B, Bekele D, **Esmael A.** (2018). Cold Chain Status and Knowledge of Vaccine Providers at Primary Health Care of Units Bale Zone, Southeast Ethiopia: Cross sectional Study. Immunome Res 14: 152. doi:10.4172/1745-7580.1000152. Kemal M, Tadesse G, **Esmael A**, Abay SM and Kebede T. (2019). Schistosoma mansoni infection among preschool age children attending Erer Health Center, Ethiopia and the response rate to praziquantel. BMC Res Notes 12:211 https://doi.org/10.1186/s13104-019-4246-8 Mekonnen A, Fikadu G and **Esmeal A.** (2019). **Disrespectful and abusive maternity care during childbirth in Bale zone Public Hospitals, southeast Ethiopia: Cross-sectional study;** Cinical Practice, 16(5):1273-80 Kuti A K, Nur A R, Donka M G, Kerbo A A, and **Roba E A**. 2020. Predictors of Intestinal Parasitic Infection among Food Handlers Working in Madda Walabu University, Ethiopia: A Cross-Sectional Study; Hindawi Interdisciplinary Perspectives on Infectious Diseases. https://doi.org/10.1155/2020/9321348 Woldetsadik M A, Ayele N A, **Roba, E A**, Haile F G and Mubashir K. (2019). Prevalence of common mental disorder and associated factors among pregnant women in South-East Ethiopia, 2017: a community based cross-sectional study. Reproductive Health 16:173. https://doi.org/10.1186/s12978-019-0834-2
References	Dr Bazabih Wondimu; Madda Walabu University Academic Vice President: Tel: +251(0)911466319 Ato Mohammed-aman Mama, MWU Goba Referral Hospital, Academic and Research Director: Tel: 0912686689 Ato Wagane Bahru, MWU Goba Referral Hospital Nursing Department Head: Tel: +251(0)917796758

