



JIMMA UNIVERSITY

COLLEGE OF EDUCATION AND BEHAVIORAL SCIENCES

DEPARTMENT OF PSCHOLOGY

MOTIVATION AND STRESSORS AS PREDICTORS OF ACADEMIC  
PERFOMANCE AMONG STUDENTS OF JIMMA COLLEGE OF  
TEACHERS EDUCATION

**BY:**

ROMEL W/ SENBET IDDOSA

MA THESIS SUBMITTED TO DEPRTMENT OF PSSYCHOLOGYIN  
PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE  
MASTER OF ARTSDEGREE IN COUNSELING PSYCHOLOGY

**ADVISOR:**BERHANU NIGUSSIE (Assistant Professor)

OCTOBER 20155

JIMMA ETHIOPIA

MOTIVATION AND STRESSORS AS PREDICTORS OF ACADEMIC  
PERFORMANCE OF STUDENTS OF JIMMA COLLEGE OF  
TEACHERS EDUCATION

BY:

ROMEL W/ SENBET IDDOSA

OCTOBER 2015

JIMMA ETHIOPIA

MOTIVATION AND STRESSORS AS PREDICTORS OF ACADEMIC  
PERFORMANCE OF STUDENTS OF JIMMACOLLEGE OF  
TEACHERS EDUCATION

BY:

ROMEL W/ SENBET IDDOSA

APPROVED BY: BOARD OF EXAMINERS

---

ADVISOR

---

SIGNATURE

---

EXAMINER

---

SIGNATURE

---

EXAMINER

---

SIGNATURE

## DECLARATION

I, the undersigned graduate student, declare that this thesis is my original work and all sources of the material used for this thesis have been duly acknowledged.

Name: Romel W/Senbet Iddosa

Signature \_\_\_\_\_

This thesis has been produced under my supervision and submitted for examination with my approval as University advisor.

Name: Berhanu Nigussie (Assistant Professor)

Signature \_\_\_\_\_

Date \_\_\_\_\_

## ACKNOWLEDGMENTS

I would like to express my heartfelt gratitude to my advisor Berhanu Nigussie for his friendly approach in providing me valuable and helpful comments about my research work in a very comfortable manner.

## Table of Contents

Contents .....	pages
Acknowledgements.....	i
Table of contents.....	ii
List of Tables .....	iv
List of Appendixes .....	v
Abbreviation and Acronyms .....	vi
Abstract .....	vii

## **Table of Contents**

Chapter One .....	1
Introduction.....	1
1.1. Background .....	1
1.2. Statements of the Problems .....	4
1.3. Research Basic Questions .....	5
1.4. Objective of the study .....	6
1.4.1. General objective of the study .....	6
1.5. Significance of the study .....	7
1.6. Delimitation of the study.....	7
1.7. Operational definitions.....	7
1.8. Theoretical Framework .....	8

1.8.1	Motivation .....	9
1.8.2	Stress.....	12
Chapter Two	.....	15
2.	Review of Related Literature .....	15
2.2.	Theoretical Approach.....	22
2.2.1	Motivation .....	22
2.2.1.1	The Relationship between Motivation and Performance.....	30
2.2.1	The Concept of Stress. ....	32
2.2.2.1	Consequences of feeling stress .....	34
2.2.2.2	The Relationship between Stress and Performance.....	35
2.2.3	The Relationship between Motivation and Stress .....	36
Chapter Three	.....	37
3.	Research Methods.....	37
3.1.	Study design .....	37
3.2.	Study area and population .....	37
3.3.	Sample and sampling Techniques.....	37
3.4	.Inclusion / Exclusion criteria.....	38
3.4.1.	Inclusion .....	38
3.4.2.	Exclusion .....	38
3.5.	Data collection instruments .....	38
3.6.	Pilot study.....	43

3.7. Procedures of data collection.....	43
3.8. Study Variables.....	44
3.8.1. Predictors (independent variables): are motivation and stressors. ....	44
3.8.2. Criterion (dependent variable): academic achievement .....	44
Chapter Four .....	45
4.1. Result .....	45
4.1.1. Data of Demographic variables.....	45
4.1.2. Gender differences in GPA, Motivation, and Stress T-Test Analysis .....	50
4.1.3. Differences in Motivation and Stress among the Three Study Year Levels- Analysis of ANOVA .....	52
4.1.4 Regression Model Analysis of Motivation and Stressors as predictors of academic performance .....	57
Chapter five.....	61
5. Discussion, .....	61
Chapter Six .....	65
6. Conclusion and Recommendations.....	65
6.1. Conclusion.....	65
6.2 Recommendation .....	67
References.....	69
Appendix A.....	72
Appendix B.....	78
Appendix C.....	82



Appendixes D.....	83
-------------------	----

List of Tables .....	Page
Table 1 Analysis of Demographic Variables .....	45
Table 2 Analysis of Mean and SD of response on Motivation and stress among all the three study year levels of students' .....	46
Table 3 Mean and SD of response on Motivation and Stress b/n gender .....	49
Table 4 T –Test analysis of gender differences in GPA .....	50
Table 5 T –Test analysis of gender differences in Motivation and Stress .....	51
Table 6 ANOVA analysis of mean of Motivation and Stress .....	52
Table 7 Multiple Regression Analysis of Genders and Study year levels as predictors Academic achievement .....	58

## IV

### List of Appendixes

Title.....	Page
Appendix A Academic Motivation Scale .....	72
Appendix B Student Stress Survey Scale .....	78
Appendix C Crosstab for environmental sources of stress.....	83
Appendix D Excluded Variables in Regression.....	84

***Abbreviation***

*CBM: Cognitive Behavioral Modification*

*AMC: Academic Motivation Scale*

*SSS: Student Stress Survey*

*GPA: Grade Point Average*

## *Abstract*

*Cross sectional survey method was used to explore whether Motivation and Stress predict Academic Performance of students of Jimma College of Teachers Education. Of 287 total sample sizes, 172 male and 115 female students were participated in the study. Multiple Linear Regression analysis was conducted by employing SPSS version 20. The result showed that gender and the three study year levels account only 22% ( $R^2=.219$ ) of variance in academic performances of students. T-Test result had also showed a significance differences between the mean GPA of male and female students ( $T(285) = 8.275, P < 0.000$ ). ), male students performed more than female students. However, there was no statistical significance difference in mean of motivation and stress between genders. Similarly, Tukey hoc test analysis showed a significance differences in mean of an extrinsic motivation between 3<sup>rd</sup> and 1<sup>st</sup> year student ( $P < 0.003$ ) as well as between 3<sup>rd</sup> and 2<sup>nd</sup> year students ( $P < 0.000$ ). A significance difference was observed, too, in an intrinsic motivation between 3<sup>rd</sup> and 1<sup>st</sup> year student ( $P < 0.037$ ) and between 3<sup>rd</sup> and 2<sup>nd</sup> year students ( $P < 0.000$ ), second year students were more motivated than first and third year students. The overall mean of motivation of all the three study year level students were 3.84, indicating that 53.8% majority of the students had high level of extrinsic motivation. On the other hand, environmental sources of stress was the most common sources of stress of all participants, first year students were being more stressed than second and third year students. Hence, changing the residential environment of students is advisable to alleviate the problem. Study skill and time management training as well as counseling services will help female students to enhance their self-efficacy in order to improve their academic performance.*



# **Chapter One**

## **Introduction**

### **1.1. Background**

There are number of factors that affect academic achievement of the students in school. Academic motivation and stress are the first to be mentioned. Of these, the most influential is motivation. Motivation also referred to as academic engagement, refers to “cognitive, emotional, and behavioral indicators of student investment in and attachment to education” (Francis, 2004). It is obvious that students who are not motivated to succeed will not work hard. It is true that several researchers have suggested that only motivation directly affects academic achievement; all other factors affect achievement only through their effect on motivation (Tucker, 2002). There are several theories of motivation which explain motivation in their studies. Self-determination theory by Ryan and Deci (2000) and Deci et al. (1991) basically distinguishes two types of motivation, intrinsic and extrinsic and a state called amotivation satisfying a lack of motivation.

According to Ryan and Deci (2000) and Deci et al. (1991), intrinsic motivation refers to doing an activity for the inherent satisfaction of the activity itself. Extrinsic motivation, on the other hand, according to the theory is to pursue it for an external gain or benefits. Research studies shows that students whose motivation are intrinsic do better in school with lower state of withdrawal, lower rate of absenteeism, low dropout rates, lower feeling of anxiety about school and higher levels of academic performance. Other theory is Goal theory, that postulates there are two main types of motivation for achieving in school. According to the theory mentioned in Francis et al. (2004) student with an ability or performance goal orientation are concerned with

proving their competence by getting good grades or performing well compared to other students (Anderman & Midgley, 1997; Maer & Midgley, 1999). On the other hand, students with a task goal orientation are motivated by a desire to increase their knowledge on subject or by enjoyment from learning the material. Studies have shown that students with a task goal orientation are more likely to be engaged in challenging tasks, seek help as needed, tend to be happier both with school and with themselves as learners (Ames, 1992; Anderman & Midgley, 1997). From this perspective Jimma Teachers Education College Students' types and levels of motivation and stress was not known.

From the researcher's experience as a college teacher he encountered that from every twenty students during teaching practice, five to six students copy portfolio of another student to earn grade without their efforts. Copying the work of other students is the manifestation of demotivation and frustration. However, no one knows how much the problem is prevalent and how much it is affecting the learning of students of Jimma Teachers Education College (JTEDC) and here it is necessitates to conduct the research.

Jimma Teachers Education College lies in Oromia regional state government, in Jimma town administration, in the extreme North Eastern of the town, along to the asphalt road that takes to King Abba-Jifar Palace. Distance of the college is four kilometers away from the downtown. This college is sited in the hilly place; that you are lucky to see the town's scenery view from the top. The college was established in 1996, but before it was grown to higher education, its status was Teachers Training Institute until the year 1969. The college is currently, conducting training program of three years-diploma- in teaching profession. Students who are recruited from any zonal administration of Oromia will take training here and deploy to any Oromia zone to teach at lower primary schools. Medium of communication during training is Afan Oromo

except, Amharic and English language that is given as a specialization. Students are off-campus residents who are exposed to sources of stressor that predicts their academic performances which is one of the issues the researchers intended to study it. Students of the college obtain 400 Birr, financial supports from the college each month. At the moment, the total numbers of students who are training in the college are 2145 (male 930 ,and female 1215) with the help of 77teaching staff (MA/MSc 55 ,BA/BSc 18 , Diploma 4).

College students' academic performances not only predicted by motivations but also by another predictors, stress.Dusselier, Dun, Wang, Shell, and Whalen, (2005)as cited in Ross, Neibling and Heckert (2008) have shown that stress lead to difficulty in concentration and lack of motivation, interest and poor attendance. It is obvious that unless students are interested in accomplishing certain task, effort is unthinkable. According to D'zurllia and Sheedy( 1991) as cited in Rosse et al.(2008) college students especially fresh men are a group particularly prone to stress. Students subjected to a weekly test and papers a need to earn high grades, excessive homework, unclear assignment and uncomfortable classroom are some of the academic related sources of stress including the fear of academic failure (Kolko, 1980).Similarly, studies conducted in Taipei Area by John Tung Foundation, (2004) show that 56.7% of the college young adult suffers from school stress. Sources of stress are not only schools, but also others. Ross et al. (2008) have showed that, major sources of stress among college students are interpersonal, intrapersonal, academic and environmental which the researcher of this study needs to deal with it.

As Chongy (2012), stress is positively correlated with amotivation, the author has also indicated that correlation between stress and motivation revealed significant inverse relationship where student with stress were found to be performing poorly and less motivated in highly



evaluated situation. Therefore, understanding the sources and levels of stress among college students and how they can cope with stress is very important in designing stress intervention for providing counseling services. However, research on sources of stressors and levels and their influences on academic performance among students of Jimma College of Teachers Education have not been so far conducted. Similarly, it is not much known about motivation and stress affecting academic performance of students of the college. Yet this evidence based data of stress and motivation and their impact on academic achievement are important information for those educational authorities, health professionals to assist in policy formulation and devising counseling intervention. In this regard, the purpose of this study is to determine what sources of stress are the most prevalent among students of Jimma Teachers Education College and to gain an understanding of levels of motivation of students and the influence of stress and motivation predictors on the academic achievement of students.

## **1.2. Statements of the Problems**

College students encounter academic problems as a result of high level of stress and decreased effort due to low level of motivation (D’Zurilla and Sheedy, 1991). Other research conducted by Chohen, Lamark and Mermelstein (2004) have also shows high level of stress has impact on the ability to concentrate and to focus the attention on a certain task. In addition the experts explain temporary receiving stress result in being unable to answer questions in examination, reading the question wrong or misinterpret their meaning.

Bennet (2003) reports a similar finding in his study and points out that stress is significantly correlated with poor academic performances. But stress doesn’t seem to be the only variable which predicts academic performance. Mitchell (1992) in a study of college students

found intrinsic motivation positively related to grade point average and extrinsic motivation negatively to academic achievement. Broussard and Garrison (2004) have also explained that how intrinsic motivational types have been associated with high perceived ability and control, realistic task analysis and planning, and the belief that effort increase one's ability and control. These research studies show how stress and motivation predicts academic performances of students in any academic institutions with varying degrees and situations. Jimma College of Teachers Education is one of the educational institutes that run the learning teaching process. At the college the researcher of the study is acting as a lecturer and has come across through observations students of the college during examination time and reflection on practicum have been experiencing stresses.

But what are not known are the students' levels of stress and motivation as well as the sources of stressors other than academic stress. In addition, it is not known what factors motivate and demotivate the college students in their academic courses. Yet information about students' level of stress and motivation as well as sources of stressors is important in seeking solution about the students' problems. Therefore the purposes of the study is to identify levels of stress and motivation as well as the sources of stressors of the students by conducting research . Based on the above statement of the problems the following basic research questions had been answered.

### 1.3. Research Basic Questions

1 .Is there differences in a mean of motivation and sources of stress among the first, second and third year students in addition to, academic achievement?

2. What major sources of stress are prevalent among the students of Jimma Teachers Education College that influence their academic performance?
3. Which study year level of students of the college is more motivated or stressed?
4. Could Motivation and Stress predict Academic Performances of Student of Jimma Teachers Education College( JCTE )?
5. Is there a difference between female and male students in terms of their stress or motivation level?

#### 1.4. Objective of the study

##### 1.4.1. General objective of the study

The general objective of this study is to determine whether motivation and stressors can predict academic performance of students of all study year levels of social science Departments of Jimma College Teachers Education.

##### 1.4.2. Specific objective of the study

The specific objectives of this study are to:

- To examine the power of predictors such as ,intrinsic and extrinsic motivations ,as well as intrapersonal, interpersonal , academic and environmental sources of stressors on academic performances of students of Jima Teachers Education College
- To identify levels of motivation among 1<sup>st</sup> ,2<sup>nd</sup> and 3<sup>rd</sup> year students .
- To explore levels of stress among 1<sup>st</sup> ,2<sup>nd</sup> and 3<sup>rd</sup> year students
- To investigate if there is a mean differences among year of students in terms of intrinsic and extrinsic motivations ,as well as intrapersonal, interpersonal , academic and environmental sources of stressors on academic performances of students of Jima Teachers Education College

- To examine gender differences in terms of the totality of intrinsic and extrinsic motivations, as well as intrapersonal, interpersonal, academic and environmental sources of stressors on academic performances of students of Jima Teachers Education College.

