The relationship between dysfunctional attitudes, self-esteem, life event stressors and depression Among Addis Ababa University students

Addis Ababa University

College of Education and Behavioral Studies

School of Psychology

BY

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Approval of Board of Examiners

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Acronym

AAU- Addis Ababa University

APA- American psychological association

BDI- Beck depression inventory

DAS – Dysfunctional attitude scale

DAs- Dysfunctional attitudes

LES- Life event stressors

NAMI- National alliance of mental illness

RSE- Rosenberg self esteem scale

SPSS- Statistical package for social sciences

WHO- World health organization

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Abstract

Studies has consistently demonstrated that major depressive episode in patients compared to controls is preceded by major life event stressors. Beck postulated that maladaptive cognitive styles when triggered by stressful life events leads to depression. Self esteem is also a vulnerability factor to depression. Self esteem deficits are thought to play a Role in vulnerability to depression. thus the present study objective was investigating how prevalent depression is in university students and examining the main effects and interaction effects of self esteem ,dysfunctional attitudes, life event stressors, and gender on depressive symptoms among university students (N = 308). cross sectional research design was utilized to met the research objectives. Prevalence rate of 31.8% was found among AAU students. Regression analysis has shown that dysfunctional attitudes, self esteem, life stressors and gender had a unique significant contribution to the variability of depression and the regression model that included these variables was significant predictor of depression. The above mentioned variables were tested for their interactive effects on depression. Interaction of life stressors and dysfunctional attitudes, and life stressors and gender were not significant predictors of depression. However Interaction of self esteem and dysfunctional attitudes were significant predictors of depression. These results suggest that self esteem, dysfunctional attitudes, gender and life stressors have relationship with depression and might be vulnerability factors to depression. Dysfunctional attitudes and self esteem in combination predicts depression above and beyond the independent effect each have on depression.

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Chapter one: Introduction

1.1 Background

Depression is one of the mood disorders. Mood disorder refers to a category of mental health problems that include all types of depression and bipolar disorder characterized by an extremely low affective state, negative self concept, self punitive wishes and retardation (Beck, 1970). According to APA (1994), the essential feature of a Major Depressive Episode is a period of at least 2 weeks during which there is either depressed mood or the loss of interest or pleasure in nearly all activities. The individual must also experience at least four additional symptoms drawn from a list that includes changes in appetite or weight, sleep, and psychomotor activity; decreased energy; feelings of worthlessness or guilt; difficulty In , concentrating, or making decisions; or recurrent thoughts of death or suicidal ideation, plans, or attempts.

According to Weissman , Bland , Canino , Faravelli , Greenwald , Hwu , Joyce , Karam , Lee, etal (1996) that published the first cross-national comparison of major depression as defined by the Diagnostic and Statistical Manual of Mental Disorders, third edition (DSM-III) from 10 population-based surveys that used the Diagnostic Interview Schedule have founded lifetime Prevalence ranging from 1.5% (Taiwan) to 19.0% (Beirut), with the midpoints at 9.2% (West Germany) and 9.6% (Edmonton, Canada). The 12-month prevalence ranged from 0.8% (Taiwan) to 5.8% (Christchurch, New Zealand). According to Solomon, Fasil, Mekonnen, Henok & Girma (2012) cross sectional study conducted In Ethiopia which includes nine regions, the prevalence proportion of depression was found to be 9.1%. In the same study it was reported those important variables that significantly contributed to depression were number of chronic non-communicable disease, alcohol consumption, older age & marital status.

Women have a twofold increased risk of Major depression compared with men (Bracke & van, 2010) . And according to WHO (2008) While depression is the leading cause of disability for both males and females, the burden of depression is 50% higher for females than males. In fact, depression is the leading cause of disease burden for women in both high-income and low- and middle-income countries. A dramatic rise in depression occurs during adolescence, such that while less than 6% of children under age 11 become depressed, nearly 20% of youth will experience a depressive episode by age 18 (Kessler, Mc gonalgle, Swarz, Blazer, & Nelson , 1993). Research also indicates that much of this increase is accounted for by a rise in depression among girls in particular; although rates of depression between boys and girls are comparable in childhood, by age 18 females are twice as likely as males to become depressed (Kessler, ,McGonagle, Swarz, Blazer,, & Nelson, 1993; Lucht , Suhaub, Meyer, Hapk, Rumpf, Bartels ,2003).

A substantial body of research using state-of-the-art interview measures of episodic life events has found higher levels of significant stressors prior to the onset of major depressive episodes in patients compared to controls, and in community samples (e.g., Brown & Harris 1989, Mazure 1998). The role of stressful life events in depression is a consistent finding across studies Mazure (1998). Mazure also reported that the majority of studies have shown that at least 80% of community/non-medical cases of major depression are preceded by a severe adverse life event. Further, several studies where depressive cases were compared to a non-medical sample, revealed that experience of a major adverse life event was 2.5 times as likely to occur for depressive patients as for controls (Shrout , Link, Dohrenwend, Skodol, Stueve, & Mirotznik., 1989).

The other risk factor for depression as cognitive models of depression argues is that early maladaptive cognitive schema correlates with depressive symptoms. According to Beck's theory of depression, dysfunctional cognitive styles such as magnification and overgeneralization, and the cognitive triad, i.e., negative views of self, others and the future, are significant components of depressive symptomatology. According to Beck's view of depression individuals vulnerable to depression have maladaptive schemas, which remain dormant until triggered by stressful life events. Dysfunctional beliefs reflect the Content of these relatively stable schemas.

Cognitive models of depression also explains how early formed maladaptive cognitive schemas can possibly cause depressive symptoms. Becks (1970) popular cognitive theory of depression and an integrated cognitive model of depression, produced by Kwon & Oie (1994) are two of the many models that are produced to explain the relationships between dysfunctional schemas or attitudes and depression. In Beck's theory (1967, 1987), individuals who possess schemata containing dysfunctional attitudes are more likely to experience a depressive episode when confronted with a negative life event than individuals with schemata free of dysfunctional attitudes. Thus, according to the cognitive theories of depression, people with maladaptive cognitive patterns are at greater risk for depression than people who do not exhibit these maladaptive cognitive patterns. Additionally self-esteem deficits are thought to play a Role in vulnerability to depression (Roberts & Monroe, 1999). Consistent with this perspective, numerous studies have found correlations between depression and low self-esteem among adults (Southall1 & Roberts , 2002).

1.2 Statement of the problem

Depression has the potential to result in disabling a person in terms of the time spent on bed and loss of productivity (NAMI,2012). Depressive disorders often start at a young age; they reduce people's functioning and often are recurring (WHO ,2012). The World Mental Health Survey conducted in 17 countries found that on average about 1 in 20 people reported having an episode of depression in the previous year (WHO ,2012). The World Health Organization ranks depression as the fourth leading cause of disability worldwide, and projects that by 2020, it will be the second leading cause.

Population based study in Ethiopia which was conducted in Meskan and Mareko district has shown that persistent depression is associated with longer days of disability, higher scores of disability and greater use of health services when compared with samples who recovered and never had history of depression (Souci, Atalay, Dereeje,&Robert, 2006).

Depression is a major problem faced by many college students today. Students with Depression can have significant impairments in many areas of functioning, including social, Academic, and occupational (Field, Diego, Deeds , & Delgado ,2012). The prevalence of depression has been shown to be higher in college-aged students than in the general population, with around 30% of college-aged students at any given time with depression and around only 9% in the general population (Ibrahim, Kely, Admas, & Glazeb, 2012).

The current study aim was to investigate the relationship between self esteem, dysfunctional attitudes, gender, stressful life events and depression. Although how cognitive vulnerabilities and psychosocial factors such as gender and life stressors relate independently and interactively is widely investigated in other countries as far as the researchers knowledge studies were not conducted in Ethiopia addressing such issues. The present study is intended to fill this gap by testing whether there is a relationship between depression and gender, dysfunctional attitudes, self esteem, and life stressors. So this study attempted to address the following research questions

- What is the prevalence of depression among university students?
- Does a Dysfunctional attitude, life event stressors, gender, and self esteem significantly predicts depression?
- Is there an interaction effect of life event stressors and gender to predict depression?
- Is there an Interaction effect of life event stressors, and dysfunctional attitudes to predict depression?
- Is there an interaction effect of dysfunctional attitudes and self esteem to predict depression?

1.3 Objective of the study

General objective: investigating the main effects and interaction effects of self esteem dysfunctional attitudes, life event stressors, and gender on depressive symptoms and to identify how prevalent depression is among university students.

Specific objectives: To identify

- The prevalence of depression among university students
- Whether there is a relationship between dysfunctional attitudes, self esteem, life event stressors, gender and depression

- Whether there is an interaction of gender and life event stressors to predict depression
- Whether there is an interaction of dysfunctional attitudes and life event stressors to predict depression
- Whether there is an interaction of dysfunctional attitudes, and self- esteem to predict depression

1.4 Significance of the study

This study will render a broader explanation for depressive symptoms since it tried to examine depressive symptoms from combination of cognitive and other psychosocial variables. It will give practitioners a better understanding how the interplay of cognitive vulnerabilities and psychosocial factors plays a role in contributing to depression and this will have a great deal of implication for clinical practice.

