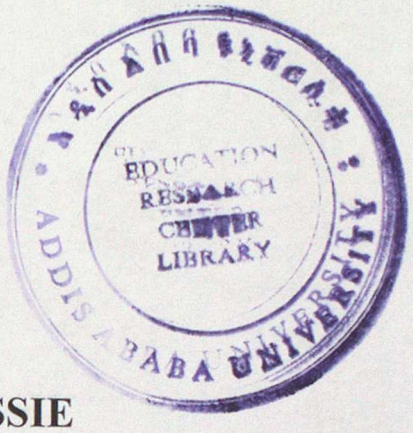
RELIGIOSITY, GOAL ORIENTATION, AND LEARNER AUTONOMY AS CORRELATES OF STUDENTS' ACADEMIC PERFORMANCE OF PREPARATORY SCHOOL STUDENTS IN SOUTH WOLLO



BY

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Abstract

This paper examines the relationships among religiosity, goal orientation, learner autonomy, and academic achievement of preparatory school students. In light of this intention, three preparatory schools in South Wollo were selected. Data were gathered using Religiosity Scale (RR), Goal Orientation Scale (GO), and Learner Autonomy Scale (LA) from 116 students in the selected schools. Achievement scores (AA) were secured from record offices of each school. Inter-correlation matrix, partial correlations, multiple regression analyses, and stepwise regression analyses were used to analyze the data. Correlation revealed that there were relationships between AA and RR, GO, and LA. Results of partial correlations indicated that AA was positively and significantly related to GO, RR, and LA after the combined contribution of other variables partial out. Results of partial correlations among RR, GO, LA indicated that GO was positively and significantly related to LA but not significant with RR. The relationship between LA and RR was not significant. Multiple regression analysis showed that RR, GO, and LA contributed significant contribution to AA of the students accounting for 22.6% of the overall variance of students' AA. The stepwise regression analysis has arranged RR, GO, LA in terms of their contribution to the regression and was found that LA, GO, and RR contributed 0.162, 0.039, and 0.025 respectively to the multiple co-efficient of determination (R^2=0.226). Based on the implication of these findings to the educational and instructional practices, the researcher recommends that non-cognitive variables need to be given due attention to increase students academic performance.

CHAPTER 1: INTRODUCTION

1.1 Background of the study

Since academic performance can have a drastic effect on one's standing in a society, it is important to understand what factors can affect it.

There are many factors that can influence student's academic performance. According to Entwistle (1972) and Conger (1991), a significant portion of the students' performance is contributed by other factors than what are considered cognitive ones. Non-cognitive variables refer to all the variables other than what are called the intellective or cognitive factors. Such factors as religiosity, attitude, personality, motivation, self concept and self-efficacy belief are some of them. In a study by Entwistle (1972), it is suggested that only 0.5-0.7 of the variance in measured academic performance is explained by cognitive factors, while 0.3-0.5 of it is accounted for by other factors.

One factor that may affect students' academic performance is students' level of religiosity. Nowadays religion becomes a hot issue in educational areas, as it is in many areas of the provision of public goods. Depending on the knowledge of the researcher, even if there are no many researches that have been done, many people are noticing that our students are more religious than previous generations of high school students.

Previous research by Paulson (1998) has indicated that individuals who have a high level of religiosity are less likely to engage in a risky behavior than individuals who have a low level of religiosity. Students who engage in risky behavior often may not have same level of academic achievement as students who do not engage in risky behavior. This can be due to the fact that, when students engage in risky behavior such as drug use, it can affect the time and concentration a student is willing to give

for his or her academic studies (Paulson, 1998).

Some researchers also said that religion has also been directly linked to academic achievement. A study by Oh (1999) found that high school students who had a high level of religiosity were more likely to have a higher academic performance than non-religious students.

Another factor that could affect students' academic performance is academic achievement motivation. Motivational factors are important to students whenever they achieve some thing significant as a result of learning. Academic achievement motivation can lower or heighten the level of academic performance of students depending on the different levels of academic achievement motivation a student held. High academic achievement motivation was related to higher academic performance and low academic achievement motivation was related to lower academic performance (Burger, 1985).

According to Cole and Chan (1994) motivation is concerned with personal energy directed towards the achievement of particular goals. They identified determinants that can affect motivation related to academic performance in school. Among these determinants are perceived cognitive competence and intrinsic and extrinsic motivation. Perceived cognitive competence is the result of students' self-evaluation appraisals of their academic performance in school. In addition to this it is cited in Conger (1991) that one of the important characteristics or motives (both primary and learned) is that they energize behavior. From many of the motivational factors that could affect students academic performance, academic goal orientation and learner autonomy are two of them. The first motivational factor to be discussed is academic goal orientation of students. Students' academic goal orientation, the purposes that students have for completing an academic task, has received much attention due to its influential role on students' performances (Ames, 1992; Dweck, 1986). Detailed in the literature are many types of goal orientations. To see some of these factors, the first is a mastery goal where students focus on mastery of a task and have the desire

to acquire new skills. The second is a performance-approach goal where learners' main concern is how competent they look in front of others, focusing on receiving favorable judgments of ability from others. The third is a performance-avoidance goal where students attempt to avoid unfavorable judgments of capabilities and looking incompetent and may stay away from challenging tasks (Elliot & Harackiewicz, 1996).

Researchers have consistently found that students who adopt mastery goals tend to have positive patterns of learning (such as paying more attention in class and processing information in a more meaningful fashion), and higher achievement (Middleton & Midgley, 1997) while students who have performance-avoidance goals tend to have lower self-efficacy and have less challenge-seeking behaviors and intrinsic value for learning (Elliot, 1999).

Research addressing in performance-approach goals, however, had reported more discrepancies. It is less clear about how performance-approach goals relate to patterns of learning and beliefs. While some researchers report performance-approach goals to be not predictive of academic achievement (Middleton & Midgley, 1997), others have found a positive relationship between this type of goal orientation and academic performances (Pajares et al., 2000).

The second motivational factor to be discussed is learner autonomy of students. Learner autonomy defined as "the ability to take charge of one's own learning" (Holec, 1981, pp.118).

The majority of students are still being taught in ways which promote dependence and leave them ill-equipped to apply their school-learnt knowledge and skills to the world beyond the classroom (McGarry, 1995) which is also a core problem in our country. From this view, it would be so easy to conclude that it is a must to help the learners to become more autonomous in every aspect of teaching learning process. The promotion of learner autonomy in the teaching learning process may be a core

point in the improvement of students' performance. How the learners perceive this term in general, how they become autonomous learner, and what aspects of learning they consider more appropriate for the effectiveness of their learning are important questions to be answered.

Holec (1981, pp. 119) points out, "it is important to insist on the need to develop the individual's (learner's) freedom by developing those abilities which will enable him/her to act more responsibly in running the affairs of the society in which he lives." In addition, as Dam (1995) indicates, teachers train learners to become gradually more active, reflective and critical thinkers in using learning strategies for their own learning as well as encouraging them to initiate experimental practice inside and outside the classroom. As a consequence of these two aspects, fostering learner autonomy is of significance as it will lead the learners to think, act and learn independently.

The researcher is interested on preparatory school students because students at this level are adolescents and assumed to engage in high academic competition so as to successfully pass the Ethiopian Higher Education Entrance Certificate Examination (EHEECE) that leads a way to join higher institutions (universities and colleges) that will have a drastic effect on their future. Since this is like a turning point in the lives of students, an understanding of any thing that may affect their academic result is very important and how much and in what manner the above-mentioned non-cognitive variables contribute to academic performance will have successful practical applications. Second the researcher is interested on the study area mentioned above because of the reason that there were lots of complains from the teachers' side about students' willingness and goal orientations towards learning.

1.2 Statement of the Problem

To the knowledge of the researcher, previous studies conducted in Ethiopia gave much emphasis to intellectual factors and some non-cognitive factors like self-

efficacy belief, motivation, locus of control, self esteem and others. But, non-cognitive factors like religiosity, learner autonomy and academic goal orientation did not have given due attention as they have effects on students' academic performance. So this study will investigate the correlations among religiosity, learner autonomy, and academic goal orientation and students' academic performance.

Since much attention and emphasis has been given by many researchers to identify the contribution of intellectual factors and limited number of non-cognitive factors in explaining academic performance of students in different levels of institutions. But it is not fair to depend only on cognitive variables and limited number of non-cognitive variables as a predictor of academic achievement of students. This is because of that a significant segment of the variance in school performance could be accounted for by some other factors such as non-cognitive variables. Some of the prominent variables are self-efficacy, locus of control, academic achievement motivation, religiosity, students' academic goal orientation and students' level of learner autonomy. Hence, this study will attempt to answer the arising research questions listed below.

1. Do religiosity, academic goal orientation and learner autonomy have significant relations with students' academic performance in preparatory school?
2. Is there a significant relationship among the independent variables under study?
3. Do religiosity, academic goal orientation and learner autonomy separately and/or jointly contributes to the variation in performance of students?

1.3 Significance of the Study

This study may give important suggestions and implications for people involved in learning and teaching purpose. Since individual's level of religiosity, academic goal orientation and learner autonomy are not permanent, changes can be obtained with

the appropriate behavioral modifications or interventions being practiced by responsible individuals. Hence, the finding can help teachers, students, counselors, curriculum experts and the pupil's families.

Teachers for example, are expected to study the behavior of their students and encourage the development of appropriate trait, and discourage the inappropriate ones. They can enhance the academic performance of their students through designing relevant educational practices that could positively influence the non-cognitive variables under consideration. The outcome of this study is also helpful for students to evaluate their assets and liabilities in respect to these variables that have an important effect on their school performance.

Counselors also could be benefited from the result of this study while they are trying to bring the desired behavioral change in the students they are helping. The findings of this study can support the curriculum experts in introducing the necessary modification in the curriculum materials through which the desired change is transmitted.

Finally the finding of this study may provide information for those who are interested to make investigation in a similar area.

1.4 Delimitation of the Study

The study was confounded to three preparatory schools in South Wollo, Amhara region and some samples from students were included from the schools. Moreover, mainly three factors: religiosity, academic goal orientation and learner autonomy were considered among the many non-cognitive variables that could affect students' academic performance.

1.5. Operational Definition of Terms

1. **Religiosity:** in the context of this study, religiosity refers more specifically to strength of religious faith rather than belief of a specific religion.
2. **Academic goal orientation**: in the context of this study, academic goal orientation refers the reasons why students approach and engage in academic tasks.
3. **Learner autonomy**: learners' attitudes, willingness, readiness, and self-confidence to take the responsibility for their own learning.
4. **Academic achievement**: refers to the average academic performance scores of students in the three selected preparatory schools that were obtained from the record offices of the schools.

CHAPTER 2: REVIEW OF RELATED LITRATURE

2.1 Religiosity

2.1.1. Conceptualization of Religiosity

According to (Hill et al., 2000) religion is typically associated with commitment to a supernatural power that is expressed through ritual and celebration both individually and within the context of a faith community. For them the term religion connotes a common belief system, a set of principles and practices, a code of conduct, and doctrine or dogma. Shared stories or symbols are often used to understand and connect with the transcendent source of power, or God.

According to Allport (1996), people display intrinsic or extrinsic orientations to the religion. Allport (1996) suggested that, a person who is intrinsically religious is characterized as being strongly committed to their faith and they believe their religion as vital to mental health and attend more religious services. On the other hand extrinsically religious persons view their religion as working towards a personal benefit. They view religious gathering as advancing social relationships with others.

Religion becomes a hot issue in educational institutions, as it is in many areas of the provision of public goods. Many people are noticing that our students are more religious than previous generations of high school students though they don't have a clear sense of why. Some studies claim that religious students are better students and there is some merit to this argument. Religion does provide students with healthy alternatives to other social engagements. Yet, studies of other researchers fail to take into account the larger picture; since religion, and especially fundamentalist religiosity, can have a negative effect on going to college. While some religious factors have a positive impact on college success, other religious commitments undermine educational attainment (Darnell & Sherkat, 1997).

