

Gender, Academic Self-Efficacy, and Goal Orientation as Predictors of Academic Achievement

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Abstract

The study attempted to assess the relationships between gender, level of goal orientation, academic self efficacy and academic performance in Woldia college of teachers education. The study employed quantitative approach which followed correlation design in involving two instruments to collect data: questionnaires (goal orientation scale and general academic self efficacy scale) and document analysis (students' cumulative GPA). Participants of this study were 482 second and third year students at Woldia College of Teachers Education in the academic year of 2016/2017 using stratified and simple random sampling techniques. To answer the research questions on the study, mean scores, standard deviation, Pearson correlation, and also inferential statistics such as t-test, and multiple regression were used to analyze the data. The result of the study showed that there was statistically significant gender difference in students' general self efficacy and academic achievement. In case of this the mean score of male students' academic self efficacy and CGPA were significantly higher than female counterparts. Gender has an independent significant effect on students' academic achievement. Moreover, the study implied that students with high goal orientation and general academic self efficacy are likely to get better academic achievement in the college. Regarding to the relationship between gender and goal orientation, results of correlation analysis indicated no significant relationship between students' gender and goal orientation, and no statistically significant relationship between students' gender and general academic self efficacy was obtained in correlation analysis though gender alone has a significant contribution to students' academic achievement. The results of correlation analysis of the present study revealed that there were statistically significant relationship between goal orientation and general academic self efficacy. Further more, there was statistically significant

Index terms— gender, academic self-efficacy, goal orientation, academic achievement
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as t-test, and multiple regression were used to analyze the data. The result of the study showed that there was statistically significant gender difference in students' general self efficacy and academic achievement. In case of this the mean score of male students' academic self efficacy and CGPA were significantly higher than female counter parts. Gender has an independent significant effect on students' academic achievement. Moreover, the study implied that students with high goal orientation and general academic self efficacy are likely to get better academic achievement in the college. Regarding to the relationship between gender and goal orientation, results of correlation analysis indicated no significant relationship between students' gender and goal orientation, and no statistically significant relationship between students' gender and general academic self efficacy was obtained in correlation analysis though gender alone has a significant contribution to students' academic achievement. The results of correlation analysis of the present study revealed that there were statistically significant relationship between goal orientation and general academic self efficacy. Further more, there was statistically significant interrelationship between goal orientation and general self efficacy ($r = 0.42$ $P < 0.05$), goal orientation and academic achievement ($r = 0.33$ $p < 0.05$), and general self efficacy and academic performance ($r = 0.17$ $P < 0.05$) was obtained. Similarly, academic achievement of male students is positively and significantly correlated with goal orientation ($r = 0.34$) and general academic self efficacy (0.30). Besides, there was a positive and statistically significant relationship between students goal orientation and general self efficacy belief. Results in multiple regression analysis indicated that students' gender and goal

2 Introduction

college students face a myriad of pressures and challenges in the academic environment as they seek to maintain optimal performance or even to remain in the academic program." (Mansfield, Pinto, Parent and Wortman, 2004:551).

Thus, students' academic achievement can be determined by various factors. Therefore, according to Mansfield et al. (2004), identification of contributing factors to college students' academic achievement help to intervene or to remedy for the improvement of students success and achievement in higher education. In this regard, researchers in the field of educational psychology have investigated a number of variables in their relationship to academic achievement. For example, some studies evidenced that achievement goals, cognition (Coutinho, 2007), self efficacy (Ford, cited in Adediora and Tayo, 2007), gender (Bandura, 1997 cited in Ayiku, 2005) and so forth determine academic achievement.

Similarly, some researchers identified various factors that affect academic achievement. For example, a study conducted by Ojerinde (1981) revealed that anxiety, achievement, motivation and level of interest affect academic achievement. Ford (1985) also distinguished self efficacy and self concept as factors that affect students' academic achievement (Adediora and Tayo, 2007).

Despite the many factors that can have an effect on academic achievement, for the purpose of the present study, three variables that have been of particular interest of researchers, are used for investigation: Gender, goal orientation and academic achievement. Gender is the first variable that can have relation to and influence on academic achievement. In this regard, various studies conducted on the interrelationship between students' gender and general academic self efficacy alone does not contribute to academic achievement. Finally, pertinent recommendations were drawn from the findings and conclusions of the study.

orientation combined together have statistically significant contribution to their academic achievement that accounts for 27.2% of the variation in academic achievement. However, Author : Psychology Lecturer, Department of Professional Studies, Woldia College of Teachers Education, North east Ethiopia. e-mails: negedekifle@gmail.com, meleseblen2563124@gmail.com academic achievement disclosed that female students perform better than male students in both general and domain specific academic tasks (Dayioglu & Asik, 2004; Kumar and Lai, 2006; Iyod, Walsh and Yailagh, 2005; Eleshi, 2005).

Moreover, Betts and Morell (Cited in Dayioglu and Asilk, 2004) reported that having controlled each attributes of GPA, gender is found to be a significant predictor of students' cumulative grade point average. However, contrary to several studies, Pokay and Blumenfeld (1990) describe that students' gender do not directly influence academic achievement. Similarly, Mackintosh (cited in Dayioglu and Asik, 2004) confirmed that no gender difference is found in general intelligence.