It will also give practitioners a better idea to develop treatment manuals that can help students, women and even clinical populations. It will also give researchers background information on the matter and a hint how to investigate the relationship depression has with cognitive and psychological and social factors such as gender and life event stressors and to come up with a better explanation for depression.

1.5 delimitation of the study

This study was delimited to AAU particularly to 6 kilo campus students. The research is also delimited to study the relationship among dysfunctional attitudes, self esteem, life event stressors and depression.

1.6 limitation of the study

Although this research tried to examine if it is possible to predict depression from a combined knowledge of psychosocial and cognitive variables and this is its strength it does also have limitations. One of its limitations is that its failure to give causal explanation of the relationship among depression Dysfunctional attitudes, self esteem and Life event stressors we can't be sure if the predictor variables used in this study are indeed causal factors for depressive symptoms or vice versa since the researcher used cross sectional research design. The other one is that this research investigated the relationship of depression to Dysfunctional attitudes, self esteem, gender and LES using normal population (university students) as study participants so this situation will serve a reason that it's hard to generalize results from this study to clinically depressed patients. The instrument that was used also measures only a range of depressive symptoms rather than diagnose Major depressive disorder so this also makes it hard to generalize results to clinically depressed patients. Other limitation is that the researcher used self report measures that can possibly be affected by various factors which will result in limiting our ability to draw reliable information from subjects of study.

1.7 Operational definition

Depression – A range of symptoms with depressed mood, lose of interest, or pleasure, decreased energy, feeling of guilt or low self worth, disturbed sleep or appetite, and poor concentration.

Dysfunctional attitudes - negative attitudes in the form of conditional statements that reflects deeply rooted schemata formed at early periods of childhood

Life event stressors - events that happen at a particular time and most likely to cause stress for the individual experiencing them.

Self esteem – it is defined as a sense of personal efficacy and a sense of personal worth that integrates self confidence and self-respect to be the conviction that one competent to live and worthy of living.

Chapter two

Literature review

2.1 conceptual framework

According to Beck (1970) argument depression is caused by dysfunctional schemata which the individual acquired through several negative experiences. What are central to depression are negative thoughts instead of hormonal changes or low states of reinforcement. Further explaining how cognitive factor plays a role in depression Beck argues that a depressive schema (dysfunctional cognitive styles) has to be activated by environmental stressors to trigger depressive symptoms. Self – esteem is also considered to be a cognitive vulnerability to depression. According to Brown & Harris, (1978) studies have found correlations between depression and low self-esteem among adults. As well known depression is more a risk for women than it is for men. one of the hypothesis that explain why women are at a greater risk for depression argues that gender difference in emotional reactivity to stress may contribute to gender differences in depression (Charbonneau, Mezulis, Hyde, 2009).

Thus integrating these theories of depression the present study focuses on investigating if depression can be predicted from gender, Dysfunctional attitudes, self esteem and LES. It also tested the interaction effect of maladaptive cognitive styles as measured by dysfunctional attitude scale (DAS), and Life event stressors (LES) on depression. It was assumed that the interaction of life event stressors and dysfunctional attitudes will significantly account for a variability of depression. This study also tested two way interaction effects of gender and life stressor, dysfunctional attitudes and self esteem to predict depression.

2.2 Depression

Everyone occasionally feels blue or sad. But these feelings are usually short-lived and pass within a couple of days. When you have depression, it interferes with daily life and causes pain for both you and those who care about you. Depression is a common but serious illness affecting ones thoughts, feelings, behavior and physical health and it is also a life- long condition in which periods of wellness alternate with recurrences of illness (NAMI,2012).

According to WHO (2012) Depression is a common disorder that presents with depressed mood, lose of interest, or pleasure, decreased energy, feeling of guilt or low self worth, disturbed sleep or appetite, and poor concentration. The essential feature of a Major Depressive Episode is a period of at least 2 weeks during which there is either depressed mood or the loss of interest or pleasure in nearly all activities (APA ,1994). The individual must also experience at least four additional symptoms drawn from a list that includes changes in appetite or weight, sleep, and psychomotor activity; decreased energy; feelings of worthlessness or guilt; difficulty thinking, concentrating, or making decisions; or recurrent thoughts of death or suicidal ideation, plans, or attempts. Depression contributes largely to the global burden of disease (WHO ,2012). Depression can become chronic and recurrent impairing an individual’s ability to take care of his or her every day responsibilities.

2.3. Prevalence of depression

Information on prevalence rate for depression doesn't exist for most countries but the data that are available shows there is wide variability among countries in the prevalence rates of depression (Bromet, Andrade, Hwang, Sampson, Williams & Kessler, 2011). But the prevalence of mood disorder has been relatively studied more in developed countries than developing countries (Kebede & Alem, 1999, & Deyessa, Berhane, Alem, Hogberg, Kullgren, 2008). According to Bromet, etal (2011), life time prevalence of major depressive disorder is higher In high income countries than low income countries. Their study which included eighteen high and low income countries showed that on average the estimated life time prevalence was higher in high income countries (14.6%) than low to middle income (11%) countries. The same study evidenced that twelve month prevalence rate is relatively similar in high income and low-to-middle income countries that is 10.6% of twelve month prevalence of high income countries and 10.5% of low-to-middle income countries.

A study conducted in Addis Ababa which examined the prevalence and socio demographic correlates of affective disorders has found 2.9% of a Life time prevalence of depressive episode (Kebede & Alem, 1999). Another study which was conducted in rural Ethiopia showed that the overall twelve month prevalence of depression among women is 4.4% (Deyessa etal, 2008). The study by Deyssa, etal (2008) consistent with other studies also revealed that depressive episodes were highly prevalent in separated or divorced and widowed women.

Depression is a major problem faced by many college students today. Students with Depression can have significant impairments in many areas of functioning, including social, Academic and occupational (Field et al., 2012). The prevalence of depression has been Shown to be higher in college-aged students than in the general population, with around

30% of college-aged students at any given time with depression and around only 9% in the general population (Ibrahim et al., 2012). And according to Zakiya, Aida, Hadiya, Rohama, Mohammed & Abdullah , (2011), has founded 27.7% prevalence of depression among university students in Oman. the prevalence of depression among Iranian university students was also found to be 33 % (Diana, Ali, Yousef, Mohammed, Rohallah & Kourosh , 2013). Eisenberg, Gollowk, Golberstein, Hefner ,(2007) have founded an estimated prevalence rate of 13.8% for undergraduate students.

2.3 Dysfunctional attitude

Cognition impacts clinically relevant aspects of day-to-day function, such as emotion, Behavior, and interpersonal relationships, and involves structures necessary to support information processing (Irismar ,2012).

According to Irismar (2012) Cognitions can be assessed at three levels of superficial, intermediate and at the deepest level. At superficial level of information processing cognitions are called Automatic thoughts. In the deepest level of information processing, cognitions are known as CBs or schemas. Beck et al. (2001) proposed the Personality Beliefs Questionnaire, and Young and Brown (1994) developed the Young Schema Questionnaire to assess these beliefs. Finally at an intermediate level of information processing cognitions are called UAs or conditional beliefs. Weissman & Beck (1978) developed the Dysfunctional Attitude Scale to assess this conditional beliefs represented by the negative attitudes of depressed patients towards self, the outside world, and the future. Dysfunctional attitudes are a set of beliefs which demonstrate rigid and perfectionist criteria on the evaluation of personal performance and self Value (Kuper, Olinger, & Martin ,1988).

According to Kwon & Oie ,(1994) there is surface and deep level cognitions, stable and transient cognitions, and cognitive moderators and mediators in the different phases of depression. They considered dysfunctional attitudes to reflect the stable, activated depressogenic schemata.

The characteristics of dysfunctional attitudes as described by Beck (cited in Mendels, 1970) comprise the concept of arbitrary inference, selective abstraction, over generalization, magnification, or minimization as well as inexact labeling. Beck and weissman (1978) defined dysfunctional attitudes from three perspectives.

- Pessimistic attitudes that exaggerate negative consequences of an action
- Perfectionist criteria that could not bear with any mistakes done in ones action
- Dependency on others approval for a satisfactory life of oneself.

Dysfunctional attitudes are formed during early childhood periods and are relatively enduring (Kilic, 2010).

2.3.1 The role of dysfunctional attitudes in depressive disorders

Thinking in a negative ways appeared to serve as risk factors for depression. More specifically in a study of 347 college students Found individuals with high risk attribution styles, or negative ways of thinking were almost seven times more likely to develop major depression over a period of 2.5 years than were those with low-risk attribution styles and positive ways of thinking (Alloy, Whitehouse., Robinson, Abramson, Hogan, Rose, etal, 2000) . According to Joiner, Metalsky, Lew, Klocek, (1999) longitudinal study students who were high in dysfunctional attitude experienced increases in depressive symptoms, when they received low midterm exam grade.

Students high in dysfunctional attitudes who received high grades did not experience symptom increase.