Several studies have shown that religious students do better on critical indicators of

academic success (Mooney, 2005). Typically, studies find a positive impact of religious factors on school success. Religious participation and personal religiosity can help lower rates of substance abuse, and limit activities that undermine college careers (Regnerus, 2000).

Students who participate in religious groups have made a choice about social commitments. Being active in religion precludes other types of social ties, particularly ones which might cut against the prescriptions of religious traditions. If a student is going to Mosque on Friday, she is unlikely to be found at the bar. Commitments to religious groups also preclude negative behaviors like taking unplanned road trips. Connections to positive social groups promote conformity, and in the pre-college setting, conformity means going to class and completing assignments. Alcohol and substance abuse are among the most important factors predicting negative educational outcomes. Most religious groups oppose alcohol use, or at least militate against drunkenness. Hence, students who choose to join religious groups are going to be less likely to abuse alcohol and other drugs (Regnerus, 2000).

To the opposite more sophisticated longitudinal research shows that strong religious affiliation and fundamentalism beliefs in the truth of religious texts have a substantial negative effect on educational attainment (Darnell & Sherkat, 1997). Religious affiliation and fundamentalism have an especially negative impact on the educational attainment of women (Darnell& Sherkat, 1997). In fundamentalist religious communities young women are expected to marry early, have many children, and be primarily responsible for childcare (Roof & McKinney, 1987). Finally, the narrowing of social networks and the restriction of information sources advocated in fundamentalist religious groups is associated with smaller vocabularies (Darnell & Sherkat, 1997), which can undermine academic success

2.1.2 Religiosity and Academic Achievements

Researchers who have examined whether religion influences students' achievements

have found controversial results. A few studies found significant and positive correlations between religiosity and students achievement (Demir & Urberg 2004; Fransis et al, 2004; cited in Mooney, 2005) and many others found no such correlations (Fransis, Ziebertis and Liwis, 2003; Liwis, 2002; Liwis, Maltby and Berkinshow, 2000; cited in Mooney, 2005).

Several studies have shown that religious students do better on critical indicators of academic success (Mooney, 2005). Typically, studies found a positive impact of religious factors on school success measure religiosity with an indicator of religious participation. Religious participation and personal religiosity can help lower rates of substance abuse, and limit activities that undermine college careers (Regnerus, 2000).

There are other reasons that religiosity ought to have an effect on academic achievement. First religious involvement provides opportunities for youth to gain skills that help them succeed in school, such as discipline and respect for authority (Regnerus, 2000). Religious involvement also provides a context in which students may develop social contacts that help them in their education and puts them in contact with religious leaders and youth group coordinators who often serve as positive role models (Gardener, 2004). Religious involvement also deters involvement in deviant activities. Students who spent more time in religious activities tend to spend less time involved in deviant activities(Johnson et al.,2000; cited in Mooney, 2005), which may foster conventional behaviors such as working on school project, doing homework, seeing education as a worthwhile pursuit, and avoiding deviant peer network.

2.2 Academic Goal Orientations

2.2.1 Conceptualizations of Academic Goal Orientations

A person's set of beliefs that reflect the reasons why they approach and engage in academic and learning tasks are important in the learning teaching process. In order to

understand this it is very important to have an idea about students' academic goal orientation. The term academic goal orientation is defined as an individuals set of beliefs that reflect the "reasons why they approach and engage in academic tasks" (Pintrich & Schunk, 2002, pp.191). Goal orientation can be exemplified by a concern for personal ability, a normative social comparison with others, a preoccupation with the perception of others, a desire for public recognition and a need to avoid looking incompetent (Aries, 2004). A learning goal orientation reflects a focus on task completion and understanding, learning mastery solving problems, and developing new skills.

Academic goal orientation is based on contemporary "goal-as-motives" theory where it is represented as that all actions are given meanings direction and purpose by the goals that individuals seek out and that the quality and intensity of behavior will change as these goals change (Pintrich & Schunk, 2002, pp.193). Achievement goal orientation theory is particularly important in education as it is believed that by reinforcing some goals (and not others), teachers can influence (change) the reasons why students change their motivation (Elliot et al., 2005). Goal theory focuses on the role that purpose plays in motivation, attitudes and behavior (Eccless & Wigfield, 2002; cited in Elliot et al., 2005).

It is cited in Pintrich & Schunk (2002) that, goal orientation represents an integrated pattern of beliefs that leads to different ways of approaching, engaging, and responding to achievement Citations. Goal orientation theory has become increasingly influential theory of achievement motivation. In light of this Elliot et al. (2005, p.19) said the following

> *Goal orientation theory has become increasingly influential over the past two decades and now appears to be one of the most prominent perspectives of achievement motivation. Examining people's goals may help as going greater insights in to different views of the means to achievement, the reasons for success or failure and the importance to the individual of achieving the desired*

outcome. Thus, goal theory was perceived as a more comprehensive means of understanding why students may be motivated to achieve.

Academic goals refer to motives of an academic nature that students use for guiding their class room behavior. As such, these goals can encourage the student; can pursue different objectives in the academic or school situation. In congruent with these Arias (2004) collected the following

1. Learning mastery tasks or task involved goals; these are referred to variously as task goals (Anderman & Midgley, 1997; Kaplan & Midgley, 1997; Middleton & Midgley, 1997) or mastery goals (Ames, 1992). This type of goals orients students toward a learning approach characterized by satisfaction up on mastery or completion of a task, with greater levels of efficacy, task value, interest, positive emotion, positive effort, greater persistence, greater use of cognitive and meta-cognitive strategies, and goal conduct(Pintrich, 2000 b).

2. Performance goals: these are called ability-focused goals (Nichols, 1984; Thorkinson & Nichols, 1998). They orient students toward a greater concern with their ability, and to noticing others' performance seeming to focus them on goals of doing tasks better than others. In general these goals are seen less adaptive because of the type of motivation associated with them, the emotional efforts, the lesser use of strategies, and poorer conduct (Ames, 1992; Pintrich, 2000a; Pintrich & schunk, 1996; Urdan, 1997).

3. Goals focused on the ego (work avoidance, ego or ego involved goals (Skaalvik, 1997). These refer to ideas, perceptions of ability from a normative and comparative reference with respect to others. Some outers have classified these in to dimensions of performance approach and performance avoidance (Elliote & Harackiewicz, 1996; Skaalvik, 1993).

To know what motivates students, researchers, and educators must observe their behavior and make inferences about their motivation. One type of inference that can

be made about students' motivation is the goals they adopt. Goals provide students with direction and a purpose to engage in an activity (Pintrich & shunck, 2002). Some educational psychologists think that motivation to achieve in school can be understood in terms of the different goals students bring to the situation (Elliot, et al., 2005). These goals can be either performance goals or mastery goals. The two goals are seen as generating two distinct frameworks for processing information. Mastery goals allow individuals to seek opportunities to increase their competence and master new challenges (Dweeck, 2000). Students who pursue mastery goals are concerned with developing their ability over time and acquiring the skills needed to master a particular task. When individuals with mastery goals experience failure they interpret the events as providing information regarding their effort in that particular situation and attribute failure to a lack of effort or ineffective strategy use (Dweck,2000; Elliot & Dweck,1998; cited in Elliot, et al., 2005). According to Pintirich & Schunk (2002) a mastery goal orientation is defined in terms of a focus on learning, mastering the task according to self-set standards or self- improvement, developing new skills, improving or developing competence, trying to accomplish some thing challenging, and trying to gain understanding or gain insight. In addition to these Elliot et al. (2005, p.19) cited the following.

> *There are different types of goals that related to highly specific or more general outcomes. These concern more general reasons for wanting to do well, for example why some one might want to pass the examination in the first place. It is these overreaching goals that are of particular interest to achieve motivational theories. Mastery goals operate when a student's main concern is with mastering aspect of learning as important ends in themselves. Here the individual is interested in challenge, improvement, personal learning, and growth independence of the performance of others.*

Previous research has shown that those who pursue mastery goals tend to seek more challenges, have higher reported use of effective strategies including meta-cognitive strategies, report more positive attitude towards school and have higher level of self-

efficacy (believe in one's ability to succeed in a given situation) than those individuals who pursue performance goals(Ames,1992; Ames& Acher, 1998; Elliot& Dweeck,1998; Middleton & Midgley, 1997; Pintrich,2000; Walter, 2004; cited in Elliot et al., 2005).

Performance goals encourage individuals to seek and maintain a positive image of their ability. Students achieve this end by pursuing one of the two types of performance goals. Initially performance goals (as a whole) where seen as being maladaptive for learning. However resent researchers have posited that the outcomes related to performance goals categorized as being approach(demonstrating ability) are different than outcomes related to performance goals categorized as being avoidance (avoidance demonstrating lack of ability) (Church,Elliot&Gabel,2001; Harackiewicz,1996;cited in Mattern, 2005). For example performance-approach goals are related to more positive outcomes, such as use of cognitive strategies (Pintrich, 2000; Wolters, Yu& Pintrich, 1996; cited in Mattern, 2005) while performance avoidance goals are related to negative outcomes (superficial learning strategies, lower performance, self-handicapping behavior, undermined intrinsic motivation). In addition to these Elliot et al. (2005, pp.19) said the following about performance approach goals.

> *Performance goals are largely influenced by a desire to demonstrate competence in relation to others; thus to motivation to achieve is conditioned by a desire to appear more accomplished than others and to avoid situations where a lack of skill or ability might be perceived by on lookers. In comparing these orientations, the literature has tended to conclude that mastery goals are more likely than performance goals to result in motivated and encouraged learning approaches, and as a result superior academic performance.*

According to Elliot et al. (2005) a number of influential studies conducted in 1980's (e.g. Elliot and Dweck, 1998), demonstrated that an orientation to performance goals could lead to a tendency to helplessness as a response to failure, resulting in low

ability attribution for failure, negative affect following failure, use of ineffective strategies, and decrease in subsequent performance.

Even if there are many contradicting ideas about the influence of performance goal orientation on students' academic achievement whether it can help to increase their achievement or decrease as a superficial stimulator of their achievement in our context, many researches have not been done as far as the knowledge of the present researcher. But according to many literatures these types of goals are deliberately used in many educational settings to encourage their learners. According to Elliot et al. (2005) much achievement in educational setting is deliberately motivated by public recognition of performance, whether by means of teacher or parental praise, high academic grades or the standing of the university that the more able students eventually enters. In addition to this Elliot et al. (2005, p.20) argues by saying the following

> *Given that some aspect of performance goals is likely to be valuable, a more differentiated analysis has been sout. Thus it is now frequently argued that it is meaningful to differentiate between "approach" and "avoidance" performance goals, arguing that this distinction should apply to mastery goals also. Whereas the former types of goal are concerned with achieving positive outcome, the later center up on avoiding some thing that is undesirable. In both cases the individual is concerned about the perceptions that will be held about him or herself by important others such as parents, teachers, and classmates. However the way by which this may be achieved can differ. Students with a performance-approach orientation are concerned to appear more capable than their peers. In contrast those, with a performance-avoidance goal would be pre-occupied with insuring that they did not present as less able than their classmates.*

If performance approach goals actually help students obtain high achievement than perhaps pursuing both mastery and performance approach goals simultaneously (a multiple goal orientation) are the most adaptive goal orientation for students to adopt

(Baron& Harackiewicz, 2001; cited in Arias, 2004). Research has shown that a multiple goal orientation can promote positive learning outcomes for students (Pintrich&Schunck, 2002). While mastery goals help promotes interest, performance-approach goals work to promote higher levels of performance. When mastery goals are coupled with performance-approach goals, students not only have a desire to increase their competence, but also to demonstrate their ability and thus perform well in evaluative situations (Baron& Harackiewicz, 2001; cited in Arias, 2004). Pintrich (2000); cited in Pintrich& Schunck(2002) found that students who have reported having both high mastery-goals and high performance-approach goals were not more anxious, did not experience more negative affect, and did not engage in more self hand-capping than the students with pre-dominantly high-mastery low-performance approach goals. However the positive outcomes associated with performance approach goals were found only when paired with mastery goals; therefore mastery goals are a necessary part of the equation (Pintrich, 2000; cited in Pintrich& Schunck, 2002)

2.2.3 Goal Orientation and Academic Achievements

Students have expectations for their school performance that influence their academic goal orientations. Most children entering elementary school have high expectations for success; when asked how they will do on a task; most elementary school children assume that they will do very well (McCromick& Pressley, 1997). On the other hand, older elementary school children are usually no so optimistic about their school performance, especially after they perform poorly on academic tasks (Wigfield, 1991).

