Motivational Predictors of Tenth Graders' Academic Achievement in Harari Secondary Schools

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ABSTRACT

The main purpose of this study was to examine the effects of intrinsic predictors, teaching style, and extrinsic predictors and challenges of male and female 10th graders' academic achievement in Harari National Regional state. The population of the study were students from Abadir secondary school, Shakib secondary school, and Harari senior secondary schools. The samples (n = 104) were selected using cluster sampling technique from eight secondary schools in the region. Reliability tests indicated acceptable coefficients (0.72, 0.85 and 0.82) for the three domains of the questionnaire. Descriptive and inferential statistics were used to analyze the data. The findings show that student-centered teaching approach is the most robust predictor of academic success. Some of the variables in the study indicated poor predictive power, some indicated moderate, and others showed high predictive power over students' academic achievement. The findings are insightful in that they reveal why some students succeed in tasks, why some give up easily, and why some other students persist. It is recommended that teachers adopt a learner/student-centered teaching method to enable their students to develop self-sustaining approach in order to maintain a lifelong enthusiasm for their future learning. The findings have implications for curriculum experts who can transform their routine approach to general education curricula in such a way as to inspire and change students' personal, moral, emotional, psychological and behavioural adjustments towards academic success.

Key words: Academic Achievement, Extrinsic Motivation, Intrinsic Motivation, Teaching Style

INTRODUCTION

The modern concept of motivation derives from the historical need to account for the arousal and direction of behavior. Motivation is the process that initiates, guides, and maintains goal-oriented behaviors. It is also a complex concept and can have many features, such as persistence, ambition, goal orientation, and self-perceptions (Erhuvwu & Adeyemi Florence, 2019). They also, define it as a psychological mechanism in which one's emotions affect one's behavior. Similarly, Erhuvwu and Adeyemi (2019) for instance, contend that, driving success has an impact on thoughts, which in turn has an impact on behaviors, values, intentions, effort, and withdrawal. These motivations can be categorized into intrinsic and extrinsic motivations (Atherton, 2010).

Intrinsic motivation is self-generated factors including responsibility, freedom to act, scope to use and improve skills and abilities, interesting and challenging work, advancement opportunities have a deeper and longer-term effect. On the other hand, extrinsic motivation is what is done to encourage people such as, rewards, bonus, and punishment which has an immediate and powerful effect.

For instance, Clevenger (2013) contend that Motivation has been connected to achievement, but achievement cannot be developed until the aspect of and element inherent motivation are understood.

Furthermore, Dunlosky et al. (2013) point out that motivation can affect the development of one's potential to be successful in life. Similarly, Molden and Dweck (2000) described that motivation is a multifaceted concept that includes persistence, ambition, goal orientation, and self-perceptions. In this regard, motivation has been connected to achievement, but achievement cannot be improved until the feature and factors of implicit motivation are understood. Kpolovie et al. (2014) added the following thought:

> *Academic achievement of student is the ability of the student to study and remember facts and being able to communicate his or her knowledge orally or in written form even in an examination condition.*

Yukseloglu and Karaguven (2013) also argue that one of the most important psychological concepts in education is motivation, because motivation is linked to a variety of outcomes, including interest, perseverance, learning, and success. Habibah et al. (2011, p. 103) argue that, a more

elaborated and incorporated mental image is needed to realize the power that push students towards academic excellence. The convergence of many motivational factors should be at work to strongly motivate students to hard work and academic achievement, according to the various theories presented in the field of motivation. Future time comparison, achievement need, learning goals, expectancy values, self-effectiveness, and self-determination (Vallerand et al., 1997).

On the other hand, some theorists propose that intrinsic motivation might be differentiated in to specific motives (Çetin, 2015). A triangular taxonomy of intrinsic motivation has been proposed by some scholars are also based on the intrinsic motivation which indicates the existence of three distinct forms of intrinsic motivations, namely intrinsic motivation to know, to accomplish tasks, and to feel stimulation (Habibah et al., 2011). Similarly, Çetin (2015) contends that motivation theories are based on nature assumptions. Research also indicates that from an organic-dialectical perspective, motivation is divided in to three categories include motivation, intrinsic motivation, and extrinsic motivation (Habibah et al., 2011, p.254; Erten, 2014) contend that motivation is described as the lack of a desire to act to perform a given activity.

In this regard, we can conclude that intrinsic motivation is a source that is fundamental to organism's existence because intrinsic motivation is based on unconscious desire for competence and autonomy. It is the foundation for a variety of activities and psychological processes. Intrinsic needs are distinct from primary drives in that they are not triggered by deficits and do not cycle. Both, however, are innate and serve as a source of energy for action (Ibrahim et al., 2017). Erten (2014) described intrinsic motivation as motivation derived from the joy or satisfaction gained from engaging in an activity. Extrinsic motivation on the other hand, is a state of cognitive or emotional stimulation aimed at achieving a goal or negative consequences.