### **1.5. Significance of the study**

The results of the study will help to design intervention strategies for those demotivated students to enhance their motivation, particularly intrinsic motivation as well as coping intervention for those students under high level of stress. Similarly, students of the college, teachers and parents will be beneficiaries. It also serves as an input for the college administrators, health professionals and counselors social workers to improve the way in which mental, (psychological), physical, emotional, social, and health of the students will be enhanced based on the sources and consequences of stress among students identified. Finally, it will be serves as body of knowledge/used as source of data for other researchers who dream to precede the study on this topic

### **1.6. Delimitation of the study**

This study was conducted in Jimma town, Jimma zone Oromia regional state, on motivation and stress as predictors of academic performance among regular students of Social Science Department of Jimma College of Teachers Education.

### **1.7. Operational definitions**

*Motivation* refers to as academic engagement in cognitive, emotion and behavioral indicators of students' investment in and attachment to education. Motivation drives behavior towards a goal. It encompasses intrinsic and extrinsic component.

*Intrinsic motivation* is a type of motivation that is animated by personal enjoyment, interest or pleasure (Guay et al., 2010).

*Extrinsic motivation* on the other hand is a type of motivation that is related to behavior not done for its own sake but for external reason (to gain reward or to avoid punishment).

*Academic performance* refers to levels of schooling the students have successfully complete and the ability to attain success in their studies. Grade point average is used as a measurement of academic achievement. *Sources of stress* are stressors that college students experience such as intrapersonal, interpersonal, academic and environmental sources of stressors (Ross, et al., 2008). *Interpersonal unawareness* and misunderstanding of others, lacking of skill how to interact with them. *Intrapersonal* – unawareness of one's own feeling, motivation, and abilities (Ross, et al., 1999)

## **1.8. Theoretical Framework**

A theoretical framework indicates the researcher's assumptions and beliefs. Sekaran (in Radhakrishna, Yoder & Ewing 2007:692) mentions that a theoretical framework is a conceptual model of how one theorizes or makes logical sense of the relationships among several factors that have been identified as important to the problem. A theoretical framework determines which questions are to be answered by the research, and how empirical procedures are to be used as tools to answer these questions (De Vos, Strydom, Fouche & Delpont 2005:35). Radhakrishna et al. (2007:692) indicate that, in essence, a theoretical framework attempts to integrate key pieces of information, especially variables, in a logical manner, and thereby conceptualizes a problem that can

be tested. . The two concepts that has been discussed and placed into context in this study are motivation and stressors

### 1.8.1 Motivation

Attribution theory, Self- efficacy and self-determination theories of Motivation are the guiding theories of this research assigned by the researcher. They are cognitive motivational theories emphasizes the role of belief, judgment, and thinking that stress on internal motivation. Since behavior is guided by an individual's belief or perception of situation or objects, these theories of motivation, have a paramount important use in changing the students' and teachers' belief and attitudes about the performance or achievement that should be based on the effort and competency rather than the belief that is based on achievement or failure is due to luck, or attributing one's own weakness to other party.

Therefore, these motivational theories enable an individual, to think rationally, to control him and hold responsibilities for the outcomes. Motives are affected by the kind of goals set by students-whether they are oriented to mastery, performance, failure avoidance or social- contact. They are also affected by students' interest, both personal and situational. And they are affected by students' attribution about the causes of success and failure – whether they perceive the causes are due to ability, effort, task difficulty, or luck. A major current perspective about motivation is based on self-efficacy theories (Bandura, 1977) which focus on a person's belief that he or she is capable of carrying out or mastering a task.

High self-efficacy affects students' choice of task, their persistence at a task, and their resilience in the face of failure. It helps to prevent learned helplessness, a perception of complete lack of control over mastery or success; high self-efficacy for a task not only increase a person's

persistence at the task but also improves their ability to cope with stressful condition and to recover their motivation following outright failure ( Seifert & Sutton , 2009 ). An extension of self- efficacy theory is self-determination theory ( Deci & Ryan,2000) , which is based on the idea that everyone has basic needs for autonomy, competence, and relatedness to others.

According to the theory, students will be motivated, more intrinsically if these three needs are met as much as possible. For a task not only increase a person's persistence at the task, but also improves their ability to cope with stressful condition and to recover their motivation following outright failure. (Seifert & Sutton, 2009). Competence needs, involve the learner's knowledge of how to achieve certain goals and skills for doing so . Relationship needs are innate requirement for secure and satisfying connections with peers, teachers, & parents. Autonomy needs – refer to the ability to initiate and regulate one's own actions. According to Deci (1991) attribution and self-efficacy theory emphasize to strongly the role of belief when accounting for intrinsic motivation. Self-efficacy theory tells us that the learners' intrinsic motivation' for a task rests with their belief about whether they are good at it and can achieve its goal. Self-determination involves more than belief about the causes of success or failure.

Deci believe that classroom promote intrinsic motivation by helping learners acquire an attitude of self-determination-meet the learners needs for competence, relationship, & autonomy. Self-determination theory suggests academic motivation can be divided into intrinsic motivation, extrinsic motivation and amotivation based on the influence or personal needs, and drives their interaction with external pressures.

#### Attribution Theory

Attribution theory, developed by Heider (1960), Kelly (1967), and Weiner (1986) . Attributions are perceptions about the causes of success and failure. For instance, if one thinks

his failure, he might think as: he didn't work as hard as he should have, luck or the ability or bad luck or task difficulties he had no control over, or some combination of these. In these respect, it could be one of the two, he may take personal responsibility for his failure or blame it on someone or something else. According Weiner (1986), in analysis of motivation, he expressed people seek to understand why they succeed or fail. In doing so, they attribute their accomplishments or losses to a host antecedents; good or bad luck, difficult or easy task, supportive or unfriendly people, their own hard work or lack therefore or the degree to which they possess certain abilities. These antecedents are 1. Locus of causality, (2) stability and (3) controllability.

Locus of causality – refers to the origin of the cause or causes to which people attribute success or failure. The origin can be either within or outside the person. Effort and ability are internal causes – they originate from within the person. The amount of energy a person expends to accomplish a goal is under that person's control. Innate ability also comes from within and is relatively immune to outside influence. People who attribute their success or failure to either of these two causes are said to be internally oriented. Locus of an attribution is the location of the sources of success or failure. If for example, somebody attributes a top mark on a test to his ability, then the locus is internal; if he attributes the mark to the tests having easy question the locus is external.

Therefore, luck or degrees of task difficulty are the typical external causes to which we attribute success or failure. If you believe, you passed your last exam because it was easy (degree of difficulty) or because the lecturer just happened to choose questions you had studied (luck), you are using external causes to account for your success. Stability is another dimensions of causal attributes. Some causal attributes can be changed, while others cannot. You can change



the amount of effort you put into task; you can get more help; you can study a different way.

These are changeable attributes. However if you attribute failure to your lack of innate ability a cause is relatively unchangeable and stable. The final dimension is controllability. Sometimes we attribute success or failure to antecedents that are out of our control. IQ is an example of uncontrollable cause so is luck. Hence, attributes can be classified along three dimensions luck (an uncontrollable, unstable, external cause of success or failure). Generally, although ability is an internal attribute of success, it is also an uncontrollable and stable. Immediate effort, on the other hand is not only internal but also unstable and controllable. In other words, effort is a cause of success-which a learner can do something about.

#### 1.8.2 Stress.

Akande, Olowonirejuaro and Okwara-kalu (2014) explain stress as a normal part of life. They insist that, stress can come from any situation or thought that makes us feel frustrated, angry, and anxious or tensioned. According to them, a low level of stress could be good. It can motivate us and help us become more productive. It provides the means to express talents & energies and pursue happiness. However, according to them, a high level of stress may have negative effect on cognitive functioning and learning of students. It can affect student's grade, health and personal adjustment they may not have concentration and attention towards the learning activity, and they may not motivated to put their effort to study, and these lead them to have poor academic performing.

Too much homework, unsatisfactory academic performance, preparation for test or examination, lack of interest in a particular subjects and delivering presentation in front of their peers/audiences are some of the school related sources of stress that college students experiences.

Roberts and White (1989) support this idea by explaining that academic work may reflect some of the high level of stress that college students have reported. According to (Mark, Blanding, Silverstein, Takahashin, Newman, Gubi, 2005), Test anxiety/stress is positively correlated with amotivation. Correlation between test anxiety and amotivation revealed significant inverse relationship where students with test anxiety were found to be performing poorly and less motivated in highly evaluative situations (Chong, 2012). What we can deduce from here that high level of stress influences academic performances. There are several stress theories which explain stress according to their principles and philosophy of thoughts.

The most influential of all psychological model of stress is Richard Lazarus (Cuirrin, 2007). Lazarus, along with his colleagues (Lazarus, 1966, Lazarus and Launier, 1978; Lazarus and Folkman, 1984, 1987) developed a cognitive theory of stress. They incorporated cognitive appraisal to the theory that takes on three forms: “Primary appraisal”; “secondary appraisal” and ‘reappraisal’. The appraisal process seeks to establish whether an individual is at risk from stress, and if so what resources are available to them to deal with that risk.

Primary appraisal determines whether an individual will judge an encounter as being irrelevant or stressful. Secondary appraisal forms one’s judgment of what can be done regarding the encounter, while reappraisal occurs when new information forces a review of an encounter (Protector, 1993). Of equal importance to the psychological viewpoint of stress is the concept of coping; which consist of “cognitive and behavior efforts to manage (master, reduce, or tolerate) a troubled person-environment relationship ( Folkman and Lazarus, 1985). According them, coping strategies are grouped into problem and emotion –focused coping. Monks (1996) concluded that emotion-oriented coping focuses on expressing, moderating or controlling one’s emotional reaction to a stressful event, while problem-oriented coping focuses on altering the

troubled relationship between the individual or environment).

According to the authors there are individual differences in coping style. Monk (1996) stated that many studies (Aspinwall and Taylor, 1992; Cronkite and Moos, 1984; Folkman and Lazarus, 1988) indicate that individual who use active coping strategies such as problem-focused coping as well as planning and seeking social support, show good adjustment to stress whereas those who utilize avoidance coping strategies, such as denial and wishful thinking, are at a far greater risk of developing adverse response to stress. With regards to illness, effect of stress upon individuals include fatigue, an inability to concentrate, lack of motivation, and headaches,

## Chapter Two

### 2. Review of Related Literature

Following are review of related literature on motivation and stress and their relations to academic performances that has been explained consequently. Then after, different theories of motivation and stress will be presented. In addition, the relationships between motivation, stress and performance have been explained. There are a lot of factors that affect students' performance among which motivation is the most influential one. Broussard and Garrison (2004) defined motivation as the force that energizes behavior, gives direction to behavior, and underlies the tendency to persist, and O' cuirrin( 2007) have also explains motivation as the set of process that arouse, direct and maintain human behavior towards attaining some goal.

Many researches have been conducted on relationship between motivation and academic performances. Of these , the research conducted by Ayub ( 2010) in Pakistan to investigate the effect of intrinsic and extrinsic motivation on academic performances he used t-test , ANOVA and Multiple Linear Regression Analysis in addition to Pearson product moment correlation coefficient to test his hypothesizes . The result shows that intrinsic and extrinsic motivation and academic performances were positively correlated ( $r = .56, n=20; sig=.000$ ). Furthermore, gender differences was found ( $t=4.324, df=198, P<.05$ ) on motivation and academic performances. Findings of the result illustrates that motivation improves academic performances of students .Another studies conducted by Areepttamannil, Freeman, and Klinger (2011) in India, to assess intrinsic motivation, extrinsic motivation and academic achievement among Indians immigrants Adolescents.

In doing so, they used multiple regression analysis to test the hypotheses. The analysis

revealed that the positive predictive effect of intrinsic motivation on academic achievement for the students whereas, extrinsic motivation had negative predictive effect on academic achievement for Indian immigrants. Similar studies were conducted in Islamabad by Afzal, Ali and Khan (2010) in the University to study students' motivation and its relations with academic performances. They used multiple regression analysis and their study shows that R- square, 80 percent was strong relationship of students' motivation with their performances. According to this study, academic performances will increase 34 percent (34%) due to extrinsic motivation whereas, academic performances will increase 23 percent (23%) due to intrinsic motivation.

However, in a study by Areepattamannil and Freeman (2008) on 573 Grade 11 and 12 learners in the Greater Toronto area, they found weak correlations between academic achievement and academic motivation variables in both the non-immigrant and immigrant groups. On the other hand, study conducted by Berg and Coetzee (2014) in South Africa University shows that there was no significant relationship between the total score of motivation and academic achievement of any of the four study year groups. According to the study a significant relation was only found between amotivation and academic achievement in the third – year students and did not in other three study years levels. The differences in the results across the four study year groups between motivation and academic achievement was not consistent. According to the study, Hierarchical regression analyses were done separately for the four study year groups, the researchers' data shows that for the first-year students (12.5%) and the fourth-year students (15.4%) the complete model does not succeed in explaining a significant variance in academic achievement.

However, in terms of the second- year students (27.8%) and the third year students (29.5%), the complete model does indeed succeed in explaining a significant proportion of the

variance in academic achievement on the 5% level of significance. In sum the literature indicated Motivation could also not explain the variance in the academic achievement of the first and fourth-year students. Motivation did, however, explain variance in the academic achievement of second and third-year students. Accordingly, motivation explained 9.5 and 12.1% of the variance in the academic achievement of the second- and third-year students respectively. The differences in the results across the four study year groups between motivation and academic achievement was not consistent. Possible reasons for inconsistencies in academic achievement across the four study year groups were as the researchers put: "the inconsistencies could be attributed to the students' academic achievement in previous years, the intellectual ability, the influence of different lecturers, poor or good class attendance, different study skill and the others".

Other studies conducted by Sahragard, Baharloo, and Soozandifar (2011) in Iranian College Students, to determine the impact of years of college (academic level) on the students of language proficiency and academic achievement one way ANOVA was run. The result revealed that statistically significant differences across the language proficiency of fresh, sophomore, junior and seniors ( $F= 11.179$ ,  $p < 0.05$ ) which shows that the students' proficiency tends to increase as a function of years of university study. A post hoc (Scheffe) test was also conducted in order to locate specifically the differences among the four groups in academic achievement. Accordingly, the mean score for junior ( $M=15.58$ ,  $SD = 1.42$ ), significantly differ from that of freshmen ( $M= 17.13$ ,  $SD=1.23$ ) and Senior ( $M=17.25$ ,  $SD=1.01$ ).

Observed Disparities in academic achievement not only across the four study year groups but also found between genders. The witness for this was conducted study by Teklu Tafasa (2013) on Disparities in Academic

Achievement in Selected Colleges of Teachers Education In Oromiya Region . According to this literature, conducted t-test analysis shows that the mean differences in Cumulative Grade Point Average (GPA) between female and male students of College. Accordingly, a statistically significant difference between college GPA of male and female students ( $t = -9.756, p = 0.001$ ) was observed . In addition, descriptive statistics of the study shows, too, that GPA of College Achievement of male and female students (mean = 2.8041, St.Dev. = 0.43988) and (mean = 2.4179, St.Dev. = 0.28293) respectively indicates that male students are performing better than female students.