Academic goal orientation is associated with many behavioral outcomes of students. One of the behavioral outcomes is actual achievement or performance of students' academic work. In light of these Pintrch & Schunk (2002, pp.228) cited the following.

Goals may promote different patterns of motivation, affect, and cognition but they should also be linked to actual classroom achievement. The more experimental research on mastery goals has shown that students in mastery conditions usually achieve or perform at higher level. In fact, given all the positive motivational, affective and cognitive outcomes associated with mastery goals, it would be expected that mastery goals would also lead to higher levels of achievement. The pattern that seems to emerge is that mastery goals are unrelated to performance or achievement in the classroom, usually indexed by grades or GPA. In contrast some of these studies, approach performance goals.

Students frequently explain outcomes by referring to effort, ability, task factors, luck and each of these attributions has different motivational consequences (Weiner, 1989). From these many attributions, the effort attribution is most likely to promote behavior leading to future academic success. This is because believes that success and failure are controllable based on the effort one puts on tasks to be mastered.

In the early conception of achievement goal theory, the distinction between performance-approach and performance-avoidance goals was not made and therefore researchers viewed performance goals in general as being associated with avoiding challenges, not asking for help, and the use of superficial learning strategies. However, researchers in the area of motivation have found that performance-approach goals are associated with higher grades (Elliot, Church& Gable, 2001; Harackiewizc, Barron, Elliot, Carter& Trash, 1997; Harackiewizc, Barron, Taver, Carter& Elliot, 2000; cited in Mattern, 2005).

A number of researches have been conducted to see whether there is relationship between academic goal orientation and academic performance. Newman et.al (1988) found that the relationship between academic goal orientation and various school outcomes seems logical. According to these evidences such as grades and academic performances are more likely to be affected by academic goal orientation than other

outcomes like commitment and assessment. Many researches conducted in indicate that mastery goal orientation facilitates creativity and academic performance, whereas performance goal orientation hinders creativity but has no effect on academic performance (Sue, 2001). In addition to these Mattern(2005, pp.29-30) conducted a research and said the following

> *All achievement groups did quit well in the course. The high mastery/low-performance-approach group (mastery goal orientation) performed the best, followed by the high mastery/high performance approach group (mastery performance approach group and the low-mastery/low-performance approach group, with low-mastery/high-performance approach group (performance-approach group) performing the worst. The mastery goal-group achieved higher course grades than the performance-approach goal group. There was no statistically significant difference between the mastery (performance-approach goal orientation and the mastery goal orientation with respect to course grades.*

Direct relationships between goals and academic results have appeared in causal studies (Roney, Higgens& Shah, 1995; Roney& Sorrentino, 1995; Schunk, 1996; cited in Arias, 2004).

McCleland(1985) and Wiener(1989) have revealed that individuals who possess high academic goal orientation have the motive to obtain high academic performance and show the need to manipulate their environment. People of this type are action oriented, have better planning ability, and have the interest to involve on demanding and challenging tasks. As a result highly academic oriented individuals tend to obtain superior performance compared to those with low level of academic goal orientation.

Some other findings, on the other hand, indicate that there is no significant relation between academic goal orientation and academic performance. Pintrich (2000a cited in Pintrich & Schunk, 2002) has found a non-significant relationship between academic goal orientation and academic performance.

2.3 Learner Autonomy

2.3.1 Conceptualizations of Learner Autonomy

There is abroad agreement in the theoretical literature that learner autonomy grows out of the individual learner's acceptance of responsibility for his or her own learning (Holec, 1981; Little, 1991). This means that learner autonomy is a matter of explicit or conscious intention. The learner must take at least some of the initiatives that give shape and direction to the learning process and must share in monitoring progress and evaluating the extent to which learning targets are achieved.

The basis of learner autonomy are learner's (1) cognitive factors (ability, or capacity) (2) affective factors (attitude, readiness, self-confidence) (3) meta-cognitive factors(setting learning goal, choosing learning materials, planning learning activities, monitoring and evaluating progress), and (4) social factors(working in co-operation with others which promote interactions a condition for enhancing one's independence problem-solving skills).

1. ***Cognitive factors***; some definition of autonomy (Holec, 1981; Little, 1991; Benson, 2001; Vanijde, 2003) take learners ability of capacity in to account. Autonomy in Holec's definition is

> *the ability to take charge of one's own learning. This ability has a potential capacity to act in a given situation-in this case learning-and not the actual behavior of an individual in that situation.*

This definition tells us that learning autonomy is when the learner is willing and capable of taking charge of his/her own learning. It is the ability of a learner to take responsibility of his/her own learning. For Holec (1981), the learner should be capable of determining the objectives, identifying the contents and the progression, selecting methods and techniques to be used, monitoring the procedure of learning, and evaluating what has been gained. For him it also includes taking initiative in the learning process. Vanijdes (2003) extends the concept of learner autonomy as a capacity and a construct of attitudes and ability that allows learners to take more

responsibility for their own learning. In Little (1991) definition, autonomy is a capacity for detachment, critical reflection, and decision-making and independent actions. Little's and Holec's descriptions concur in that learner autonomy is the ability to take charge of one's own learning. However Little's definition involves an element of awareness in that capacity (Reinder, 2000). This awareness results from critical reflections on one's learning. For Agota and Anita (2000) autonomous learners are those who accept the idea that their own efforts are crucial to progress in learning and behaving accordingly. For them autonomous learners are those who make efforts in order to learn something and can consciously monitor their own progress, and make an effort to use avoidable opportunities to their benefit, including classroom activities and homework. In sum, cognitively learner autonomy has been defined as the ability to take charge of one's own learning with a certain degree of awareness.

2. Affective factors: other definition of learner autonomy take learner's active attributes such as learner's attitudes, willingness, readiness, and self-confidence in to account. In Wonden's (1987) definition, autonomous learners are willing to take the responsibility for learning. They see themselves as having the crucial role in their learning. They are self-confident learners believing in their ability to learn, to self-direct and to manage their learning. For Tomlinson (1998), learning autonomy is more importantly an ongoing process requiring individual effort. For him for developing learning autonomy both the skills and certain attitudes towards learning are important. The skills according to him could be instrumental techniques such as learning strategies and helpful attitudes for autonomy are those like self-confidence and independence of mind. Tomlinson continues to argue that even if a learner possesses instrumental skills, he/she will not able to use them in an autonomous way, unless the underling attitudes are there as well.

3. Meta-cognitive factors: what taking charge of or taking responsibility of one's own learning means in certain contexts of teaching and learning should be explained

clearly (Benson, 1997). Learner autonomy should be defined as the ability or capacity to take control (rather than responsibility) over the management of one's learning (i.e. learning process, resources and language use). This control over learning regards learners' involvement in setting goals, defining content and working out evaluation mechanism for assessing achievement and progress (Little, 1991). The extent to which learners demonstrate their control over learning is manifested through their ability to use a set of tactics in setting learning goals, choosing materials and tasks, planning practice opportunities and monitoring and evaluation progress(Cotterral, 1995). Dam (2001), stresses the learners needs and purposes, reflected in learning goals set by learners themselves. Definitions taking meta-cognitive factors highlight the learners' self-regulation skills, planning, monitoring and evaluating progress.

4. ***Social factors***: Dam (2001) includes the social factors are necessary to work in comparison with others as a socially responsible person that is a quality required for an autonomous learner. Benson (2001) maintains that greater control of learning process, learning resources, and language use cannot be achieved by each individual's acting along according to their own preferences. Control is acquisition of collective decision making rather than individual choice.

To summarize, the concept of learner autonomy has been described with four factors which are cognitive, affective, meta-cognitive and social factors. However no definition of learner autonomy in learning has considered all factors. In any way from the given definitions it is possible to gather the following implications.

- The first step towards autonomy is acceptance of responsibility for one's own learning
- Acceptance of responsibility is a matter of conscious intention.
- Learner autonomy means learning how to learn.

To all purposes, the autonomous learner takes a pro-active role in the learning

process, generating ideas, and avoiding himself of learning opportunities, rather than simply reacting to various stimuli of the teacher (Boud, 1988). In addition to these the following are considered to be some basic assumptions of learning autonomy (Holec, 1981; Boud, 1981).

1. Autonomy is a capacity that has to be learned: Holec's(1981) view is that learning autonomy is not innate and then it leaves a scope for the development of a system and technique that may help learners to learn how to learn.
2. The road to autonomy is a process: Boud (1981) argues we have to assume that few students who come to us do not need much help, but the majority may not be familiar to making choices and taking responsibility in their own learning. For him such kinds of students will be benefited from teachers support.
3. The state of autonomy is usually unstable: the degree of autonomy varies on one individual and between individuals according to a number of factors including the type of task involved.
4. Autonomy requires supportive structures: both internal and external teachers should provide circumstances, frameworks, and structures that will encourage students to take control of their learning.
5. Autonomy requires a conscious awareness of the learning process.

Because the term autonomy focuses attention on individuality and independency, it is some times assumed that learners make the best and fastest progress when they work on their own. However this may a mistake. We are social creatures and as such we depend on one another in an infinity way. Thus the independence that we exercise through our developed capacity for autonomous behavior is always conditioned and constrained by our inescapable interdependence. Incongruent with these, Boud(1988) mentioned the following as what learner autonomy is not.

1. Autonomous learning is not an absolute standard to be met but a goal to be pursued: what is important here is that the direction-towards students' responsibility for learning-not the magnitude of change in any given situation.

2. Autonomy does not mean that intervention or initiative on the part of the teacher is banned.
3. Autonomy does not mean that learning without teacher.

2.3.2 Learner Autonomy and Academic Achievements

Self-determination theory postulates that self-determined, or autonomous motivation is related to positive academic and emotional outcomes (including school achievement), whereas no self determined motivation is related to negative outcomes (Deci & Ryan, 1991). Evidence exists to support this idea. For example, some researchers have found that more self-determined motivation was related to better academic performance, lower dropout, better ability to cope with failures, and higher quality learning (Deci & Ryan, 1991). Other researchers have found that non-self determined motivation is related to higher dropout, less interest, less value, and less effort toward achievement (Vallerand, 1990; cited in Deci & Ryan, 1991).

In the context of learning autonomy assessment, Mullis and colleagues (Mullis et al., 2000) found that students who show more autonomy toward math were more likely to perform well.

High levels of autonomy have consistently been identified as being associated with higher academic scores (Stiernborg *et al.*, 1997). Responsible learning, notably motivation to seek meaning, understanding of underlying principles and identification of relationships between ideas and concepts, has been shown to be a prerequisite for self-directed learning and has also been shown to be consistent with the ability to be critically reflective (Kember, 2003). Few authors have found no meaningful relationship between high approaches to learning responsibility and academic achievement (Diseth & Martinsen, 2003).

Entwistle (1972) has shown that academic success and failure in higher education is

influenced by the match between how material is presented and how students are responsible to process it. Drysdale et al. (2001) carried out a study on the effect of learner autonomy on the academic performance of 4,546 first-year students. Although they found academic performance based on learner autonomy to be significant in 11 of the 19 courses, they found no significant differences between the learner autonomy and academic performance of liberal arts and social sciences' students.