Furthermore, intrinsic motivation can affect how one satisfies one's drives by increasing or decreasing the strength of one's drives (Erhuvwu & Adeyemi, 2019). Academic performance, on the other hand, is often characterized in terms of examination performance. According to Cambridge University report (2003), the proceeding arguments are clearly depicting that there is no single indicator of academic achievement. This suggests that there are more ways to explore in order to find additional predictors of academic success. Consequently, the purpose of this study was to fill knowledge and methodological gaps in the related literature by investigating the relationship between intrinsic, teaching style, and extrinsic motivational predictors of academic achievement in three selected grade ten secondary schools in Harari regional state.

On the other hand, Erhuvwu and Adeyemi (2019) found that motivation is lack of inability of person to sense the conditions that exist between his or her actions and their consequences. A motivation according to Rosemary F. and Mullen (2018) arises when students do not receive constructive feedback about their success or feel they have failed on regular basis. This indicate that motivation occurs when individual

students cannot get positive feedback regarding their performance or believe that they have failed on a repetitive basis and non-contingent situations, according to the revised theory of helplessness, contribute to motivation when one perceives oneself as incompetent to achieve desired outcomes (Erhuvwu & Adeyemi, 2019).

Statement of the Problem

A number of studies have been carried out worldwide regarding motivational predictors on students' academic achievement in secondary schools (for example, Kpolovie et al., 2014; Elias et al., 2011). Elias et al. (2011) found that, it is important to instill in school students all five kinds of motivation, mainly because they tap the intrinsic, inner drive to perform well in examination. Developmental, preventive or intervening programs in schools can very well expose students to the essential ingredients of academic success to help improve their academic performance. Perspective was the strongest predictor, followed by self-efficacy, expectancy values, and self-determination and mastery goal.

On the other hand, Geleta (2017, p. 239) in his study conducted on schools climate and student achievement in secondary school of Ethiopia, states that teachers' professionalism is the most positive predictor of student achievement in Ethiopia secondary schools. Similarly, collegial leadership and academic press are also found to be significant predictor of academic achievement. In the same way, Ambachew et al. (2019) reported that there is a strong relationship between parent involvement and academic achievement motivation of students' academic achievement motivation.

Additionally, Bereket et al. (2019) revealed that there was significant difference in academic performance on students of different age, but in the opposite way, there is no significant difference in academic achievement of students from different parental occupation level, no significant difference in parental education level and place of residence. Similarly, Daniel and Bamlaku (2017) examined students 'academic achievement in terms of mothers and fathers literacy, average class test performance, parents' income, domestic working hours had found a positive relationship between participating in school clubs and primary school leaving examination score, as well as negative and important relationship between participating in school clubs and primary leaving examination score.

Similarly, Covington (2000) contend that academic motivation is the most important factor in students' academic success. This is because academically motivated students are more likely to prepare and set academic goals, and then work hard to meet their intended objectives. Erten (2014) also added that students are much more likely to devote all of their time and effort to their academic work, and to see academic difficulties as barriers to be overcome.

Moreover, Husena et al. (2017) carried out a study to address the impact of parental influences on students' academic success in secondary schools and found that parents' attitudes toward their children's education and lack of motivation had an impact on students' academic outcomes. Furthermore, they claim that low academic performance is

due to parents' lack of planning, time, and interest, as well as their socioeconomic status and socio-cultural factors.

Similarly, Lockshin and Zamkov (2009) found that the majority of students' academic performance is influenced by both intrinsic and extrinsic motivations. However, in secondary schools, teaching style, in addition to intrinsic and extrinsic motives, are the most motivating predictors of students' academic results (Dramanu & Mohammed, 2017). According to Dagnew (2017), students' attitudes towards school, educational values, achievement motivation, and academic achievement had a positive and important relationship. Galata (2018) reported that, academic achievement motivation predicts students' academic performance.

In general, the aforementioned studies highlighted the effect of motivational predictors on students' academic achievement in public secondary schools, and researchers indicated that intrinsic motivation, teaching style and extrinsic motivations that take predictors into consideration at public secondary schools are becoming a serious problem and challenge in Ethiopian education delivery system. Furthermore, most former studies have not directly addressed the issue of intrinsic motivation, teaching style, or extrinsic motivation in the field of secondary schools (Ambissa, 2010).

Therefore, this study is more extensive in terms of its depth. Additionally, it differs from previous studies in terms of its inclusiveness. It involved grade ten students from three schools Harari National Regional State, which is located in the eastern part of Ethiopia, where there are no such extensive studies conducted in this specific field that consider at the motivational predictors of secondary school students' academic achievement and related preventive issues in terms of the three constructs of intrinsic motivation, teaching style, and extrinsic motivation. As a result, gaps found when evaluating various studies related to the issue under consideration with a prospect, limitations, and content gaps based on secondary education field gaps. Thus, this study attempts to fill in the gaps in both theory and experience by looking at motivational predictors of student academic achievement. Accordingly, the following are the guidelines for the study, which are based on six basic questions.