Other study conducted at Felican College in Lodi (New Jersey) by Castiglia (2004) .His intention was to know what motivates students or to recognize major sources of motivation of students. The researcher's research was based on different theories of motivations such as whether students' motivation was driven by needs Maslow's (1968) theory, or motivated by innate needs to achieve aligning with McClelland's work or motivated to study only when the content of their course inspires them as suggested by Herzberg (1959). Accordingly the researcher found that using spearman rank correlation calculation between GPAs (over 3.5) were significantly correlated with (at alpha-level .05) motivating factor of grades, honors, and being on the dean's list.

Low GPAs (under 2.5) were correlated (at the .05 level) with concerning over "disappointing my family " " losing my scholarship ", result shows that among the top reason for studying among all students were grades and upcoming exam. According to this study 78 percent of the students claimed to study most when the subject is " interesting and practical ". The need to " prove something to my " was cited motivation to study 68 percent . Among many other things including motivation that influences students' academic achievement, stress is another factor that influences students' performances

either negatively or positively. If students are stressed, they may not be motivated to put effort, they will have less concentration in learning activity, in this regard stress will influence their academic performance. According to ( Kai-wen, 2010) stress is a mental or physical phenomenon formed through one's cognitive appraisal of the stimulation and is a result of one's interaction with the environment. The existence of stress depends on the existence of the stressor. Stressors events that bring stress (Elias, Ping & Abdullah, 2010). Stressed can be caused by environmental factors, psychological factors, biological factors and social factors.

It can be negative or positive to an individual depending on the strength and persistence of the stress, the individual's personality, cognitive appraisal of the stress and social support. Stress is a state of physical or mental tension that cause emotional distress or even feeling of pains to an individual (Lai et al. 1996). Most people come across stress that leads them to rapid bodily change such as feelings of emotional unrest causing the body strains with body aches .With repeated stressful situations causes tension , and pressure on the body that contribute to physical and psychological problems ( Dixon & Robinson , 2005). According to (D'zurilla & Sheedy, 1991) people who encounter stress will have different experiences in their feelings and thoughts and this depends upon individual's ability to effectively cope with stressful events and situations when college students meet nervous tension and it is not deal with effectively they feel lonely and nervous with excessive worrying due failure to cope with their negative feelings (Segal, 2013).

College students had almost the same pattern of encounters about stress related problems (Gittins, 2007). This involves many factors such as interpersonal, intrapersonal, academic and environmental. The 2001 National College Health Association of American Report (2001) revealed that during the year 2000 , 76% of students felt ‘ ‘ overwhelmed ’ ’ and 22% were



unable to function as a result of depression .This means that stress among college students caused body strain with body aches where they are unable to normally function in times of stress. Presnall (2008) conducted the student stress survey that showed the college students having high stress on school related issues.

Some of these pressure affected their emotion and mental health. Furthermore, the survey polled 2,253 undergraduate students age 18 to 24 randomly selected from schools nationwide and revealed that the primary sources of stress were financial problems, relationships, family problems, and extracurricular activities. In the outcomes of students who experienced stress, they considered alcohol drinking, wanting to use drugs, and going out with friends as their immediate solutions. Professional help from teachers and counselors were also seen as positive solutions. MacGeorge, Samter and Gillihan (2005) and Sasaki and Yamasaki (2007) said that depression is a major problem. Intrapersonal and interpersonal factors were also traced by the psychologists that exacerbate college stress and depression. According to this study , college students face many unique forms of stress and the most common was to get good grades , having juggle schoolwork with other responsibilities , making decision about future career choice , and developing a variety of new interpersonal relationships .

Furr ,Westefeld ,McConnel and Jenkins (2001)reported that 53 % of 1,455 college students labeled themselves as being depressed since starting college and are attributed to academic issues ,loneliness , financial difficulties and social relationship problems .Additionally, 9 % of them reported having suicidal ideation. Morris, Brooks and May (2003) stated that the perceived stress and stressors unnecessarily consistent across all college students and have been found to differ between traditional and nontraditional students.Many scholars have conducted research on sources of stress at the college level. Of these, conducted research at Iran Medical

Science University , on Iranian nursing student , the result indicates that the most frequent academic sources of stress was due to increased class workload 66.9% and 64.2% environmental sources of stress were due to being placed in “ unfamiliar situation ” (Seyedfatemi , Tafreshi and Hagani ,2007). According to the study, interpersonal and environmental sources of the study were reported more frequently than intrapersonal and academic sources of stress.

In addition , according to the study Mean interpersonal (  $p=0.04$ ) and environmental ( $p=0.04$ )sources of stress were significantly greater in first year than in fourth year students .Tamina ( 1998) have also showed that college students experiences high stress at predictable times each semester due to academic commitments , financial pressure and lack of time management skill . Other potential sources of stress for college students include excessive homework, unclear assignments and uncomfortable classroom. Evan and Kelly (2004) explain that too high level of stress interferes with teaching, and this influences students’ academic performances and health even may lead a student to dropout college (Shields, 2000).

Seyedfatemi et al. ( 2007) in their study sources of stress of college students they used Analysis of Variance ( ANOVA) to compare the mean sources of stress in different years of groups. In addition the Scheffe test was used to determine which group different from the other. Accordingly, their study shows that the mean stress was significantly greater in first year than in fourth year nursing students (36.4 vs. 29.3,  $F=3.39$ ,  $p=0.009$ ) and environmental (4.02 vs. 3.15,  $p=0.04$ ) sources of stress compared with four years. Another study conducted by Akande, Olowonirejuro and Okawara-kalu (2014) on level and sources of stress among secondary school students the t-test analysis indicates that there is significant gender differences in intra-personal (  $t=6.89, P<0.05$ ),academic ( $t=-12.19, P<0.05$ ) and environmental sources ( $t=8.13, P<0.05$ ) of stress

among secondary school students . However, there was no significant gender differences ( $t = -1.57, P > 0.05$ ) between male and female students in the inter-personal sources of stress

## **2.2. Theoretical Approach**

### **2.2.1 Motivation**

The concept of Motivation goes to different theories as they explain it in different approach. Accordingly, current theories of motivation focus on beliefs and cognitions and address the following three broad motivational questions: Can I do this task? Do I want to do this task and why? What do I have to succeed in performing this task? (Eccles, Wigfield & Schiefele, 1998). Attribution (Graham, 1991; Weiner, 1985), self-efficacy (Bandura, 1994), and self-worth (Covington, 1992) theories of motivation focus on the first question such as “Can I do This task?”. According to Eccles (1998), when students answer these questions affirmatively, they perform better and select more challenging tasks. The second question “Do I want to do this task and why?” the theories that drive this question include Modern Expectancy-values Theories (Feather, 1992), Intrinsic Motivation Theories such as Effectiveness or Mastery Motivation Theory (Harter’s, 1983), Self-determination theory (Deci & Ryan, 1985).

The third questions. “what do I have to succeed in performing this task?” are addressed by social cognitive theories of self-regulation (Zimmerman, 1989) and theories of motivation and volition (Corno & Kanfer, 1993; Kuhl, 1987) which presumes higher levels of cognitive ability in young adults. The descriptions of each of these motivational theories are presented as the following. As Lai (2011) indicated motivation underlies behavior that is characterized by willingness and volition. This is how motivation influences behavior and this behavior may be observed differently under different types of motivation. Hence to observe this, literatures divide

motivation in to Intrinsic motivation, Extrinsic motivation and A motivation-an individual and who is neither externally motivated, nor intrinsically motivated .

Intrinsic motivation is motivation that is animated by personal enjoyment, interest or pleasure. As Deci et al. (1999) observe, Intrinsic motivation energizes and sustains activates through the spontaneous satisfactions inherent in effective volitional action. Here, key words that describe intrinsic motivation are: interest, enjoyment and inherent satisfaction. As the author explains, it is manifested in behavior such as play, exploration and challenge seeking. Researchers often contrast intrinsic motivation with extrinsic motivation, which is motivation governed by reinforcement contingencies. Traditionally, psychologists consider intrinsic motivation to be more desirable and to result in better leaning outcomes than extrinsic motivation (Deci et al. 1999 as cited in Lai, 2011).

According to the author, motivation involves a constellation of beliefs, perceptions, values, interests, and actions that are all closely related. As a result, various approaches to motivation can focus on cognitive behaviors (such as monitoring and strategy use) .Here, strategy as a Turner (1995) defines; it is intentional deliberate actions that learners invoke to solve specific problem or meet a particular goal. In a nutshell, rehearsal elaboration, and organization and comprehension during reading decoding is also used as one strategy. Other than, cognitive behaviors to motivation non-cognitive aspects (such as perception in the approach for example; Gottfried (1990) in defining academic motivation as a mastery orientation, curiosity and persistence characteristics. On the other hand, Turner (1995) considers motivation to be synonymous with cognitive engagement, which he defines as “ voluntary uses of high level self-regulated learning strategies , such as paying attention, connection, planning and monitoring .

According to Stipek (1996)

the study of motivation were rooted in the literature on extrinsic reinforcement that is all behavior governed by reinforcement contingencies; positive reinforces are consequences that increase the probability of a given behavior they were made contingent on, whereas, negative reinforces are consequences that increase the desirable behavior by removing some negative external stimulus. Punishment on the other hand, refers to unpleasant consequences that decrease undesirable behavior. Under this framework, the teacher's job is to use praise or good grades to reward desired behavior and loss of privileges as punishment. As, Stipek notes, this approach is limited to the extent that rewards and punishment are not equally effective for all students, and desired behaviors (such as paying attention) are difficult to reinforce. Moreover, according to the author, the benefits of extrinsic rewards tend to decay overtime.

As Stipek (1996) explains, the limitation of extrinsic reinforcement led to development of new approaches to motivation including cognitive behavior modification (CBM). This approach recognizes that the effect of reward contingencies are mediated by cognitive variable, such as verbal ability, thus, the goal of CBM is to change the overt behavior by manipulating cognitive processes'. Under this approach, students take more responsible for their own learning by monitoring their behavior, setting goal, deploying metacognitive strategies, and administering their own rewards. However, empirical studies showed children "Cheating" either by setting low performance standards for themselves, or rewarding themselves undeservedly (Speidel &Tharp, 1980; Wall, 1983, as cited in Stipek, 1996).

These limitation, led to another transformation, of the literature on motivation to contemporary one. Contemporary motivational theories emphasizes on thinking, self-control, metacognitions, judgment ,perception and others to understand , predict and control behavior . Self-efficacy is among these theories to

be mentioned. Self-efficacy (Bandura 1982) is judgment of how well one can execute course of action required to deal with prospective situations. it is an individual's confidence in his or her "ability to organize and execute a given course of action to solve a problem (Eccles and Wigfield, 2002).According to Bandura's (1982) self-efficacy is the major determinant of effort, persistence, and goal setting .Empirical research supports this notion, suggesting that individuals with higher self-efficacy tend to be more motivated and successful on a given task (Pintrich and De Groot, 1990). Locus of control is another theory that claims individuals should be more motivated to the extent that they feel they are in control of their own successes and failures (Eccle & Wigfield, 2002).

Locus of control is closely related to the concept of attributions. Attribution Motivational theory refers to an individual's beliefs regarding causes of successful or failing performance. There are several types of attributions, including ability, effort, task, and luck. According to attribution theory, the types of attributions a person holds determine his or her level of motivation according to whether the cause is perceived as something that is changeable & within the person's control (Weiner, 1985, as cited in Eccles & Wigfield, 2002).On the other hand, effort is within a person's control and entirely manipulated. Both task characteristics and luck are outside one's control and tend to be variable. Thus, poor performance on a task is more likely to contribute to reduced effort and motivation for those holding ability attribution than for those holding effort attributions, because failing in performance for the former group communicates a lack of ability that may be difficult to change, whereas failure for the latter group communicates that success is within reach if more effort is expended.

Empirical research suggests that those holding effort attribution tend to exhibit more positive learning behaviors, such as goal-setting that that focuses on learning rather than performance (Miller & Meece, 1997), use of

strategies, and persistence at difficult or challenging tasks (Stipek, 1996). However as the author recommends, teachers should frame successful performances in terms of ability rather than effort, because success communicates positive information about competency to students (Schunk, 1983). Self-worth theory is another theory that emphasizes that students need to believe they are competent in academic domains to feel they have self-worth in the school context (Covington, 1992, as cited in Eccles & Wigfield, 2002). This line of research suggests that students attempt to maximize their self-worth and will protect a sense of competence by making causal attribution that enhances their sense of competence and control.

For example, empirical research suggests that the most common attribution among both college-level and younger students are ability and effort, and the most preferred attribution for failed performance is a lack of effort. The above motivational theories, self-efficacy, Locus of control, attribution and self-worth have focused on answering the question, Can I Do this task? Below, according to Broussard and Garrison (2004) theories of motivation such as expectancy-value theories, intrinsic motivation theories, and self-determination theory focused on answering the question, Do I want to do this task and why?

Expectancy value theories \_ values individuals hold for participating in various types of activities (Eccles & Wigfield, 2002). Values are incentives or reason for engaging in an activity. The value of a given task or activity has four components: attainment value, which refers to the personal value of doing well on a task; intrinsic value, which refers to subjective interest or enjoyment of performing a task; utility value; which refers to the extent to which task completion is perceived to facilitate current or future goals; and cost, which refers to negative aspects of engaging in a given task, such as anxiety and fear of failure (Eccles & Wigfield, 2002; Stipek, 1996). Intrinsic Motivation is

another one to be discussed.

## Intrinsic Motivation

Refers to motivation that is animated by personal enjoyment, interest, or pleasure, and is usually contrasted with extrinsic motivation which is manipulated by reinforcement contingencies (Guay et al. 2010). Typically, manipulation of extrinsic motivation is effected by the provision of rewards which can be either tangible (e.g. money, grades, privileges etc.) or intangible (e.g. Praise). However, extrinsic motivation comes about by other means. For example, self-determination theory-which explain that individuals have a psychological need for autonomy; distinguishes several different types of regulatory mechanism that can act as reinforcement. External regulation corresponds to the lowest level of self-determination (the 2<sup>nd</sup> least self-determined behavior) where behavior is motivated by a desire for reward or punishment avoidance, performed to satisfy external demand.

For example, when we use education studying without any interest, or perceived relevance, only because of pressure or expectation of others\_ ex parents, the locus of causation in external regulation is fully external. Interjected regulation occurs when behavior is driven by internal pressures such as obligation or guilt-for example, a student realizes the importance of study, but the locus of causation is still external, behavior are controlled by internal reward or punishment such as guilt or anxiety. Under identified regulation, individuals identify with or find personally important the reason for performing an activity. For example, the student has come to value, the importance of his study, has identified with it & accept the regulatory process; it is amore autonomous, self-determined, person attributing personal importance to behavior. Under integrated regulation, the regulator is actually consistent with an individual's other values and needs and become part of one's self-identity. This latter type of regulation is the close to intrinsic motivation (Guay et al. 2010); the locus of causation is internal. Educators typically



consider intrinsic motivation to be more desirable than extrinsic motivation, and some research suggest that the learning outcomes of intrinsic motivation are better than those obtained under extrinsic motivation (Ryan & Plant, 1990). It is a self-determination theory that described, extrinsic, intrinsic and a state called "amotivation" in the first hand. Other theories such as Self-regulation and Volition theories (Boroussard and Garrison, 2004) connect motivation with cognition. For example, self-regulated learners have been shown to use a variety of strategies, have high self-efficacy, and set goals for themselves; self-regulated learners also monitor their own activities, evaluate their performance, and experience reactions to evaluate outcomes.