In Beck's theory (1987), individuals who possess schemata containing dysfunctional attitudes are more likely to experience a depressive episode when confronted with a negative life event than individuals with schemata free of dysfunctional attitudes. The moderating role of dysfunctional attitudes in depression has been recognized and examined by some investigators. Several cross-sectional studies for example (Kuiper et al., 1988; Kwon and Oei, 1994; Olinger et al. 1987) has founded that the interaction of dysfunctional attitudes and negative life events add to the main effects of each factor in predicting depressive symptoms.

2.4. Stressors

Stress is usually referred to as harmful physical, psychological and emotional response of an individual to perceived environmental pressures and these pressures are termed as stressors (Assure programs, 2003). A stressor is anything you perceive as a personal threat or beyond your ability to manage. Stressors can be minor hassles or serious life challenges. In the biomedical sciences, stress is mainly understood as an organism's response to adverse stimulation but In Psychology, stress is usually understood as the process where a person and the environment Interact (Folkman & Lazarus 1985; Folkman, Lazarus, Gruen, & Delongis, 1986). According to Lazarus, (1991) conceives stress as an active, unfolding process that is composed of causal antecedents, mediating processes, and effects. Antecedents are person variables, such as commitments or beliefs, and environmental variables, such as demands or situational constraints. Mediating processes refer to coping and appraisals of demands and resources. Experiencing stress and coping bring about both immediate effects, such as affect or physiological changes, and long-term effects concerning psychological well-being, somatic health, and social functioning.

When someone says, “I have a stressful marriage,” they refer to the situation, not to their response to that situation. The stimulus-based perspective takes this approach, paying more attention to the particular characteristics of the stressor. It is argued that each critical episode has its unique demands, be it physical, social, role, or task, that specifically tax the individual’s coping resources, thus triggering a particular stress response (Schwarze ,2011).

According to Cognitive theory of stress the probability that a particular environmental event leads to stress depends on the evaluation of the event in light of certain factors. If the person perceives the event stressful after evaluating it then stress occurs. That’s why stress is best conceptualized as interactional and bidirectional process between the person and the environment (Alkan, 2004).

Stress is not only the outcome of external stressors but also internal processes. Researchers has supported this notion by persuasively arguing that although there are certain events that simply befall on people there are other events that occur because of the individuals’ own action (Ingram & Luxton,2005). The other factor that led to the conclusion stress is not only the outcome of external stressors is that stressful situations have to be appraised as undesirable or perceived by the individual to exceed coping sources to deal with them in order to engender stress.

Stress falls into broad categories one major category include the occurrences of significant life events that are interpreted by the person as undesirable (Lazarus & Folkman, 1984; Luthar Zigler, 1991; Monroe & Peterman, 1988; Monroe & Simons, 1991). Selye’s (1963) classic description of stress notes that such events represent a strain on the person’s adaptive capability that cause an interruption of the person's routine or habitual functioning. Stress thus reflects those factors that interfere with the system's physiological and psychological homeostasis (Ingram &Luxton,2005). As empirical studies revealed some stressful events are reported or judged to be more stressful than others and these includes death of a child, death of a spouse, marital infidelity or separation, business failure, legal trouble, injury, and medical illness (Mazure, 1998).

2.4.2 The relationship between life event stressors and depression

Stress independently predicts depression in different population(Monoroe ,2008) and around 50-80% of people with depression had experienced major life stressor before the onset of depression. Decades of research has provided support for the notion that life stress is associated with depression but what's unclear is the mechanism through which it affects depressive symptoms (Eberhart, Auerbach & Peyton, & Abela, 2010).

Being one of the models conceptualizing the relationship between stress and depression Stress generation models Hammen (1991) posit that there are certain vulnerability factors to individuals that plays a role for the occurrence of stressors which could result in increased chance of having depressive symptoms and disorders. There is evidence that interpersonal vulnerability factors such as anxious attachment, sociotropy/dependency and reassurance seeking contribute to stress generation and subsequent depressive symptoms. In general stress generation models argues that the individual is responsible for the occurrences of the stressors which ultimately causes the depressive symptoms.

On the other hand diathesis stress models argue that individuals have vulnerabilities that could possibly cause the depressive symptom to occur but only in the presence of life stressors (Abela, Auerbach, 2006). There is another model conceptualizing the diathesis stress relationship in causing depression by taking time into consideration for example post (1992), proposed the idea which suggest that with repeated episodes of mood disorders depression in this case causes neuronal change that results in greater sensitivity even to small amount of stress. When we apply this concept to diathesis-stress model it appears to be that the relationship between depression and stress is not static but dynamic since with recurrent episodes the relationship also changes (Ingram & Luxton, 2005).

2.5. Gender and Depression

Prevalence of depression varies between countries but it is reported that depression is more prevalent among women than men across diverse societies and social contexts (WHO ,2008). Most of epidemiological data also showed that depression is more prevalent among females than males (Merritt, Conner, 2009). Although boys and girls have similar prevalence rates of depression during childhood, at age eighteen females are twice likely as men to be depressed (Lucht, Suhaub, Meyer, Hapke, Rumpf, Bartels, 2003). This gender difference in depression emerges in early-to-middle adolescence (between ages 13 and 15), and has been demonstrated both for depressive symptoms as well as diagnoses (Nolen-Hoeksema 2002).

Although Data on prevalence of depression clearly shows that there is gender difference in the prevalence of depression still there is limited understanding of the process that explains the difference (Mezulis, Funasaki, Charbnneau,& Hyde,2010). Factors suggested that may contribute to greater prevalence rates of depression among females includes the stress of multiple and family responsibilities, sexual and physical abuse, sexual discrimination, lack of social supports, traumatic life experiences and poverty (NAIMI ,2010).

Building on the cognitive stress model of depression a number of researchers tried to explain the existing gender difference in depression (Mezulis, etal. 2010). Hyde, Mezulis, & Abramson, (2008) are one of these researchers that tried to explain gender difference in depression by suggesting that gender differences in prevalence rate of depression could be explained by gender differences in mean levels of negative cognitive styles and/or differential exposure to stressors that emerge in the transition to adolescence. Although there is no difference in overall exposure to acute/episodic stressors there might be difference in specific domains such as interpersonal events (Hammen ,2005). Consistent with this notion Rudolph ,(2002) has founded that adolescent girls were more likely to experience depression associated with interpersonal events than boys. Epidemiologic data in rural Ethiopia has also showed that depression is highly prevalent among women who were widowed, separated or divorced (Deyessa, etal.2002). This shows that females are more likely to respond to interpersonal stressors to develop depression (Tenant, 2002). and also Females more likely are to generate dependent stressors than males (Hammen, 2009) and at the same time depression is related more with dependent events than independent events (Hammen,2005). We can conclude from this that high prevalence of depression among females could partly be explained by the fact that females are more prone to dependent stressors that have strong relationship with depression.

The other hypothesis postulates that the relationship between cognitive vulnerability, stress and Depression is stronger for females than males (Hyde etal. 2008). According to Bouma,Ormel,Verhulst, & Oldehinkel,(2008), girls are most likely to respond to stress to develop depressive symptoms than boys.

2.6. Self esteem and its relationship to depression

As defined by Brown and Marshall (2006), self-esteem global refers to the way of one evaluating him/herself in general. In more detailed definition, according to Braden (cited in Mruk, 2006), self-esteem has two interrelated aspects which entails a sense of personal efficacy and a sense of personal worth that integrates self confidence and self-respect to be the conviction that one competent to live and worthy of living. According to Bednar, Wells and Petersen (1989), high self-esteem is correlated with low psychological distress, and Solomon (2006) mentioned that high self-esteem is able to reduce the tendency of acting defensively as well as cognitive distortion. numerous studies have found correlations between depression and low self-esteem among adults (Bernet, Ingram, & Johnson, 1993).

2.7. Cognitive Diathesis – stress models of depression

Most diathesis-stress models of psychopathology suggest that all people have some level of predisposing factors (diatheses) for any given mental disorder Monroe and Hadjiyannakis (cited in, Ingram &Luxton2005). These predisposing factors have to be triggered by life stress in order to lead to psychopathology/depression (Abela, Aydin, & Aurebach, 2006). According to Ingram and Luxton (2005), the predisposing factors or vulnerability whether stemming from genetically acquired characteristics or acquired through psychological or learning process resides with in the person and are relatively stable but not immutable, latent and requires activation before psychopathology/depression occur.

Most of cognitive theories of depression can usefully be conceptualized in diathesis-stress Model framework. The first cognitive approaches to depression developed in the late 1960s and the early1970s. The new approaches were inspired from the rise of information-processing

Approaches in psychology, especially from the study of social cognition (e.g. Nissbett & Ross, 1980), and by Lazarus' research (1966), which demonstrated that specific contents of thoughts (e.g. threat and danger) mediated emotional reactions (e.g.anxiety). Beck's cognitive theory for example label those early maladaptive schemas which are defined as cognitive structures that aid in screening, coding, and evaluating are as a vulnerability factors for developing depression. They remain latent until external stressors trigger them to lead to depressive symptom (Milligan, 2013). Based on beck's theory of depression Kwon & Oie (1994), produced an integrated cognitive model of depression which gives elaborated understanding of the relationship between dysfunctional attitudes and depression by arguing that maladaptive cognitive schemas and external stimulus interact to increase the number of occurrences of automatic thoughts which eventually leads to depression.