Research Aim

The overarching aim of this study was to determine; the current state of intrinsic motivation, teaching style, and extrinsic motivation predictors have an effect on students' academic achievement; specifically, the study was envisioned to investigate: the degree to which parents' economic status has a direct effect on their children's academic achievement; the extent to which parents' the current state of residential location have an effect on students' academic achievement; the degree to which intrinsic motivation predict students' academic performance; to which degree teaching style predict students' academic performance; the most powerful group of motivational predictors for predicting students' academic achievement; and whether there is a statistically significance difference between students score and extrinsic motivation, teaching style, and extrinsic motivation, in Harari Region public secondary schools.

LITERATURE REVIEW

Recent studies indicate that academic achievement plays a significant role as an outcome activity (Bandura, 1971). Academic achievement of students is also considered widely as a criterion for evaluating educational systems. Therefore, identifying variables that influence academic achievement is critical, because things can become much more ambiguous if perception, motivation, and their components are not addressed.

The majority of research in the areas of motivational predictors and academic achievement, agrees that that intrinsic motivation, teaching style, and extrinsic motivation can all play a role in predicting achievement (Lockshin & Zamkov, 2009). Thus, the relationship between intrinsic and extrinsic motivation and students' academic achievement, teaching style and students habits on academic achievement, types of motivational variables, the contribution of goal orientation and perceived values to their academic achievement, mastery, and curiosity can all be considered potential predictors of academic performance.

Therefore, investigating more closely at other factors those influence the intrinsic, teaching style and extrinsic motivational predictors to identify the most predicting variables is crucial (Vallerand et al., 1997). Several philosophical theories argue that actions can be intrinsically and extrinsically motivated. This indicate that for every action there is either intrinsic or extrinsic motivation for the holder. Therefore, students have one of the motivating factors to possess day to day activities at their home or at their school. In this regard, Husena et al. (2017) suggest that theoretical approach to education has sparked many decisions and appears to be very relevant. Family education, socio-economic status, and residential area, such as urban, rural, and semi-urban backgrounds, have all played a major role in influencing students' performance in schools around the globe (Chow & Yong, 2013). Likewise, Charmaz (2006) proposed that intrinsic motivation and extrinsic motivation should be perceived as mostly independent dimensions, rather than opposite ends of a single dimension.

Concept of Motivational Predictors

Motivation has always been connected to academic achievement in schools. Despite the literature's numerous motivational variables, it has yet to be established which form of motivation has the greatest effect on performance (Gbollie & Keamu, 2017). Moreover, Habibah et al. (2011) described that future time perspective, achievement need, learning goals such as mastery and performance, expectancy values, self-efficacy, and self-determination were also can contribute to motivation.

Empirical studies

Some researchers in other countries have conducted studies on the various motivational predictors of secondary education student's academic achievement. Dukmak and Ishtaiwa (2015) conducted a study on factors influencing the academic achievement of students in the United Arab Emirates'

preparatory and secondary schools, proposing that there is a significant relationship between parents' education level and students' academic achievement, but no statistical significance differences were found in the study between other predictors and outcome measures.

Similarly, the research conducted by Deci et al. (1991) on motivation and education: the self-determination perspective, indicate that, promoting self-determined motivation in students should be a top priority in students' academic achievement activities; in this regard, autonomy assistance and interpersonal engagement are the two most critical components to consider. Additionally, through the process of internalization and integration, students are more likely to retain their inherent curiosity (intrinsic motivation for learning) and develop autonomous forms of self-regulation. In a similar way, Ng'ang'a et al. (2018) carried out a study on relationship between achievement goal orientation and academic achievement among three students in Kiambu County, Kenya found that all the domains of achievement goal orientation significantly correlated to academic achievement.

Additionally, the research carried out by Chow and Yong (2013), on secondary school students' motivation and achievement in combined science, found that a group of students had a moderate level of intrinsic motivation, personal importance, self-determination, and self-efficacy, high level of extrinsic motivation and appraisal anxiety. Furthermore, their finding shows that there are major variations in motivational orientations toward studying combined science between boys and girls, as well as between high and low skill students, and also students' motivational orientations and science achievement have a significant positive relationship. In a similar way, a study carried out by Abebe and Getachew (2015), reported that, mastery goals and success goals had positive and negative effects. In the realm of inspiriting students' academic achievement, classroom activities and practices should receive consideration. It also revealed that there is a particular need to focus on promoting mastery goals because they are linked to a variety of positive outcomes for students' academic achievement. In this regard, it is critical to develop secondary school classroom practices and policies that include interesting, demanding activities, autonomy support, and follow up processes that place a premium on effort over students' ability.

Moreover, a domestic study carried out by Galata (2018) on assertiveness and academic achievement motivation of adolescent students in selected secondary schools of Harari Peoples Regional State, showed that assertiveness of adolescent students was low; and relatively male adolescents were found to be more assertive than their female adolescent counterparts. The study also indicated that there was a statistically positive association between assertiveness and academic achievement motivation when it came to assertiveness and academic achievement motivation. Furthermore, a statistically significant positive association between parental educational level and assertiveness was found. Unlike assertiveness and parental educational status sex tended to play a similar role in explaining adolescent's motivation for academic achievement.