This theory postulates that individuals can fortify their own motivation by engaging in a number of self-regulatory strategies, such as setting appropriate and achievable goals, applying learning strategies, and monitoring & evaluating progress towards goals (Schunk & Zimmerman, 2007). Volition theory is defined as a strength of will, akin to conscientiousness, discipline, self-direction, and striving. Cormo argues that the effect of motivation on behavior is mediated by volition. In other words, motivation may lead to a decision to act, but volition is what determines whether those decisions are implemented. On the other hand, Interests are content-specific, can be viewed as both a state and a trait, and entail both cognitive and affective component. Empirical evidence connects interest with performance or achievement (Hidi & Harackiewicz, 2000).

The literature on interests distinguishes between individual, or personal interest and situational interest. According to the literature, individual interest refers to a relatively stable trait developed with respect to a particular subject or topic. This type of interest leads to persistence at a task over long periods of times, closer attention, ability to focus, and increased learning and enjoyment. Situational interest, on the other hand, is more immediate, affective,

and transitory, depending on the task environment (Hidi & Harackiewicz, 2000). Unusual sight, sound or words can stimulate situational interest ex. overhead project. In addition, task features likely to encourage greater interest include personal relevance, novelty, activity level, and comprehensibility (Hidi & Baird, 2002).

Seifert and Sutton (2009) too, have ideas to say about situational interest and personal interest. According to them, personal interest is relatively permanent preferences of students and are usually expressed in variety situations. In classroom, a student may or may not have a personal interest in particular topics, activities or subject matter. In this case according to authors, to stimulate little personal interest: surprise in your comment and in classroom activities from time to time, relate new material to students' prior experience, encourage students to respond to new material actively; let them talk about the material together connection to prior personal interest and the social interaction.

Finally, an individual's goals are related to his or her reasons for engaging with tasks. According to Spiclbrger(2002) Goals are what one trying to accomplish. Goals contribute to motivation, because people pursuing goal persist and expend effort to succeed. As the author notes, goals may be specified (e.g. read 10 pages) or general (e.g. Read some pages), proximal (e.g. Read 10 pages by next week); and difficult (e.g. Read 400 pages) or easier (e.g. Read 50 pages). From a motivational perspective, goals that are specific, proximal, and moderately difficult produce higher achievement motivation than do goals that are general, distant, and either too difficult or too easy. Thus motivation is not aided when goal denotes general outcomes (because nearly any action will satisfy them), are temporally distant (if is easy to put off until tomorrow what does not need to be done today), and too difficult or too easy (people are not motivated to attempt the impossible and may procrastinate completing easy tasks).

Goals can be subdivided into mastery goal (which can be compared with intrinsic values) and performance goals (which can be compared with extrinsic motivation) (Broussard & Garrison, 2004). Mastery goals focus on learning for the sake of learning, whereas, performance goals emphasize high achievement. Mastery goals are associated with high perceived ability, task analysis and planning, and the belief that effort improves one's ability. On the other hand, performance goals are associated with judgment about achieving, grades, or external rewards. As Eccles & Wigfield (2002) observe, mastery goals are associated with the strongest empirical evidence to date and have been linked to self-competence, self-concept, effort attribution, increased persistence at difficult tasks, and use of cognitive strategies to monitoring, problem solving, deep processing of information, and self-regulation.

As many research show mastery goals are important from the point of view of learning to be consistent, students to put effort on task, students to acquire high self-efficacy. Therefore, to be practical, Seifert & Sutton (2009) recommend the following issues, to encourage mastery goal: Focus on students individual effort, and improvement as much as possible, rather than on comparing students, successes to each other; Define success in terms of improvement, & progress; emphasize effort, learning, and working hard on challenging task; focus on how students are learning rather than on how they perform.

### **2.2.1.1 The Relationship between Motivation and Performance**

There are several studies which focus on the relationship between motivation and its effect on performance. In general, those studies show that being motivated to perform well in education will lead to higher performance (Fortier, Vallerand & Guay, 1995). Broadhurst (1957) confirms this results and points out that the presence of intrinsic or extrinsic motivation leads to

an increased number of successfully learned tasks and behaviors. But in addition to that, he claims that the difficulty of the problem that has to be solved has also a high impact on the relationship between motivation and successful learning. Given the case that the problem is relatively simple, hence both extrinsic and intrinsic motivation enhances learning.

But in contrast to that, high motivation can be harmful to more difficult problems and can even decrease the effectiveness of learning (Hochhauser & Fowler, 1975). This is an important result, due to the fact that students are more often faced with difficult tasks than with simple tasks in their studies. With a view to the literature intrinsic motivation has the most positive impact towards learning and is therefore the highly relevant for academic performance (Fortier et al.1995; Boggiano, Shields, Barret, Kellam, Thompson, Simons & Katz, 1992).

Researchers have made several recommendations for educators interested in supportive students' motivation; including the limited use of reward, using reward to provide information about competence, increasing student autonomy and choice, using collaborative or cooperative learning methods, and creating a supportive classroom environment with respect to goal structure, attributions, and external evaluation (Deci et al,1999;Guthrie,2000;Hidi and Karackiewicz,2000; Pintrich, 2003; Stipek, 1996; Turner, 1995 ; as cited in Lai, (2011). According to the literature, the empirical literature on the effects of extrinsic rewards on student motivation suggest that teachers should sparingly and carefully use these types of rewards in the classroom (Deci et al.1999).

In particular, tangible rewards (such as grades, candy, cash or special privileges) have significant negative effects on both free-choice behavior and self-reported interest compared to intangible rewards (such as verbal feedback). The author continues by explaining that when rewards are contingent on engagement or participation in the activity, regardless of whether the

student completes or excels at the task, the negative effect of tangible rewards on free-choice behavior is significantly greater for children than for college students. Verbal rewards (such as praise or performance feedback) enhance the free choice behavior of college students, but not children. However, negative performance feedback significantly attenuates intrinsic motivation for both groups of students. Thus, a comment such as “keep up the good work” can be experienced as controlling which can attenuate students’ sense of autonomy and negatively impact intrinsic motivation. On the contrary, as the author explains, extrinsic rewards may have a place in the classroom, particularly for certain types of students.

#### 2.2.1 The Concept of Stress.

If students are stressed, they may not be motivated to put effort, they will have less concentration in learning activity, in this regard stress will influence their academic performance. According to Lazarus & Folkman (1984, as cited in Kai-wen,2010) stress is a mental or physical phenomenon formed through one’s cognitive appraisal of the stimulation and is a result of one’s interaction with the environment. The existence of stress depends on the existence of the stressor. Stressors events that bring stress (Elias, Ping & Abdullah, 2010). Stressed can be caused by environmental factors, psychological factors, biological factors and social factors.

It can be negative or positive to an individual depending on the strength and persistence of the stress, the individual’s personality, cognitive appraisal of the stress and social support. Stress is a state of physical or mental tension that cause emotional distress or even feeling of pains to an individual (Lai et al. 1996). A person’s response towards stress depends on whether an event is appraised as a challenge or a threat (Lazarus & Folkman, 1984).

Challenging stimulus can lead to positive outcomes such as motivation and improved task performance, while threatening ones or distress can result in anxiety, depression, social dysfunction and even suicidal intention. Stress is a normal part of life. It can come from any situation or thought that makes you feel frustrated, angry or anxious. A low level of stress could be good. It can motivate you and help you become more productive. It provides the means to express talents and energies and pursue happiness. However, too much stress or a strong response to stress can be harmful. A high level of stress may have negative effect on cognitive functioning and learning of students. It can affect student's grades, health and personal adjustment. Kai-wen (2010) in his study on stress sources among college students in Taiwan identified the following sources:

Physical or mental Factor: Adolescents are mostly concerned about their physical appearances than about other aspects. This is more peculiar with girls than boys and as such girls may feel upset by their appearance. Feng (1992) in Kai-wen (2010) pointed out that setting high goals, being a perfectionist and comparing self with others and self-degradation may all cause stress and result in depression. School Factor: Some of the situation in the school that could cause stress for students include: too much homework, unsatisfactory academic performance, preparation for test/examination, lack of interest in a particular subject.

According to Roberts and White (1989) academic work may reflect some of the high level of stress that college students have reported. Some of them experience grade pressures that cause students to have problem with stress. Too much stress can interfere with a student preparation, concentration and performance. One of the main causes of academic stress is test anxiety. Relationship factor: Many students at this level of development are pre-occupied with the development of relationship with opposite sex. They want to belong and be accepted by their

peers. Making new friends is another source for college students. "Giving up or changing new friendships and developing new ones is often a stressful activity associated with college life" (Greenberg, 1996, p280).

Family factor: The family can also be a source of stress for secondary school students. Some families place a great deal of stress on students by telling them that they need to acquire good grades. In addition, families with constant conflicts are characterized by a lack of parent-child communication and shallow understanding of each other's expectation. Similarly, Rose et al. (1999) has listed the major sources of stress among college students such as interpersonal, intrapersonal, academic and environmental sources of stress. He implied that , college students especially freshmen , are prone to stress (D' Zurrilla & Sheedy , 1999 ; as cited in Ross et al.1999) due to the transitional nature of college life( Towbes & Cohen ,1996). According to the author, if stress is not dealt with effectively, feelings of loneliness, and nervousness ,as well as sleeplessness , excessive worrying may result ( Wright ,1967). It is important that stress intervention programs be designed to address stress of college students. However, in order to design an effective intervention, the stressor specific to college students must be determined (Wright, 1967).

### **2. 2.2.1 Consequences of feelingstress**

Stress can lead to temporary effects as well as consequences which affects the individual on the long term. First of all, a high amount of stress has an impact on the ability to concentrate and to focus the attention on a certain task (Cohens, Evans, Stokols & Krantz, 1986).Temporary, receiving stress can result in being unable to answer questions in an exam, reading the questions wrong or misinterpret their meaning. Therefore, only low or at least moderate levels of stress

will lead to successful learning and the gain of good grades (Ryan & Deci, 2000a). Besides the short-term effects, stress can also have an impact in the long term. Nandamuri & Ch (2011) claim that if stress is perceived as negative and excessive, this can result in physical and psychological impairment.

Psychological impairment means that Students may experience a feeling of inability to handle new stressful events in the future (Selye, 1976). This is of course a kind of impairment which may also affect their success at the college because handling new and stressful events are part of a study and students will often be faced with stressful situations within their academic career. Furthermore the level of stress can become so high that there is a serious risk for illness because the immune system fails to work (Ader, 2001). Another negative outcome and a long-term effect of stress is the occurrence of a burnout syndrome. Especially if an individual is exposed to stress over a long period of time the risk increases to feel exhausted and burned out (Bruce, 2009). Also depression can be the result of being faced with a high amount of stress (Selye, 1976). Due to the fact that stress enhances the blood pressure, stress can also strengthen the risk of heart diseases (Smith, Gallo & Ruiz, 2003).

### **2.2.2.2 The Relationship between Stress and Performance**

The “*Yerkes-Dodson law*”, describes that even though a moderate level of stress improves the individual’s performance, too much stress results in less performance (Stevenson & Harper, 2006). Applied to students, a high amount of stress can have a heavy impact and will influence the student’s performance negatively. When students perceive high levels of stress this often leads to the fact that they become overwhelmed with handling different tasks and responsibilities in their study (Vlisides, Eddy & Mozie, 1994). This is why high amounts



of stress lead to a detrimental academic performance at the university (Sloboda, 1990).

Bennett (2003) reports a similar finding in his study and points out that stress is significantly correlated with poor academic performance. As mentioned before, studies show that especially undergraduate students have to handle the possible negative effects of stress concerning their academic achievements (Elias, Ping & Abdullah, 2011).

### **2.2.3 The Relationship between Motivation and Stress**

Several studies show that motivation not only influences the effectiveness of learning, but that being intrinsically motivated is also associated with better well-being and an increased amount of satisfaction (Miserandino, 1996; Ryan & Deci, 2000b; Sheldon & Kasser, 1998). If extrinsic and intrinsic motivation is thus correlated with positive psychological states, this raises the question if a lack of motivation, will lead to more negative states as being stressed. In other words Chong (2012) has showed that high level stress positively correlated with a motivation (lack of motivation).

## Chapter Three

### 3. Research Methods

#### 3.1. Study design

The study employed cross sectional survey method.

#### 3.2. Study area and population

Populations of the study werestudents of Jima Teachers Education College of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> years from all departments..

#### 3.3. Sample and sampling Techniques

Probability stratified sampling techniqueswas employed. 287 Sample (male 172, female 115), were elected from among a total of 2140 of 1<sup>st</sup> 2<sup>nd</sup> and 3<sup>rd</sup> year students from social sciencedepartments of Jimma Teachers Education College by using simple random/lottery method. All the students were young withan age range of 18 to 21.The initial sample size was 326 which weresome students didn't complete questionnaires correctly; hence the actual number of participants was 287. Of these,the first year students represented 30.7%, of total sample, the second year students represented 36.2 % and the third represented 33.1%.

The sample size was determined by using formula that has been developed by Robert and Morgan (1970) as the following:  $S = \frac{X^2 NP}{D^2 (N-1) + X^2 P (1-P)}$  Where S= required sample size,  $X^2$ is= 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 (.05)

### **3.4 .Inclusion / Exclusion criteria**

#### 3.4.1. Inclusion

All regular students of Jimma Teachers Education College from year one to year three of all departments .

#### 3.4.2. Exclusion

Evening and summer students as well as those who refuse to give informed consent.

### **3.5. Data collection instruments**

Construct validity of the instruments, draft questionnaires were established through expert judgment made by some college psychology instructors. The reliability of instruments was established through SPSS version 20 that involved thirty students who did not participate in the research. The questionnaires were dispatched to the respondents one week before they sat for examination. There was no limit in filling out the questionnaires but most subjects completed it within fifteen to twenty minutes. The questionnaires were translated into Afan Oromo for the convenience of removing language barriers. .

Scoring response to both motivation and stress was done by counting the number of responses and adding up and using calculated mean for scoring. However; before adding up the responses; negative item number 5 was recoded for motivation. Both motivation and stress questionnaires had five responses on Likert Scales and the sum of responses Of domain were normalized and scaled based on mean of the items. These further had been explained under each measurement of motivation and stress. For both motivation and stress items statistical techniques such as Independent Sample T\_ Test, One-Way ANOVA, and Linear Multiple Regression was

used to test the research question at 0.05 levels of significances.

Generally, two types of data collection instruments\_ questionnaires such as Academic Motivation Scale (AMS) to measure motivation of students whereas Student Stress Scale (SSS) was used to measure students stress. Students' academic achievement has also been measured by their cumulative grade point average. Stress and motivation scores were as predictors variables of academic achievement .and the students' grade point average (GPA) was collected from the college's registrar office.

#### I. Academic Motivation Scale (AMS)

It is a measure of motivation toward education, and was originally developed in French, namely the Echelle de Motivation en Education (EME) (Vallerand et al.1992). The Academic Motivation Scale is a questionnaire developed to assess the various dimensions of motivation (Cokley et al., 2001). It is used to investigate the reasons why students attend college (Clark and Schroth 2010). The Academic Motivation Scale assesses three motivational orientations, namely intrinsic, extrinsic and amotivation.

The Academic Motivation Scale consists of 28 items that students respond to on a 5-point Likert-type scale, 1 representing, 'Does not correspond at all' and 5 'Corresponds exactly'. The researcher worked with raw scores and not with the standardized scores. Twelve items in the questionnaire measure intrinsic motivation. These twelve items represent the score for intrinsic motivation. Another twelve items in the questionnaire measure extrinsic motivation and the total score of these twelve items represent the score for extrinsic motivation.