Opposing Becks theory of depression (young ,1990) postulated that maladaptive cognitions are independent risk factors for depression. Supporting young's theory alternate aetiologies model proposes that depression onset could be the result of both stressful life event and preexisting cognitive vulnerability both acting as independent risk factors(Parry & Brewin ,1998).

2.7.1 The alternate aetioligist model

The alternate aetiologiest model proposes that "--depression can be precipitated either by a severely stressful event or alternatively by preexisting cognitive vulnerability, both operating as independent provoking factors" (Parry and Brewin, 1988). The alternative etiologies Model holds that negative life events and Dysfunctional attitudes influence negative automatic Thoughts and depressive symptoms independently, Rather than in an interactive manner (Kwon & Oie, 2007).

2.7.2 Linear mediation model

The linear mediation model proposes that negative life events activate the dysfunctional beliefs, thus increasing the frequency of negative automatic thoughts, which in turn activate depressive symptoms (Oei, and Kwon, 2007).

2.7.3 Integrated cognitive model

Integrated model of depression was developed by kwon & oei (1994).this theory holds that dysfunctional attitudes interact with negative life events to increase the frequency of negative automatic thoughts which ultimately is a reason for depressive symptoms.

According to Kwon & Oie (1994) integrated cognitive model of depression which propose that negative cognitive structures need to be activated by an environmental event in order to produce the depressed affect, implying that cognitions do not act as independent risk factors but rather pose a vulnerability to specific stressors. Due to this aspect this theory is capable of explaining why some people may go through extremely negative life events without developing clinical depression.

In the ICM, Beck's cognitive theory of depression is reformulated into a model that elaborates on the causal relationships among the following four variables:

(1) negative life events as a precipitating factor, (2) dysfunctional attitudes as cognitive moderator, (3) automatic thoughts as cognitive mediator, and (4) depressive symptoms as a consequence (Oie &Kwon, 2007).

2.7.4. Symptom model

According to Parry and Brewin (cited in Mirelle, 2007) symptom model of depression holds that maladaptive cognitions are only symptom related. This means that negative life-events directly cause depressive symptomatology, which in turn causes automatic thoughts that lead to dysfunctional attitudes (Oei, Hibbert, & O'Brien, 2005). This model unlike the others described in the previous section is based on the primacy of depression over cognition and proposes that automatic thoughts and dysfunctional attitudes are the consequences of depressive symptoms, which might be precipitated by negative life events. It could be argued that automatic thoughts are a relatively immediate consequence of depressive symptoms, whereas dysfunctional attitudes, as relatively stable cognitions, are a delayed consequence of depression (Oie &Kwon, (2007).

Chapter Three

Method

In this section study design, study area, study population, sample size and sampling techniques, variables, data collection instruments, data collection procedures, and data analysis are described.

3.1 Study site

The study was conducted in Addis Ababa University (sidist kilo campus) which is one of the campuses of Addis Ababa University. Addis Ababa University is the oldest and largest university in Ethiopia. This University was opened in 1950. Before getting its current name, Addis Ababa University had two names. The first name is known as University College of Addis Ababa and this name is used until in 1962. But after this year the name is changed and renamed by the name of the former Ethiopian Emperor Haile Selassie and known as Haile Selassie University. Finally the name is changed and gets the current name in 1975. Addis Ababa University has thirteen campuses. Twelve of these are situated in Addis Ababa, and one is located in Bishoftu or Deber Ziet, which found few kilometres far from Addis Ababa. Sidist kilo campus is one of the campuses of AAU and this campus is the first and main campus of the university.

3.2 Target population

All regular students in AAU were the source population. There are around 20,117 students in the year 2013/2014 in AAU 4,550 of them are females and the remaining 15,567 students are males.Sample was drawn from all first, second, and third year students residing at Sidist Kilo main Campus.These populations were only regular undergraduate Addis Ababa University students who enrolled during study period of 2013/2014. The reason is that extension and distance students were not found at the same time with the regular undergraduate students during data collection. There are around 2,212 students in the first three consecutive batches (year-I: 782; year II: 488; year- III: 942) at Sidist Kilo Campus in academic year of 2013/2014. In terms of gender, there are around 623 female and 1589 male students in Sidist Kilo Campus. There are 23 Departments organized under four colleges (college of Social Science (8 departments), college of Humanities, Language Studies, Journalism and Communication (11 departments), college of Law and Governance Studies (1 department), college of Education and Behavioral studies (3 departments) in this campus.

3.3 sample and Sampling technique

Study subjects were selected from the four colleges of the first three batches by using stratified sampling method. There are around 2,212 students in the Main campus in the first three Batches and under these colleges there were 23 departments. From the twenty three departments organized under four colleges ten departments were selected randomly. The selected departments were stratified by sex and study year (batch). Then, the required sample of study subjects were calculated by using proportional to size allocation technique from each department, study year and sex stratum by using the calculated sample size. The sample size for the study was determined using sample size determination formula which is stated by Robert V. Krejcie and Daryle W. Morgan . They also put a table for determining the required sample size for a given population based on this formula which is ready and easy reference to use.

$$S = X^2 \ NP(1- p) \div d^2 (N- 1) + X^2 P (1-p).$$

S = required sample size

X^2 = the table value of chi square for 1 degree of freedom at the desired confidence level (3.841).

N = the population size

P = the population proportion (assumed to be .50 since this would provide the maximum sample size).

d = the degree of accuracy expressed as a proportion (margin of error) (.05)

So, the sample size was S = 3.841 x 2212 x 0.5 (1 – 0.5) ÷ 0.05^2 (2211) + 0.96

S = 2124.07 ÷ 6.49 = 327

So total sample taken from the entire population was 327 students.

3.4 Variables

The Independent (predictor variables) – gender, dysfunctional attitudes, self esteem and life event stressors.

Dependent (outcome variable) - depression as measured by BDI.

3.5 Data collection instruments

Quantitative Data were collected through self report questioners to measure student's dysfunctional attitudes, overall stress levels, self- esteem and depressive symptoms.

3.5.1 Beck depression inventory (*BDI*)

BDI was used to assess current depressive symptomalogy. It is a self report measure of depressive symptoms. It consists of 21 statements and answered on 0 to 3 scales. Total scores on BDI can from 0 to 63, with high scores reflecting greater levels of depressive symptoms. individuals scoring 0-13 are classified as normal (non depressed), a score that ranges from 14 - 19 is classified under mild level of depression , a score from 20 – 28 is categorized under moderate level of depression and the remaining scores that is scores that ranges from 29 – 63 are classified under severe level of depression. According to Beck (1988) The BDI has high internal consistency, test retest reliability and validity with both psychiatric and normal samples. Cronbach's alpha coefficient has been reported as .87 steer(1997) and split half reliability was reported to be above .90 (steer etal; 1997). It has also good concurrent validity when compared with both psychiatric rating of depression and student population that is r = .79 (Beck etal; 1961) and r = .79 (Blumberry etal; 1978) respectively.

3.5.2 Dysfunctional attitude scale (DAS)

DAS is 40 item self report inventory developed to assess the overall DAs presence that serves as a vulnerability factor to depression (Dobson & Shaw, 1986; Oliver & Baumgart, 1985; Weissman &Beck, 1978). Each item is rated on 1 to 7 scales. Total score can range from 40-280 with higher scores indicating greater DAs. DAS has a good internal consistency with alpha coefficients ranging from .79 to .84 (Cane & Gotlib, 1987; Dobson & Breiter, 1983 Weissman & Beck, 1978). DAS has also showen to have good internal consistency at alpha level .88 (Haeffel etal; 2005).

3.5.3 Rosenberg self esteem scale (RSE)

RSE-10 instrument has been used internationally in many studies and has demonstrated good reliability with Cronbach's Alpha of 0.849 (Piyavhatkul et al. 2011). It demonstrated also good overall validity and construct validity. It is a well internationally accepted instrument with cross-cultural sensitivity. The Rosenberg self-esteem questionnaire (Rosenberg, 1965) consists of half positively worded items and the rest half are negatively worded items. The positive and negative items are presented in random order to reduce the effect of respondent set. The items were scored on a four point scale from strongly agree to strongly disagree.

3.5.4 Student stress scale: the Student Stress Scale developed by (Insel, & Roth, 1985), was used to measure stressors. Respondents provided a "Yes" or "No" answer to each item they had experienced during the current school year. Insel and Roth (1985) based this scale on the Social Readjustment Rating Scale (Holmes and Rahe1967). It presents students with a list of 32 life events, ranging from‘‘change of major’’ to ‘‘death of close family member.’’Participants are asked to indicate whether the event has happened to them during the past 12 months.

Life events are assigned a score value, with the most disruptive receiving higher scores.