The second factor that can affect academic achievement is level of goal orientation. The goal orientation theory has been a major concern for various educational researches because of its influence on the performance of students. As to Fuente (2004) cited in, academic goals are defined as academic motives that are used to guide students classroom behavior.

According to goal orientation theorists, students are engaged in academic tasks to achieve their own various goals. Thus, some students strive to earn better grades in the course, some other students motivated not to expose their inability in academic tasks. Still some other students are concerned on comprehending specific content domain (Mattern, 2005) Therefore, according to Coutinho (2007) and Mattern (2005), goal orientations are classified in to two: Master goals and performance goals.

Mastery goals are goals that help students to master specific content domains and encourage them to focus on tasks at hand. They help students to improve their knowledge about something. Thus, student who have mastery goal orientation focus on mastering the task irrespective of comparison with others. Mastery goal oriented students spent longer time working on difficult or challenging tasks. They are also attributing their

accomplishment and failure to factors that are internal to them. However, performance goals focus on better performance comparing with others. Unlike mastery goals, performance goal orientated students attribute their success and failure to factors external to them ??Countinho, 2007;Mattern, 2005;.

Previous studies conducted on the relationship between level of goal orientations and academic achievement revealed that level of goal orientations are associated with academic achievement (Demirkaya, 2008; ??alter, (2004). Moreover, Harackiewicz et'al ??2000, ??002) cited in Mattern (2005) showed that unlike performance goals, mastery goal orientations predict students' academic achievement. However in their conditional finding, Seijts, Latham, Tasa & Latham (2004), showed that goal orientation predicts achievement when the goal is Vague. Besides, they further report that performance goal orientation makes the correlation between goal orientation and achievement weak.

Academic self efficacy is also another factor that may affect students' academic achievement. Bandura (1997:3) cited in Chemers, Hu and Garcia (2001) defined academic self efficacy as "the belief in one's capability to organize and execute courses of actions required to produce given attainments." Like the other factors that may affect academic achievement, academic self efficacy is correlated with academic achievement. Fore example, Lloyed, Walsh and Yailagh (2005) disclosed that academic self efficacy influence students efforts, choices and academic achievement.

To the understanding of the researchers, although in the past several studies were conducted on domain specific self efficacy like mathematics self efficacy, very few studies have been conducted on general self efficacy. For example, a study conducted on first year college students by Chamers, Hu and Garcia (2001) revealed that there is a strong relationship between general academic self efficacy and students' academic achievement. In this regard, students who have high general self efficacy tend to obtain better grades in school activities (Tuckers and Hall, 2003;Yeo and Neal, 2006).

However, as to the knowledge of the researchers, so far in Ethiopia, there is no any local studies conducted on the intercorrelation between gender, level of goal orientation, general academic self efficacy and academic achievement though each of the variables have been correlated by various researchers with other variables. Thus, studying the relationship between these variable is important to improve students' achievement.

The purpose of the present study is, therefore, examples the relationship between students' gender, level of goal orientation, academic self efficacy and academic achievement. The present study is, therefore, aimed at answering the following questions:

1. Are there a significance gender difference among students' goal orientation, general self efficacy and academic achievement?
2. Are there a significant interrelationship among gender, goal orientation, general self efficacy and academic achievement?
3. Do students' gender, goal orientation, general academic self efficacy independently and/or jointly contribute to a significant variation in academic achievement?

3 Operational Definition

? Academic achievement: in this study refers to cumulative grade point average accumulated over three semesters.

? Gender: in this study refers to the social or cultural sex roles of students. ? Goal orientation: in the context of this study goal orientation refers to the reason why students approach and engage in academic tasks. ? Self efficacy: refers to evaluation of One's ability to perform various domains of academic tasks in this study, self efficacy refer to students' belief that they will be successful in different subjects.

II.

4 Methods a) Design of the Study

Since the study was examined the interrelationship between gender, goal orientation, self efficacy and academic achievement, the research design used in the present study is correlation design. To achieve its purpose, the research followed quantitative approach. This research approach allowed the researchers to numerically analyze the relationships among the dependent and independent variables in the study. Moreover, in the study two variables were used: the independent/predictor and dependent/criterion variables.

5 b) Variables

i. Independent /Predictor Variables ? Gender: is naturally dichotomized as male and female ? Goal orientation scores: were artificially labeled as high and low based on mean academic achievement

? General academic self efficacy scores :are artificially dichotomized as high and low based on mean academic achievement ii. Dependent/ Criterion Variables ? Academic achievement scores: Commulative Grade point Average accumulated over three semesters

6 c) Participants

The participants of this study were 482 second and third year students at Woldia College of teacher Education in 2016/17 academic calendar/year. This is because since the researcher's work place is WCTE, it might allow him to participate in supporting, altering or intervening the teacher training program. Moreover, the rational for selecting second and third year students is since students of both year levels have spend two to three years in the training programs, it was believed by the researchers that freshman years was a period of adjustment to

college environment and maladjustment to college environment could affect their college achievement. Therefore, correlating the variables under study make the study effective.