CHAPTER 3: RESEARCH METHODS

3.1. Research Design

In this study RR, GO, and LA were considered as predictor variables. The purpose of the study was to examine how these variables related to AA and the relations among each other. Hence to carry out the research quantitative method of correlational analysis method was used to investigate the relationships among these variables.

3.2. Sampling Procedure

The study area is one of the Amhara regional zones known as South Wollo. The number of government preparatory schools in the zone is 16. Three preparatory schools were selected by lottery method from the 16 preparatory schools in south Wollo zone that include preparatory schools namely: Borena senior secondary and preparatory school, Wogdi senior secondary and preparatory school and Ajbar senior secondary and preparatory school.

There were a total of 804 students in grades 11 and 12 in the aforementioned schools. Since the focus of the study was preparatory school students, the samples were from grades 11 and 12.

To select participants of the research, random sampling technique was implemented by using table of random numbering. By using this technique, a total number of 180 students were selected. Thus, a total number of 180 students were used as the sample of the study. Out of these student participants, the responses of 16 students (7 from grade 12 and 9 from grade 11) were excluded from the analysis because 12 of them have failed to respond to the questionnaire appropriately and the academic result of the rest of 4 students were not completed. Therefore the final analyses were done based on the responses of 164 students.

Randomization was done in order to generalize the result and to control some known and unknown variables among the participants in equal manner. The researcher of this study recognized that many factors do have possibility to affect students' academic achievement, yet a few of them are attempted to be controlled statistically. Therefore the effect of the uncontrolled variables is assumed to be distributed to the study participants in equal manner due to randomization.

3.3 Variables

3.2.1. Independent Variables

- **Religiosity Score:** the results obtained from the religiosity scale.
- **Academic Goal Orientation Score:** the results obtained from the Academic Goal Orientation Scale.
- **Learner Autonomy Scores:** the results obtained from the Learner Autonomy Score.

3.2.2 Dependent variable

- **Academic Achievement Scores**: score obtained from the average scores on all subjects of the first semester based on the 2001 academic years for grade 11 and the three semester average (two semester of 2000 and first semester of 2001 academic years) for grade 12.

3.3 Tools of Data Collection

The following instruments were implemented to collect data.

- Religiosity Scale with 14 items
- Goal Orientation Scale with 18 items
- Learner Autonomy Scale with 16 items

All the instruments were translated into Amharic, with the consultation of language experts regarding the agreement on both forward and backward translations. The

questionnaires were translated into Amharic and back to English version to see the agreement of the translation. Some disagreements between the translated and the original version were corrected. The translation was made mainly to avoid language barriers and facilitate the process while the respondents were responding to the questionnaire.

3.3.1 Religiosity Scale(RR)

The Santa Clara Strength of Religious Faith (SCSORF) questionnaire was the bases for the development of the present study instrument. The original scale contains 10 items. The SCSORF is a quick, easy to administer, 10-item measure developed by Thomas Plante. It is a Likert type scale, and assesses strength of religious faith regardless of religious denomination or affiliation (Plante & Boccaccini, 1997). According to Plante & Boccaccini, the SCSORF has high internal reliability (alpha = 0.94 to .95) and split-half reliability (r = 0.90 to 0.96) when assessing undergraduate students. Pearson correlation coefficients revealed positive correlations with various other measures of religiosity (which ranging from 0.64 to 0.90), with no consistent gender disparity identified (Plante & Boccaccini, 1997). Assuming that the SCSRFQ which is used for and developed for other cultures might not be applicable for the present study, adapting the scale was preferred instead of taking the scale as it is. In addition to the Santa Clara Strength of Religious Faith (SCSORF) questionnaire literatures and study findings in the area were utilized for the development of the scale. Likert-scale was used in the design of the questionnaire items. Some of the items were stated negatively and others were stated positively. Responses range from '1'= "Strongly Disagree" to '5'= "Strongly Agree" were used. To develop the scale the researcher followed the following steps. First 22 statements were developed on the basis of the above sources at the initial period (10 of the items were taken from SCSRF and 12 of them were developed by the present researcher). To establish content validity, the developed statements were presented to 6 professionals to maintain their judgment as to how each statement was favorable with respect to the construct. The judges were asked to give their response under the alternative which

says "acceptable item" "not acceptable item" "can not say". Along with this, the judges were also asked to indicate their comments with regard to items to be included and unclear items. At this stage the content validity of the scale was developed. Statements which got agreement of four judges were selected for the study. Hence 6 of the statements were eliminated and 16 remained to be used for the pilot study. Two items from SCSRF and four items that were developed by the present researcher were eliminated. During the data collection on the pilot study two items were eliminated due to unclearness (many students asked questions about the clarity of the two items) of the items during the pilot test (one item from SCSRF and one item from the present researcher). Finally the 14 items Crombach Alpha reliability was computed and was about 0.77.

3.3.2 Goal Orientation Scale (GO)

The academic goal orientation scale has been constructed mainly by the present researcher by developing items from literature. Some of the items were stated negatively and others were stated positively. Likert-scale was used in the design of the questionnaire items. In scoring responses range from '1'= "Strongly Disagree" to '5'= "Strongly Agree" were used. The scale was developed by the present researcher by utilizing relevant theories, literatures, and study findings. The developed items were 28 at the initial period. The same procedure of religiosity was applied to evaluate each item and maintain the scale's content validity. The same judges evaluated the items of the scale. After the judges' evaluation 18 items which got the agreement of 4 judges were accepted for the pilot study. After the pilot study Crombach Alpha reliability of the test was computed and become 0.79 and 18 items were accepted for the final study.

3.3.3. Learner Autonomy Scale (LA)

The questionnaire was developed based on Camilleri's study (1997). The original questionnaire consisted of 13 questions regarding learner autonomy. Based on this questionnaire, the researcher developed a new questionnaire with 27 statements on

autonomy while adding and removing some statements. Likert-scale was used in the design of the questionnaire items. Responses range from '1'= "Strongly Disagree" to '5'= "Strongly Agree" were used. The scale was developed by the present researcher by utilizing relevant theories, literatures, study findings, and the questionnaire adapted from Camilleri's study (1997). The developed items were 27 at the initial period. 11 of the items were taken from Camilleri's study (1997) and 16 of the items were developed by the present researcher. The same procedure of religiosity was applied to evaluate each item and maintain the scale's content validity and the same judges evaluated the items of the scale. After the judges' evaluation 17 items which got the agreement of four judges were accepted for the pilot study. 8 of the items were taken from Camilleri's study (1997) and 9 of the items were developed by the present researcher. After the pilot study, one item was eliminated and coefficient alpha reliability of the test was computed and become 0.83 and 16 items were accepted for the final study. The eliminated item was developed by the present researcher.

3.4 Procedure of Data Collection

First permission from each school administrators were asked and schedule of administering the tests was provided to the researcher's assistant coordinators of each school and students were informed about their participation in the study. The researcher and the researcher's assistants briefed the participants about the purpose of their participation before the administration of the test. Some of the participants asked why they were selected from many and some of the non-participants also asked why they were not selected to participate in the study. They were provided the necessary information.

Before the final data was collected pilot study was conducted in Borena Preparatory school. 50 randomly selected sample participants of 11th and 12th grade students were involved in the study. The pilot study was conducted to ensure that the items of the scales' could be understood by the participants and to determine the reliability of the

scales. At this level items for goal orientation scale were18 items, for religiosity scale 16 items, and for learner autonomy scale 17 items. Based on the observation during the administration of the pilot study, 2 questions from religiosity scale and 1 question from learner autonomy scale were a little bit confusing for some participants and this gave for the researcher an insight to eliminate these confusing items for the final data collection.

During the final data collection, the instruments were administered on 180 students with the help of the research assistants in each school. The researcher and the researcher's assistants, in addition to the directions given on the questionnaire papers, briefed the participants orally concerning the purpose of the study and on how they were supposed to respond to the questions.

The academic achievement results were the score of the participants collected from the official record of the sampled preparatory schools. A close contact was made with each school students' record officers. The present researcher collected the academic results of the participants from the record office of each schools based on the list of the participants. For grade 11 students only their first semester results of the 2001 E.C academic year were considered. For grade 12 students' average of three semester's academic performance of each student in all subjects were considered.

3.5 Method of Data Analysis

The responses obtained from the students and their academic performances obtained from the record offices of each office were analyzed using SPSS 15.

In order to see the strength of relationship between predictor variables (GO, RR, LA) and criterion variable (AA) and among the predictor variables themselves, zero-Order correlation among the variables is employed. Partial correlations were computed to

identify the strength of relationship between each of the predictor variable with criterion variable and a pair of the predictor variable at a time that was free of the effect of other variables in the study.

Multiple and stepwise regression analyses were done for total students to indicate the combined and independent contribution of the predictor variables on the criterion variable.

CHAPTER 4: RESULTS AND DISCUSSION

This chapter has two sections. The first section of this chapter deals with the results obtained from the instruments and their statistical analysis. The result parts have been summarized under the following subheadings: result of correlation analysis, result of multiple regression analysis, and result of stepwise regression analysis. The discussion part of this chapter is presented in the second section. The discussion part attempts to see whether the research questions raised are answered satisfactorily or not.

4.1. Results

4.1.1. Results of Correlation Analysis

Cohen and Manion (1989) have suggested three approaches in interpreting the magnitude of relationship between predictor and criterion variables. Namely; examining the strength of relationship, examining statistical significance of relationship, and examining the square of the correlation coefficient. Usually when an attempt is made to explain the nature and degree of relationship between independent and dependent variables, these techniques are employed. As far as this study is concerned, the data gathered are interpreted using these techniques.

In order to see the strength of relationship between predictor variables (GO, RR, LA) and criterion variable (AA) and among the predictor variables themselves (GO, RR, LA), zero-order correlations among the variables was employed. Inter-correlation matrix is mainly used to evaluate the magnitude and strength of relationships between predictor variables (Goal orientation, Religiosity, and Learner Autonomy) and criterion variable (Academic Achievements).

Table 1: Zero-order correlation matrix among academic achievement, religiosity, and goal orientation and learner autonomy

Measures	AA	GO	RR	LA
AA	-			
GO	.342(**)	-		
RR	.250(**)	.166(*)	-	
LA	.403(**)	.399(**)	.189(*)	-

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

As can be seen from the above table, AA was positively and significantly related to GO ($r = .342$, $p < .05$), RR ($r = .250$, $p < .05$), and LA ($r = .399$, $p < .05$).

In addition, each of the predictor variables was significantly correlated with each other. GO was positively and significantly correlated with RR and LA ($r = .166$ and $r = .399$; $p < .05$ respectively). RR was positively and significantly correlated with learner autonomy ($r = .189$, $p < .05$).

Since the results of inter-correlations among AA, GO, RR, and LA revealed that each of the predictor variable was significantly related to academic achievement of students, partial correlations were computed to identify the strength of relationship between each of the predictor variable and criterion variable that was free of the effect of other variables in the study.

According to Mangal (2003), while conducting studies in the field of education and psychology, we often find that the relationship between two variables is greatly influenced by a third variable or an additional variable. In such a situation, Mangal (2003, p. 228) argues it becomes quite difficult to have a reliable and an independent

estimate of correlation between these two variables unless there is some possibility of nullifying the effect of a third variable or a number of other variables on the variable in equation. "It is the partial correlation which helps in such a situation for nullifying a third or any additional variable on the relationship of the two variables".

Table 2: Partial correlation of academic achievement, and religiosity, goal orientation, and learner autonomy

Control Variables	Criterion Variable	Predictor Variable		
		GO	RR	LA
LA, & RR	AA	.193*	-	-
GO, & LA	AA	-	.177*	-
GO, & RR	AA	-	-	.262*

*p< .05

As can be seen from the above table, results of partial correlations indicated that AA was positively and significantly related to GO (r=.193, p< .05), RR (r= .177, p< .05), and LA (r=.262, p<.05).