With regards to teaching style as predictor of students' academic achievement, Kimani et al. (2013) reported that teachers' age, gender, educational qualifications, and teaching experience were not significantly linked to students' academic achievement. Rather, the study indicated that in secondary schools, the teaching style of teachers had a significant and optimistic relationship with students' academic achievement. Furthermore, Khalid et al. (2017) conducted a research on secondary school teachers teaching styles and learning styles and their students' learning style, as well as the relationship between teaching learning style match and student' achievement, and found that students' learning style and their achievement in English courses have statistically significant differences.

Furthermore, Churcher et al. (2016) carried out a research on teaching styles and students study habits on academic achievement in mathematics among junior high schools in upper east region of Ghana reported that teachers teaching styles and student study habit on academic achievement are good and even better predictors of academic achievement and performance in junior secondary school in Ghana. They also contend that, study habit alone is a good predictor of academic achievement in Junior High Secondary school. Furthermore, it has been found that teachers' teaching style contributes to the variance in students' academic achievement in Social Studies.

Moreover, merging concepts and theories motivational predictors of students' academic achievement in secondary schools in general and grade ten in particular requires students' self-emotion including intrinsic and extrinsic motivation, as well as well-organized and motivated teaching style. Furthermore, the role of parents in following up of their children, fulfilling the learning equipment's, parents educational status, and parents socio-economic status are observed as best predictors of students' academic achievement in secondary school. Motivating students by reward may cause depend on material benefits, therefore parents and teachers need to work only on their duties and responsibilities to enable students to focus towards their academic achievement. Furthermore, teachers must employ a variety of teaching methods in order to assist their students in achieving their academic goals, as well as take into account their students' individual differences in order to maintain a balance in the students' comprehension of what the teachers teach in the classroom.

The Conceptual and Theoretical Framework of the Study

Basically, studies' theoretical and conceptual context are inseparably connected to each other, since the theoretical framework of the research is the most fundamental and central issue for the conceptual framework of the study. As a result, this study is guided by two basic theories including cognitive theory of teaching and social learning theory and goal orientation theories which encompasses two specific theories (multiple Goals and self-efficacy concepts). Consequently, cognitive teaching and social learning theory advocates cognitive theory in the field of education provides

more focuses on attention, perception, memory, forgetting, and retrieval (Bjorklund, 1995, as cited in Kaya & Akdemir, 2016, p. 9). As a result, internal stimulants, rather than external stimulants, are the focus of learning. According to this theory, intelligence is not passively obtained but actively built up by the recognizing subject; cognition is adaptive and serves the organization of the experiential world rather than the discovery of ontological truth (VonGlaserfeld, 1989, as cited in Fernando & Marikar, 2017).

Similarly, the specific constructs achievement and goal orientations, are able to explain why students approach and engage in certain tasks and not others. Achievement goal orientations are likely to impact on the implementation of self-regulation strategies such as attending study skills courses and utilizing academic advising services which in turn influence attainment (Covington, 2000). While, Self-Efficacy concept beliefs about competence in terms of their action in specific circumstances (Bandura & Locke, 2003). Furthermore, Pintrich (2003) argues that students are motivated when they have instilled adaptive self-efficacy constructs and competence perceptions.

Overall, constructivist teaching and learning theory advocates students' self-effort to achieve their intended goal. Hence, teachers need to encourage their students to do more to attain their academic performance, and also apply knowledge of classroom management: maximizing the quantity of instructional time, handling classroom events, teaching at a steady pace, maintaining clear direction in lessons; knowledge of teaching methods: having a command of various teaching methods, knowing when and how to apply each method; Knowledge of classroom assessment: knowledge of different forms and purposes of formative and summative assessments, knowledge of how different frames of reference (e.g., social, individual, criterion-based) impact students' motivation. Similarly, students have to be goal oriented, adapt self-regulation, and mastery strategies to come up with academic achievement.

The study's framework is depicted in Figure 1. As independents variables, it looked at intrinsic motivation, extrinsic motivation, teaching style, and demographic variables, while academic achievement was the dependent variable. The dependent variable (DV) is predicted by the independent variables (IV), and the dependent variable is defined by the aforementioned independent variables. It scrutinized intrinsic motivation, extrinsic motivation, teaching style, and demographic variables as independent variables and
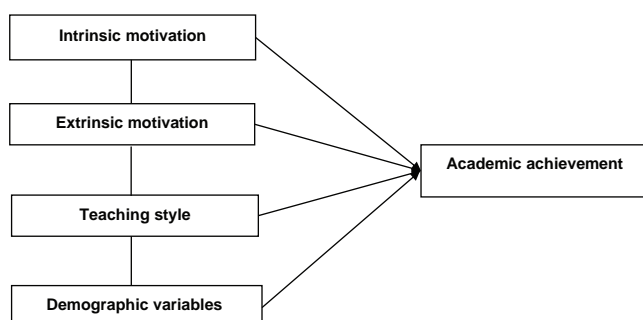

Figure 1. Conceptual framework

academic achievement as dependent variable. The independent variables (IV) are interfaced each other to predict the dependent variable (DV) and the dependent variable is determined by the independent variables.