The total number of second and third year students were 1605(587 females and 1018males). Out of the total population, only 482(293 second year 189 3 rd year students) were selected from 10 departments. This was done initially students were stratified by year level, department and gender. (see table1 below).

7 Instruments

The data collection instruments that were used in this study are: The goal orientation scale, self efficacy scale and document/cumulative GPA.

8 a) The goal orientation scale

The goal orientation scale is a 34 items Likert scale type questionnaire that was designed to include three sub-goal orientations (Mastery, performance, performance avoidant and work avoidant). The primary focus that was measured in the scale is mastery and performance goal orientation. However, it is important to note that the two sub goal orientations and work avoidant) measure the negative outcomes. The scale measures the tendency of students to set goals and make plans in every day academic tasks. Various studies reported that the acceptable reliability Cronbach's Alpha estimates range from values of 0.64 to 0.81 (Was, 2006:542). Thus students will be asked to rate each item on the scale using a 4 point scale Likert scale questionnaire from 1(strongly disagree) to 4(strongly agree.)

9 b) The General academic self Efficacy scale

Although in most previous studies domain specific self efficacy scales were used, the present study was used general academic self efficacy scale to measure students' global sense of competence across various academic subjects and tasks.

A 4-point Likert type general academic self efficacy scale which is ranging from strongly agree (5) to strongly disagree (1). Total the scale were stated negatively and the others were positive statements.(see appendi). The items were piloted to 50 pilot samples of second year students at woldia Collage of Teacher Education. The reliability coefficient (internal consistency) of Cronbach alpha was 0.78.

10 c) Document /college record

Document or college records that contain students' cumulative grade point average was used as data collection instrument. Academic achievement in this study is explained in terms of cumulative grade point averages that are collected over three semesters. This was done because the researchers intended to take CGPA of three semester of both second and third year students to make uniform analysis. Thus, the cumulative GPA of students was taken from the registrar's office.

IV.

11 Method of Data Analysis

Responses obtained from goal orientation and self efficacy scales and their academic achievement were analysed using spss version 16. Responses obtained from students in both scales were artificially labeled as high and low based on their mean scores. Students who score above the mean in both scales were labeled as possessing higher value of each trait where as those who score below the mean were labeled as possessing lower values in both cases. Similarly gender was naturally dichotomized as female and male. In this study, descriptive statistics such as mean and standard deviation, correlation, and multiple regressions were used to analyze the data. Mean and standard deviation were employed to see the variation among the variables under investigation. Partial correlation controlling for gender were performed to see the relationship between goal orientation, academic efficacy and academic achievement. Multiple regression were also employed to see the independent contributions of the predictor variables to the criterion variables. Finally, the level of significance is planned to set at 0.05.

V.

12 Results

The main purpose of this study was to examine the interrelation ship between students' gender, goal orientation, general self efficacy and academic achievement.

13 a) Gender Difference in Variables under study (n=482)

The data in table 1 below, presents descriptive statistics of variables under study. These data were used to carry out further analysis. The mean and standard deviation of variables under study for females and males are presented in table 2. These data indicated that there were no statistically significant difference in goal orientation and between female and male students although the mean score of male students goal orientation slightly higher than female students. However, statistically significance gender difference in general academic self efficacy and

academic achievement was obtained ($t = -6.76$, $P < 0.05$). The data on the distribution of participants based on the various categories of each predictor variables are presented in table 3 below. The data in table 2 and 3 are used to employ three way Analysis of variance in order to see whether the mean differences observed in each of the predictor variable are statistically significant or not. Summary of the significant interaction of means are shown in figure 1 and 2 below. However, the ANOVA results do not show the independent contributions of each variable in the prediction of academic performance. Therefore, in order to see the variation in students' academic performance that is contributed by each variable it is important to carry out multiple regression analysis.

14 VI. Intercorrelations Among Variables

The data on the interrelationship between the variables under study are presented in table 3 below. Analysis of the correlation coefficient the variables show that there were no statistically significant interrelationship between students' gender and goal orientation ($r = 0.03$), and gender and general self efficacy ($r = 0.02$). This generally indicate that on both cases, there is no relationship between these variables.

On the other hand, however, statistically significant positive relationship was observed between students' gender and academic performance ($r = 0.42$, $P < 0.05$ and $P < 0.01$).

Similarly, there were significant positive relationship between goal orientation and general self efficacy ($r = 0.45$, $P < 0.05$), goal orientation and academic performance ($r = 0.31$, $P < 0.05$), and general self efficacy and academic performance ($r = 0.22$, $P < 0.05$). In order to see the joint and/ or contribution of sub levels of goal orientation to academic performance, multiple regressions was computed. The results of multiple regressions analysis indicated that all sub levels of goal orientation such as mastery goals, performance goals and work avoidance goals jointly have a significant contribution to academic achievement that accounts 9.7% of the variation in academic achievement.

In order to see whether the contribution of each sub level of goal orientation is statistically significant or not ,t-test was computed. The results indicated that mastery goals($t = 2.624$, $p < 0.05$), performance goals ($t = 2.514$, $p < 0.05$)and work avoidance goals ($t = 2.635$, $p < 0.05$) separately have significant contribution to the prediction of academic achievement.