The same to the results of inter-correlations among AA, GO, RR, and LA, the results of inter-correlations among the predictor variables revealed that each of the predictor variable was significantly related to each other, partial correlations were computed to identify the strength of relationship between each of the predictor variable that was free of the effect of other variables in the study.

Table 3: Partial correlation among the variables religiosity, goal orientation and learner autonomy

Control Variables		Correlated Variable	
		RR	LA
LA, & AA	GO	.062	-
RR, & AA	GO	-	.279*
GO, & AA	RR	-	.077

*p< .05

As can be seen from the above table, results of partial correlations among the independent variables indicated that GO was positively and significantly related to LA (r=.279, p< .05), but not significant with RR (r= .062, p> .05). The relationship between LA and RR was not significant (r=.077, p>.05).

4.1.2. Results of Multiple Regression Analysis

As mentioned earlier, this study doesn't only deal with determining the relation of each independent variable to the dependent variable. It also concerns the combined prediction of two or more independent variables on the dependent variable. Thus multiple regression analysis is considered to be appropriate to apply in this study.

So, in order to see the combined contribution of all the variables together and the relative contribution of each variable in the prediction of students' academic achievement score a multiple regression analysis was carried out. All the predictor variables are employed simultaneously.

Table 4: ANOVA Table for multiple regressions for the predictor variables religiosity, goal orientation, learner autonomy and the criterion variable academic achievement

Model	Sum of Squares	df	Mean Square	F	R^2
Regression	3667.218	3	1222.406	15.578*	0.226
Residual	12554.819	160	78.468		
Total	16222.036	163			

*$p<0.05$

This ANOVA table for multiple regressions revealed that all the independent variables combined together have significant contribution for the prediction of the students' academic achievement scores. All of them added significantly to the prediction of academic achievement which accounts for about 22.60% of the variance in academic achievement. The F-value (15.578) of the multiple regressions as can be seen in Table 4 shows that all the predictor variables combined together make statistically significant contribution at .05 significant level.

In order to know the significance of each predictor variable to the prediction of academic achievement scores of students and the magnitude of standardized coefficient of each predictor variable in predicting the dependent variable, it is important to test each of the variables independently.

Table 5: T-test results for the multiple regression analysis of the predictor variables religiosity, goal orientation, learner autonomy and the criterion variable academic Achievement

Variables	B	SEB	Beta	t
GO(X_1)	.230	.088	.198	2.595*
RR(X_2)	.219	.097	.161	2.267*
LA(X_3)	.353	.092	.293	3.833*

a. Dependent Variable: AA *p<0.05

The regression analysis indicated that goal orientation (t=2.595, p<.05), religiosity (t= 2.267, p<.05), and learner autonomy (t=3.833, p<.05) have significant contribution to the prediction of students academic achievement.

The regression equation is:

$\acute{Y}$= 13.339+0.230 X_1+0.219X_2+0.353X_3

Where $\acute{Y}$= predicted Academic Achievement Score

X_1= Goal Orientation Score

X_2= Religiosity Score

X_3= Learner Autonomy Score

4.1.3. Results of Stepwise Regression Analysis

To evaluate the relative contribution of each predictor variables in predicting criterion variable and to identify the strongest predictor, stepwise regression method has been employed.

In the stepwise regression analysis, the variable to enter the model first is one having the highest zero-order correlation coefficient with the criterion variable that has already been determined by the correlation analysis.

The independent variable to enter the model at step two will be the one that has the next highest correlation coefficient with the criterion variable that has already been determined by the correlation analysis.

The independent variable to enter the model at step three will be the one that has the third highest correlation coefficient with the criterion variable. Each successive step progresses in a similar procedure until the change in R^2 is no more significant. Tests of significance were performed at each step to determine the contribution of each predictor in the regression model.

Table 6: Summary of result of stepwise regression analysis for the predictor variables religiosity, goal orientation, learner autonomy and the criterion variable academic achievement

Variables	B	SEB	Beta	t	R^2 change
LA	.353	.092	.293	3.833*	.162
GO	.230	.088	.198	2.595*	.201
RR	.219	.097	.161	2.267*	.226

*$p<0.05$ $R^2=.226$

As it can be seen from the stepwise regression analysis, the independent variables considered in this analysis are LA, GO and RR. In this analysis LA, GO and RR are found to be significant in descending order. The Table also shows that, the variable learner autonomy has entered first into the stepwise regression with a contribution of .162(16.2%) of the variance in AA followed by Goal Orientation which contributed 0.039 (accounting about 3.9% of the variation in academic achievement). The last independent variable entered into the stepwise regression is religiosity which

contributes about 0.025(which account 2.5% of the variation in academic achievement

The regression equation is:

$\acute{Y}$= 13.339+0.230 X_1+0.219X_2+0.353X_3

Where $\acute{Y}$= predicted Academic Achievement Score

X_1= Goal Orientation Score

X_2= Religiosity Score

X_3= Learner Autonomy Score

4.2 Discussion

The discussion section attempts to relate the result of the analyses with the research questions forwarded at the beginning. Thus, it is necessary to restate the questions once again for the sake of easy reference.

1. Do religiosity, academic goal orientation, and learner autonomy have significant relationship with students' academic performance in preparatory school?
2. Is there a significant relationship among the independent variables under study?
3. Do the level of religiosity, academic goal orientation and learner autonomy separately and/or jointly contributes to the variation in performance of students?

4.2.1 Goal Orientation and Academic Achievement

Results of the correlation analyses have indicated that there exists a statistically significant correlation between academic achievement scores of students and scores of academic goal orientation. The partial correlations also indicated that goal orientation was statistically correlated with academic achievement of students even after the other two independent variables were partial out.

The multiple and stepwise regression analyses results have indicated that academic goal orientation has a significant contribution to the prediction of academic achievement of students. The proportion of variance accounted for by academic goal orientation on preparatory school students academic achievement was the second largest next to learner autonomy of students (3.9% and 16.2% respectively).

The result of this study is in agreement with various studies. Newman et al. (1988) found that the relationship between academic goal orientation and various school outcomes is logical. According to these evidences such as grades and academic

performances are more likely to be affected by academic goal orientation than other outcomes like commitment and assessment. Many researches conducted in indicated that goal orientations facilitate creativity and academic performance (Sue, 2001).

On the other hand direct relationships between goals and academic results have appeared in causal studies (Roney, Higgens& Shah, 1995; Roney& Sorrentino, 1995; Schunk, 1996; cited in Arias, 2004). Numerous studies have also shown relationships between quality of cognitive processing and academic results showing that high level of academic goal is associated with achievement (Covington, 1992; cited in Arias, 2004).

McCleland(1985) and Wiener(1989) have revealed that individuals who possess high academic goal orientation have the motive to obtain high academic performance and show the need to manipulate their environment. People of this type are action oriented, have better planning ability, and have the interest to involve on demanding and challenging tasks. As a result highly academic oriented individuals tend to obtain superior performance compared to those with low level of academic goal orientation.

Additional evidences show the relation between goal orientation and academic achievement. Academic goal orientation is associated with many behavioral outcomes of students. One of the behavioral outcomes is actual achievement or performance of students' academic work. In light of these Pintrch and Schunk(2002; pp, 228) cited the following.

> *Goals may promote different patterns of motivation, affect, and cognition but they should also be linked to actual classroom achievement. The more experimental research on mastery goals has shown that students in mastery conditions usually achieve or perform at higher levels. In fact, given all the positive motivational, affective and cognitive outcomes associated with mastery goals, it would be expected that mastery goals would also lead to higher levels of achievement. The pattern that seems to emerge is that mastery goals are unrelated to performance or achievement in the classroom, usually indexed by grades or*

GPA. In contrast some of these studies, approach performance goals.

4.2.2 Religiosity and Academic Achievement

For the independent variable religiosity, results of the correlation analyses have indicated that there exists a statistically significant correlation between academic achievement scores of students and scores of religiosity. The result of the partial correlation also indicates that religiosity was correlated with students' academic achievement after the contribution of goal orientation and learner autonomy partial out.

Results of the multiple and stepwise regression analyses also indicated that religiosity added significantly to the prediction of academic scores of students.

As compared to the other variables in the study, the proportion of variance accounted for by religiosity on academic achievement of preparatory school students was the third largest (2.5%). This could be due to the reason that religious students do better on critical indicators of academic success (Mooney, 2005). Typically, studies found a positive impact of religious factors on school success. Religious participation and personal religiosity can help lower rates of substance abuse, and limit activities that undermine college careers (Regnerus, 2000).

The result of this study is also in agreement with many research works, which demonstrated significant and positive relationship between religiosity and academic performance. A study by Oh (1999) found that high school students who had a high level of religiosity were more likely to have a higher GPA than non-religious students. Someone with high level of religiosity would most likely to believe in working to be a good person so that they reach a higher spiritual state. This individual may also believe in studying and working hard in order to get good grades.

Researchers who have examined whether religion influences students' achievements have found significant and positive correlations between religiosity and students achievement (Demir and Urberg 2004; Fransis et al., 2004 cited in Mooney, 2005).

Students who participate in religious groups have made a choice about social commitments. Being active in religion promotes other types of social ties, particularly the prescriptions of religious traditions. Commitments to religious groups also hinder negative behaviors like taking unplanned road trips. Connections to positive social groups promote conformity, and in the college setting, conformity means going to class and completing assignments. Alcohol and substance abuse are among the most important factors predicting negative educational outcomes. Most religious groups oppose alcohol use, or at least influence to prevent against drunkenness. Hence, students who choose to join religious groups are going to be less likely to abuse alcohol and other drugs (Regnerus, 2000). Depression, loneliness, and anxiety are also strongly associated with poor college performance. Students who are depressed often skip classes, return home, or begin abusing alcohol or drugs. Religious activities provide a basis for social support outside of the home, thus combating the loneliness and isolation which can lead to mental health problems (Sherkat & Ellison, 1999).

There are other reasons that religiosity ought to have an effect on academic achievement. First religious involvement provides opportunities for youth to gain skills that help them succeed in school, such as discipline and respect for authority (Regnerus, 2000). Religious involvement also provides a context in which students may develop social contacts that help them in their education and puts them in contact with religious leaders and youth group coordinators who often serve as positive role models (Gardener, 2004). Religious involvement also deters involvement in deviant activities. Students who spent more time in religious activities tend to spend less time involved in deviant activities(Johnson et al.,2000; cited in Mooney, 2005), which may foster conventional behaviors such as working on school project, doing homework, seeing education as a worthwhile pursuit, and avoiding deviant peer network.

4.2.3 Learner Autonomy and Academic Achievement

For the independent variable learner autonomy, results of the correlation analyses have indicated that there exists a statistically significant correlation between academic achievement scores of students and scores of learner autonomy. The result of the partial correlation also indicates learner autonomy was correlated with students' academic achievement after the contribution of goal orientation and religiosity partial out.

Results of multiple and stepwise regression analyses also indicated that learner autonomy added significantly to the prediction of academic scores of students.

As compared to the other variables in the study, the proportion of variance accounted for by learner autonomy on academic achievement of preparatory school students was the first largest (16.2%). This could be due to the reason that autonomy has consistently been identified as being associated with higher academic scores (Stiernborg *et al.*, 1997). Autonomous learning, notably motivation to seek meaning, understanding of underlying principles and identification of relationships between ideas and concepts, has been shown to be a prerequisite for self-directed learning (Kreber, 2003) and has also been shown to be consistent with the ability to perform high in school (Leung and Kember, 2003).