The highest score that a student can obtain for the items on intrinsic and extrinsic motivation respectively was 60 (Mean=5). The lowest score was 12 (Mean= 1). A high score for intrinsic motivation indicates that a student had high intrinsic motivation. The same is

true for extrinsic motivation. A total score that includes both the items of intrinsic and extrinsic motivation represents the score for the construct motivation. The highest score that a student can obtain on intrinsic motivation and extrinsic motivation combined is 120, and the lowest is 24. The remaining 4 items in the questionnaire measure the amotivation of the students. The highest score that a student can obtain for amotivation is 20, and the lowest score is 4. Thus, if a student scores high on amotivation, it means that the student is amotivated, which indicates that the student is not motivated at all.

To sum up, the scales were scored on a Likert Point scale of 5 ranging from “strongly disagree” to “strongly agree”. The higher the score, the greater is the strength of motivation. The internal consistency of AMS was assessed with the use of Cronbach alpha value and its value for the entire Academic Motivation Scale (AMS) was 0.89. These findings were similar to those of the original French Canadian versions where values varied from 0.76 to 0.86, a study with a large English speaking sample (Fairchild, Horst, Finney, and Baron, 2005). According to McMillan and Schumacher (2006) an acceptable range of reliability coefficients for most instruments are between .70 and .90.

In summary, responses were assigned a number value and the total scale score was found by summing the numeric responses given to each item. Accordingly, the sum of weights of all items  $5 \times N$  ( $N =$  the number of 12 items for intrinsic motivation, and 12 items for extrinsic motivation;  $24 \times 5 = 120$ ;  $120/24 =$  mean 5, high, this was how to get mean). Similarly, the lowest possible scores  $1 \times N$  (24 items for intrinsic and extrinsic motivation,  $24/24 =$  Mean 1), therefore, the total score was divided by the number of items to arrive at means. Based on this, the level of motivation was:

- A minimum score for both extrinsic and intrinsic was 24 (or Mean = 1)

- A maximum score for both extrinsic and intrinsic was 120 ( or Mean =5 )
- 60 ( Mean = 3 ) was a cut off score

Therefore, score below a cut off for motivation indicates low level of motivation whereas high score from a cut off score shows high level of motivation. In the following, each range of score differs by 0.99 points equally below and above cut off score.

#### Range of Score and Level of Motivation

Range of Mean	level
1.00 -2.00	low level
2.01-3.00	medium
3.01-4.00	high level
4.01-5.00	very high

## II The Student Stress Survey (SSS)

In order to assess sources of stress among indicated subjects, the researcher had adapted and used the Student Stress Survey/Scale of (Insel & Roth, 1985). The survey consists of 37 items and four categories of potential sources of stress: 6 items representing interpersonal sources of stress, 14 items representing intrapersonal sources of stress, 8 items representing academic sources of stress, and 9 items representing environmental sources of stress.

This scale was used among different researchers, such as (Seyedfatemi, et al, 2007; Ross et al., 2008; Do Dinh, 2007; Meichi & LiKang, 2007). The reliability Coe-efficient of the

Cornbrash's for the entire Student Stress Survey (SSS) was 0.78. According to Chou (2002) reliability for stress questionnaires range between 0.57 to 0.84 isadequate. Higher score in SSS indicates higher level of stress. Measuring levels of stress was similar to range for mean as mentioned in motivation, since both motivation and stress questionnaires employ the same, a 5-Point Likert-type scale.

Range of Score and Levels for stress

Range of Mean	level
1.00 -2.00	mild stress
2.01-3.00	medium/moderate stress
3.01-4.00	high level of stress
4.01-5.00	sever stress

III Cumulative Grade Point Average (CGPA)

For the purpose of this study, GPA had been used as a proxy of academic performances that was obtained from college's registrar office. The GPA was calculated by dividing the total amount of grade point earned by total amount of credit hours attempted. The students' academic achievement used was based on 2015 academic year of the second semester examination result of the college. .According to the college's GPA demarcation,high GPA was over 3.5 and low

GPA was under 2.5 and accordingly the researcher used this to compare students' academic performance in this research.

### 3.6. Pilot study

A pilot study was undertaken prior to distribution of measuring scale to ascertain any difficulties respondents may encounter when filling out the questionnaires (scale). The scale had been disseminated to experts for content validity and checked for reliability before it was distributed to respondents. Then after based upon the feedback of experts, the modification of the questionnaires had taken place.

### 3.7. Procedures of data collection

Obtaining of ethical and research proposal approval was the preliminary procedure in conducting pilot study. Based on this, before approaching the participants of the study, the researcher had contacted the dean of the college for obtaining permission for study on students' motivation, stress and academic achievement. After getting permission from the college, the researcher approached sample of students of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> year for three consecutive days turn by turn and briefed them for 45 minutes about the aim of study, ethical consideration and how to fill questionnaire. This procedure was continued after participants were willing for study participation during their spare time in the afternoon in the college of Aba Jifar hall.

The medium of communication was Afan Oromo to avoid communication barriers. After explaining all these information, participant who had been volunteer had received questionnaires such as Academic Motivation Scale and Student Stress Scale to fill out in their home privately without consulting any other person and they came back next day with questionnaires and gave it back to their respective class monitors in the morning before the 1<sup>st</sup> period of lecture starts. The



participants filled out the questionnaire one week ahead before second semester final examination of the college took place.

### 3.8. Study Variables

3.8.1. Predictors (independent variables): are motivation and stressors.

3.8.2. Criterion (dependent variable): academic achievement

## Chapter Four

### 4.1. Result

The results of analyzed data were presented based on the research questions. They were presented in tables 1, 2,3, 4, 5, 6, and7 as the flowing:

#### 4.1.1. Data of Demographic variables

Table 1 :Analysis ofDemographic variables ofall thethree study year levels of college students

year in the college	Mean	N	Std. Deviation	% of Total N
first	2.73	88	.553	30.7%
second	3.16	104	.357	36.2%
third	2.89	95	.388	33.1%
Total	2.94	287	.470	100.0%
male	3.11	172	.400	59.9%
female	2.69	115	.456	40.1%
Total	2.94	287	.470	100.0%

Note N refers number of participants in each study year levels

Table one shows a total of two hundred eighty seven respondents participated in the study. Of this, male respondents account 59.9 % whereas female respondents were 40.1 %. By study year levels, first year studentsaccounts 88 out of the total respondents. Second year and third year students' account104, and 95 respectively out of the total respondents. Regarding Grade Point Average (GPA) the mean for male respondents were 3.11 with standard deviation of .400 while the mean GPA of female respondents were 2.69 with standard deviation of .456. To determine whether the effect size was strong or not between gender and academic achievement, Cohen's d formula was used for calculation. The calculation result was 0.965. According to

this result there was moderate effect or relationship between gender and academic achievement. This would be emphasized later on more during regression analysis .

Table 2:Analyses of Mean and standard Deviation of response on Motivation and Sources of Stress among all the Three Study Year Levels of the College Students .

Variables		Study Year levels						Overall Mean Total
		First		Second		Third		
subscales		Mean	Std	Mean	Std	Mean	Std	
MOTIVATION	intrinsic	3.89	1.18	4.17	1.01	3.57	1.41	3.87
	extrinsic	3.91	1.19	4.10	1.06	3.46	1.41	3.82
	Total Mean	3.9	1.18	4.13	1.03	3.51	1.41	3.84
	Amotivation	2.10	1.21	2.75	1.58	2.56	1.47	2.47
SOURCES OF STRESS	GPA Mean	2.73	1.56	3.16	1.36	2.89	1.68	
	interpersonal	3.15	1.51	2.92	1.52	3.00	1.56	3.02
	intrapersonal	3.05	1.48	2.94	1.51	2.95	1.6	2.98
	Academic	2.91	1.45	2.7	1.45	2.70	1.45	2.77
	Environmental	3.09	1.44	2.75	1.27	2.81	1.51	2.88
Total Mean		3.05	1.47	2.82	1.43	2.86	1.53	2.91

Note std stands for standard deviation

Table 2 shows that the mean levels of motivation (intrinsic and extrinsic) that college students experienced in all the three of the study year levels. Their overall mean levels of motivation were 3.84, indicating that 53.8 % ( see appendix ) majority of the students had high level of extrinsic motivation .However, the level of motivation differed across study year

levels..Accordingly, second year students were extrinsically motivated at very high level (mean 4.13)than first ( mean, 3.9highlevel ) and third ( mean, 3.5 high level)year students.

In addition ,57.7% ( N = 60) ( see appendix ) majority of the respondents of second year groupwere strongly agreed for from among extrinsic motivation items “teaching profession will enable me to enter the job market “ followed by “ in order to obtain a more prestigious job later on “ in explaining their reason why they came to school .As we saw from the table two, the mean GPA of second year students was 3.16 which were greater than first and third year groups.The reason for mean differences among year groups could be the contribution of several factors.

However, as far as second year group concerned, the assumption was second year students had passed the transitional period of crises that experienced during their first year academic performanceand theiradaptation to school and residential environmentcould contribute to their motivation. Further information about the relationship between motivation and academic achievement of the students can be seen later on more during Multiple Regression Analyses. The next analysis dealt with stresses.

As shown in Table 2, regarding sources of stress, all the three year groups of students’ at most encountered stress overall meanwere3.02 in Interpersonal sources of stressat a medium level. This amount of level of stress doesn’t interfere with the students’ academic performances. The mean of this interpersonal source of stress differed across study year groups. Accordingly, the mean interpersonal source of stress of first year students was3.15 and as a result of this, first year students felt much more stress than second and third year. On the other hand, as it could be seen from table two, first year students’ GPA was less than second and third year studentsand this would be analyzed more in multiple comparison of ANOVA. Going further

with specific result, 33.56 % (see appendix) respondents of first year students were strongly agreed for the item “trouble with parents stressed me ” in responding from among Interpersonal sources of stress. In addition, 31.16 % of respondents were strongly agreed for the item “ fight with boy/girlfriend stressed me ”. In general, 36 .5 % (see appendix) of the majority of respondents were strongly agreed in their response for “poor water supply of the house I rented stressed me “ Stood first from all across sources of stress items that belonged to environmental sources of stress. Similarly, “ thought of deploying in remote area of work stressed me “ and “ financial difficulties stressed me “ items from intrapersonal sources of stress stood second and third respectively. On the other hand, the mean (2.77) Academic Sources of stress was the lowest stressors from among sources of stress.

In summary, the data showed that of all sources of stress, Interpersonal sources of stress (mean, 3.03) due to trouble with parents and fight with boy/girlfriend was the major stressor of the college students at moderate level that accounts 31.87 % of total samples, followed by intrapersonal sources of stress with the mean of (2.98) that respondents experienced due to thought of deploying in remote area of work place and financial difficulties accounted 34 .68 % respondents . To measure the discrepancy between interpersonal and intrapersonal sources of stress, effect size was calculated at 0.14, hence it can be concluded that the effect size between these groups were weak. So far, what the researcher had been analyzing from table one and table two until now was the response to research questions earlier mentioned .

The next analyses from Table three were to answer for the following research questions, if there were mean differences in motivation and sources of stress between genders.. Is there a difference of mean between female and male students in terms of their motivation/ stress level?

Table 3 : Mean and standard Deviation of response on Motivation and Sources of Stress between genders

Variables	Gender							
	Male				Female			
	N	%	Mean	Std	N	%	Mean	Std
	172	59.9			115	40.1		
Intrinsic	172	59.9	3.07	0.94	115	40.1	2.93	0.89
extrinsic	172	59.9	2.98	0.88	115	40.1	2.93	0.85
Motivation Total	172	59.9	3.02	0.91	115	40.1	2.93	0.87
Amotivation	172	59.9	1.42	1.52	115	40.1	1.14	1.40
GPA Mean			3.11	.400			2.69	.456
interpersonal	172	59.9	1.88	0.94	115	40.1	1.77	0.91
intrapersonal	172	59.9	1.74	0.90	115	40.1	1.86	0.93
Sources of Stress								
academic	172	59.9	1.47	0.77	115	40.1	1.66	0.87
Environmental	172	59.9	1.68	0.84	115	40.1	1.66	0.87
Total	172	59.9	1.69	0.86	115	40.1	1.74	0.89

Note N stands for number of respondents whereas std for standard deviation.

As shown in Table 3 59 % of male respondents' overall mean of motivation (intrinsic and extrinsic) was 3.02 with standard deviation of 0.91, whereas 40.01 % of female respondents overall mean of motivation was 2.93 with standard deviation of 0.87. Accordingly, the level of motivation of both male and female respondents was moderate. However, even though both genders' motivation was moderate, male respondents were either intrinsically or extrinsically motivated than female students. Calculated effect size was 0.05 indicated modest effects between the two variables. Regarding sources of stress, mean of stress for male respondents was 1.69 with

the standard deviation of 0.86 whereas the overall mean of stress of female respondents was 1.74 with standard deviation of 0.89. The data showed that female respondents were more stressed than male. Particularly, they are stressed at most in intrapersonal sources of stress due to fighting with boyfriends and trouble with parents. Further, the relationship between genders in terms of motivation and stress and GPA would be understood from the following T-Test analysis.

#### 4.1.2. Gender differences in GPA, Motivation, and Stress T-Test Analysis

Table 4: T - Test analysis of gender differences in Grade Point Average (GPA)

##### Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Student Grade point average	male	172	3.11	.400	.030
	female	115	2.69	.456	.043

##### T-Test

	F	Sig.	t	df	Sig., G02	
					(2-tailed)	
GPA	2.816	.094	8.257	285	.000	0.949
			8.044	222.19	.000	

Note GPA is an abbreviation for Grade Point Average

As shown in Table 4, the Independent Sample T-Test indicated that there was a significant difference between the mean GPA of male and female students. ( $t(285) = 8.257, P < .000$ )

) .Since our group statistics box revealed that the mean for Grade Point Average of male respondents(M=3.11, SD. = .400) was greater than the mean for Grade Point Average of female(M=2.69, SD. = .456) respondents. Similarly, Omega Square test in t –test 0.949 indicated that 9 % of the variation in students’ academic achievement is explained by gender. In all case we can conclude that male students can more perform than female students in academic area.

Table 5: T - Test analysis of gender differences in Motivation and Stress

Group Statistics

	Gender	N	Mean	Std.
Extrinsic Motivation	male	172	46.34	10.329
	female	115	45.96	10.569
Intrinsic Motivation	male	172	47.14	10.596
	female	115	45.96	10.934
Amotivation	male	172	10.60	4.472
	female	115	9.56	4.094
Inter personal sources of stress	male	171	18.3846	6.69386
	female	115	17.8783	6.90302
Intrapersonal sources of stress	male	172	41.4360	13.22330
	female	115	42.7913	13.00303
Academic sources of stress	male	172	21.7093	7.93153
	female	115	23.0870	7.41213
Environmental sources of stress	male	172	26.1512	7.74071
	female	115	25.9826	8.88818

As it could be seen from Table 5 in the Appendix D,the t-test assumptions were not violated. In addition , there was a significant difference in the mean of amotivation between male and female students . Accordingly,the mean of amotivation for male respondents were 10.60 with standard deviation of 4.42 whereas , 9.56 and 4. 09 was the mean and standard deviation of amotivation for female respondents (t(285) =2.001, P=.046).The calculated effect size was 0.96



indicated moderate effect between the two variables. Hence by observing from group statistics it was possible to conclude male students were more amotivated than female students. However, there was no a significant difference in the mean of intrinsic and extrinsic motivation as well as stress between male and female students.