The results also indicated that mastery a goal, performance goals and work avoidance goals separately contributes significantly that accounts 0.039, 0.035 and 0.034 respectively. In other words, 3.9% of the variation in academic achievement is accounted for by mastery goals. The rest 3.5% and 3.4% of the variation in academic achievement is accounted for by performance and work avoidance goals. The multiple regression analysis indicated that gender and goal orientation have significant contribution to the prediction of students academic achievement.

15 Coefficient of correlation

However, general self efficacy alone has no significant contribution to the prediction of students' academic achievement. Besides,the contribution of gender and goal orientation together added significantly to the prediction of academic achievement which accounts for about 26.5% of the variation in academic achievement. Where: $Y_1 = \text{Predicted academic achievement}$ $X_1 = \text{Gender}$ $X_2 = \text{Goal Orientation}$ $X_3 = \text{General academic self Efficacy}$

The data on step wise regression analysis are presented in table 8 below. These data show that students' gender, goal orientation and general self efficacy have an independent contributions in the prediction of academic achievement. As indicated in table 9 below, partial correlations controlling for gender were performed. The result indicated that there was statistically significant positive correlations between goal orientation and general self efficacy ($r = 0.45$, $P < 0.05$). Similarly students' academic achievement was significantly correlated with goal orientation ($r = 0.33$, $P < 0.05$) and general self efficacy ($r = 0.23$, $P < 0.05$).

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17 (A)

The independent contributions of gender, goal orientation and general self-efficacy are 0.178, 0.095 and 0.046 respectively. In other words, the variations on students' academic achievement are accounted for by gender, goal orientation and general self efficacy belief are 17.8%, 9.5% and 4.6% respectively.

Step

18 Discussions

The analyses of results in relation to the research questions raised are presented in the discussion section. Besides, this section attempts to relate the results with past findings and literatures. Thus, the purpose of this study is to examine the interrelationship between students' gender, goal orientation, general academic self efficacy and academic achievement. The study is also attempt to investigate the independent /joint contribution of the predictor variables to academic achievement.

In line with the purpose of the present study, the research questions raised at the beginning are restated as follows: 1. Are there a significance gender difference among students' goal orientation, general self efficacy and academic achievement? 2. Are there a significant interrelationship among gender, goal orientation, general

21 C) INTERRELATIONSHIP BETWEEN SUB LEVELS OF GOAL ORIENTATION AND ACADEMIC ACHIEVEMENT

self efficacy and academic achievement? 3. Do students' gender, goal orientation, general academic self efficacy independently and/or jointly contribute to a significant variation in academic achievement?

19 a) Gender Difference in Variables under Study

Results of t-test (see table 2 and 3) indicated that there was statistically significant gender difference in students' academic achievement. The mean CG.P.A of male students were significantly higher than female students' CGPA. Unlike the results of the present study, various researchers (e.g Dayioglu and Asik, 2004; Kumar and Lai, 2006; ??ioyd et'al. 2005) reported that female students perform better than their counter parts in both general and domain specific academic tasks.

Moreover,the mean difference comparison (t-test) between female and male students indicated that there was statistically significant gender difference in academic achievement between students with high level of goal orientation. However, no statistically significant gender difference in academic achievement among students with low goal orientation was obtained. (see table 3)

Similarly, statistically, significant gender difference in academic achievement between females and males students with high general academic self efficacy was obtained. There was also a statistically significant gender difference between females and males students with low general academic efficacy. The mean CGPA of male students with low general academic self efficacy was significantly higher than female students with low general self efficacy.

20 b) Interrelationship among Variables

Results of correlation analysis indicated that there was a significant positive relationship between students' gender and their academic achievement as explained by CGPA. Like the present study, Betts and Morell cited in Dayioglu and Asik (2004) reported that gender is significantly related with students' academic performance.

Regarding the interrelationship between students' goal orientation and academic achievement, a significant positive interrelationship between goal orientation and academic achievement was obtained. This indicates that the higher the students' goal orientation, the higher the grades students' obtained. This result is consistent with the study of Jeng and Shih (2008).The study generally reported that students with higher goal setting have performed better than those with lower goal setting .Unlike the former researchers ,a local study conducted on college students revealed that there was statistically non significant relationship between academic achievement motivation and academic achievement. ??Tsigie, 2006) The correlation analysis results also revealed that general academic self efficacy was positively and significantly related with academic achievement. These indicate that the higher students' general academic self efficacy, the higher is their grade point average they obtained in various courses. Moreover, results of the multiple regression analysis also indicated that student's general academic self efficacy added significantly to the prediction of students' academic achievement. This result agrees with the studies of Hackett & Betz; and Lent, Brown and Larkin cited in Zimmerman ??2000).The study generally reported that there is a significant correlation between self efficacy and academic achievement of students. Zimmerman (2000) also disclosed that there is a positive relationship between self efficacy beliefs and academic achievement. The study further indicated that self efficacy improves students' method of learning and predicts academic achievement achievement.

Regarding to the relationship between gender and goal orientation, results of correlation analysis indicated no significant relationship between students' relationship between students' gender and general academic self efficacy was obtained in correlation analysis though gender alone has a significant contribution to students' academic achievement.