3.6 Pilot test

To test the reliability of the instrument pilot test were conducted on 30 randomly selected students of Addis Ababa University (sidist killo campus). The first rational to conduct the pilot test was that the instrument translated into Amharic language thus to correct errors with regard to language usage, meaning and other limitations. This was done with the intention of making the final questionnaire easily understandable and enabling students to respond without difficulty. it was difficult to find students at two different times because of a number of reasons so it made it hard to use the test retest reliability method for estimating the reliability of the instruments used in this study therefore, Cronbach coefficient alpha was computed for BDI, DAS, RSE and the result presents (α=.874), (α=.77), and (α =.72) respectively.

3.7 Data collection Procedure

The study used a self-administered Questionnaire consisting of Rosenberg Self-esteem scale (RSE; 10 -items), DAS (dysfunctional attitude scale) BDI (Beck depression inventory), and student stress scale which is adopted from Holmes and Rahe social readjustment rating scale. The data were collected by the researcher. Before disseminating the self report questionnaire the researcher gave a brief orientation as to how students fill the questionnaire and the purpose of the study. The questionnaires were administered in classrooms before lectures begin and collected when classes are dismissed. To avoid peer group influence for assuring independent response the students were told to avoid discussion concerning the administered questionnaire.

3.8 Study design

This study utilized a cross sectional research design. This design was chosen primarily Because of its common utilization in the social sciences and can be conducted in a short period of time. By using this design it was also intended to test whether depression can be predicted from Dysfunctional attitudes, Life event stressors, self esteem, and gender. Interaction terms using the above mentioned variables were also analyzed for their relationship with depression.

3.9 Methods of Data analysis

After data were collected descriptive and inferential statistics were performed. In the first phase the quantitative data was ordered, coded, and entered into the computer. Then Analysis for simple descriptive summaries was performed: standard deviation, and mean of the predictor variables for each level of depression. The prevalence of depression was computed using frequencies and percentages for the total sample and for female and male participants independently. Then Correlation analysis was conducted to see the overall relationship among all independent and the dependent variables included in this study. Linear multiple regression analysis was performed for modeling relationships using dysfunctional attitudes , self esteem, gender and life event stressors as predictors and depression as an outcome variable. Regression analysis was also performed for two way interaction of dysfunctional attitude (DA), and life event stressors (LES) and DA and Self esteem (SE) to predict depression. ANOVA was also performed to test for mean differences among levels of depression on dysfunctional attitudes, life event stressors and self esteem. The statistical Package for Social Sciences, version 20 (SPSS version 20) was used in analyzing the data.

3.10 Ethical Considerations

The ethical approval was obtained from the Psychology Department of Addis Ababa University. Written informed consent also obtained from the study participants. The data collection did not reveal the eligible participants names. An information sheet was attached with each questionnaire to provide study details, rights of the participants and suggesting that filling the questionnaire implies informed consent. Participants had been given the right to withdraw from the study at any stage of the research.

Chapter four

Result

In this section data were analyzed using descriptive summaries of independent variables, Anova , and linear regression analysis. Results from these analyses are presented below.

4.1 prevalence of depression

Table 1 prevalence of depression in AAU

Level of depression		frequency	percent (%)
Normal	Female	52	61.2
	Male	158	70.9
	Total	210	68.2
Depressed	Female	33	38.9
	Male	65	29.1
	Total	98	31.8

As can be seen from table 2 frequencies and corresponding percentages of depressed and normal students for both male and female participants were computed. The result showed that from the total participants 210 (68.2%) were normal. number of female participants in this group was 52 that is 61.2% of female participants were normal. The remaining 158 were male participants. from the total number of male participants 70.9 % were normal. it was found that 98 (31.8 %) participants were depressed. from the total number of depressed students 33 or 38.9 % of female participants were depressed, and 65 were male students, that is 31.8% of male participants were depressed.

4.2. Descriptive summaries of independent variables by levels of depression

Table 2 Mean and median of independent variables by levels of depression

Level of depression		DA	LES	SE
Normal	Mean	125.89	205.18	20.28
	Std. Deviation	20.38	123.16	5.20
	N = 210			
Mild	Mean	130.84	175.00	19.60
	Std. Deviation	17.26	98.19	3.47
	N = 25			
Moderate	Mean	129.91	277.19	17.40
	Std. Deviation	19.72	127.90	3.88
	N = 61			
Severe	Mean	153.83	364.18	17.16
	Std. Deviation	22.48	110.61	3.80
	N = 12			
Total	Mean	128.17	222.84	19.53
	Std. Deviation	22.05	128.21	4.93
	N = 308			

DA= dysfunctional attitudes, SE = self esteem, LES = life event stressors

Data were summarized using mean, and standard deviation of independent variables for each levels of depression. As can be seen from the above table mean of dysfunctional attitudes for higher levels of depression is larger than for lower levels of depression. Mean for life event stressors also differs among levels of depression. Participants in higher level group had larger mean scores compared to the lower level groups of depression. Mean and median score of self esteem for participants in different levels of depression also differs that is self esteem mean scores decreases as levels of depression increases.

4.3 relationship of depression with dysfunctional attitudes, self esteem, gender and life event stressors.

Table 3 Mean differences in independent variables by levels depression

		SS	df	MS	F
DA	Between groups	10242.60	3	3414.20	7.47***
	With in groups	139042.57	304	457.38	
	Total	149285.18	307		
LES	Between groups	569375.12	3	189791.70	12.90***
	With in groups	4428033.94	304	14711.08	
	Total	4997409.06	307		
SE	Between groups	459.76	3	153.25	6.65***
	With in groups	7008.85	304	23.06	
	Total	7468.61	307		

Note: DA = dysfunctional attitudes, LES = life event stressors , SE = self esteem ***P = .00

As displayed above in the Anova table The mean differences of dysfunctional attitudes, life event stressors and self esteem among levels of depression were significant; F (3,304) = 7.47 , P = .00 and F (3, 304) = 12.90, P = .00 and F (3,304) = 6.65, P =.00 respectively.

Table 4Post hoc test for life event stressors.

DV	(I) level of depression	(J) level of depression	mean difference	std error
LES	Normal	Mild	30.18	25.81
		Moderate	-72.00*	17.75
		Severe	-158.99*	37.72
	Mild	Normal	-30.18	25.81
		Moderate	-102.19*	28.95
		Severe	-189.18*	44.11
	Moderate	Normal	72.00*	17.75
		Mild	102.19*	28.95
		Severe	-86.98	39.94
	Severe	Normal	158.99*	37.72
		Mild	189.18*	44.11
		Moderate	86.98	39.94

Note: Mean difference is significant at the .05 level, *P < .05

A post hoc analysis has shown that There is a significant mean difference in life event stressors between normal and moderate, normal and severe, mild and moderate, mild and severe, moderate and severe levels of depression.

Table 5 post hoc test for dysfunctional attitude.

DV	(I) Level of depression	(J) level of depression	Mean difference	std error
DA	Normal	Mild	- 4.94	4.53
		Moderate	- 4.02	3.12
		Severe	-27.94*	6.36
	Mild	Normal	4.94	4.53
		Moderate	0.92	5.09
		Severe	-22.99*	7.53
	Moderate	Normal	4.02	3.12
		Mild	0.92	5.09
		Severe	-23.91*	6.77
	Severe	Normal	27.94*	6.36
		Mild	22.99*	7.53
		Moderate	23.91*	6.77

Note: Mean difference is significant at the .05 level, *P < .05

As displayed in the above table there is significant mean difference in dysfunctional attitudes between normal and severe, mild and severe, moderate and severe levels of depression.

Table 6 post hoc test of self- esteem

DV	(I) level of depression	(J) level of depression	Mean difference	std error
SE	Normal	Mild	0.68	1.01
		Moderate	2.87*	0.69
		Severe	3.11	1.42
	Mild	Normal	-0.68	1.01
		Moderate	2.19	1.14
		Severe	2.43	1.68
	Moderate	Normal	-0.68	1.01
		Mild	-2.19	1.14
		Severe	0.24	1.51
	Severe	Normal	-3.11	1.52
		Mild	-2.43	1.68
		Moderate	-0.24	1.51

Note: Mean difference is significant at the .05 level, *P < .05

As shown in the above table the only significant mean difference in self- esteem exists between normal and moderate levels of depression.

Table 7 Correlations among predictor and criterion variables

Measurement	BDI	DA	SE	LES
DA	.251**			
SE	-.22**	-.34**		
LES	.271**	.27**	-.13*	
Gender	-.12*	-.11	.094	.091

Note: DA = dysfunctional attitude, SE = self esteem, LES = life event stressors

There is positive correlation between dysfunctional attitudes and depression as well as between dysfunctional attitudes and life event stressors. There is also relationship between depression and gender, depression and life event stressors. Life event stressors and self esteem, dysfunctional attitudes and self esteem has significantly correlated.