Intrinsic Predictors

Intrinsic motivation to learn refers to a person's desire to learn whether it is fun, interesting, or important to their core psychological needs (Augustyniak et al., 2016). Intrinsic motivation, in reality, is a powerful factor in success, learning persistence, and productivity. Furthermore, Vallerand et al. (1997) demonstrated that intrinsic motivation and extrinsic motivation can coexist and are not mutually exclusive. According to Ibrahim et al. (2017), goal oriented and perceived values led to students' academic performance both directly and indirectly through intrinsic motivation and meta cognition, Goal orientation, accompanied by perceived value, was found to be the most significant determinant of intrinsic motivation and meta cognition.

Çetin (2015), on the other hand, argues that currently, there is a debate about which types of achievement goals promote optimal academic achievement. Theorists claim that, from a mastery target viewpoint, based on the adaptive and maladaptive implication of mastery goals. Others advocate for a multi-goal approach, in which mastery and success objectives can also be helpful. To the contrary (Barron & Harackiewicz, 2001; Bhattacherjee, 2012) contend that the student perceptions of classroom structures are important for their motivation. From the arguments we can understand that there are so many motivational predictors that need to be investigated.

Teaching style

In teaching and learning, a welcoming, conducive, and enjoyable learning environment is crucial. This is because students' willingness and readiness to learn is influenced by the teacher's teaching style as well as the students themselves (Fowler, 2009). On the other hand, Houghton et al. (2012) found that there is no meaningful association between students' learning styles and teachers' teaching styles. Similarly, Churcher et al. (2016) argue that teachers' teaching styles and students' study habits on mathematics academic achievement are good, if not better, predictors of academic achievement and success. Hence, from these two arguments we can draw a conclusion that leads us to understand there is no commonly accepted indicators of the effect between teaching style and academic achievement. Therefore, still it needs more to be done to identify the relationship between teaching style and academic achievement.

Extrinsic Predictors

The motivational belief component of extrinsic goal oriented was described as the most preferred beliefs, according to Gbollie and Keamu (2017), while test anxiety was the least possessed belief. Furthermore, Dunlosky et al. (2013) emphasize that the external regulation occurs when

students relate outcomes in order to control for the function of time and rewards, which they assign to learned activities. Nevertheless, external control, which includes being motivated to receive incentives or escape penalties, is the least autonomous form of extrinsic motivation (Molden & Dweck, 2000). According to Fowler, F. J. (2009), external control has a causality condition that is viewed from the outside.

RESEARCH METHODOLOGY

Description of the Study Area

This study was conducted in the Harari National Regional State one of Ethiopia's nine regional states that make up the Federal Democratic Republic of Ethiopia. It is situated in the Eastern part of Ethiopia, 515 kilometers to the south-east of Addis Ababa, at an elevation of 1750 meters above sea level (Ahmed, 2015). The region's administrative center, is located in the region's south-western corner, about 525 kilometers east of Addis Ababa. Furthermore, it is divided into nine administrative districts (woredas). As a result, the secondary schools chosen for this study are in Harari National Regional state

Source of Data

Both primary and secondary sources were used to complement each other in this study. As a result, primary data was collected using a questionnaire distributed to 104 students in the 10th grade from three secondary schools. Secondary data, such as journal, papers, e-books, and proceedings, and book chapters was accessed through the internet.

Population and Sampling Techniques

Students from Abadir, Shakib, and Harari Senior secondary schools were included in this study. They were chosen from 8 (eight) secondary schools in the region using a simple random sampling technique. Although each school's sampled students were chosen using a systematic random sampling technique.

Instruments of Data Collection

Relevant data for the study were collected through five point Likert scale questionnaire developed by the investigator and document analysis was also been used.

Questionnaire

The first part of the questionnaire included measure motivational predictors as an independent and students score as dependent variable which was formulated by the researcher. The second part was also consisting of 40 items under 6 sub-scales.

Secondary Source of Data

Publications such as textbooks, journal articles, book reviews, book chapters, and commentaries that are reviewed in the literature were used as secondary sources of data for this research. Since the research was performed using a descriptive survey design, these were used to substantiate the data obtained from primary source in the quantitative approach using questionnaires.

Procedures of Data Collection

Prior to engagement in the data collection process, a letter of permission was obtained from college of education and behavioral science department of adult and community development and submitted to Harari peoples national regional state educational office, and the letter was sent to school principals and permission was obtained from the principals of each schools. As a result, 113 questionnaires were distributed and 104 were returned. Data collection procedure involved distribution of questionnaire to respective classroom teachers by the investigator and its collection after seven days.

Methods of Data Analysis

Data collected from field through questionnaire were organized in the frequency table for proper management and cleaned, encoded and entered into a computer and analyzed using SPSS version 20. Consequently, descriptive statistics like Mean, Medians, and SD were utilized to analyze the results, as well as inferential statistics such as Pearson Product-Moment Correlation, One-Way ANONVA and two way ANOVA analysis were utilized to interpret the data and complement both methods of the analysis. Finally, the data was interpreted, summarized and recommendations were made.