The results of correlation analysis of the present study revealed that there were statistically significant relationship between goal orientation and general academic self efficacy. Like the present study, despite their study is on primary grades ,Middleton, Kaplan & ??idgley (1988 ??idgley (,2004) cited in Was (2006;543) found that there was a positive association between goal orientation ,particularly performance goals and self efficacy belief They further noted that students with performance goal orientation are likely to have a high self efficacy. Besides the result revealed that significant relationship between gender and academic performance; goal orientation and academic performance; and general academic self efficacy and academic achievement (see table 9) was obtained.

21 c) Interrelationship between sub levels of Goal Orientation and Academic achievement

In order to see the relationship between goal orientation sub levels and academic achievement, as well as the relative contribution of each sub level of goal orientation to academic achievement, correlation analysis, multiple regression and step wise regression analysis were computed. The result of correlational analysis revealed that academic achievement (CGPA) was positively and significantly related with mastery and performance goals.

The multiple regression analysis results indicated that the goal orientation sub levels jointly contribute significantly in the predication of academic achievement which accounts 9.7% of the variation in academic performance. Similar findings were reported by researchers (e.g Continho, 2007; Grant and Dweek, 2003;). Fore

example, a study conducted by Continho(2007) revealed that mastery goals are associated with GPA achievement. The result of the present study also agrees with the study of ??rant and Dweck (2003). The study reported that mastery goal orientation has positive effect on students' intrinsic motivation and academic achievement. Besides, in relation to performance goals, Elliot and his colleagues ??Elliot and Church, 1997; ??lliot and ??cGregor, 1999, 2001) indicated that performance approach goal orientation have a positive effect on exam achievement.

A step wise regression analysis was also computed to see the independent contribution to each goal orientation sublevel. The result indicated that the highest contribution, which is 3.9% of the variation in students' academic achievement, is accounted for by mastery goal orientation. This implies that college students need to set and achieve mastery goal orientation and the act of setting mastery goal and being mastery goal oriented can be encouraged by teachers. Besides 3.5% of the variation in academic achievement of students is accounted for by performance approach goal orientation. This result is consistent with several researchers (e.g Mattern, 2005; ??rant and Dweck, 2003; ??ontinho, 2007). For example, Mattern (2005) disclosed that compared to students' with performance goal orientation, students with mastery goal orientation demonstrated higher level of academic achievement.

The result of the present study generally implies that the study provides an insight to teachers and the college about deficiencies of students in their academic achievement and techniques that can improve students' academic performance. One important information that was obtained in the result of the study was students with high goal orientation and general academic efficacy are likely to get better grades in the college. The result of the study further suggest that students who are encouraged to set goals and plan for academic tasks in various courses are likely to be goal oriented to perform various tasks. Thus, teacher educators need to encourage students to acquire new knowledge and to understand course contents at hand in various courses .It is important to note that together with encouragement of students to be mastery goal oriented ,students need to be supported to achieve better academically in various tasks. The result of the study also suggest that students who are supported to plan academic tasks in various courses are tend to achieve academically than those who are not encouraged to plan.

The study further point to the need for altering instructional methods that involve the improvement of students' goal orientation and general academic self efficacy belief. Therefore, teacher educators need to use instructional methods, in their teaching, that help Gender, Academic Self-Efficacy, and Goal Orientation as Predictors of Academic Achievement

The result of the study also implies that students with mastery goals are likely to have better academic performance than students with performance goals Therefore teacher educators need to encourage students to adopt a mastery approach learning. The other implication of the result of the study is students who are adequately prepared for various courses and those who made maximum effort and persistent in difficult tasks have a tendency to develop the belief that they can perform various academic tasks.

In addition, results of partial correlation analysis controlling gender indicated that academic achievement was significantly correlated with students' goal orientation. This result contradicts with the results found in Tucker et ??al. (2003) studies that no significant relationship was found between goal orientation and grade point average. However, general academic self efficacy is significantly correlated with students' academic achievement. This result is consistent with the study of Caraway et ??al. (2003). Their result showed that there was a significant relationship between general academic self efficacy and academic achievement.

students to develop or improve their belief about their ability to perform various tasks.

22 d) The effect of independent variables on depenedent variable

Results in multiple regression analysis indicated that students' gender and goal orientation combined together have statistically significant contribution to their academic achievement that accounts for 27.2% of the variation in academic achievement. However, general academic self efficacy alone does not contribute to academic achievement.

The multiple regression analysis is also revealed that gender and goal orientation combined together have significant contribution to academic achievement that accounts 26.5% of the variation in academic achievement. Like the results found in the present study, Midgley, Middleton and Kaplan(2001) reported that performance approach goals are more facilitative for boys than girls. Similarly, Urdan cited in ??idgley et.al. (2001) disclosed that performance approach goas are positively correlated with male students whose peers have positive orientations to schools, but not for females.

The step wise regression analysis indicated that the independent contribution of students' gender to their academic achievement is 17.8%. That is, 17.8% of the variation in academic achievement of students is accounted for by gender. This implies that male students outperform female students academically. The reason for variation in academic achievement between female and male students could be because of the stereo type of the society towards females and the negative perceptions and beliefs that female students have about their ability.