In addition to these the results of this study support the finding of other researchers (Drysdale et al.2001). Entwistle (1972) has shown that academic success and failure in higher education is influenced by the match between how material is presented and how students are responsible to process it. Drysdale et al. 2001) found a correlation between learner autonomy and increased levels of GPA. Dunn et al. (1995) found that making students aware of their learning style to be autonomous learner and helping them develop compatible with their preferred learning style had a positive affect on academic performance. In a similar vein, O'Brien (1991; cited in Dunn et al. 1995)), the subjects represented a variety of majors including business, education, and arts

and sciences; found that differences in the level of learner autonomy were associated with academic achievement. Based on the results of a meta-analysis of 42 experimental studies, Dunn et al. (1995) claim that students who are more autonomous and taught by an approach compatible with their learning do better than those are not autonomous and whose learning styles are not matched to teaching approaches. In a similar vein, Griggs and Dunn (1996; cited in Drysdale et al. 2001) claim that students who learn from an approach compatible with their preferred learning style experience greater academic achievement and have a more positive attitude towards learning. Drysdale et al. (2001) carried out a study on the effect of learner autonomy on the academic performance of 4,546 first-year students. Although they found academic performance based on learner autonomy to be significant in 11 of the 19 courses, they found no significant differences between the learner autonomy and academic performance of liberal arts and social sciences' students.

In this study an investigation was also made to see the combined predictive power of goal orientation, religiosity and learner autonomy on academic achievement of students.

The multiple regression model used to examine the combined prediction of these predictor variables on academic performance of students revealed that all variables combined together accounted for about 22.6% of the explained variance in academic performance.

Each independent variable has an independent significant contribution to the explained variation in students' academic achievement. Relative to other variables in the study, learner autonomy has the highest contribution to the prediction of academic achievement of preparatory school students followed by academic goal orientation and religiosity respectively.

4.2.4 The Relationship among the Predictor Variables

The inter correlation matrix held among AA, GO, RR and LA for students revealed that each of them has a positive and significant relationship. The relationship between the predictor variables goal orientation and learner autonomy was positive and significant even after the combined contribution of the variables academic achievement and religiosity were partial out. But the relationship between learner autonomy scores and religiosity score for students was not significant after the combined contribution of goal orientation and academic achievement partial out. Similar to this the relationship between goal orientation and religiosity was not significant after the combined contribution of learner autonomy and academic achievement partial out.

Regarding to the relationship between religiosity and the other two predictor variables, the result of this finding is not consistent with the finding of other researchers. A study by Murk & Addleman (1992) found that students who had a high level of moral reasoning were also more likely to have high level of autonomy. Many religious organizations feel that it is their duty to teach moral values, so one can assume that religious students are also likely to score high on a moral reasoning scale. Strayhorn (1996) has found that people, who have a high need for achievement, also have a belief in their own ability or skill to determine the outcome of their efforts.

Someone with goal orientation would most likely believe in working to be a good person so that they can reach a higher spiritual state. This individual may also believe studying and working hard in order to get good grades.

Concerning the relationship between learner autonomy and goal orientation the finding of this study is in agreement with many

researches. According to Deci & Ryan, (1991) self-determination theory is a theory of motivation, but combines traditional empirical methods and a theory that deals with people's internal resources for motivation. The theory proposes that people's psychological needs are the basis for their motivation. In particular, the needs for autonomy, competence, and relatedness are believed essential for enhancing motivation. From these one can understand that learner autonomy and goal orientation have close linkages. The need for autonomy is the need to engage in self-directed behavior (Deci &Ryan, 1991). The need for competence (Deci & Ryan, 1991) is the need to experience satisfaction in improving one's abilities. Research results have generally supported these claims. For example, some researchers found that students' perceived autonomy competence, and relatedness affect their motivation (Deci & Ryan, 1991).

Researchers have suggested that motivation is related to students' initiation of the task, the amount of effort that they expend on the task, and their persistence in completing the task (Wigfield, 1991). Consequently, students' motivation has been proposed to affect their actions and academic achievement. Bandura (1997) maintained that people's actions and behaviors are guided by their beliefs about how successful they can be in performing a task, termed as self-efficacy and taking responsibility to improve their result. Not only do people need to have the skills and knowledge to execute a task successfully, they also have to have a certain level of expectation for success before they take on the assignment. Researchers have found that individuals who believe that they can successfully complete a task (or those who have high self-efficacy) tend to perform better with more responsibility as compared to those who lack such a belief (Pajares, 2003). They also suggest that individuals' self-efficacy beliefs may influence the types of goals they adopt for learning and the level of responsibility for

learning. Such reasons students learn or goals they have for learning are termed as goal orientation (Elliot &Harackiewicz, 1996). It is the goals that individuals set that influence their actions, reactions, and motivation for learning (Elliot et al., 2005).

CHAPTER 5: SUMARRY, CONCLUSSION AND RECOMMENDETION

This chapter summarizes the results of this study, interprets its results, discusses its implications, and concludes with recommendations for future research

5.1 Summary

One objective of this study was to investigate the correlation of academic goal orientation, religiosity and learner autonomy with the academic performance of preparatory school students. Another objective for the study was to find out the relative contribution of each of these variables to the variation of students' academic performance.

164 students were used from three preparatory schools, namely: Borena senior secondary and preparatory school, Wogdi senior secondary and preparatory school and Ajbar senior secondary and preparatory school

Data were obtained using self-administered questionnaire: Goal Orientation scale, Religiosity Scale and Learner Autonomy Scale. All of the questionnaires were developed by the researcher by adapting items and literatures. All questionnaires, which were in English, were translated to Amharic (the subjects' local language) with the consultation of language experts. The translated versions were translated back to English and thus faithful translation into Amharic was confirmed. Students' academic achievement scores were secured from the record office of each school.

The correlation, the multiple and stepwise regression analyses, were employed to analyze the data by using SPSS 15. The correlation analyses including partial correlation were used to see the relationships between the predictor variable with the

criterion variable and the relationships among the predictor variables themselves. Multiple and stepwise regression analyses were used to see the combined and relative contribution of the variables to the variance in the academic achievement of the students.

The correlation analyses indicated that AA was positively and significantly related to GO ($r= .342$, $p< .05$), RR ($r=.166$, $p<.05$), and LA ($r= .399$, $p<.05$). In addition, each of the predictor variables was significantly correlated with each other. Results of partial correlations indicated that AA was positively and significantly related to GO ($r=.193$, $p< .05$), RR ($r= .177$, $p< .05$), and LA ($r=.262$, $p<.05$) respectively after the combined contribution of other variables partial out. Results of partial correlations among the independent variables indicated that GO was positively and significantly related to LA ($r=.279$, $p< .05$), but not significant with RR ($r= .062$, $p> .05$). The relationship between LA and RR was not significant ($r=.077$, $p>.05$).

The multiple regression analyses technique employed to see the relative contribution of the variables under study on the academic achievement of students has indicated that all of them have contributed significantly to the prediction of students' academic performance. The stepwise regression analysis has arranged each variable in terms of its contribution to the regression and was found that learner autonomy, academic goal orientation and religiosity contributed 0.162, 0.039, and 0.025 respectively to the multiple co-efficient of determination ($R^2=0.226$)

5.2 Conclusions

Based on the analysis, discussions and findings of the study, the following conclusions are made:

1. The correlation analyses have revealed that there is statistically significant relationship between each predictor variable and the criterion variable and also the predictor variables among themselves. The partial correlations have

revealed that each predictor variable has significant relations with the criterion variable after the combined contribution of other variables partial out.

2. Multiple regression analysis involving goal orientation, religiosity and learner autonomy showed that each of them separately and jointly is very much closely related to the academic performance of preparatory school students. They jointly and significantly add to the prediction of students' academic achievement.

3. The relative contribution of each independent variable in predicting the dependent variable showed that each predictor variable entered the regression model. Learner autonomy, goal orientation and religiosity entered the model in descending order in predicting academic achievement of preparatory school students.

To sum up, the findings of this study are in line with the evidences found by other researchers in the field. The findings have important practical implication to the educational institutions specifically preparatory school education of our country. The contribution of the non-cognitive factors on the academic performances observed between students with different levels in the above mentioned traits call for suitable intervention strategies on the part of teachers, counselors, school administrators and curriculum designers.

The importance of goal orientation, religiosity and learner autonomy are critical for the high scores in academic subjects. Cognitive factors like intelligence and aptitude are fundamentally needed for academic achievement. However, these qualities by themselves are not the only decisive factors for high performance of students. Thus, the aforementioned factors provide great contribution to the academic performance of high achievement. In this respect their importance is never overstated.

5.3 Recommendations

Based on the findings of this study the following short-term and long-term recommendations are made:

5.3.1 Short term recommendations

1. Preparatory school teachers need to give due attention to the contribution of the non-cognitive variables such as those mentioned in this study to promote students' high academic goal orientation, religiosity and learner autonomy.
2. Short term training for teachers should be given in order to aware the contribution of non-cognitive variables in increasing students' academic performance.

Generally, all responsible bodies that directly or indirectly involve in the process of education like: parents, teachers, counselors, school administrators, curriculum experts, governmental and non-governmental organizations need to work jointly and independently for the betterment of academic performance of students.

5.3.2 Recommendations of Future Research

The findings of this study revealed a need for further research in the domain of non-cognitive variables:

1. The present study mainly dealt with three non-cognitive factors that only account 22.6% of the variance in academic achievement. Thus further research is important that will pinpoint the factor leading to the non-cognitive variables included in the present study and others.
2. A model that includes cognitive and non-cognitive factors predicts better academic performances. Therefore future research has to include in its model a reliable and valid cognitive measures in addition to non-cognitive variables to improve the proportion of explained variance in academic performance
3. In this study, the variables were measured using self-report type questionnaire. The weakness of such an approach is well documented in many researches. So

other ways of measuring the variables are needed for further confirmation of the findings.

4. This study can be replicated with a larger sample size to support the findings revealed in this study in a similar population.
5. The present study has considered only preparatory school students and includes less number of samples. Therefore, a further comprehensive study that includes elementary and secondary school students shall be conducted.

References

Agota, S., & Anita, S. (2000). **Learner Autonomy**: *A Guide to Developing Learner Responsibility.* Cambridge: Cambridge University Press.

Allport, G. W. (1996). "Personal and Religious Orientation and Prejudice". **Journal of Personality and Social Psychology,**5, 432-443.

Ames, C.M (1992). **Achievement Goals and Classroom Motivational Climate**. Hillsdale, NJ:Erlbaum.

Arias, D.J. (2004). "Recent Perspectives in the Study of Motivation: goal orientation theory". **Journal of developmental psychology**, 34, 263- 281

Bandura, A. (1997). **Self-efficacy: The exercise of control**. New York: Freeman.

Benson, P. (2001). **Teaching and Researching Autonomy in Language Learning.** London: Longman.

Boud, D. (1981) Developing Student Autonomy in Learning. New York: Kogan Press.

Boud, D. (1988): **Moving towards Autonomy: Developing Student Autonomy in Learning.**(2nd ed.). London: Kogan

Burger, J.M. (1985). "Desire for Control and Achievment Related Behavior." **Journal of Personality and Social Psychology**, 35, 125-159.

Camilleri, G. (1997). **Learner Autonomy: The Application of it**. (Retrieved from www.ecml.at/documents/pubCamilleriG_E.pdf , 2009, February, 18).

Cohen, L., & Manion, R. (1989). **Research Methods in Education.** (3rd ed.). London: Routledge.

Cole, N., & Chan, V. (1994). "Readiness for Learner Autonomy: what do our learners tell us?" **Journal of Teaching in Higher Education,** 64, 505 – 518.

Conger, J. (1991). **Adolescence and Youth: Psychological Development in a Changing World**. (4th ed.). New York: Alfred A. Knopf Inc.

Cotterall, S. (1995). "Promoting Learner Autonomy Through the Curriculum: Principles for Designing Language Courses." **ELT Journal**, 54, 109-117.

Dam, L. (1995). "Learning Autonomously: The Learners' Perspectives''. **Journal of Further and Higher Education,** 25, 285-300.

Dam, L. (2001). **Learner Autonomy: from Theory to Classroom Practice**. Dublin. Authentik.

Darnell, S.R., & Sherkat, F.M. (1997). "The Impact of Fundamentalism on Educational Attainment". **American Sociological Review,** 62, 306-316.

Deci, E.L., & Ryan, R.M. (1991). "Motivation and Education: the Self-determination Perspective". **Journal of Educational Psychology**, 26, 325-346.