Table 8 regression analysis of the relationship of depression with gender, self esteem, dysfunctional attitude, and Life event stressors

predictors	B	SE B	β
Constant	9.88	4.27	
Gender	-2.24	1.00	-.12*
SE	-.23	.09	-.14*
DA	.06	.02	.16**
LES	.02	.004	.22***

Note: gender = sex identity of students; LES = life event stressors; DAs = dysfunctional attitude; SE = self esteem, gender = sex identity of students. R^2 =.14 (ps = .00). ***P = 00 **P < .01 *P < .05

A multiple regression analysis using life event stressors, dysfunctional attitudes, gender and self esteem as predictors and depression as criterion yielded a significant regression model F (4, 300) =12.55, P = .00. All predictor variable entered into the regression model had a significant unique contribution in the prediction of depression, t (308) = -2.24; P < .05 for gender, t (308) = - 2.40; P < .05 self esteem, t (308) = 2.71; P < .01dysfunctional attitudes and t (308) = 4.08; P = .00 for life event stressors.

4.4 interaction effects of predictor variables on depression

Table 9 Regression analyses for an interaction life event stressors, and gender to predict depression

Block	predictors	B	SE B	ß
1	**Main effect**			
	Constant	16.33	1.83	
	Gender	-2.29	1.03	-.12*
	LES	.02	.01	.27**
2	**interactions**			
	Constant	16.33	1.83	
	Gender	-2.29	1.03	-.12*
	LES	.02	.02	1.27
	Gender x LES	.00	.01	.01

Note: gender = sex identity of students, LES = life event stressors, Gender x LES = interaction of life event stressors and gender. $R^2 = .09$ For the first block; R^2 change = .00 for the second block and F change (1, 301) = 9.74 ; $P > .05$. **$P < .01$ *$P < .05$.

The first model containing gender and life event stressors as main effect significantly predicted depression. F (2, 302) = 14.65 and as displayed in the above table both life event stressors and gender had an independent significant contribution in the prediction of depression. The second model of the interaction term was not significant and the change due to the interaction was not significant F change (1, 301) = 9.74; $P >.05$.

Table 10 Regression analyses for an interaction of dysfunctional attitudes, and life event stressors to predict depression

Block	predictors	B	SE B	ß
1	**Main effect**			
	Constant	12.38	.45	
	LES	.02	.00	.23**
	DA	.08	.02	.20**
2	**interactions**			
	Constant	12.25	.46	
	LES	.01	.00	.20*
	DA	.07	.02	.19*
	DA x LES	.00	.00	.09

Note: LES = life event stressors; DA = dysfunctional attitude; DAs x LES = interaction of dysfunctional attitude and life event stressors; R^2 = .113 For the first block; R^2 change = .006 for the second block and F change (2,302) = 2.16;P > .05. **P < .01; *P < .05.

As displayed above on Table 5 the first model that included life event stressors and dysfunctional attitudes was significant predictor of depression, F(2, 302) = 19.21, P = 00, R^2 = .113. Both Life event stressors, t (308) = 4.13, P < .01 and dysfunctional attitudes t (308) = 3.67; P < .01 had a significant unique contribution to the prediction of depression. The second block of two way interaction didn’t show a significant change in the prediction of depression than the first model

R^2 change = .014, F change (1, 301) = 2.16; p >.05. Interaction of dysfunctional attitudes and life event stressors was not significant predictor t (304) = 1.47. P > .05

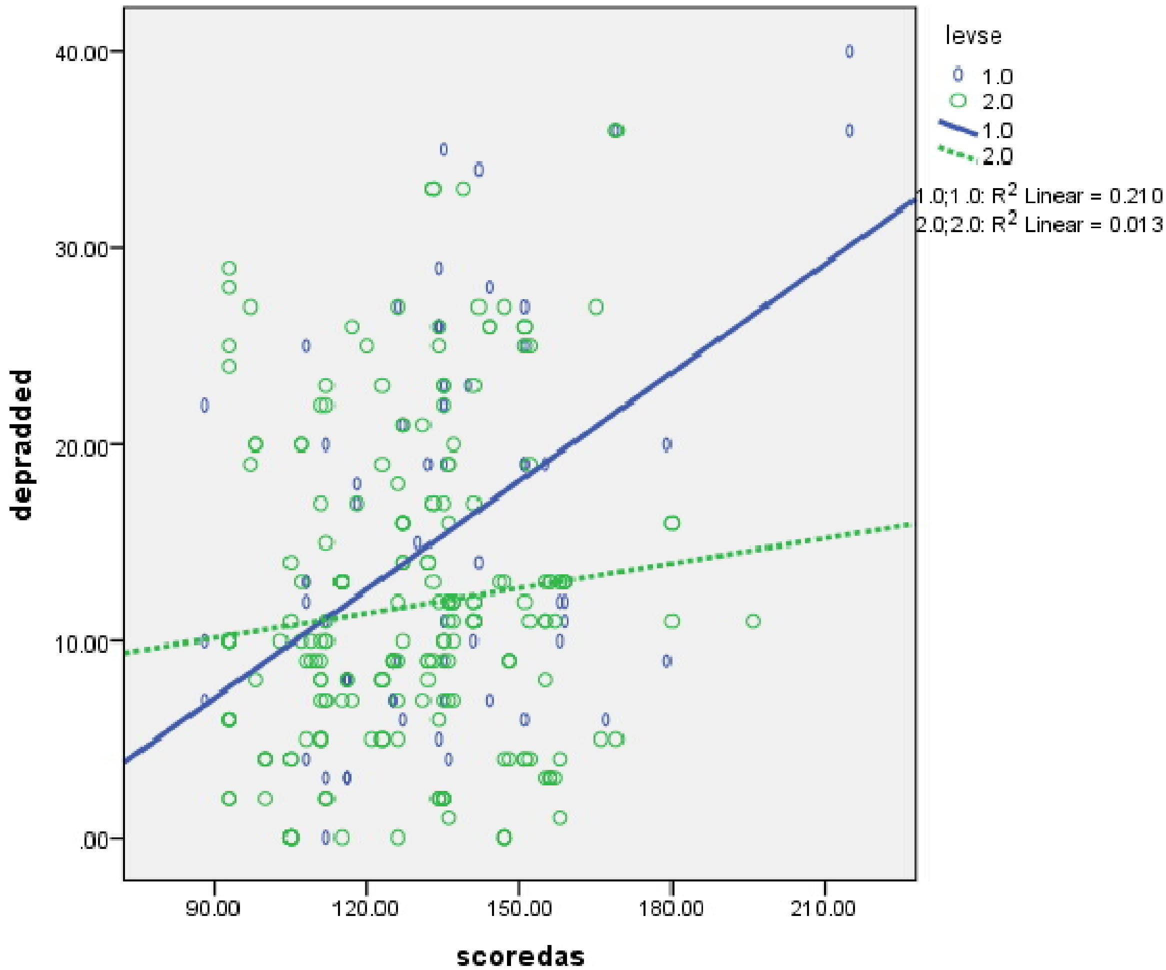
Table 11 Regression analysis for an interaction of self esteem and dysfunctional attitudes

Block	predictors	B	SE B	ß
1	**Main effect**			
	Constant	17.16	1.96	
	SE	-2.72	1.08	-.14*
	DA	.09	.02	.24**
2	**interactions**			
	Constant	16.21	1.91	
	SE	-2.13	1.06	.11*
	DA	.44	.08	1.16**
	DA x SE	-.21	.05	-.95**

Note: DA = dysfunctional attitude, SE = self esteem, DA x SE = interaction of dysfunctional attitude and self esteem. R^2 = .08 for the first block and R^2 change = .06 second block and F change (1, 301) = 9.15; P < .05. **P < .01 *P < .05

As displayed in table 7 the regression analysis showed that the first model that included self esteem and dysfunctional attitudes as main effects explained 8% of variance in depression that is R^2 = .08 and this model was significant predictor of depression; F (2, 299) = 13.41, P = .00.both variables entered into the model had a unique significant contribution in the prediction of depression. In the second block the interaction term of the two variables was entered and its coefficient was significant predictor t (308) = -3.03; P < .05.

Figure 1 scatter plots for dysfunctional attitudes(X axis) by depression (Y axis) with case markers for self esteem.



Note : depradded = BDI score, levse = level of self esteem, and scoredas = score on DAS. The upper/solid line shows the regression to predict depression for low self esteem (low self esteem=1) and the lower / dashed line shows the regression to predict depression for high self esteem (high self esteem = 2)

Chapter five

Discussion

The prevalence of depression has been shown to be higher in college-aged students than in the general population, with around 30% of college-aged students at any given time with depression and around only 9% in the general population (Ibrahim, Kely, Admas, & Glazeb, 2012).
The present study has founded a prevalence rate of 31.8% among students in AAU. The prevalence rate for female students was 38% and 29% for male students. This finding is nearly similar with other studies which used student population for estimating prevalence rate of depression, (Zakiya, etal , 2011) has founded 27.7% prevalence of depression among university students in Oman. According to Diana etal, (2013) the prevalence of depression among Iranian university students was found to be 33 %. Eisenberg, etal ,(2007) have founded an estimated prevalence rate of 13.8% for undergraduate students.