Compared to the contribution of gender to academic achievement the independent contribution of goal orientation to students' academic achievement was small. That is, 9.5% of the variation of students' academic achievement is accounted for by their goal orientation. Although the contribution of goal orientation to academic

achievement was small compared to gender in the present study, goal orientation has a significant contribution in the prediction of academic achievement. This result is consistent with several studies (Elliot and Church 1997; Middleton 1997; Continho 2007; Demrkaya, 2008; and Walter 2004). For example, Continho, 2007 reported that goal oriented students who orient themselves to doing well can perform better. The result of the present study also agrees with Demrkaya (2008) and Walter (2004). Their study revealed that goal orientation is associated with academic achievement. Similarly, Seijts et al. (2004) confirmed that goal orientation predicts students' academic achievement.

The independent contribution of general academic self efficacy to students' academic achievement was the smaller and non-significant though, 4.6% of the variation in students' academic performance is accounted for by general academic self efficacy. This result contradicts with the findings of Tucker et al. (2003). Their result revealed that those young adolescents with high general self efficacy score higher grades in various school tasks. They further indicated that general self efficacy is a significant predictor of students' academic achievement. Similarly, Shelton; Sherer et al. cited in Yeo and Neal (2006) disclosed that general academic self efficacy has a positive association with achievement. They also indicated that individuals with high general academic self efficacy have better performance in variety of tasks. Besides, Mone Baker & Jefferies as cited in Ayiku (2005) disclosed that there was statistically significant interrelationship between self efficacy and academic achievement. They further reported that academic self efficacy is a significant predictor of academic achievement. Like the former researchers, Zimmerman & Bandura (1994) cited in Zimmerman (2000) evidenced that the self efficacy belief and goal setting significantly predict academic achievement. Similarly, Rodesevich et al. (2008) found that performance goal orientation is positively associated with academic achievement.

VIII.

Conclusion

In conclusion, The independent t-test analysis results indicate that there exist statistically significant difference on students' general academic self efficacy, and academic achievement on sex. In this regard, male students were found to have higher academic self efficacy and academic achievement than female students. In contrast, there were no significant sex difference on students' goal orientation.

In addition, this study gender, goal orientation, and academic self efficacy are significantly and positively correlated with the WCTE students' academic achievement. The multiple regression analysis reveal that gender, goal orientation and general academic self efficacy positively and significantly predict the students' academic achievement.

In general conclusion, this study clearly shows that gender, goal orientation, general academic self efficacy have effects on WCTE students' academic achievement. Thus, we have to find ways to foster the students' goal orientation, general academic self efficacy for better academic achievement.

IX.

Recommendations

Based on the findings and conclusion of the study the following recommendation are forwarded.

1. Students should be trained with learning and motivational deficiencies by modeling specific self regulatory methods and cognitive processes. First the sample participants of the present study was relatively small (n=482), was chosen only in Teacher Education college and did not represent students from other teacher education colleges in Amhara region, Ethiopia. Therefore concluding the results of this study to other colleges make difficult.

The other potential problem is that data were only obtained from students. Better results would be obtained if data were gathered from teacher educators.

The way students respond to the questionnaire might be susceptible to response set. It is the act of students' that respond to each item in the questionnaire in uniform manner irrespective of what they feel.

Besides, what students respond to the questionnaire items might not be what they feel, but they respond what is generally accepted by the society. This is social desirability. This also limits the result of the study. Besides, participants in the present study might have reported their perceived goals and efficacy belief, not their actual goals and competencies, which may be different. This could be one of the potential limitations that may change the results of the study.

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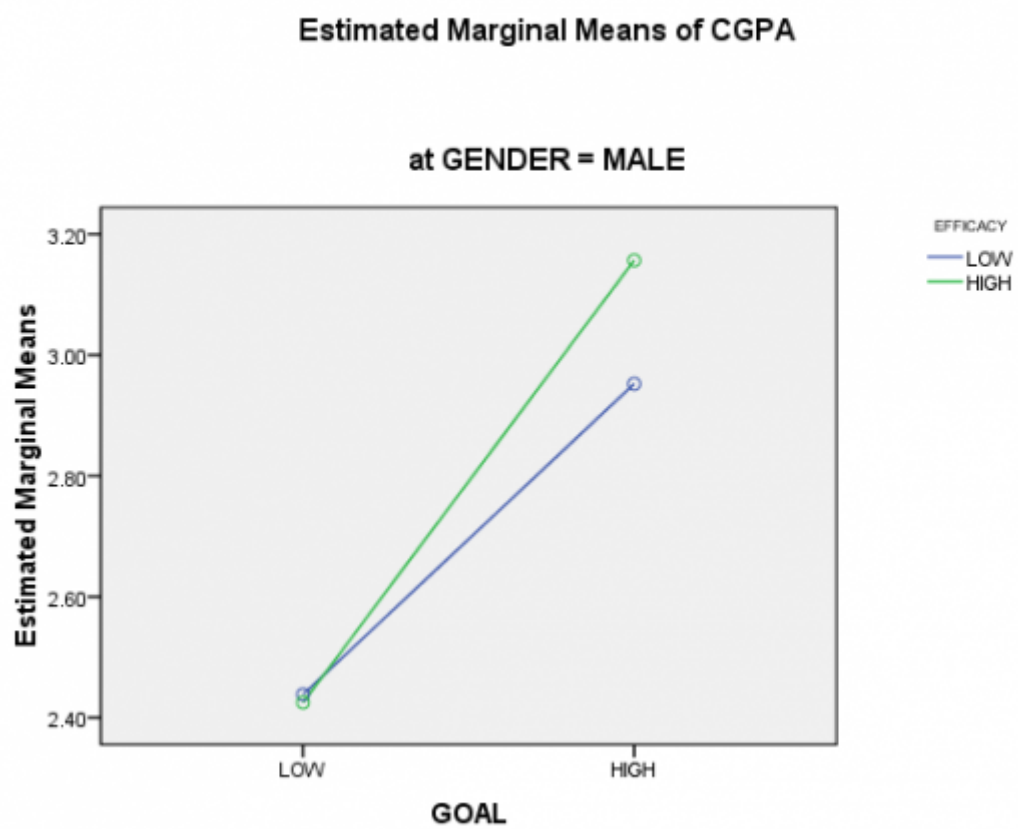