Ethical Considerations

Ethical concerns and right behaviors are of paramount importance when planning, conducting, evaluating research and disseminating findings. In this study, the investigator considered the relevant ethical considerations such as: explaining the objectives and significance of the study in order to obtain consent from selected respondents, encouraging them to participate voluntarily, and ensuring confidentiality that any information they provide will mainly be used only for the purpose of the study and categorization and reporting will be made anonymously. In addition, questionnaire papers were registered by numbers rather than names. The sampled secondary schools were requested and allowed the researcher to conduct his study in their schools. All the data were kept confidential and anonymous so that the identity of the respondents and participants would be protected. The publication out of this study followed utmost ethical values of academic and scholarly principles. In a nut shell, the conduct of this research has strictly followed the highest possible ethical considerations available during design, data collection, analysis and interpretation.

RESULTS AND DISCUSSION

Under this section the results from the quantitative data were presented. Motivational predictors on grade ten students'

academic achievement in Harari Secondary Schools were examined. The association between the three variables (Intrinsic, teaching style/method, and extrinsic motivation), and the significance differences were presented and analyzed.

The preceding sections provided background, examined relevant literature, and outlined the methodology of the current study which examines the effect of motivational predictors such as intrinsic, teaching style and extrinsic predictors on students' academic achievement. The quantitative results of the survey are presented, analyzed, interpreted, and discussed in this section.

Table 1 is the two way ANOVA results that indicate an effect of sex and parent socio-economic status on student academic achievement, a 2 × 3 two way ANOVA was used to respond to the first basic research question, which was: "is there a significant effect between sex and parental socio-economic status on students' academic achievement?" to examine whether there exists an effect of sex and parent-socio economic status on students' academic achievement. To answer the first basic research question which was stated as: Is there a significant effect between sex and parent's socio-economic status on students' academic achievement? Table 1 indicates the result of the analysis such that, interaction of sex $F_{(1,98)}$ =1.541, p = .217, η^2=.015 this shows that sex has no significant effect on students' academic achievement. Similarly, the interaction of parent and student academic achievement indicates $F_{(2,104)}$ =1.023, p = .363, η^2=.020, this again indicates that parents socio economic status has no significant effect on students' academic achievement, since the significant value of both interactions are >.05. In a similar fashion, sex and parents socio economic status interaction shows $F_{(2,103)}$=1.320, p = .272, η^2=.026, this also indicates that sex and socio-economic interaction have no significant effect on students' academic achievement. In general from the result we conclude that sex and parent socio-economic status individually and interactively have no significant effect on students' academic achievement.

Table 2 is SPSS output for One-way-ANOVA was conducted to test the third basic research question which was stated as: Is there difference in students score for parents' low, medium and high socio-economic status? (n = 104). The independent variable, parent socio-economic status: low

(M=2.68, SD =. 1.013, n = 31), medium (M=2.69, SD =.922, n = 58), high (M=2.33, SD =.976, n = 15). The assumption of homogeneity of variance was tested and found tenable using Levine's test, F (2, 575) =.062, p = .94. The ANOVA was significant at $p<0.01$ (F(2, 575) =14.35, p = .001, $\dot{\eta}2$=.05). Hence, there is no significant evidence to conclude that there existed differences in socio-economic status among the three levels of parents living status in students score achievement based on the living standards of their parents at all levels ($p>0.05$). Therefore, even though it is expected that the parents' socio-economic status may have significant effect on their children's performance, but on the contrary, in the context of the study area the parental economic-status does not have an impact on students' academic achievement. This cannot indicate that in other regions of Ethiopia the same scenario will happen, because there are diversified cultural background, religion, beliefs, and outlooks regarding the importance of education for the country in general and for individual learner in particular.

Table 3 is the SPSS output for descriptive analysis implemented to answer the fourth basic question, which was stated as: What is the current status of intrinsic motivation on students score in the school? Mean (M) and standard deviation (SD) were used to see the level of agreement by the respondents towards the major variables and their sub-scales. Table 3 depicts that (N = 104). Although the constructs and their sub-scales were depicted in Table 3 as follows: the major constructs I am highly interested in learning, The subjects am doing will be important for my future, I find classroom exercise easy to do, I am interested in the subjects am doing, and I use a variety of resources such as the library in learning, mean score was 3.92 (SD=.832), 3.78 (SD =.847), 3.91(SD =883) and 4.08 (SD=.856) respectively. Hence, it can be concluded that the status of intrinsic motivation of the students was lower since the mean score was closer to undecided ranging from mean score of minimum 3.91 to maximum of 4.08. This in turn indicate that students have no internal motivation to their academic achievement to become self-initiative for their own future life and development, their parents' life improvement as well as for their country development. In general this result represent only the specific study area, not represent the entire country which consists

Table 1. The Effect between Sex and Parents' Socio Economic Status

Tests of Between-Subjects Effects						
Dependent Variable: score achieved						
Source	Type III Sum of Squares	df	Mean Square	F	p	Partial Eta Squared
Corrected Model	4.313a	5	.863	.941	.458	.046
Intercept	493.633	1	493.633	538.696	.000	.846
SEC1Sex	1.412	1	1.412	1.541	.217	.015
SEC1pses	1.875	2	.938	1.023	.363	.020
SEC1Sex * SEC1pses	2.419	2	1.210	1.320	.272	.026
Error	89.802	98	.916			
Total	816.000	104				
Corrected Total	94.115	1				

a. R Squared = .046 (Adjusted R Squared = -.003)

eleven regional states and two administrative cities, because of two reasons. First, the demographic factor influences the students' intrinsic and extrinsic motivation towards learning. Second, the environment in which they live have also an impact on their emotional filings as environment can play a vital role for human beings in general and for students' in particular.