These figures decrease in studies which used different population other than university students. For example a study in Ethiopia that included all Ethiopian population aged eighteen and above has found a 12 month prevalence proportion of 9.1%, Solomon, Fasil, Mekonnen, Henok, & Girma (2012). Other study in Ethiopia particularly in Addis Ababa city has shown that a life time and point prevalence of depressive episodes was 2.9% & 2.3% respectively (Kebede & Alem,1999). Higher prevalence rates among university students can be explained from a perspective of academic work load, new environment, as it is evident that students leave their home and enter into a whole new setting which can lead to depression. Other factors include achieving below expectation, not fitting into the new social, cultural and physical environment.

Inconsistencies in prevalence rates also can be the result of methodological issues; tools used and study population of the study.

It is founded that there is a significant difference between male and female participants in depression in this study. Additionally regression analysis has also showed that gender has a unique contribution in the prediction model that includes dysfunctional attitudes, life event stressors, self esteem and gender as predictors. The prevalence of depression is more prevalent among women than men across different societies and contexts (WHO, 2008). Studies consistently demonstrated that gender difference emerges during adolescence girls being more vulnerable than boys (Lucht, Meyer, suhaub, Hapke, Rampf, & Bartles, 2003). This difference could be the result of more stressors encountered and greater sensitivity to these stressors. Factors suggested that may contribute to greater prevalence rates of depression among females includes the stress of multiple and family responsibilities, sexual and physical abuse, sexual discrimination, lack of social supports, traumatic life experiences and poverty (NAIMI ,2010). in specific to traditional culture like Ethiopia women has greater strains when compared with their male counterparts this includes more social responsibilities, low social support, inequality, and discrimination on the basis of gender identity, & physical or verbal abuse to mention only a few.

A regression model that included Gender, dysfunctional attitudes, life event stressors and self esteem had a significant contribution in the prediction of depression additionally each predictor variables significantly predicted depression. This finding is consistent with a longitudinal study of Joiner, Metalsky, Lew, Klocek (1999) which founded that students who possessed high dysfunctional attitudes subsequently experienced increases in depressive symptoms. Results from Cheng & Yusooff (2010) showed that those with low self esteem on average resulted in markedly higher depression scores when compared with those with high self esteem. In the same study subjects with high and low dysfunctional attitudes were significantly different on mean scores of depression. In a study of 347 college students Alloy, Whitehouse., Robinson, Abramson, Hogan, Rose (2000) Found individuals with high risk attribution styles, or negative ways of thinking were almost seven times more likely to develop major depression over a period of 2.5 years than were those with low-risk attribution styles and positive ways of thinking.

Stress independently predicts depression in different population (Monoroe ,2008) and around 50-80% of people with depression had experienced major life stressor before the onset of depression. According to Hammen (2005) studies consistently has founded evidence for a notion that stressful life events plays a major role in depression. Mazure, 1998 ; Brown & Harris, (1989) has founded higher levels of major life events in patients compared to controls and also in community samples. Consistent with these studies the present study has founded that stressful life events significantly predicted depression. From the other three predictor variables entered into the regression model stressful life event had the biggest beta coefficient suggesting it contributed better in the prediction of depression.

According to Hammen (2005) the issue of gender differences in depressive reactions to stress appears to Yield greater consensus, with more studies indicating that women are more likely to become depressed in response to stressors than are men. in support of this notion Hyde, Mezulis, and Abramson ,(2008) in their ABC (Affective, Biological and Cognitive) model of depression hypothesized that gender difference in depression could be related with females greater emotional reactivity to stressors than males and that this gender difference in emotional reactivity may be linked to gender Differences in temperament present early in life. The Results of this study didn't evidence this notion since the interaction of the two was not significant predictor which means that the relationship of stressful life events and depression doesn't change as a function of gender. In consistent with this finding McGonagle & Kessler (1990) found no sex difference in the impact of episodic stress on depressive symptoms. Kendler, Thornton, Gardner (2001a) argued that gender differences in depression were not explained by differential sensitivity to stressors.

An important feature of Beck's theory is that the depressive schemata remain latent until an environmental stressor activates them. Supporting Beck's theory Kuiper et al, (1988); Kwon and Oei, (1994) has founded that the interaction of dysfunctional attitudes and negative life events add to the main effects of each factor in predicting depressive symptoms. Beck ,(1970) emphasized that events by themselves doesn't result in a particular emotional state unless they are intervened by cognitive process. So behaviors manifested in the form of lack of motivation feeling of guilt and sadness are the result of cognitive triad which is popular terminology representing a meaning of negative attitude towards self, world and the future. But this cognitive pattern has to be triggered by environmental stressors in order to cause a depressive state.

The present study result failed to support for beck's theory since the interaction of dysfunctional attitudes and life event stressor was not a significant predictor above and beyond independent relationship each factors have with depression. The study supported Young's (1990) theory that postulates maladaptive cognitive patterns could possibly engender depression without necessarily interacting with stressful life events to trigger them. Consistent with this finding Cankaya (2002) founded that maladaptive cognitive patterns independently predicted depression supporting young’s theory. Barnett and Gotlib (1990) and Robins, Block ,& Peselow (1990) also failed to obtain the significant interaction effects.

Studies consistently showed that self esteem and dysfunctional attitudes are cognitive vulnerabilities for developing depression (Hammen ,2005). Interaction effect of dysfunctional attitudes was examined to test if the two variables have a prediction power beyond the relationship each have with depression. Results have shown that there is an interaction of dysfunctional attitudes and self esteem to predict depression. This result was supported by Southall & Robert, (2002) which founded an interaction of attribution style other measure of dysfunctional cognitive process and self esteem in significantly predicting depression. This shows the importance of the combined roles of self-esteem and maladaptive cognitive styles in prediction of depression.

Chapter six

Conclusion and recommendation

6.1. Conclusion

Based on the result of this study the following conclusion were drawn

- Depression is prevalent among university students. Prevalence rate of depression is larger for females than male participants.
- Dysfunctional attitudes, self esteem, gender and life event stressors are significantly related with depression.
- Depression can be predicted from an interaction effect of dysfunctional attitudes and self esteem. That means the effect of the two variables in combination predicts depression above and beyond the independent effect each have on depression.
- Life event stressors and gender don't interact to significantly predict depression this is to mean that life event stressors effect on depression doesn't depend on gender identity of participants.
- The effect of life event stressors on depression doesn't depend on the level of dysfunctional attitudes. The two variables only have an independent contribution in the prediction of depression.

6.2 Recommendations

Taking the results of the study into consideration the following recommendations are forwarded

- Practitioners should consider the relationship depression has with factors such as cognitive vulnerabilities and other psychosocial factors such as gender and life stress while conceptualizing patients' problem and formulating treatment plans.
- Since it is found in this study and in others' that depression is more prevalent in university students it is highly recommended that counselors or mental health care professionals partake in activities such as maintaining student's mental health by providing counseling, psycho education or implementing different training programs.
- Preventative programs may need to be implemented to address the root of depression and possible healthy coping mechanisms for students. Both students and universities need to be able to identify risk factors, external stressors, and signs and symptoms of the disease.
- Clinicians are also recommended that they develop treatment manuals that are specific to females and university students since both being female and enrolling in universities are vulnerabilities for depression.
- Studies should be conducted in different population such as clinical or normal population other than students.
- Longitudinal studies should be done in the future in order to test if the relationship depression has with cognitive and other psychosocial factors studied in this research vary across time. A longitudinal study would also have the benefit of enabling researchers to identify if dysfunctional attitudes are trait like factors that endure and pose vulnerability for individual having them or are only displayed during depressive episodes among clinically depressed patients.

- Other cognitive and psychosocial variables that are not included in this study but proved to have effect on depression needs to be examined for their independent or interactive effect they have on depression.
- Other stressors other than life stressors such as daily hassles and chronic stressors like for example poverty should be tested for their relationship with depression.

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Obtaining consent

Opening: Dear participants these questionnaires were designed to conduct a research for the fulfillment of the requirements for the degree of M.A in Clinical Psychology. One of the requirements for the degree is to conduct a research project. The topic of the study is the relationship between dysfunctional attitudes, self - esteem, life event stressors and depression among AAU students.

Your participation in this study is voluntary. You as a participant have full right to participate, not to participate, you don't have to answer any questions that you don't want to answer and ask questions which are not clear.

However, your honest answer to the questions is very important for the purpose of the study. I would also like to remind you that your genuine answer is of paramount importance to the outcome of the research and that all the answers and your identity are kept anonymous and confidential. Confidentiality of the participants is maintained and the participants’ privacy would never be disclosed by any means at any stage of the study.

Do you agree to participate in the study? YES ☐ NO ☐

Thank you in advance!

Appendix A

Addis Ababa University

School of psychology

Clinical psychology program unit

The aim of this questionnaire is to collect data that would help to identify the relationship depression has with dysfunctional attitudes, self esteem, and life event stressors. The reliability of this research depends on what you respond to each items. Your response in this questionnaire will be kept with confidentiality and will only be used for the purpose of this study. You don’t need to write your names in any page of the questionnaires.