Annex 8: Theoretical framework

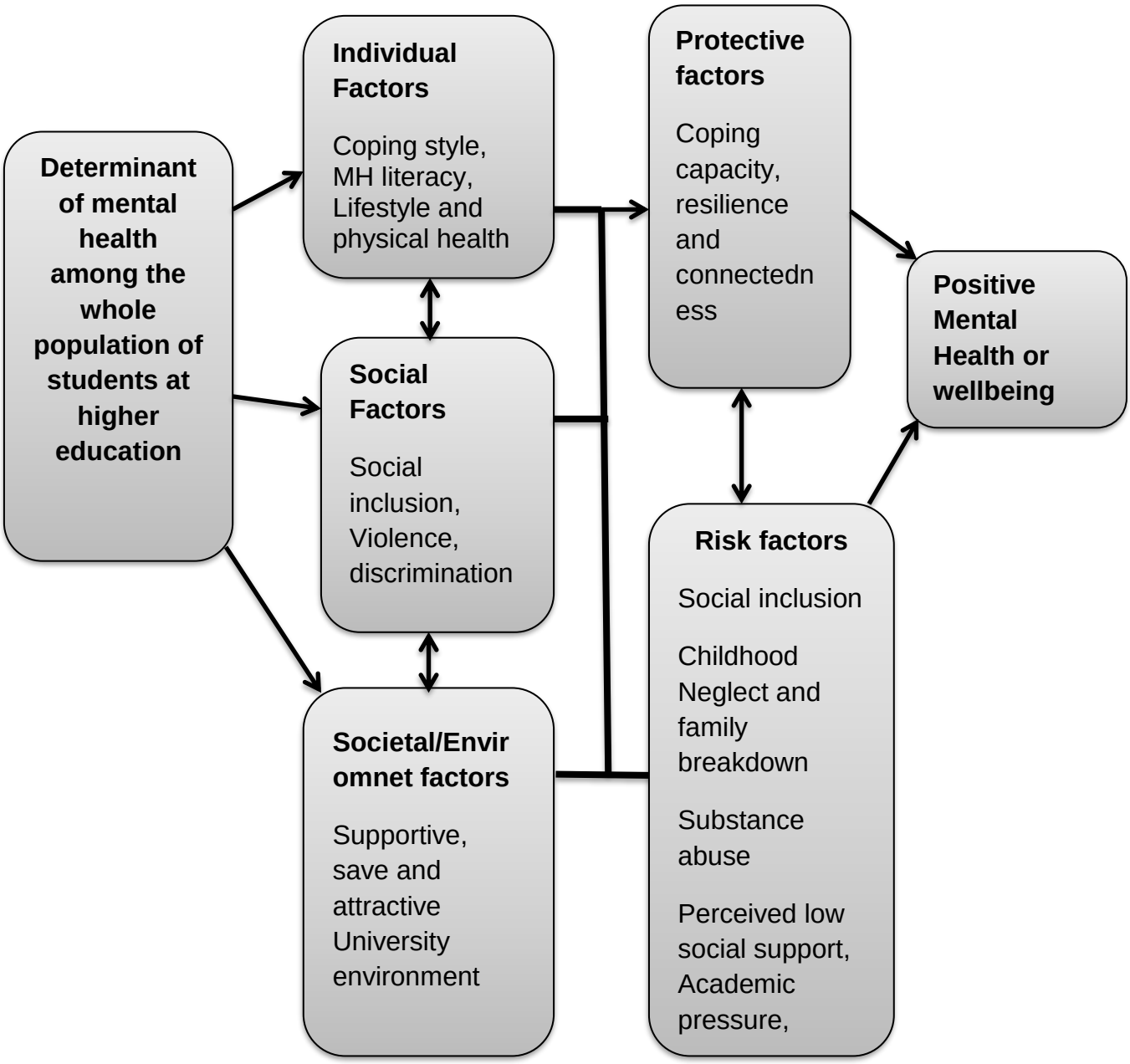


Figure 6. Determinants of Positive mental health among students at higher education adapted from Victorian Health Promotion Foundation 2005

Annex 9: Profile of experts who critiqued and endorsed the strategies

Profile of experts who critiqued and endorsed the strategies

SN	Position	Gender	Age	Rank	Years of experience
1	Academic and Researcher	M	40	Associate Professor (PhD)	15
2	Academic and Researcher	M	42	Assistant Professor	15
3	Academic and Researcher	M	39	Assistant Professor	10
4	Academic and Researcher	M	38	Assistant Professor	8

Annex 10:Co-coder certificate

Qualitative data analysis

PhD in Public Health

Adem Esmael Roba

THIS IS TO CERTIFY THAT

Associate Professor Kemal Ahmed has co-coded the following qualitative data:

28 In-depth-interview

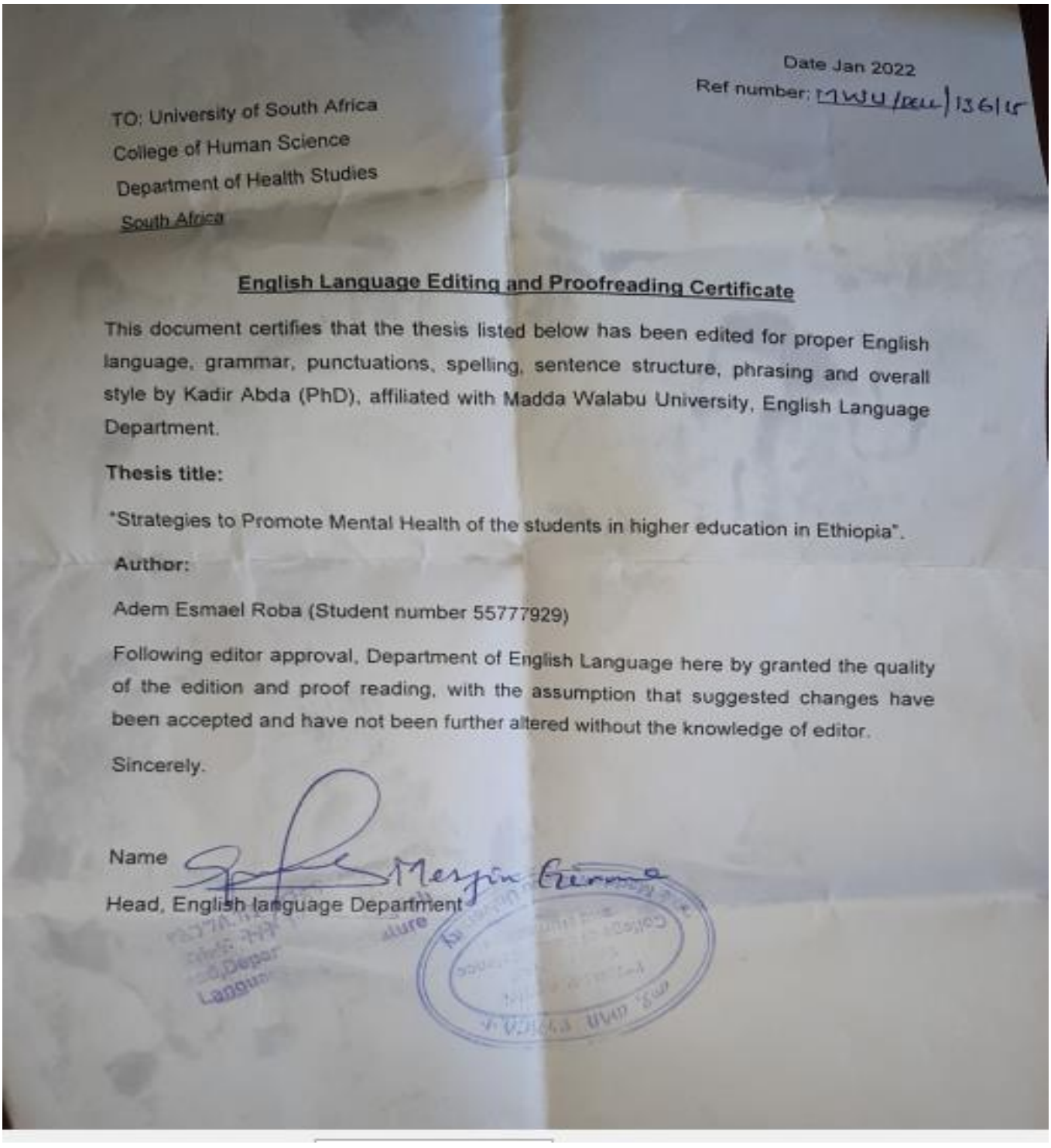
For the study:

STRATEGIES TO PROMOTE MENTAL HEALTH AMONG STUDENTS IN HIGHER EDUCATION IN ETHIOPIA

I declare that the candidate and I have reached consensus on the major themes, categories and codes reflected by the data during a consensus discussion. I further declare that adequate data saturation was achieved as evidenced by repeating themes.

Kemal Ahmed (Associate Prof)

Annex 11: English Languange Editing and Proofreading Certificate



Date Jan 2022
Ref number: MWU/DEU/136/15

TO: University of South Africa
College of Human Science
Department of Health Studies
South Africa

English Language Editing and Proofreading Certificate

This document certifies that the thesis listed below has been edited for proper English language, grammar, punctuations, spelling, sentence structure, phrasing and overall style by Kadir Abda (PhD), affiliated with Madda Walabu University, English Language Department.

Thesis title:

"Strategies to Promote Mental Health of the students in higher education in Ethiopia".

Author:

Adem Esmael Roba (Student number 55777929)

Following editor approval, Department of English Language here by granted the quality of the edition and proof reading, with the assumption that suggested changes have been accepted and have not been further altered without the knowledge of editor.

Sincerely.

Name Mergin Gemmo

Head, English language Department

Annex 12: Quantitative analysis endorsement statement

Date: 10 Jan 2023

TO: University of South Africa

College of Human Science

Department of Health Studies

South Africa

Subject: Assuming the endorsement of the quantitative part of the study

My name is Mr. Sano Kedir, I am a statistician with experiences of statistical analysis of quantitative studies, teaching statistics courses and researcher at Madda Walabu University department of statistics. Academically I have BSc in Mathematics and MSc in Applied Statistics.

On the request of Mrs Adem Esmael Roba student number 55777929, who is working on his thesis on "Strategies to Promote Mental Health of the students in higher education in Ethiopia" I reviewed the methodology, analysis, presentation and description of the quantitative part of the study; which chapter 3 and 5, and assisted him with the tasks and addressed feedbacks from his supervisor.

I agreed with each stages of statistical analysis utilized throughout the process and I feel they are acceptable for the data and addresses the objectives of the study.

Furthermore, I approved the approach, the findings and I guarantee the appropriateness of the technique utilized as well as the correctness of the findings and result.

To ensure my help and qualification, I signed the letter and supplied relevant experiences and credentials for your review.

Sincerely.

Sano Kedir (BSc, MSc in Statistics)

CC: Prof. TSB MOKOBOTO-ZWANE

South Africa

Contacts
Email: sanokedir@gmail.com Phone: +251911971264