Table 4 is SPSS output for correlation analysis to describe the strength and direction of linear relationship between gender, age, parents educational level, parents socio economic status, and students' academic score. As a rule, Positive sign of the result shows that with increase in one variable the other increases as well, while negative correlation indicates that with an increase in one variable, the other decreases. However the value itself provides an indication of the strength of relationship. Accordingly, the result revealed that correlation between age, gender, and family back ground as predictor of students' academic achievement. Accordingly, the result shows that, 1 and 2 (r = -.062, $p>0.05$); likewise, 3 and 4 also shows that (r= -.091, $p>0.05$). Hence, Pearson product correlation of parents' educational level and parents' socio-economic status, was found to be markedly low and statistically insignificant. Therefore, this can be inferred as an increase in parents' educational level and socio-economic status would lead to low students' academic achievement.

The SPSS matrices output for correlation analysis between dependence on teacher and students' academic achievement, specifically, items 5 and 6, shows that (r = .263, $p<.001$). Hence, for students dependency on their teacher in terms of seeking teachers' help to do every work for them, shows that dependence on their teacher is very low positive correlation with their academic achievement. Therefore, students are expected to perform their independent work rather than seeking every help from their teacher. But for works above their capability, they can consult their teacher the way it can be performed not let their teacher works for them. On the other hand, the correlation result further shows that, 7 and 8, (r = .259, $p<.001$). Thus, based on Evans (1996), the results of the two constructs stated as when I don't understand something right away I want the teacher to tell me the answer and I like to have the teacher help me with my schoolwork indicates clearly shows that, the two constructs have insignificant correlation with students' academic achievement. This indicate that students' dependence on their teachers does no help them to achieve their academic goal. Rather it may lead them to be dependent on others in their future life.

On the other hand, students who asks their teachers when they face challenge to solve their school work had showed better results. This indicate that the more the students develop their intimacy with their teachers the more they benefited. Teachers also fill a sense of collegiality with their students and fill happy to help their students in problem solving and

Table 2. Difference in Students Score and Parents Socio-Economic Status

Descriptive Statistics				
Dependent Variable: score achieved				
Sex of the respondents	Parent socio-economic status	Mean	Std. Deviation	n
female	low	2.55	1.099	20
	medium	2.75	.996	36
	high	2.00	1.000	7
	Total	2.60	1.040	63
male	low	2.91	.831	11
	medium	2.59	.796	22
	high	2.62	.916	8
	Total	2.68	.820	41
Total	low	2.68	1.013	31
	medium	2.69	.922	58
	high	2.33	.976	15
	Total	2.63	.956	104

Table 3. Current Status of Intrinsic Motivation on Students Score in the School

	1	2	3	4	5	6
N	104	104	104	104	104	104
Mean	3.92	3.78	3.84	3.89	3.91	4.08
SD	.832	.847	.814	.847	.883	.856

1= I am highly interested in learning, 2=The subjects am doing will be important for my future, 3= I find classroom exercise easy to do, 4= I am interested in the subjects am doing, 5= I use a variety of resources such as library in learning, 5= I have a strong sense of satisfaction and 6= I am confident with my academic performance

Table 4. Correlation between family background as predictor of students' academic achievement

1	2	3	4	5	6	7	8	
1	1	-.062	.041	.101	.040	.040	.074	.016
2	-.062	1	.137	.052	-.223*	-.263**	-.147	-.141
3	.041	.137	1	-.091	-.087	-.074	-.127	-.139
4	.101	.052	-.091	1	-.047	-.025	.259**	.159
5	.040	-.223*	-.087	-.047	1	.688**	.456**	.465**
6	.040	-.263**	-.074	-.025	.688**	1	.523**	.510**
7	.074	-.147	-.127	.259**	.456**	.523**	1	.673**
8	.016	-.141	-.139	.159	.465**	.510**	.673**	1

1= gender 2=age 3= Parents educational level 4=Parent's socio-economic status 5=When I don't understand something right away I want the teacher to tell me the answer, 6= I like to have the teacher help me with my schoolwork, 7= When I make a mistake I like to ask the teacher how to get the right answer, 8= If I get stuck on a problem I ask the teacher for help

in developing their students' knowledge, skills, and attitudes which can help to develop their future self-improvement. This is the same as to say, students need to have close relationship with their teachers in order to achieve their future goal of self-development and specifically, their academic goal. This is not only helpful for their personal development, but also for their family and their entire regional development. Furthermore, intimacy with their teacher may improve their academic achievement, problem solving and mutual co-existence with their classmates, other students, school community and general social life.