#### 4.1.3. Differences in Motivation and Stress among the Three Study Year Levels- Analysis of ANOVA

Table 6: One-way ANOVA for motivation and stress differences among the three study year levels of students.

ANOVA

		One way ANOVA				
		SS	df	MS	F	Sig. $\omega^2$ .
EXTRINSIC MOTIVATION	Between Groups	2590.200	2	1295.100	12.952	.0000.07688
	Within Groups	28397.640	284	99.992		
	Total	30987.840	286			
INTRINSIC MOTIVATION	Between Groups	2574.812	2	1287.406	12.046	.0000.0714
	Within Groups	30351.077	284	106.870		
	Total	32925.889	286			
AMOTIVATION	Between Groups	394.495	2	197.248	11.181	.0000.06624
	Within Groups	5010.083	284	17.641		
	Total	5404.578	286			
INTER PERSONAL SOURCES OF STRESS	Between Groups	103.634	2	51.817	1.131	.324
	Within Groups	12963.616	283	45.808		
	Total	13067.250	285			
INTRA PERSONAL SOURCES OF STRESS	Between Groups	201.041	2	100.520	.581	.560
	Within Groups	49100.834	284	172.890		
	Total	49301.875	286			
ACADEMIC SOURCES OF STRESS	Between Groups	172.085	2	86.043	1.439	.239
	Within Groups	16979.316	284	59.786		
	Total	17151.401	286			
ENVIRONMENTAL SOURCES OF STRESS	Between Groups	514.519	2	257.260	3.899	.021 0.0198
	Within Groups	18739.474	284	65.984		
	Total	19253.993	286			

Note: SS = Sum of Square, MS= Mean Square ,  $\omega^2$ stands for Omega Squared

As it could be seen from Table 6 , there was significant differences between the groups in an extrinsic motivation ,  $F( 2, 284) = 12.952 , P<.000$  “and there was also significant differences between the groups in an intrinsic motivation ,  $F(2, 284) = 12.046, P<.000$ ” .

Similarly there was significant differences between the groups in amotivation, too,  $F(2, 284) = 11.181, P < .000$ ”; in the same way regarding sources of stress “ There was significant differences between the groups in environmental sources of stress ,  $F(2, 284) = 3.899, P < .01$  .” However , as the table shows “There was no significant differences between the groups in interpersonal , intrapersonal and academic sources of stress ,  $F(2, 283) = 1.131, P = .324$  .” ;  $F(2, 284) = .581, P = .560$  and  $F(2, 284) = 1.439, P = .239$  .” respectively . To see how much IV has affected the DV in this study, the effect size measure in ANOVA, eta-square was calculated by dividing within group sum of square by total sum of squares as Cohen’s guideline. Accordingly, the calculated effect size for extrinsic, intrinsic motivation, amotivation and environmental sources of stress was 0.083, 0.078, 0.72 and 0.026 respectively. Hence, motivation has moderate effect size whereas environmental sources of stress has weak effect..

Similarly, Omega Square test in ANOVA indicated that 8 % and 7% of the variation in students’ academic achievement among the three study years levels were explained by extrinsic and intrinsic motivation respectively. In the same table, 2% of variation in students’ academic achievement were explained by environmental sources of stress. The above analysis of difference between groups did not tell us specifically which groups were different from each other. Therefore, multiple comparisons table shows which groups differed from each other. The Tukey Post hoc test was used for this purpose as the following.

From the table of Multiple comparison below, we could observe that there was a significant differences in mean of an extrinsic motivation between third and first year ( $P < 0.003$ ) as well as between third and second year students ( $P < 0.000$ ). Similarly, as we can see from Post Hoc test in multiple comparisons, the mean difference (I-J) between third and first year students was -4.884. This means that, third year students are lower in motivation level than first year

by 4.884 points. Or first year students are more motivated than third year by 4.884 points. Since negative sign (-) indicates low in degrees whereas positive one shows more in magnitude here. In the same talk, the mean difference (I-J) between third and second year students in an extrinsic motivation was -7.105. Meant that, third year students are lower in motivation than Second year students by 7.105 points or second year students are more motivated than third year by 7.105 points. There was also a significant differences in an intrinsic motivation between third and first year students ( $P < 0.037$ ) with the mean difference (I-J) -3.78, means that third year students are lower in an intrinsic motivation than first year by 3.78 points. Similarly, a significant differences in an intrinsic motivation between third and second year students ( $P < 0.000$ ) was observed with the mean difference (I-J) -7.201. The mean difference (I-J) -7.201 indicates that third year students are lower in an intrinsic motivation than second year by 7.201 or second year students are more in an intrinsic motivation than third year by this amounts of points. It was also observed from the table that differences in mean between first and second year students (-2.221). This means, the mean of extrinsic motivation of first year students was more than 2 points lower than the mean of extrinsic motivation of second year students. In other words, first year students' motivation level was lower than second year students. In any way, second year students are more motivated than first and third year students either extrinsically or intrinsically. The Omega test for extrinsic and intrinsic motivation and amotivation

Post Hoc Tests

Dependent Variable	(I) year in the college	(J) year in the college	Mean Difference (I-J)	Std. Error	Sig
EXTRINSIC MOTIVATION	first	second	-2.221	1.448	.277
		third	4.884*	1.479	.003
	second	first	2.221	1.448	.277
		third	7.105*	1.419	.000
	third	first	-4.884*	1.479	.003
		second	-7.105*	1.419	.000
INTRINSIC MOTIVATION	first	second	-3.414	1.497	.060
		third	3.787*	1.530	.037
	second	first	3.414	1.497	.060
		third	7.201*	1.467	.000
	third	first	-3.787*	1.530	.037
		second	-7.201*	1.467	.000
AMOTIVATION	first	second	-2.608*	.608	.000
		third	-2.464*	.621	.000
	second	first	2.608*	.608	.000
		third	.145	.596	.968
	third	first	2.464*	.621	.000
		second	-.145	.596	.968
INTER PERSONAL SOURCES OF STRESS	first	second	-1.42864	.98031	.313
		third	-.45672	1.00392	.892
	second	first	1.42864	.98031	.313
		third	.97191	.96321	.572
	third	first	.45672	1.00392	.892
		second	-.97191	.96321	.572
INTRA PERSONAL SOURCES OF STRESS	first	second	-1.81381	1.90449	.608
		third	-.14833	1.94539	.997
	second	first	1.81381	1.90449	.608
		third	1.66549	1.86609	.645
	third	first	.14833	1.94539	.997
		second	-1.66549	1.86609	.645
ACADEMIC SOURCES OF STRESS	first	second	1.61801	1.11994	.319
		third	.01376	1.14399	1.000
	second	first	1.61801	1.11994	.319
		third	1.60425	1.09736	.311
	third	first	.01376	1.14399	1.000
		second	-1.60425	1.09736	.311
ENVIRONMENTAL SOURCES OF STRESS	first	second	3.02972*	1.17655	.028
		third	.54055	1.20183	.895
	second	first	-3.02972*	1.17655	-.028
		third	2.48917	1.15284	.080
	third	first	-.54055	1.20183	.895
		second	-2.48917	1.15284	.080

- The mean difference is significant at the 0.05 level.

It was observed from multiple comparisons of ANOVA , Table 6, Mean differences in amotivation between first and second year students was ( -2 .608 ) . This means, that first year

students were lower than second year students by 2.608 points in amotivation, and this in turn mean that second year students were more demotivated than first year students or first year students were less amotivated ( demotivated ) than second . However, there was no significant difference in mean of amotivation between second and third year students ( $P= 0.968$ ). Regarding motivation, it was likely that all the three study year groups differ from one another. Accordingly second year students had highest mean either in extrinsic or intrinsic motivation followed by first year students.

With regard to sources of stress, there was a significant difference in mean of environmental sources of stress between first and third year ( $P<0.028$ ), with the mean differences of (3. 029) between first and third year groups. This means, first year students were higher than third year students by more than 3 points in stress , and this in turn showed the more first year groups' level of stress were higher the more they were stressful than second year group . In all aspects according to this data,environmental sources of stress were the most sources of stress of first year group.

#### 4.1.4Regression Model Analysis of Motivation and Stressors as predictors of academic performance

Table 7: Regression Model Analysis

## Regression

Model Summary					
Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.445 <sup>a</sup>	.198	.195		.421
2	.468 <sup>b</sup>	.219	.213		.416

The result in table 7 regression model indicated those predictor variables, gender and the three study year levels account only for 22% (  $R^2 = .219$  ) of variance in college GPA . So, 78 % of variance in college GPA was explained by other factors. Here, according to this data motivation and sources of stress had no account for GPA variation.

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.456	1	12.456	70.254	.000 <sup>b</sup>
	Residual	50.353	284	.177		
	Total	62.809	285			
2	Regression	13.739	2	6.869	39.617	.000 <sup>c</sup>
	Residual	49.070	283	.173		
	Total	62.809	285			

a. Dependent Variable: student grade point average

b. Predictors: (Constant), gender

c. Predictors: (Constant), gender, year in the college

ANOVA Table shows that , the predictors , gender and study year levels statistically significantly predict academic achievement of students  $F ( 2,283 ) = 39.617$  ,  $P < .001$  ) .

Coefficients		
Model	Unstandardized	Standardized

	Coefficients		Coefficients		
	B	Std. Error	Beta	T	Sig.
	3.539	.075		46.917	.000
	-.426	.051	-.445	-8.382	.000
	3.373	.096		35.058	.000
gender	-.429	.050	-.449	-8.536	.000
year in the college	.084	.031	.143	2.720	.007

a. Dependent Variable: student grade point average

Model predicted that as grade levels increased there was an increase in GPA by .084.

To determine variables that predict academic achievement of college students, I entered variables such as stress, motivation, gender and the three study year levels into regression model that only the two variables, gender and study year levels predicted academic achievements of the students. In many literatures it was found that stress and motivation was predictor of academic achievements of students. However, this limits to the values and perception of the society the students live in. For instance, stimulus that motivate one student may not motivate others because of gender, religion, cultural and personality differences. Similarly, one stimulus may be a stressor for an individual whereas it may not be stressors for others.

In this study gender predicted academic achievement that was male students performed more than female students in academic achievement, because of gender biased those female students preoccupied with housework and don't have sufficient time to study. In addition, females lack equal opportunities and experiences particularly from home environment. This applies to school environment and this gender differences made variation in academic achievement between gender groups.





## Chapter five

### 5. Discussion,

This study found that gender and study year groups were significantly predictors of academic achievement of students of Jimma Teachers Education College. Regression model indicated those predictor variables, gender and the three study year levels account only for 22 % ( $R^2 = .219$ ) of variance in college GPA. Study conducted by Sahragard, Baharloo, and Soozandnfar (2011) in college students to determine the impact of study year groups on academic achievement showed that students proficiency or achievement tends to increase as a function of College study. The Sahragard's, Baharloo's, and Soozandnfar's (2011) study support the result of this study that different study year levels and genders predicted academic achievements of the college students .

Similarly ,the present result of t-test analysis showed that gender differences in mean of GPA that there was a significant differences between the mean GPA of male and female students ( $t(285) = 8.257, P = 0.000$ ). In addition, group statistics revealed that the mean for Grade Point Average of male respondents ( $M=3.11, SD. = .400$ ) was greater than the mean for Grade Point Average of female ( $M=2.69, SD. = .456$ ) respondents. Accordingly, male students are more performed than female students in academic achievement. This result is similar to study conducted by Teklu (2013) that shows male students are more performed than female students in academic achievement.

Hence, further investigation is needed why female students' academic performance was lower than male students; Since previous academic achievement of pre-college learning experience influences the present college performances. But because of gender biases females are mostly preoccupied with housework tasks. As a result of this they may not have sufficient time to study. Attitude of learning and study skill of female students as well as putting their effort begins at home environment, if females obtain sufficient support of family.

So the process of empowering women or intervention should take place not only at the organization like college or universities but also in families, small groups and individual level According

to this study, even though, motivation and stressors failed to predict academic achievement in this study, there is a significance difference of mean of amotivation (no-motivation) between male and female students. However, there was no a significance difference in the mean of intrinsic and extrinsic motivation as well as stress between male and female students. In this study, motivation didn't predict academic achievement of student and this result is similar to the study of Berg and Coetzee (2014) whose literature explained that there was no significant relationship between the total score of motivation and academic achievement.

According to study of Berg and Coetzee (2014) there is no significant relationship between intrinsic motivation and GPA,  $r(146)=0.81$ ,  $P=0.33$  as well as between extrinsic motivation and GPA,  $r(146)=0.04$ ,  $P=0.64$ . However, differences in GPA, Motivation and Stress differed across study year levels according to the result of this study. There are differences in overall mean of GPA in first, second and third year students, Mean=2.73, SD =1.56; Mean =3.16, SD=1.36; Mean =2.89, SD =1.68 respectively. High GPA was observed in second year students.

The Tukey Post hoc test One- Way ANOVA analysis in motivation shows that there is a significant differences in mean of an extrinsic motivation between third and first year ( $P<0.003$ ) as well as between third and second year students ( $P<0.000$ ). Similarly, there was also a significance differences in an intrinsic motivation between third and first year students ( $P<0.037$ ) as well as between third and second year students ( $P<0.000$ ). This data analysis shows that second year students are more motivated than first and third year students either extrinsically or intrinsically.

Similarly, there is a significant difference in mean of amotivation (non-motivation) between first year and second as well as between first and third year students. In both case, first year students are less demotivated than second and third year students. With regard to level of motivation, the overall mean of motivation of all the three study year students were 3.84, indicating that 53.8 % majority of the students had high level of extrinsic motivation whereas, 7 % of them were experiencing very high level of motivation. On the other hand, whether there is a significance differences in mean of sources of stress

such as in an interpersonal, intrapersonal, academic and environmental, among first, second and third years of students, Tukey Post hoc test was employed.

Accordingly, there was a significant difference in mean of environmental sources of stress between first and second year students ( $P < 0.028$ ). This means, first year students were higher than second and third year students in stress level. Studies conducted by D'zurila and Sheedye, (1991) and Yaffee (2000) show similar result to this study, as first year students experiences high level of stress due to transitional nature of college life . On the other hand, there was no significant difference in mean of interpersonal, intrapersonal and academic sources of stress among the groups. In all aspects, according to this data, environmental sources of stress particularly, stress due to 'poor water supply of rental house ' and 'living in a slum area of rental house that is inappropriate for study stressed me ' were the most common sources of stress of all the three study year levels. Lazaru (1966) had also confirmed that environmental condition such as noise, and crowding, can also be one factor that contributes for stress, particularly that divert students attention during study in concentration.