Diseth, A. & Martinsen, O. (2003). "Approaches to Learning, Cognitive Style and Motives as Predictors of Academic Achievement". **Journal *Educational Psychology***, 23, 195-201.

Drysdale, M.R. (2001). "Cognitive Learning Styles and Academic Performance: Successful Students versus Students at Risk". **Journal of Education**, 6:271-289.

Dweck, C. S. (1986). "Motivational Processes Affecting Learning". **Journal of Educational psychology**, *41*, 1040-1048.

Dweck, C. S. (2000). "Motivational and Education". **Journal of Educational psychology**, *82*, 1236-1248.

Dunn, R.M, Dowson, P.M., & Cuneen, T. (1995). "Validation of the Dunn and Dunn Learning Styles Model". **Journal of Educational Research**, 88, 353-361.

Elliot, A. J. (1999). "*Approach and Avoidance Motivation and Achievement Goals*". **Journal of *Educational psychology,*** *34,* 169-189

Elliot, A. J., & Harackiewicz, J. M. (1996). "Approach and Avoidance Achievement Goals and Intrinsic Motivation: a Mediational Analysis". **Journal of Personality and Social Psychology,** *70*, 461-475.

Elliott, G., Hufton, R., and Willis, W. (2005).**Motivation, Engagement and Educational Performance**.Macmillan: Palgrave.

Entwistle, N. (1972). "Personality and Academic Attainment". **British Journal of Educational Psychology,** 42, 137-151.

Gardner, D. (2004). **Establishing Self—access: from Theory to Practice**. Cambridge: Cambridge University Press.

Hill, T. D., Hyde, J.S., & McCullough, M. E. (2000). "Religious Involvement and the Intoxication Trajectories of Low-income Urban women". **Journal Personality and Social Psychology**, *38,* 847–862.

Holec, H. (1981). **Autonomy in Foreign Language Learning**. Oxford: Pergamon.

Kember, C. (2003). "The Relationship between Students' Course Perception and their approaches to Studying in Undergraduate Science Course". **Higher Education Research and Development,** 22(1), 57-75.

Leung, D. Y. P. and Kreber, D. (2003). "The Relationship between Approaches to Learning and Reflection upon Practice". **Journal of Educational Psychology**, 23(1), 61-71.

Little, D. (1991*).* **Learner Autonomy: Definitions, issues and problems.** Dublin: Authentic Limited.

Mangal, S.K. (2003). **Statistics in Psychology and Education.** (2nd ed.). Printice-Hall of India, New Delhi.

Mattern, D. (2005). "Goals and perceived ability: Impact on student valuing, self-regulation, and persistence." **Contemporary Educational Psychology**, *18,* 2-14.

McCleland, S. (1985). "Promoting Learner Autonomy: Guidance and Learner Autonomy." **Journal of educational Psychology**, 6, 231-243

McCormick, C. & Pressley, M. (1997*).* **Educational Psychology: Learning, Instruction, and Assessment**. RR Donnelley and Sons Company. New York.

McGarry, D. (1995). **Learner Autonomy***: The Role of Authentic Texts.* Dublin. Authentik.

Middleton, M. J., & Midgley, C. (1997). "Avoiding the Demonstration of Lack of Ability: An Under Explored Aspect of Goal Theory." **Journal of Educational Psychology**, *89*, 710-718.

Mooney, M (2005). "Personal and Religious Orientation and Prejudice."**Journal of Personality and Social Psychology,**4, 332-345.

Mullis, I.S., & Addlenan, M.O.,(2000). "Causal Effects of Academic Self-Concept on Academic Achievement Structural Equation Models of Longitudinal Data". **Journal of Educational Psychology**, *89,* 41-54.

Murk, D.A. & Addleman, J.A. (1992). "Relations among Moral Reasoning, Locus of Control, and Demographic Variables among College students." **Psychological Reports, 70(2), 467-476.**

Newman, Y.M, Rema, B.W, & Wagner, J. (1988). "Achievement Motivation Factors and Student's College Outcomes". **Psychological Reports**, 62, 555-580.

Oh D.M (1999). "Evidence on the Correlation between Religiosity and Social Psychological Behavior and the Results Impacting on Students' Performance". **Journal of social psychology** 71, 643-657

Pajares, F. (2003). "Self-efficacy beliefs, motivation, and achievement in writing: A review of the literature". **Reading and Writing Quarterly**, *19,* 139-158.

Pajares, F., Britner, S., & Valiante, G. (2000). "Relation between Achievement Goals and Self Beliefs of Middle School Students in Writing and Science". ***Contemporary Educational Psychology***, *25*, 406-422.

Paulson R.L (1998). "Alcohol Conceptions, Strength of Religious Beliefs and Risky Sexual Behavior in College Students". **Journal of American college health**, 45, 227-232

Pintrich, P. R., & Schunk, D. H. (2002). **Motivation in Education: Theory, Research, and Applications.** (2nd ed.). Upper Saddle River, NJ:

Merrill/Prentice Hall.

Plante, T.G. & Boccaccini, M. (1997a). The Santa Clara strength of religious faith questionnaire. *Pastoral Psychology*, **45**, 375-387. (Retrieved, November 12, 2009 from http://www.suu.edu/fafulty/shwalb/ pdf/ PastoralPsychology Article.pdf).

Regnerus, M.D. (2000). "Shaping Schooling Success: Religious Socialization and Educational Outcomes in Metropolitan Public Schools". **Journal for the Scientific Study of Religion,** 39, 363-370

Reinders, H. (2000). "A learners' Perspective on Learner Autonomy and Self-access Language Learning in an English Proficiency Program". **Journal of educational psychology,** 90, 341-358

Roof, W. & McNinney, M. (1987). **American Mainline Religion**. New Brunswick: Rutgers University Press.

Sherkat, D. E. & C.G. Ellison. (1999). "Recent Developments and Current Controversies in the Sociology of Religion". **Journal of Social Psychology,** 25, 363-394.

Stiernborg, M., Guy, J. & Tinker, R. (1997)." Students' Approaches to Studying". **Education Today**, 17, 121-127.

Strayhorn, J.M. (1990). "A Measure of Motivatio, and Its Relation to Students Achievment." **Journal of Educational Psychology, 18, 34-43.**

Sue, C. S. (2001). "Goals: An approach to Motivation and Achievement." **Journal of Personality and Social Psychology**, *54*, 5-12.

Tomlinson, R. (1998). "Attention in Cognitive Science and Second Language Acquisition." **Studies in Second Language Acquisition**, *16*, 183-203.

Vallerand, R. J., Fortier, M. S., & Guay, F. (1997). "Self-determination and Persistence in a Real-life Setting: Toward a Motivational Model of High School dropout." **Journal of Personality and Social Psychology**, *72*, 1161-1176.

Vanijdee, A. (2003). "Distance English Learners and Learner Autonomy." **Open Learning**, *18*(1), 75-84.

Weiner, B. (1989). **Human Motivation.** New Jercy: Lawrence Erlbaum Associate Publishers, Hillsdale.

Wenden, A. (1987). **Learner Strategies for Learner Autonomy: Planning and Implementing Learner Training for Language Learners**. New York, NY: Prentice Hall.

Wigfield, A. (1991). "Expectancy-value Theory of Achievement Motivation: A Developmental Perspective." **Educational Psychology Review**, *6*, 49-78.

Wilson, J. & Janoski, T. (1995). "The Contribution of Religion to Volunteer Work." **Sociology of Religion**, 56, 137-152.

Wortman, C.B., & Lottus, E.F. (1985). ***Psychology.*** (2^{nd}ed.). New York: Alferd A. Knopf Inc.

Zald, M. N. (2000). "Ideologically Structured Action: An Enlarged Agenda for Social Movement Research." **Journal of Social Research,** 5, 1-16.

Appendix A
Addis Ababa University
Faculty of Education
Department of Psychology
Graduate Programme

Questionnaire for Students

Dear respondents,

The purpose of this questionnaire is to gather information for research purpose on the things you do in order to learn.. Thus, the value of this study is highly dependent on your sincere and frank responses to each question in the questionnaire.

Therefore, below is a list of statements about your academic goal orientations (Part A), your religiosity (Part B), and your learning autonomy (Part C). The researcher would like you to indicate your opinion about each statement by putting "X" in the appropriate box, thus, indicating the extent to which you disagree or agree with the statement.

Concerning the information you give me, I would like to assure you that all would be kept confidential and would be used for the research purpose.

Thank you in advance for your cooperation

1. Background information

Instruction: Provide the required information in the following in the space given

Sex_____ Section_____ Id. No_____

2. The Questionnaire

Instruction: Part A, Part B, and Part C are intended to investigate students' goal orientations, religiosity and learner autonomy. Read the statements carefully and show the extent to which you agree or disagree with each of the statements by putting "X" under **only One of the given choices in** the appropriate boxes

Key: SA means I "Strongly Agree" with the given idea.

A means I "Agree" with the given idea

ND means I "Don't have any idea or not decided"

D means I "Disagree" with the given idea

SD means I "Strongly Disagree" with the given idea

A) Goal Orientation Inventory (GO)

No	Items	Responses				
		SA	A	DN	D	SD
1	I work hard to get a high grade					
2	I like problems that are hard enough to show that I am smart					
3	I like to work hard to learn something new, even if the problems are so hard that I will get a lot of wrong					
4	An important reason why I do my school work is because I like to learn new things					
5	I feel successful if I do better than other students in my class					
6	One of my main goals is to avoid looking like I can't do my work					
7	I feel successful when I learn something new					
8	I feel successful when I know more than other people					
9	I don't worry about if I got lower test scores than other students*					
10	I don't think I will be successful in my education*					
11	The future is too uncertain for a person to make a plan*					
12	If I failed several times consecutively, I would stop as harder next time*					
13	I have to do well at school in order to get a good job later on					
14	I think I have to get better marks than other people do at school					
15	Getting praise from my teacher for my school work is important to me					
16	It is not so much important for students to help each other at school work*					
17	While in schools, I usually feel the time is going too fast					
18	I choose easy work at school so that I don't have too much trouble with it					

* negatively stated items

Religiosity Inventory (RR)

No	Items	Response				
		SA	A	DN	D	SD
1	I go to church/mosque because it helps to pass time than worship*					
2	I doesn't much matter what I belief about the existence of God as I am good*					
3	I have often had a strong sense of God's presence					
4	I try hard to live all my life according to religious beliefs					
5	My whole approach to life is based on my religion					
6	I pray mainly because I have been taught to pray than worship*					
7	Although I believe in my religion, many other things are more important in life*					
8	I follow religious commands to a very large extent					
9	Some times I doubt that there may not be life after death*					
10	I like very much to discuss issues related with religion as religion is part of my life					
11	Even though I am religious, I don't belief the existence of devil*					
12	Prayer is for peace and happiness					
13	My religion is important because it answers many questions about the meaning of life					
14	I pray mainly to get relief and protection					

* negatively stated items

C) Learner Autonomy inventory (LA)

No	Items	Response				
		SA	A	DN	D	SD
1	I rarely require outside assistant to complete a project or activity in learning					
2	The role of the teacher is to set my learning goals*					
3	Good learners have to identify their strengths and weaknesses					
4	I am responsible for planning my own learning					
5	I like the teacher to set my learning goals*					
7	Good learners will set learning goals for themselves					
8	I like the teacher to tell me how long I should spend on an activity in accomplishing my work*					
9	I know that I am responsible for checking my work for mistakes in learning					
10	Good learners will measure their learning knowledge progress					
11	I strongly need the teacher to tell me how I am progressing *					
12	The teacher should always tell us why and how we are doing an activity in class*					
13	As a student I don't often need to be told by the teacher what to do, when to do, and how to do					
14	I set my goals and objectives for my learning					
15	My own effort plays an important role in successful learning					
16	It is important for me as a student to evaluate my weaknesses and strengths					