CONCLUSIONS

The preceding chapters have detailed the background, reviewed the relevant literature, and described the methodology of the study. In chapter 4, the researcher depicted the data as obtained through following the methodology outlined in chapter 3. This chapter presented the summary of the study, the conclusions that were derived from the study, and the recommendations forwarded for teachers' trainers, education experts, curriculum specialists, and for future research in the area.

This study attempt to identify whether or not there exist mean differences among parents socio economic status and sex on their academic performance. The study also tried to investigate which motivational predictors are more sensitive to predict students' academic achievement. Furthermore, this study gave more emphasis to the intrinsic, teaching style and extrinsic motivation whether this constructs are actually have an effect on students' academic achievement. Based on these view the study tried to answer the following five basic question:

1. Does sex or a parent's socio-economic status have a direct effect on a student's academic achievement?
2. Is there difference in students score for parents' low, medium and high socio-economic status?
3. What is the current status of intrinsic motivation on students score in the school?
4. What is the best set of motivational predictors that are most effective in predicting Students' Academic achievement?
5. What are the most effective motivators for predicting student academic achievement?

Descriptive survey method research was used in this study in which quantitative data were collected using questionnaire. The quantitative data were derived from randomly selected 104 sample respondents (104 from a total population of 1589 in the three schools.) These respondents were drawn from three sample secondary schools (Abadir, Shakib and Harar secondary schools), that were chosen from the total population of eight secondary schools using a simple random sampling technique. The quantitative data was analyzed with descriptive statistics such as Frequency, Percentage, Means and Standard Deviations as well as inferential statistics such as Pearson Product-Moment Correlation (r), One-Way ANONVA, two way ANOVA and regression analysis. Accordingly, summaries of the major findings were presented here-under.

The finding of the study revealed that most parents have no educational background. Regarding the residential area, almost more than 50% of the parents are living in urban area; with respect to living standards more than 50% are in medium living status. The sex of the respondents is found that, M=1.39, age of the respondents indicates that M=1.29, place of birth shows M=1.60, parent educational level depicts that M=2.31 and the mean of parent socio-economic status shows M=1.85. From the result the highest mean was observed in parents' educational level and the least is age of the respondents.

To sum up, the demographic back ground of the students have no significant effect on students' academic achievement. The socio-economic status among the three levels of parents living status also has no effect on student's academic achievement. The status of intrinsic motivation of the students was lower in predicting the student's academic performance. Some of the predictive constructs examined in the study shows weak prediction power, some are moderate and others such as student centered teaching method are strong predicting power on students' academic achievement. Students who consult their teachers when they make a mistake and try to get the right answer and those who get stuck on a problem and ask for help their teacher indicated that they have strong relation to be successful in their' academic achievement.

From the findings, it can be concluded that parents' background such as parents' educational level, residential area and socio-economic status have no significant effect on students' academic achievement. As was mentioned above, the major predictor of students' academic achievement was reported that student centered teaching method is the best teaching method for the learners to be successful in their academic performance. Students who depend on teachers help have low academic performance. While those who try to solve any given problem and only those asks their teachers for guidance are successful in their academic achievement.

Most of the respondents indicated that they do not have internal initiation or intrinsic motivation to achieve their academic goal, rather they were motivated in extrinsic motivation such as receiving rewards from their parents or from others. As mentioned above student centered teaching style have been reported as the most academic achievement motivational predictor. Therefore, from the finding we can conclude that teachers and parents need to do more to let the students have strong will and internally motivated for their success in their education career, rather than depending on external motivation. Because as can be observed from the study, some students believe in extrinsic reward for their academic performance rather than intrinsic motivation. This indicates that most of the students learning in grade ten do not have intrinsic motivation for their educational achievement. Therefore, parents and teachers have to motivate their children/students to be self-motivated and encourage them to build self-steam for their future academic career.

Based on the major conclusions reached in section 5.2., recommendations were forwarded to enhance students'

academic performance. For those who are involved in teaching-learning activities such as: trainers in training institutes who train teaching professionals, educational experts, curriculum specialists and for future research. Teacher trainers may find the following points useful:

- Teacher trainers need to consider and give more emphasis on how the trainees should handle their students'.
- Prioritizing teaching method that will encourage students to achieve is vital. Therefore, trainers should equip their trainees to overcome the need of secondary school students considering their age level and the environmental situation of their learners.
- Trainers need to encourage their trainees to follow student centered teaching method.
- Trainers have to equip their trainees with necessary knowledge, attitude and skills of teaching.

Educational specialists have to pay due attention to improve strategic and planned student's achievement system to fill all levels of general education with academically qualified, motivated and ethically fit teachers in general and for grade ten students in particular in line with the teacher development policy. This in turn contributes to motivate students for their academic achievement.

Curriculum experts have to turn their routine way of planning the general education curriculum in a way that it motivates and change student's personal, moral, emotional, psychological and behavioral change towards academic performance through enabling the teachers to participate in curriculum development.

Although the researcher has a belief in that this study has some strength and it has also have some limitations that future research will fill the gap by investigating deep study on motivational predictors of general education in general and grade ten in particular.

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