We can understand from this study that all the three study year groups differ either in GPA, or in motivation level. There are previous studies that support the above mentioned ideas. Of these, Sahragard ,Baharloo , and Soozandehfar ( 2011) had conducted research on Iranian College Students to determine the impact of study year level on the students' language proficiency and academic achievement and one way ANOVA result revealed statistically significance differences across the language proficiency of freshmen ,sophomores , juniors and Seniors (  $F = 11.179$  ,  $P < 0.05$ ) which shows " the students' language proficiency tend to increase as a function of years of University Study "

According to the study, a post hoc ( Scheffe) test was conducted on academic achievement to locate specifically the differences among the four groups .That is, the mean score for seniors( $M = 51.36$ ,  $SD = 3.98$ ), significantly differ from that of fresh ( $M = 41.82$ ,  $SD = 9.4$ ), sophomores ( $M = 45.23$ ,  $SD = 8.85$ ). And juniors ( $M = 44.47$ ,  $SD = 6.99$ ). We can observe from this literature that seniors out performed than the three groups. Study conducted by Berge and Coetzee (2014) show that different study year levels

experience differently, different types of motivation with variance in academic achievement. According to their study, an explanation of variance by complete model per study year group, for first- year group (12. 5 %) and fourth- year group (15. 4 %) the complete model doesn't succeed in explaining a significance in academic achievement. However, in terms of the second year students (27. 8 %) ,and third -year students(29. 5 %) , the complete model does indeed succeed in explaining a significant proportion of variance in academic achievement

## Chapter Six

### 6. Conclusion and Recommendations

#### 6.1. Conclusion

Current findings of Regression Model Test indicates that gender and study year levels explained variances in academic achievement of the College students ( $R^2 = 0.219$ ). Similarly, t- test result show a significant differences between the mean of Grade Point Average (GPA) of male and female students ( $t(285) = 8.257, P < 0.000$ ). Group statistics also shows male students ( $M=3.11, SD. = .400$ ) performed than female ( $M=2.69, SD. = .456$ ) in academic achievement. This present study is similar to the study of Teklu (2013). The reason why female students' performances were lower than male students seek another research.

In this study, motivation and stress failed to predict academic achievement of the students. However, there was a significance differences in a mean of amotivation between genders. Of this, 28.4 % male students ( $M=1.42, SD =1.52$ ) were amotivated (non-motivated) than female ( $M=1.14, SD =1.40$ ) respondents at low level. However, there was no significance difference in the mean of intrinsic and extrinsic motivation as well as stress between male and female students. In this study, as it had been mentioned earlier, motivation didn't predict academic achievement of the student. Berg's and Coetzee's (2014) study support this idea that motivation didn't predict academic achievement of the students. On the other hand, to determine the differences in mean of motivation and sources of stress among first, second and third year students of the College, a Tukey Post Hoc Test in One -Way ANOVA was employed.

Accordingly, significance differences was observed in mean of motivation between

3<sup>rd</sup> and 1<sup>st</sup> year students ( $P < 0.003$ ); as well as between 3<sup>rd</sup> and 2<sup>nd</sup> year students ( $P = 0.000$ ). The data shows, second year students are more motivated ( $M = 4.13$ ,  $SD = 1.03$ ) than both first ( $M = 3.9$ ,  $SD = 1.18$ ) and third year students ( $M = 3.51$ ,  $SD = 1.41$ ). Further study should be conducted to understand why was the difference in mean of motivation among study year levels of the college. With regard to the level of motivation, the overall mean of motivation of all the three study groups were 3.84, indicating that 53.8 % of majority of the students had high level of extrinsic motivation whereas 7 % of them were experienced very high level of motivation.

Tukey Post Hoc test shows in the present study that there was a significance differences in mean of environmental sources of stress between 1<sup>st</sup> ( $M = 3.05$ ,  $SD = 1.47$ ), 2<sup>nd</sup> ( $M = 2.75$ ,  $SD = 1.27$ ) and 3<sup>rd</sup> year students ( $M = 2.81$ ,  $SD = 1.51$ ). The data show that first year students were more stressed than the other groups of study years. The reason why first year students stressed more were because it is a transitional period for them until they adapt to college as well as new living environment.

This study was similar to Seyedfatemi et al. (2007) in their study sources of stress of college students they used Analysis of Variance (ANOVA) to compare the mean sources of stress in different years of groups. In addition the Scheffe test was used to determine which group different from the other. Accordingly, their study shows that the mean stress was significantly greater in first year than in fourth year nursing students (36.4 vs. 29.3,  $F = 3.39$ ,  $P < 0.009$ ) and environmental (4.02 vs. 3.15,  $P < 0.04$ ) sources of stress compared with four years. Hence, more emphases should be given for first year student how to adapt to stressful environment.

Generally environmental sources of stress particularly, stress due to ‘poor water supply of rented house’ and ‘living in a slum areas of rental house that was inappropriate for study

stressed me' were the most common sources of stress of all the three study year levels . Lazaru (1966) Confirms this that environmental conditions such as noise and crowding can contribute for stress and divert students attention during study in concentration. On the other hand, there was no significant difference in mean of interpersonal, intrapersonal and academic sources of stress among all the three study year groups for this reason mentioning levels of stress didn't necessitate.

## **6.2 Recommendation**

According to this finding female students were lower than male students in academic Performances. This lower performance can affect the self-esteem of female students that might lead them to have negative self- concept towards themselves and others. This in turn, makes them to reduce their effort in academic activities and this still leads to low performances. Hence, academic professionals, counselors and other concerned bodies should provide their support to female students in order that female students will be able to develop study skill and time management for better academic performance.

According to Devine's (1987) effective study skills enhance students' sense of personal control and self –efficacy. According to the literature, students with good study skill feel competent and confident. For this reason, helping female students to acquire study skill helps them to build their self-efficacy. Designing tutorial time for re-learning for female students at a regular base can also empower them in their academic performances.

The other result of this finding indicates that an environmental source of stress was the most common sources of stress that all the respondents experienced. The stress at most was due to loud noise that interferes with the students' attention during study in concentration. The reason



for this was the students' residential house they rent was being in a cite of slum areas that contributed for stress.

Similarly, according to this findings freshman students were also the one who suffers from stress due to the transitional nature of college life. Freshman or first year students must adjust to being away from home for the first time, maintain a high level of academic achievement, and adjust to a new social environment. Hence, for all parties beit freshman or others study- year groups, college administrators should consider incorporating stress management training in orientation activities, in addition to counseling services at a regular base for students.

In addition, in sufficient water supply of the rented house was also identified as part of environmental sources of stress of the students. Therefore, if students were made to live in on-campus in the dorms rather than off-campus housing, they can access sufficient water supply, secured and loud noise free environment. Therefore, the college administrators are expected to change residential environment that might cause stress .

## References

- Afzal, H., Ali, I. & Khan, M.A (2010). A study of University Students Motivation and its Relationship with their Academic performances. *International Journal of Business & Management, Vol. (5, No.4)*.
- Allen, S., & Hiebert, B. (1991). Stress and coping in adolescents. *Canadian Journal of Counseling, 25, 19-32*.
- Akande, J.A., Olowonirejuaro, A.O & Okwawra\_kalu, C.E.(2014). A Study of Levels and Sources of Stress among Secondary School Students. *Journal of Research and Method in Education (ISOR\_JRME), Vol.(4, Ver.1)*.
- Areepattamannil S.Freeman JG (2008). Academic achievement, academic self-concept, and academic motivation of immigrant adolescents in the Greater Toronto Area Secondary Schools. *Journal of Advanced Academics, 19(4): 700-743*.
- Berge, G.V & Coetzee, L.R(2014). Academic Self –Concept and Motivation as predictors of Academic Achievement.
- Broussard, S.C. & Garrison, B.G.(2004). The Relationship between Classroom Motivation & Academic Achievement in Elementary School Age Children. *Family and Consumer Sciences Research Journal, Vol (33, No.2)* journalspermissions.nav.
- Bulo, J. G & M.G. Sanchez (2014). Sources of Stress among College Students. *CVCITC Research Journal, vol ( 1, No.1)*.
- Chang, Y. S. (2012). Understanding Students Motivations in Higher Education Participation: A Psychological Validation of the Academic Motivation Scale in Malaysia context: 53(26).
- Chohen, S., Lamarck, T. & Mermelstein, R. (2004). Global Measure of Perceived Stress, *Journal of Health and Social Behavior, Vol (24, 1983)*.
- Chong, Y. A. (2012). Understanding Students Motivations in Higher Education. Sapub.org/ijap, *International Journal of Applied Psychology 2014, Vol (4 No.2):68\_72*.
- Cuirrin, M.O (2007). An Empirical Analysis of the Interrelationship between Motivation and stress in computing (A Partial Fulfillment of the Requirements for the degree of Masters of Arts), Waterford Institute of Technology.

- Dixo, S. and Robinson, E. (2005). Depression and Anxiety among University Undergraduates . *Journal of College Students Development*, 49(5) .
- D'zurilla, J. J. and Sheedy, C. F (1991) . Relationship between Social Problems ability and Subsequent Level of Psychological Stress in College Students .*Journal of Personality and Psychology* , 61 ( 5 ).
- Francis, A. et al. (2004). Promoting Academic Achievement and Motivation, A discussion and contemporary issue based approach .Minded Students team, University of Maryland.
- Furr, R .S. Westefeld, S. J., McConnell, N. G & Jenkins, M. J (2001 ). Suicide and Depression among College Students: A decade later \_*Professional Psychology: Research and Practice*, 32, 97 \_100.
- Kai\_Wen, C.( 2010) . A Study of Stress among College Students in Taiwan. *Journal of Academic and Business Ethics*, 2(1)35\_41.
- Marks, S. C., Blanding, Z. B. Perna & Elliot (1999). Academic Motivation. *Journal of International Online Learning*, Vol (9, No .1) , Spring 2010.
- Rajiah, K., Coumaravelou, S. and Ying, O.W (2014). Relationship of Test Anxiety, Psychological Distress and Academic Motivation among First Year Undergraduate Pharmacy Students. *International Journal of Applied Psychology*, vol (4 No .2) 68\_72 .
- Rose, S.E., Neibling, B.C. & Heckert, T.M (2008). Sources of Stress among College Students, *Journal, Jung 99*, Vol (33, No.2) .
- Rucker, J. C. (2012) . The Relationship between Motivations, Perceived Stress & Academic Achievement in Students. University of Twente.
- Ryan RM, Deci EL 2000. Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25: 54–67.
- Sahragard , R., Baharloo , A., and Soozandehfar ,S.M.A.,( 2011) . Theory and Practice in Language Studies , vol ( 1, No.12).
- Salkind, N.J, (200). *Motivation*, Encyclopedia of Educational Psychology, volume 1& 2, New York: Sage Publication Ltd.

Seifert, K. & Sutton, R ( 2009 ) . Motivation, Encyclopedia of Educational Psychology,  
(2nd ed.) , global text

Spielberger, C.(200NE4). *Motivation*, Encyclopedia of Applied Psychology, vol.(1  
NewYork: Elsevier Inc.

Teklu, T.O., (2013). Disparities in Academic Achievement in selected Colleges of  
Teachers Education in Oromia Region. Vol .( 9,No., 1 ), Ethiopia .

## Appendixes A

Jimma University, College of Education and Behavioral Sciences, Department of Psychology

**Academic Achievement Motivation Scale (AMS)** (safartuu fiixaan bahiinsa si'aayinaan barachuu ittiin safaran)

### General Instructions

This questionnaire asks you about your motivation. Your participation in this survey is voluntary and you may withdraw at any point. The data you provide will be kept confidential and be used only for study purposes. Thank you in advance for your participation.

### I Demographic ( odeeffannoo waa'ee teessoo, maqaa , saala ,barums )

Tick at the appropriate place (iddo ilaallatutti mallattoo √ dhan agarsiisi )

1. Sex /saala: male  dhiira female  dubara

2. Age / umurii \_\_\_\_\_

3 waggaa / Year level \_\_\_\_\_ group/ garee \_\_\_\_\_

4 Department / mummee \_\_\_\_\_

5 Students' GPA / obtained from the registrar of the college \_\_\_\_\_

**Instruction:** -There is no right and wrong answer and you simply choose items presently corresponds to one of the reasons why you are taken this class .Tick'' √ '' symbol in the following box for each separated items given below.

Value 1. = strongly Disagree (SDA) 2. = Disagree (DA) 3. = Neither (N) 4. = Agree

(A) 5. =Strongly Agree (SA)

**Qajeelfama:** himootni armaan gadii barachuu maaliif akka barbaadde deebisa siif ta’u of keessaa qaba. Deebisni kennamu sirrii dha ykn sirrii miti wantti jedhamu hin jiru . Kanaaf , deebisa kee sanduuqa keessatti mallattoo ‘√’ tin agarsiisi .

**Hiika** 1= baay’ee walii hin galu (BWHG) 2= walii hin galu (WH G) 3= Yaada hin qabu (YHQ) 4= waliin gala (WG) 5= bay’ee walii gala ( BWG) .

Why are you taking this class? Yeroo ammaa maaliif barataa jir taa?

S. No	Items/ yaada akka sababaatti kaa’ame	Response rate/deebisa				
		1(SDA) (BWHG)	2(DA) (WHG)	3(N) (YHQ)	4(A) (WG)	5(SA) (BWG)
1	Because with only a ten grade complete certificate, I would not find a high paying job later on.( kutaa kudhan xumur qofaan gara booda irratti hojii kaffaltii gaarii qabu argachuu wantan hin dandeenyeefidha)					
2	Because I experience pleasure and satisfaction while learning new Things about psychology ( waa’ee xiinsammu wanta haaraa barachuun gammacuu wanta naf kennuufidha)					
3	Because I think that this class will help me better prepares for the career I have chosen( hojii booda irratti bobba’uuf filadheef akkan qophaa’uu nagargaara)					
4	For the intense feelings I experience when I am communicating my own ideas about understanding children( waa’ee hubannaa dagagina daa’immanii iraatti yaada koo ibsuudhan muaxannon ani gonffadhu keessoo kootti wanta natti dhaga’amuu fidha)					
5	Honestly, I don’t know, I really feel that I am wasting my time in this class.( dhugaa haa’sauuf ,wantan beeku hin jiru, daree kana kessatti akkan yeroo gubaa jirutt natti dhaga’ama )					

S. No	Items/ yaada akka sababaatti dhiyaate	Response rate/deebisa				
		1(SDA) (BWH)	2(DA) (WH)	3(N) (YHQ)	4(A) (WG)	5(SA) (BW)
6	For the pleasure I experience while surpassing myself in my studies of child behavior( yaad qalbii daa'immanii hubachuudhan qo'annaa gochuun gammachuu wanta naaf kennufiidha)					
7	To prove to myself that I am capable of passing this class.( kutaa kana darbuuf ga'umsa qabaachuu kotiif off mirkaneffachuu dhaaf )					
8	In order to obtain a more prestigious job later on.(booda irratti hojii baay'ee barbaadamaa /kabajamaa ta'e arguchuu )					
9	For the pleasure I experience when I discover new things about child development pattern ( waa'ee dagaaginaa daa'immanii wanta haaraa ta'e tokko argachuun waan gammachuu naaf kennuufiidha )					
10	Because eventually it will enable me to enter the job market in teaching profession field like.(xumur irratti ogummaa barsiisummaa ani jaaladhu irratti akkan bobba'u wanta nagagaaruu fiidha )					
11	For the pleasure that I experience when I read interest things about method of teaching (waa'ee mala barsiisuu nama sissi'eessu yemmuun dubbisu gammachuu wanta naaf kennuu fiidha).					
12	I once had good reasons for taking this class However, now I wonder whether should continue.(barumsa kana jalqabuu koottif sababa gahaa ta'een qaba ;amma garuu itti fufuu koo shakkaan jira )					
13	For the pleasure that I experience while I am surpassing myself in one of my personal accomplishment(raawwii dhimmoota dhuunfaa kootii irra caalaa fooyyeessuuf jecha yemmuun tattaafadhuu					

	wanta nagammachiisuu fidha )					
14	Because of the fact that when I succeed in this class I feel important (barumsi kun barbaachisaa ta'uun isaa kan natti dhaga'amu yoon bu'aa qabeessa ta'ee dha)					

S. No	Items/ yaada akka sababaatti dhiyaate	Response rate/deebisa				
		1(SDA) (BWH)	2(DA) (WH)	3(N) (YHQ)	4(A) (WG)	5(SA) (BW)
15	Because I want to have'' the good life'' later on ( booda irratti jireenya gaarii jiraachuu wantan fedhuu fidha )					
16	For the pleasure that I experience in broadening my knowledge about teaching profession.( beekumsa ogummaa barsiisummaa koo gabbifachuun want na gammachiisuu fiidha )					
17	Because this will help me make a better choice regarding my career orientation(hojii ittiin argachuuf akka filannoo gaarii ta'e tokkotti wantan kaawwadhee fiidha )					
18	For the pleasure that I experience when I feel completely absorbed by what I am reading about teaching methodology( waa'ee mala barsiisuu gadi fageenyaan , qalbeeffannaa fi xiyyeeffannaadhan yemmuun dubbisu wanta na gammachiisuu fiidha).					
19	I can't see why I am taking this class and frankly I couldn't care less. ( barumsa kana maalifan hordofaa akkan jiru natti hin mul'anne ; haa ta'uu ti akka nama hin dhimmammnee ta'uu hin qabuun ture .					