Figure 1:



1

Figure 2: Figure 1 :



2

Figure 3: Figure 2 :

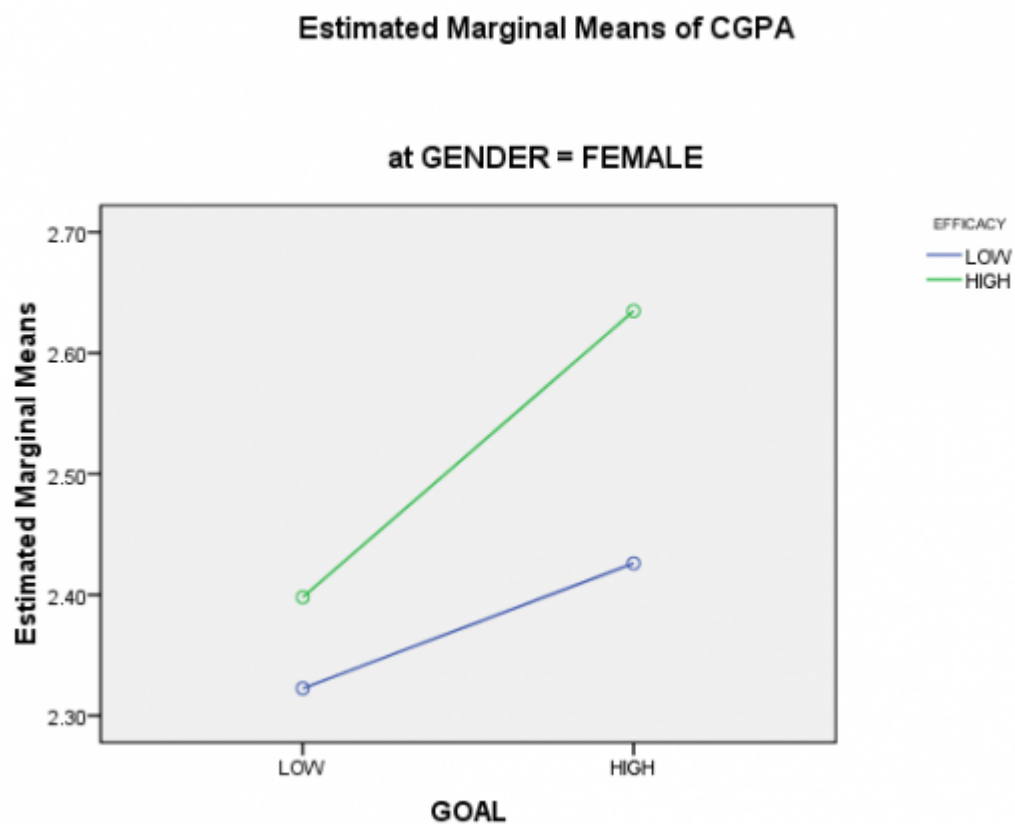


Figure 4:

1

Year	Male	Population	Female	Total	Male	Sample	Fe-
						male	
Second year	614	362		976	184	109	293
Third year	404	225		629	121	68	189
Total	1018	587		1605	305	177	482

III.

Figure 5: Table 1 :

2

Range of Scores

Figure 6: Table 2 :

3

Variables	Females		Males		P value
	Mean	SD	Mean	SD	
Goal orientation	91.44	7.95	91.88	6.87	0.431
General Self Efficacy	40.88	5.68	41.06	5.39	0.01
Academic achievement	2.47	0.37	2.88	0.52	0.00

* P < 0.05 where M=305, F=177, N=482

Figure 7: Table 3 :

4

Variables	Levels	Mean	SD	N	t-test
Gender	Female	2.47	0.39	126	-6.759*
	Male	2.89	0.52	87	
Goal Orientation	High	2.81	0.52	128	6.810*
	Low	2.39	0.30	85	
General self Efficacy	High	2.74	0.51	125	3.639*
	Low	2.49	0.41	88	

* P<0.05

Figure 8: Table 4 :

5

*P< 0.05

Figure 9: Table 5 :

6

Coefficient of correlation

Figure 10: Table 6 :