* negatively stated items

Appendix B

በአድስ አበባ ዩኒቨርሲቲ

የሳይኮሎጅ ትምህርት ክፍል

የ ደህረ-ምረቃ ፕሮግራም

በአሜራ ክልል በደቡብ ወሎ ማኅተዳደር ዞን በተመረጡሶስት የመሰናዶ ት/ቤቶች ወስጥ የሚሠሩ ተመራዎችን በሃይማኖታዊነት፤ የትምህርት አላማ ግንዛቤ፤ የትምህርት ተግባርን በመወጣት እና በቀለም ትምህርት አቀባበል መካከል ያለዉን ግንኙነት ለመረዳት የተዘጋጀ መጠይቅ፡ ፡

ክፍል አንድ፡ አጠቃላይ መረጃ

መመሪያ አንድ፤ የሚከተሉትን ጥያቄዎች ካነበቡበሀዋላ ይመልሱ

1. እድሜ----- 2) ጾታ a) ወንድ b) ሴት 3)የትምህርት ደረጃ a) 11ኛ b) 12ኛ

4) ክፍል-------5) ተራ ቁጥር ----------

ክፍል ሁለት፤ መለኪያዎች

የሃይማኖታዊነት፤ የትምህርት አላማግንዛቤ እና የትምህርት ተግባር መወጣት መለኪያወች

መመሪያ ሁለት፤ መጠይቆቹ በ3 ክፍል የተመደቡ ናቸዉ፡ እነሱም 1) ሃይመኖተኝነትን በተመለከተ 2) የትምህርት አላማ ግንዛቤን በተመለከተ እና 3) የትምህርት ተግባር መወጣትን በተመለከተ የቀረቡ መጠይቆች ሲሆኑ ለመጠይቆቹ መልስ ሲሆኑ ይችላሉ ተብለዉ የተገመቱ 5 አማራጮች በመጠይቆቹ ፊት ለፊት ተዘርዝረዋል፡ ፡ አማራጮቹምበተራ ቁጥር የተወከሉ ሲሆኑ መገለጫቸዉም የሚከተለዉን ይመስላል፡ -

- "በአል" ን ከመረጡበሃሳቡ በጣም አልስማምማለት ነዉ.
- "አል" ን ከመረጡ በሃሳቡ አልስማምማለት ነዉ.
- "እአ"ን ከመረጡአርግጠኛ አይደለሁም ማለት ነዉ.
- ከመረጡ"እስ"ን ከመረጡ በሃሳቡ እስማምማለሁ ማለት ነዉ.
- "በእስ"ን ከመረጡበሃሳቡ በጣም እስማምማለሁ ማለት መሆኑን በቅድሚያ ይገንዘቡ፡ ፡ በመቀጠልም የተሰጠዉን ሀተታዊ አረፍተ ነገሮች በጥንቃቄ ካነበቡ በሀዋላ የርሰዎን ሃሳብ ብቻ ሊገልጽ የሚችለዉን በመምረጥ በስሩ የ "X" ምልክት ያድርጉ፡ ፡ በመልሶቹ ላይ ይህ ትክክል ነዉ ይህ

ስህተት ነዉ የሚባል ነገር ስለሌለ ብዙ ማቬቄቅ አያስፈልገዎትም ፡ የሜፈለገዉ የእርሰዎ አመለካከት ብቻ ነዉ ፡

የዚህ ማከይቅ አላማ ከላይ የተጠቀሰዉን ጥናት እና ምርምር ለማካሄድ ሲሆን የምትሰጡት መረጃ ሁሉ ሚስጥራዊነቱ የተጠበቀ ነዉ ፡ የጥናቱ ተአማኒነት እናንተ በምትሰጡት መረጃ ላይ የተመሰረተ ስለሆነ የበኩላችሁን ትብብር እንድታደርጉ በአክብሮት እጠይቃለሁ ፡ ፡

ለሚደረግልኝ ትብብር በቅድሚ ያ አመሰግናለሁ::

1) የትምህርት የአላማግንዛቤን በተመለከተ የቀረቡ ጥያቄዎች

ተ.ቁ	ጥያቄወች	የቀረቡ አማራጮች				
		በአልል	አልል	እአ	እስ	በእስ
1	ጥሩ ዉጤት ለማስመዝገብ ጠንክሬ እሰራለሁ					
2	ችሎታየን ስለማያሳዩልኝ ጠንከር ያሉ ጥያቄዎችን መስራት እመረጣለሁ					
3	በርካታ ስህተቶችን እየሰራሁ ቢሆን እንኳ አድስ ነገር ለማግኘት ስል ጠንክሬ መስራትን እመርጣለሁ					
4	የሜጨናበት ዋናዉ ምክንያት አዳድስ እዉቀቶችን ለማግኘት ነዉ					
5	ከሌሎች ተማሪዎች በስራ በልጦ እንደማገኘት የሚያረካኝ ነገር የለም					
6	በትምህርት ህይወቴ ወስጥ የሚይሰራ ሰዉ መስሎ መታየት አልፈልግም					
7	አዳድስ ነገር እየተማርኩ በሄድኩ ጊዜ ስኬታማእንደሆንኩ ይሰማኛል					
8	እዉቀቴ ከልሎች ልቆ ከተገኘ ስኬት እያስማዝገብኩእንደሆነ ይሰማኛል					
9	በዉጤቴ ከሌሎች ተማሪዎች ያነሰ ማርክ ባገኝ ብዙ አያስጨነቀኝም*					
10	በትምህርት ስራየ ላይ ለወደፊት ትልቅ ደረጃ እደርሳለሁ ብየ አላስብም*					
11	ወደፊት የሜፈጠዉ ስለሚታወቅ ሰዎች እቅድ ነድፈዉ ለመንቀሳቀስ ይቸገራሉ ብየ አስባለሁ *					
12	በስራየ ላይ በተደጋጋሚ የሚሳካልኝ ከሆነ ተስፋ በመቁረጥ መስራቴን አቆማለሁ*					
13	ለወደፊት ጥሩ ስራ ለማግኜት በትምህርት ቤት ጠንክሬ መስራት አለብኝ					
14	በትምህርት ስራየ ከሌሎች የበለጠ ማርክ ማግኘት አለብኝ ብየ አስባለሁ					
15	በትምህርት ቤት ላስማዝገብኩት ዉጤት ከማማህሩ ሽልማት ማግኘት አለብኝ					
16	ተማሪዎች በትምህርት ቤት እርስ በርስ ባይረዳዱ ምንም ማለት አይደለም*					
17	በትምህርት ህይወቴ ወሥጥ ጊዜ በፍጥነት ይሄድብኛል					
18	በአስቸጋሪ ጥያቄዎች መጨነቅ ስለማልፈልግ ቀለል ያሉ ጥያቄወችን መስራትን እመርጣለሁ					

2) ሃይማኖታዊነትን በተመለከተ የቀረቡ ጥያቄዎች

ተ.ቁ	ጥያቄዎች	የቀረቡ አማራጮች				
		በጣም	አዎ	አላ	አሰ	በጣም
1	ብዙ ጊዜ ቤተክርስቲያን ወይም መስጅድ የምሄደው ለአምልኮ ሳይሆን ጊዜ ለማሳለፍ ነው*					
2	ጥሩ አመለካከት ካለኝ ስለ ፈጣሪ መኖር ብዙም አልጨነቅም *					
3	ምን ጊዜም ቢሆን ለአምላክ ተገዥ መሆኔን አረጋግጣለሁ					
4	የህይወቴ መመሪያ የሀይማኖቴን ህግጋት የተከተለ እንድሆን እጥራለሁ					
5	በአጠቃላይ የህይወት ፍልስፍናየ (አቋሜ) ሃይማኖቴን መሰረት ያደረገ ነው					
6	የምቀልይበት ወይም የምሳሳድበት ዋናው ምክንያት እነድፀልይ ወይም እነድሰግድ በሃይማኖት አባቶች ስለተማርኩኝ ነው*					
7	በሀይማኖት አጥብቄ ባምንም ለህይወት መመሪ ሊሆኑ ሚቻሉ ከሃይማኖቱ የበለጡሌሎች ነገሮች እነዳሉ ይሰማኛል*					
8	ሀይማኖታዊ መመሪያዎችን በከፍተኛ ደረጃ እፈፅማለሁ					
9	ከሞቱ በህዋላ ጽድቅ ወይም ኩነኔ አለ የሚለው ነገር አንዳንድ ገዜ ያጠራጠረኛል*					
10	ሀይማኖታዊ ጉዳዮች የህይወታችን መመሪያወች ስለሆኑ ሥለነሱ መወያየት ያስደስተኛል					
11	አማኝ ብሆንም እንደሰይጣን አለ የሚለውን ነገር አልቀበለውም*					
12	ፀሎት ወይም ስግደት የሰላምና የደስታ መሰረት ነው					
13	ስለ ህይወት ፍልስፍና የሚሉ ጥያቄዎችን ስለመልሰልኝ ሀይማኖቴ በጣም ጥሩ ነው ፡					
14	የምሳሳደው ወይም የምቀልየው ከምንም በላይ የአእምሮ እረፍት እና እርካታ ለማግኘት ነው					

3) ሃላፊነት መወጣትን በተመለከተ የቀረቡ ዝርዝር ጣቢይቆች

ተ.ቁ	ጥያቄወች	የቀረቡ አማራጮች				
		በአል	አል	አአ	አስ	በአስ
1	በትምህርት ስራ የሚሰጠኝን ስራዎች ለማጠናቀቅ የሌላ ሰዉ እርዳታ ብዙ አያስፈልገኝም					
2	መምህሩ የኔን የትምህርት አላማየ መንደፍ ሃላፊነት አለበት*					
3	ጥሩ ተማሪዎች ድከመታቸዉን እና ጥንካሬያቸዉን ነቅሰዉ ያወጣሉ					
4	ለምማረዉትምህርት እቅድ ማዉጣት የኔ ሃላፊነት ነዉ					
5	መምህሩ የትምህርት አላማዎን እንዲነ ድፍልኝ እፈልጋለሁ*					
6	መምህሩ ምን መስራት እንዳለብኝ እንዲነ ግረኝ እፈልጋለሁ*					
7	ጥሩ ተማሪዎች የትምህርት አላማቸዉን ቀድመዉ ይነ ዲፋሉ					
8	የቤት ስራየን ሰርቸ ለማጠናቀቅ ምን ያክል ሰአት ማዮሩት እንዳለብኝ መምህሩ እነ ድነ ግረኝ እፈልጋለሁ*					
9	በትምህርት ስራ ላይ ለሜፈጡሩ ስህተቶች ስራየን ደጋግሜየ ሞ ት ግደታ እንዳለብኝ ይሰማኛል					
10	ጥሩ ተማሪዎች በትምህርት ላይ የሚያጣኩትን መሻሻል በየጊዜዉ ይገ መገማሉ					
11	በትምህርቴ ላይ የሜጠብቀዉን መሻሻል መምህሩ እንዲነ ግረኝ እፈልጋለሁ*					
12	በከፍል ዉስጥ የምንሰራቸዉን ስራዎች ለምን እንደሚሰሩ እና እንዴት እንደሚሰሩ ሁልጊዜ የማበራራት ግደታ የመምህሩ ነዉ*					
13	ተማሪ እንደመሆኔ ይህንን ስራ፣ በዚህ ጊዜ ስራ፣ በዚህ መንገድ ስራ ተብየ በመመምህሩ መጎ ገር አያስፈልገኝም					
14	ለምማረዉትምህርት አላማነ ድፈ እንቀሳቀሳለሁ					
15	ለትምህረቴ መሳካት የእኔ ጥረት ወሳኝ ነዉ					
16	ተማሪ እነ ደመሆኔ ድከመት እና ጥንካርየን በየጊዜዉመገ ምገ ም አለብኝ					

Declaration

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

Name Mohammed Dawssie

Signature _____

Date _____

This thesis has been submitted for examination with my approval as a university advisor.

Name _____

Signature _____

Date _____

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