Part one □ general information

Instruction □ respond to the following questions by putting “✓” mark or answer by giving the required information

1. sex female ☐ male ☐
2. Age -----------------------------------
3. College ------------------------------------
4. Department -----------------------------------
5. Academic year first ☐ second ☐ third ☐

Dysfunctional Attitude Scale (DAS)

This inventory lists different attitudes or beliefs which people sometimes hold. Read each statement carefully and decide how much you agree or disagree with the statement. For each of the attitudes, show your answer by using the number code given below that best *describes what you think*. Be sure to choose only one number for each attitude. Because people are different, there is no right or wrong answer to these statements. To decide whether a given attitude is typical of your way of looking at things, simply keep in mind what you are *like most of the time*.

1	2	3	4	5	6	7
Totally agree	Agree very much	Agree slightly	Neutral	Disagree slightly	Disagree very much	Totally disagree

01	It is difficult to be happy unless one is good looking, intelligent, rich and creative.	
02	Happiness is more a matter of my attitude towards myself then the way other people feel about me.	
03	People will probably think less of me if I make a mistake.	
04	If I do not do well all the time, people will not respect me.	
05	Taking even a small risk is foolish because the loss is likely to be a disaster.	
06	It is possible to gain another person's respect, without being especially talented at anything.	
07	I cannot be happy unless most people I know admire me.	
08	If a person asks for help, it is a sign of weakness.	
09	If I do not do as well as other people, it means I am an inferior human being.	
10	If I fail at my work, then I am a failure as a person.	
11	If you cannot do something well, there is little point in doing it at all.	
12	Making mistakes is fine because I can learn from them.	
13	If someone disagrees with me, it probably indicates he/she does not like me.	
14	If I fail partly, it is as bad as being a complete failure.	
15	If other people know what you are really like, they will think less of you.	
16	I am nothing if a person I love does not love me.	
17	One can get pleasure from an activity regardless of the end result.	
18	People should have a reasonable likelihood of success before undertaking anything.	

19	My value as a person depends greatly on what others think of me.	
20	If I don ‘t set the highest standards for myself, I am likely to end up a second-rate person.	
21	If I am to be a worthwhile person, I must be truly outstanding in at least one major respect.	
22	People who have good ideas are more worthy than those who do not.	
23	I should be upset if I make a mistake.	
24	My own opinions of myself are more important than others' opinions of me.	
25	To be a good, moral, worthwhile person, I must help everyone who needs it.	
26	If I ask a question, it makes me look inferior.	
27	It is awful to be disapproved of by people important to you.	
28	If you don ‘t have other people to lean on, you are bound to be sad.	
29	I can reach important goals without slave driving myself.	
30	It is possible for a person to be scolded and not get upset.	
31	I cannot trust other people because they might be cruel to me.	
32	If others dislike you, you cannot be happy.	
33	It is best to give up your own interests in order to please other people.	
34	My happiness depends more on other people than it does on me.	
35	I do not need the approval of other people in order to be happy.	
36	If a person avoids problems, the problems tend to go away.	
37	I can be happy even if I miss out on many of the good things in life.	
38	What other people think about me is very important.	
39	Being isolated from others is bound to lead to unhappiness.	
40	I can find happiness without being loved by another person.	

Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, mark **SA**. If you agree with the statement, mark **A**. If you disagree, mark **D**. If you strongly disagree, mark **SD**.

	Items	**SA**	**A**	**D**	**SD**
1.	On the whole, I am satisfied with myself.				
2.	At times, I think I am no good at all				
3.	I feel that I have a number of good qualities.				
4.	I am able to do things as well as most other people				
5.	I feel I do not have much to be proud of.				
6.	I certainly feel useless at times.				
7.	I feel that I'm a person of worth, at least on an equal plane with others				
8.	I wish I could have more respect for myself.				
9.	All in all, I am inclined to feel that I am a failure.				
10.	I take a positive attitude toward myself.				

Student stress scale

Instructions: below there are a list of events that are potentially stressful Check the events if you had experienced them in the past one year. Put "✓" mark on the front box if they had happened to you in the past one year.

1.	Death of close family member		17	Increased workload	
2.	Death of close friend		18	outstanding personal achivement	
3.	Divorce between parents		19	First semester in college	
4.	Jail term		20	Change in living conditions	

5.	Major personal injury or illness		21	Serious argument with instructor	
6.	Marriage		22	Lower grades than expected	
7.	Fired from a job		23	Change in sleeping habits	
8.	Failed important course		24	Change in social activities	
9.	Change in health of a family member		25	Change in eating habits	
10.	Pregnancy		26	Chronic car trouble	
11.	Sex problems		27	Change in no. of family get together	
12.	Serious argument with a close friend		28	Too many missed classes	
13.	Change in financial status		29	Change of college	
14.	Change of major		30	Dropped more than one class	
15.	Trouble with parents		31	Minor traffic violations	
16.	New girl or boyfriend				

Beck depression inventory (BDI)

instruction:This questionnaire consistes of 21 group of statements. please read each group of statements together carefully, and then pick out the one statement in each group that best describes the way you have been feeling these two weeks, including today. if several statements seem to apply equally well circle the highest number for that group.

1.Sadness

0 I don’t feel sad

1 I feel sad much of the time

2 I am sad all the time

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

2. Pessimism

0 I am not discouraged about my life

1 I feel more discouraged about my future than I used to be

2 I don’t expect things to work out for me

3 I feel my future is hopeless and will only get worse

3. Past failure

0 I don’t feel like a failure

1 I have failed more than I should have

2 as I look back, I see a lot of failures

3 I feel I am a total failure as a person

4. loss of pleasure

0 I get as much pleasure as I ever did from The things I enjoy

1 I don’t enjoy things as much as I used to

2 I get very little pleasure from the things I I used to enjoy

3 I can’t get any pleasure from the things I used Enjoy

5. guilty feelings

0 I don’t feel particularly guilty

1 I feel guilty over many things I’ve done or Should have done

2 I feel quite guilty most of the time

3 I feel guilty all of the time

6. Punishment feelings

0 I don’t feel I am being punished

1 I feel I may be punished

2 I expect to be punished

3 I feel I am being punished

7. self – dislike

0 I feel the same about myself as ever

1 I have lost confidence in myself

2 I am disappointed in myself

3 I dislike myself

8. self – criticalness

0 I don’t criticize or blame more than usual

1 I am more critical of myself than I used to be

2 I criticize myself for all of my faults

3 I blame myself for everything bad that happens

9. Suicidal thoughts or wishes

0 I don't have any thoughts of killing myself

1 I have thoughts of killing myself, but I wouldn't carry them out

2 I would like to kill myself

3 I would kill myself if I had the chance

10. Crying

0 I don't cry any more than I used to

1 I cry more than I used to

2 I cry over every little thing

3 I feel like crying, but I can't

11.Agitation

0 I am no more restless or wound up than usual

1 I feel more restless or wound up than usual

2 I am so restless or agitated that it's hard to stay still

3 I am so restless or agitated that I have to keep moving or doing something

12 Loss of interest

0 I have not lost interest in other people or activities

1 I am less interested in other people or things than before

0 I have not experienced any change in my

2 I have lost most of my interest in other people or things

3 it's hard to get interested in anything

13. Indecisiveness

0 I make decisions as about as well as ever

1 I find it more difficult to make decisions than usual

2 I have much greater difficulty In making decisions than I used to

3 I have trouble making any decisions

14. Worthlessness

0 I don't feel I am worthless

1 I don't consider myself as worthwhile and useful as I used to

2 I feel more worthless as compared to other people

3 I feel utterly worthless

15. Loss of energy

0 I have as much energy as ever

1 I have less energy than I used to have

2 I don't have enough energy to do very much

3 I don't have enough energy to do very much

16. Changes in sleeping pattern

0 I have not experienced any change in my sleeping pattern

1a I sleep somewhat more than usual

1b I sleep somewhat less than usual

2a I sleep a lot more than usual

2b I sleep a lot less than usual

3a I sleep most of the day

3b I wake up 1-2 hours early and can't get back to Sleep

17.Irritablity

0 I am no more irritable than usual

1 I am more irritable than usual

2 I am much irritable than usual

3 I am irritable than usual

18. Changes in appetite

0 I have not experienced any change in my apetite

1a my appetite is somewhat less than usual

1b my appetite is somewhat greater than usual

2a my appetite is much less than usual

2b my appetite is much greater than usual

3a I have no appetite at all

3b I crave food all the time

19. Concentration difficulty

0 I can concentrate as well as ever

1 I can't concentrate as well as usual

2 it's hard to keep my mind on anything for very long

3 I find I can't concentrate on anything

20. Tiredness or fatigue

0 I am no more tired or fatigued than usual

1 I get more tired or fatigued more easily than usual

2 I am too tired or fatigued to do a lot of the things i used to do

3 I am too tired or fatigued to do most of the things I used to do

21. lose of interest in sex

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

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

2 I am much less interested in sex now

3 I have lost interest in sex completely

Appendix B

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DECLARATION

I, the undersigned, declare that this thesis is my original work, has not been presented for a degree in any university and that all sources of materials used for the thesis have been duly acknowledged.

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Eden Hussen

october 2014

This thesis is submitted for examination with my approval as an advisor of the candidate.

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prof. Yeswant Signt Vagrecha

october 2014