20	For the satisfaction I feel when I am in the process of accomplishing difficult academic affinities.( barnoota ulfaataa ta'an barachuun /irratti hojjechuun wanta naquubsuu fiidha )					
21	To show myself that I am an intelligent person (sammuudhan nama cimaa ta'uu kootiif ofiin of mirkaneeffachuuf)					
22	In order to have better salary later on ( booda irratti mindaa gaarii argachuuf)					
23	Because this class allows me to continue to learn about many things that interest me about classroom management. ( barumsa kana barchuudhan waa'ee hoggansa daree barnootaa waa baayyee beekuun wanta nagammachiisuu fiidha )					

S. No	Items/ yaada akka sababaatti dhiyaate	Response rate/deebisa				
		1(SDA) (BWH)	2(DA) (WH)	3(N) (YHQ)	4(A) (WG)	5(SA) (BW)
24	Because I believe that this class will improve my competence as a professional in teaching ( barumsa kana hordofuun ga'umsa ogummaa barsiisummaa koo akka fooyyeessu wantan amanuu fiidha )					
25	For the high feeling that I experience while reading about various methods of teaching students.(kitaaba mala barsiisu adda addaa barttota ittiin barsiisan yemmuun dubbisu baay'ee wanta natti dhaga'amuu fiidha)					
26	I don't know, I can't understand what I am doing in the class.( daree barnoota kana keessatti maal hojjechaa akkan jiru hubataa hin jiru )					

27	<p>Because this class allows me to experience a personal satisfaction in my quest for excellence in my teaching profession.(  koorsii kanneen /barumsa kana hodofuun waa'ee ogummaa barsiisummaa sadarkkaa isa olaanaa eggate irraa akka gahu barbaaduun gammachuu dhuunfaa naaf kenna )</p>					
----	--	--	--	--	--	--

## Appendix B

Jimma University, College of Education and Behavioral Sciences, Department of Psychology.

Student Stress Survey/Scale ( Safartuu Dhiiphachuu Barattoota ittiin safaran )

Sources of stress ( Madda dhiiphachuu )

**Instruction:** There is no right and wrong answer, and you simply choose items which you perceived as sources of stress in this semester. Tick, “✓” symbol in the following box for each separated items given below. Value: 1= Strongly Disagree (SDA), 2= Disagree (DA), 3= Neither (N) 4= Agree (A), 5= Strongly Agree (SA).

**Qajeelfama:** himootni armaan gadii madda dhiiphachuu barattoota kolleejjii tokkoo ibsu . Dhiiphachuu kana akkaataa hubannoo(guuttachuu) keetii irratti hundaa’uun deebisa kee kenni. .Deebsni kenname sirrii dha ykn sirrii miti wantti jedhame madaalamu hin jiru . Kanaaf , deebisa kee sanduuqa keessatti mallattoo “ ✓ ” tin agarsiisi .

**Hiika :** 1= baay’ee walii hin galu (BWHG) 2= walii hin galu (WH G)

3=Yaada hin qabu ( YHQ) 4= walii ni gala (WG) , 5= baay’een walii gala (BWG) .

S. No	Items/ yaada akka sababaatti dhiyaate	Response rate/deebisa				
A	Interpersonal sources of stress ( Dhiiphachuu sababa dandeettii walii galuu , namoota hubachuu dadhabuu irraa maddu)	1(SDA) (BWH)	2(DA) (WH)	3(N) (YHQ)	4(A) (WG)	5(SA) (BW)
1	Change in social activities stressed me(gochaaleen ani duraan hawaasaaf rawwadhu gocha biraatiin jijjiiramuun isaa na dhiiphise)					
2	Roommate (classmate) conflict stressed me( hiriyoota dareetti waliin barannu wajjiin walitti bu’uun na dhiiphise )					

3	Work with people I don't know stressed me( namoota hin beekne waliin hojjechuun na dhiiphise)					
4	Fight with boyfriend/girlfriend stressed me( jaalallee koo wajjiin walitti bu'uun na dhiiphise )					
5	Meeting new boyfriend/girlfriend stressed me( jaalallee koo haaraa wajjin walqunnamuun na dhiiphise )					
6	Trouble with parents stressed me ( rakkoon maatii wajjin qabu na dhiiphise)					
B	Intrapersonal sources of stress( dhiphachuu sababa dandeetti ,fedhii ,si'aayina,currisa/sansakka ofii beekuu hafurraa maddu )	1(SDA) (BWH)	2(DA) (WH)	3(N) (YHQ)	4(A) (WG)	5(SA) (BW)
7	Change in my sleeping habits stressed me ( haalli barmaatilee hirriiba koo jijjiiramuun na dhiiphisa )					
8	Change in my eating habits stressed me (haalli barmaatilee nyaataa koo jijjiiramuun na dhiiphise)					

S. No	Items/ yaada akka sababaatti dhiyaate	Response rate/deebisa				
		1(SDA) (BWH)	2(DA) (WH)	3(N) (YHQ)	4(A) (WG)	5(SA) (BW)
9	New responsibilities in the college stressed me ( itti gaafatamummaan haaraan kolleejjii keessatti qabu na dhiiphise )					
10	Financial difficulties stressed me ( hanqinni qarshii na dhiiphise)					
11	Spoke in front of the students of the class in the college stressed me (barattoota hedduu fuula dura dhaabbadhee haasa'uun na dhiiphise)					
12	Change in use of drugs like alcohol, chat & cigarette stressed me ( caatiin, dhugaatii fi siijaaraan itti fayyadamu hafuun na dhiiphise)					

13	Outstanding personal achievement stressed me ( bu'aa qabeessummaa olaanaa gonfachuun na dhiiphise)					
14	Thought of deploying on remote area of work place stressed me( (iddoo hojii fagoo ta'etti ramadamee hojjechuuf yaaduun nadhiiphise )					
15	Decline in personal health stressed me (haalli fayyaa koo gadi bu'aa dhufuun na dhiiphise )					
16	Law violation in the college stressed me ( seera kolleejichaa cabsuun na dhiiphise )					
17	Death of my family member stressed me ( duuti miseensa maatii koo na dhiiphise)					
18	Death of my friend stressed me ( duuti hiriyyaa koo na dhiiphise)					

'S. No	Items/ yaada akka sababaatti dhiyaate	Response rate/deebisa				
		1(SDA) (BWH)	2(DA) (WH)	3(N) (YHQ)	4(A) (WG)	5(SA) (BW)
19	Change of my wearing style stressed me (barmaatileen uffannaa koo jijjiiruun na dhiiphise )					
20	Change of my religious wearing style stressed me (barmaatileen uffannaa amantaa koo jijjiiruun na dhiiphise)					
C	Academic sources of stress (dhiiphachuu sababa barachuutiin dhufu)	1(SDA) (BWH)	2(DA) (WH)	3(N) (YHQ)	4(A) (WG)	5(SA) (BW)
21	Increased class workload stressed me(gochaaleen baay'ee daree barnootaa keessatti kennaman na dhiiphise )					
22	Increased homemade assignment/project stressed me( abbaltiin /hojiin manaa baay'inaan naaf kennamu na dhiiphise )					
23	Lower grade than anticipated (expected) stressed me( qabxii barnootaa ani eege					

	gadi argachuun koo na dhiiphise )					
24	Change of major department/placement to department without my preference stressed me (fedhii kootiin ala mumme hin barbaadine irratti ramadamuun na dhiiphise)					
25	Missed too many classes stressed me (daree barnoota irraa baay'inaan hafuun na dhiiphise )					
26	Loud noise from around my rented house that destruct my attention from study stressed me ( sagaleen guddaan naannoo mana kireeffadheti uumamu akkan xiyyeeffannan hin qayyabanne na godhu na dhiiphise )					
27	Serious argument with my instructor stressed me ( barsiisaa wajjiin baay'ee wal_falmmuun na dhiiphise )					
28	Taking the taste stressed me ( qormaata kolleejjichaa qoramuun na dhiiphise )					
D	Environmental sources of stress( dhiiphachuu naannoo irraa maddu )	1(SDA) (BWH)	2(DA) (WH)	3(N) (YHQ)	4(A) (WG)	5(SA) (BW)
29	Vacations/breaks stressed me( kolleejjiin boqonnaaf cufamuun na dhiiphise)					
S. No	Items/ yaada akka sababaatti dhiyaate	Response rate/deebisa				
		1(SDA) (BWH)	2(DA) (WH)	3(N) (YHQ)	4(A) (WG)	5(SA) (BW)
30	Computer problems stressed me(koompuutara shaakaluun na dhiiphise )					
31	Poor water supply of the house I rent stressed me (hanqinni tajaajila bishaanii mana ani kireeffadhe na dhiiphise)					
32	Poor electric supply of the house I rent stressed me (hanqinni tajaajila ibsa mana ani kireeffadhe na dhiiphise)					
33	Change in living environment stressed me ( naannoo keessa jiraadhu jijjiiruun na dhiiphise )					

34	Sexual harassment inflicted on me on my way to college and home stressed me (tuttuqaan saalaa gara mana kireeffadheetti yemmuun galuufi gara kolleejjiitti yemmuun dhufu na irratti raawwatu na dhiiphise )					
35	Teasing inflicted on me, on my way to home and college stressed me ( gara kolleejjii fi mana jireenyaa yemmuun dhaqu arrabsoonii fi jechootni saalfachiisoo haamilee namaa tuqan na irratti raawwatu na dhiiphise )					
36	Always experiencing insufficient feeding stressed me ( yeroo hunda nyaata gahaa argachuu hafuun koo na dhiiphise )					

## Appendixes C

SPSS OUT PUT – CROSSTAB FOR ENVIRONMENTAL SOURCES OF STRESS

Crosstab

		insufficient water supply of the rented house stressed me					Total		
		SAD	DA	N	A	SA			
year in the college	first	Count	23 <sub>a</sub>	13 <sub>a,b</sub>	3 <sub>b</sub>	22 <sub>b</sub>	27 <sub>b</sub>	88	
		% within year in the college	26.1%	14.8%	3.4%	25.0%	30.7%	100.0%	
		% within poor water supply of the rented house stressed me	47.9%	29.5%	18.8%	29.7%	25.7%	30.7%	
		% of Total	8.0%	4.5%	1.0%	7.7%	9.4%	30.7%	
		second	Count	9 <sub>a</sub>	11 <sub>a,b</sub>	6 <sub>a,b,c</sub>	34 <sub>c</sub>	44 <sub>b,c</sub>	104
		% within year in the college	8.7%	10.6%	5.8%	32.7%	42.3%	100.0%	
		% within poor water supply of the rented house stressed me	18.8%	25.0%	37.5%	45.9%	41.9%	36.2%	
		% of Total	3.1%	3.8%	2.1%	11.8%	15.3%	36.2%	
		third	Count	16 <sub>a,b</sub>	20 <sub>b</sub>	7 <sub>a,b</sub>	18 <sub>a</sub>	34 <sub>a,b</sub>	95
		% within year in the college	16.8%	21.1%	7.4%	18.9%	35.8%	100.0%	
		% within poor water supply of the rented house stressed me	33.3%	45.5%	43.8%	24.3%	32.4%	33.1%	
		% of Total	5.6%	7.0%	2.4%	6.3%	11.8%	33.1%	
Total		Count	48	44	16	74	105	287	
		% within year in the college	16.7%	15.3%	5.6%	25.8%	36.6%	100.0%	
		% within poor water supply of the rented house stressed me	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
	% of Total	16.7%	15.3%	5.6%	25.8%	36.6%	100.0%		

Each subscript letter denotes a subset of insufficient water supply of the rented house stressed me categories whose column proportions do not differ significantly from each other at the .05 level.

## Appendix D

### Excluded Variables



Model	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics	
					Tolerance	
1	EXTRINSIC MOTIVATION	.050 <sup>b</sup>	.938	.349	.056	1.000
	INTRINSIC MOTIVATION	.070 <sup>b</sup>	1.325	.186	.079	.997
	AMOTIVATION	-.033 <sup>b</sup>	-.620	.536	-.037	.987
	INTER PERSONAL SOURCES OF STRESS	-.060 <sup>b</sup>	-1.122	.263	-.067	.999
	INTRA PERSONAL SOURCES OF STRESS	-.061 <sup>b</sup>	-1.140	.255	-.068	.997
	ACADEMIC SOURCES OF STRESS	-.067 <sup>b</sup>	-1.248	.213	-.074	.992
	ENVIRONMENTAL SOURCES OF STRESS	-.053 <sup>b</sup>	-.991	.322	-.059	1.000
	year in the college	.143 <sup>b</sup>	2.720	.007	.160	.999
2	EXTRINSIC MOTIVATION	.081 <sup>c</sup>	1.507	.133	.089	.962
	INTRINSIC MOTIVATION	.093 <sup>c</sup>	1.762	.079	.104	.976
	AMOTIVATION	-.069 <sup>c</sup>	-1.269	.206	-.075	.937
	INTER PERSONAL SOURCES OF STRESS	-.063 <sup>c</sup>	-1.206	.229	-.072	.998
	INTRA PERSONAL SOURCES OF STRESS	-.060 <sup>c</sup>	-1.150	.251	-.068	.997
	ACADEMIC SOURCES OF STRESS	-.065 <sup>c</sup>	-1.234	.218	-.073	.991
	ENVIRONMENTAL SOURCES OF STRESS	-.055 <sup>c</sup>	-1.054	.293	-.063	1.000

**independent Samples Test**

	F	sig.	t	df	Sig.( 2- taile d)
Extrinsic Motivation	.001	.972	.308	285	.758
			.306	240.65	.760
Intrinsic Motivation	.002	.964	.915	285	.361
			2.03	258.69	.043
Inter personal sources of stress	.300	.584	.619	284	.536
			.616	239.53	.539
Intrapersonal sources of stress	.016	.899	-.86	285	.392
			-.86	247.32	.391
Academic sources of stress	1.01	.315	-1.5	285	.140
			-1.5	255.52	.135
Environmental sources of stress	1.66	.198	.170	285	.865
			.166	221.04	.869

Table 7

Multiple Regression Analyses of Motivation and stress as a predictor of Academic Achievement

### Regression

Model Summary					
Mode	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.445 <sup>a</sup>	.198	.195		.421
2	.468 <sup>b</sup>	.219	.213		.416

a. Predictors: (Constant), gender

b. Predictors: (Constant), gender, year in the college