7

Variables	N	Mean	SD	Coefficients of correlation			AP
				MG	PG	WAG	
Mastery goals (MG)	482	34.74	3.56	1			
Performance goals(PG)	482	33.78	4.44	0.10	1		
Work avoidance goals	482	23.09	4.06	0.43	0.23		1
Academic performance	482	2.64	0.48	0.20 *	0.19*	0.18 *	1

Figure 11: Table 7 :

8

Variables	G	Go	GSE	CGPA
Gender (G)	1			
Goal orientation (GO)	0.03	1		
General self Efficacy (GSE)	0.02	0.45*	1	
Academic performance (CGPA)	0.42*	0.31*	0.22*	1

Figure 12: Table 8 :

9

Variables	B	SEB	Beta	T
Gender	0.406	0.058	0.413	6.998*
Goal orientation	0.016	0.004	0.253	3.841*
General self Efficacy	0.008	0.006	0.095	1.434
				* P<0.05

Constant = 0.64

The regression equation is:

$$Y_1 = 0.64 + 0.406X_1 + 0.016X_2 + 0.008X_3$$

Figure 13: Table 9 :

10

1	Gender	0.21	0.178	0.174	45.68*
2	Goal orientation	0.42	0.095	0.090	22.05*
3	General self-efficacy	0.31	0.046	0.041	10.153*

[Note: * P<0.05]

Figure 14: Table 10 :

11

Variables	R	R ²	AR ²	F
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Figure 15: Table 11 :

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- [M] *A thesis submitted to the faculty of the graduate school of the university of Maryland*, M .
- [Chemers et al. ()] 'Academic Self-efficacy and first year college students performance & Adjustment'. M Chemers , T Hu , F Garcia . *Journal of educational psychology* 2001. 93 p. .
- [Wolters ()] 'Advancing Achievement goal theory: using Goal structures and Goal orientations to predict motivation, cognition and Achievement'. A Wolters . *Journal of Educational psychology* 2004. 96 p. .
- [Yeo and Neal ()] *An examination of the Dynamic Relationship between self Efficacy, and performance across level of analysis and levels of Volume XVII Issue VI Version I*, B Yeo , A Neal . 2006.
- [Mattern ()] *College students; goal orientations & Achievement International Journal of teaching and learning in higher education*, A Mattern . <http://www.iseti.org/ijtibe/on22> 2005. 17 p. .
- [Zelege ()] 'Gender difference in Mathematics Performance among fifth and Sixth Grade children in Addis Ababa'. Sileshi Zelege . *The Ethiopian Journal of Education* 2005. 1 p. .
- [Seijts et al. ()] 'Goal setting and Goal orientation: An integration of two different yet related literatures'. H Seijts , P Latham , K Tasa , W Latham . *Academy of Management journal* 2004. 47 p. .
- [Pintrich and Degroot ()] 'Motivational and Self Regulated Learning components of Classroom Academic Performance'. & Pintrich , Degroot . *Journal of Educational Psychology* 1990. 82 p. .
- [Adediwura and Tayo ()] *Perception of Teachers' knowledge Attitude and Teaching skills as Predictor of Academic Performance in Nigerian Secon-dary School*, A Adediwura , B Tayo . <http://www.academicjournals.org/ERRonoct> 2007. 2016.
- [Midgley and Kaplan ()] 'Performance Approach Goals: Good for what, For Whom, under what circumstance, and At what cost'. Middleton & Midgley , Kaplan . *Journal of edu. Psychology* 2001. 93 p. .
- [Tuckers et al. (2003)] *Self efficacy, Goal orientation and Fear of failure As predictors of school Engegements in high school students. Psychology in the schools*, M Tuckers , M Reinke , C Hall . Retrieved from www.interscience.wiley.com 2003. Oct. 08/2016. 40 p. .
- [Wilhite ()] 'Self Efficacy, Locus of control, self Assessment of memory Ability, and study Activities as predictors of colleges course achievement'. Wilhite . *Journal of educational psychology* 1990. 82 p. .
- [Lloyd and Yailagh ()] 'Sex Differences in Performance Attributions self Efficacy, and Achievement in Mathematics: If I'm so Smart, why don't I know It?'. Walsh Lloyd , T Yailagh . *Canadian journal of Education* 2005. 28 p. .
- [Rose ()] 'Students self efficacy in college science: An investigation of Gender'. Rose . *Age & Academic Achievement* 2003. (Msc thesis submitted to the Graduate school, university of Wisconsin)
- [Coutinho ()] 'The relationship between goals, metacognition, and academic success'. A Coutinho . <http://www.educatejournal.org/onNov.24/2016> *Journal of educate* 2007. 7 p. .
- [Ayiku ()] *The Relationships Among College self efficacy Academic self efficacy, and Athletics self efficacy for African American male football players*, Ayiku . 2005.
- [Kumar and Lai ()] 'The role of self efficacy and gender difference among the adolescents'. & Kumar , Lai . *Journal of the Indian Academy of Applied psychology* 2006. 32 p. .
- [Demirkaya ()] 'Using and accomplishment style to predict geography academic achievement of prospective teachers'. H Demirkaya . <http://www.esosder.orgonNov.24/2016> *Journal of social sciences* 2008. 7 p. .