

Family Structure and Academic Achievement Motivation of Adolescent Students in Haramaya Senior Secondary and Preparatory School, East Hararghe, Ethiopia

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Abstract: This study examined academic achievement motivation (AAM) and associated personal (age, grade, sex) and familial structural factors (intact, single, and step family background) among a sample 201 (94 males and 107 females) adolescent students in one of the peri-urban schools of east Hararghe zone (Haramaya). Data were collected through an inventory containing twenty four items being adapted from previous versions. Data were analyzed using a blend of descriptive and inferential statistical methods that were successively conducted to examining the status of AAM (one-sample t-test), ANOVA, regression analysis), and the pair-wise comparison (Scheffe test) of the three categories of family structures. Findings indicated that adolescent students had a reasonably acceptable level of AAM that was remarkably influenced by family structure compared to other personal factors. Although sex couldn't make significant main effects, its interaction with family structure yielded significant effect on AAM in such a way that boys from intact family were found to stand in sharp contrast mainly to girls from step family background. Attempts were made to explain findings within the existing ecological and socio-cultural profile of the study area. Recommendations were also suggested to help properly addressing the gaps noted in this research.

Keywords: Academic Achievement Motivation; Adolescent Students; Family Structure; Haramaya; Hararghe

1. Introduction

Adolescence is one of the most remarkable developmental stages characterized by such fundamental and rapid physical, cognitive and social changes that fuel psychosocial development including emergence of academic achievement as a major adolescent concern (Steinberg, 2004). Academic achievement is a particularly important issue in the study of adolescence in contemporary societies that underscore independence, competition, excellence, and success; to which achievement motivation or n-achievement is a precursor (McClelland, 1985). Not until the period of adolescence are individuals cognitively capable of seeing the long term consequences of educational and career decisions (Steinberg, 2004). Adolescents' desire for meaning and pursuit of future life goals appear to generate a renewed strength and interest in academic achievement as an instrument for materializing their envisaged long term goals. In line with this, Steinberg (2004) argues that amongst all stages of development, adolescence is the period in which achievement motive gets higher because adolescents are preparing themselves for adult roles and status which enable them to make decisions on their future career and aspirations. According to McClelland (1985), this motive to achieve is manifested through one's interest and activity to master and manipulate the physical and social environment. Hence, two individuals having low or high achievement motivation are different in their choice of level of aspiration, in risk taking behavior, in their level of persistence in the task, in time perception and future goal orientation (Ducke 2004; cited in Ayoda, 2006). People high in their achievement motivation prefer to choose a task of intermediate difficulty. In contrast, people with low achievement motivation are motivated to avoid failure. As a result, they seek out very difficult tasks for which failure has no negative implication (Ducke 2004; cited in Ayoda, 2006).

The extent to which adolescents successfully navigate through this period and eventually develop a clear sense of identity and positive future orientation is structured, mediated, and directed by a host of contexts (e.g. peers, school and teachers, media, and internet...); of which family environment obviously assumes a critically important and foundational role (Kamla, 2008). Many family researchers (e.g Kamla, 2008; Olantude and Abisola, 2010) indicate that the home environment is the most significant one amongst other factors in influencing adolescents' academic motivation in several ways and can take various forms such as presence at school, communicating with teachers, or assisting at home with home-work, among others (Eliston 2012; cited in Girma, 2014). Important mechanisms mediating the effects of home environment on adolescent students' academic achievement motivation include economic resources, socialization resources (parental involvement) and parental warmth and affection (Ping and Meng, 2000). The most basic involvement of parents in their child's schooling is provision for material needs (Gilford, 2007), supervision of children's activities, and ensuring child-friendly home environment (Yale, 2006; cited in Semaw, 2009). The other type of parental school involvement also includes helping children with school work, listening and discussing the child's school problems (Yee, 2010), attending parent-teacher conferences, children's extracurricular activities and serving on school boards; taking part in activities to

support, encourage, assist, recognize, and contribute towards the child's cognitive development (Melang, 2005; cited in Kamla, 2008). Extensive literature has shown that parental involvement in schooling is associated with children's academic success (e.g., Epstein, 2000; cited in Gilford, 2007).

Recognizing these indispensable familial roles, the Convention on the Rights of the Child has also indicated that children have the best chance of developing their full potential in a family environment as it avails interaction with the immediate and other agents of development in the environment (Carry, 2001; cited in Swick, 2004). The family is the child's early microsystem for initial learning about the world and for learning how to live (Swick, 2004). It offers the child a reference point of the world (Rogoff, 2003), and is a nurturing centerpiece as well as a haunting set of positive as well as negative memories of one's earliest encounters that could differently structure present life conditions. The essence in this early relationship with family is children's experience of building trust and affection with their significant people (Brazelton and Greenspan, 2000).

The family which plays these and many other important roles in the development of adolescents has increasingly undergone through a number of structural transformations (Hangal and Vigayalaxmi, 2007). Structurally then, families are diverse in their nature; some are intact, others are broken, and the rest are reconstituted through remarriage. While intact family is the traditional type of family in which mother, father and children live together, non-intact families are those that are with either one or both parent/s missing in which case the family is incomplete (Konive, 2002; cited in Eweniyi, 2005); typical of the later is a single parent family which consists of one parent raising one or more children on his or her own. Often single parent family is a mother with her children, although there are single fathers as well. Usually individuals who end their previous marriage in divorce choose to get remarried and this creates stepfamily, which involves two separate families merging into one new unit (Wise, 2003).

Tefera and Gena's (2016) review of empirical investigations on intact and non-intact families have shown that children from the former group were found to fare much better than the latter in so many psychological, social, and academic profiles. A lot of evidences suggest that compared to children from intact families, those from non-intact (mainly from reconstructed or stepparent) families experience an increased risk of behavioral problems and adjustment difficulties (Wolchik *et al.*, 2002), develop externalizing and internalizing behavior problems (Emery *et al.*, 1999), get lower grades on achievement tests (Ferugsson *et al.*, 2011; cited in Tefera and Gena, 2016), drop out of school (Bogenscheider, 2007), and are likely to get significantly lower support and psychological wellbeing from step parents (Tefera and Gena, 2016).

Many other research investigations were also in support of such negative outcome. According to Han and Huang (Han and Huang, 2000; cited in Wise, 2003), adolescents from intact families have an advantage over adolescents from single and stepparent families in terms of parental economic resources, and socialization enabling them score high in academic motivation scale than adolescents from single

and stepparent families. Olatunde and Abisola (2010) have still reported that life in a single-parent and stepparent family can be traumatic and children brought up in such family structure often suffer from some emotional problems such as stress and depression which may hinder their academic performance. Hence, in contrast to families with two biological parents, single parents are usually pressed by the burden of life and thus cannot afford much time and support for the children. Children in stepfamilies are also at a disadvantage because they cannot access the resource that parents hold because the parent-child relationship is usually more distant than in the former two types of families (Astone and McLanahan, 1997).

Concerning the relationship between adolescents' family structure and their academic achievement motivation, it was found that adolescents who are living with their both biological parents (intact family) score higher in academic achievement motivation than adolescents from single and stepparent families among college (Kamla, 2008; Ping and Meng, 2000) and high school (Donna and Robert, 2004) students. Perhaps the most influential study on the relationship between family structure and students' educational achievement (McLanahan and Sand fur, 1994) found that children who grow up in single-parent families and with stepparents have lower educational achievement motivation and attainment than those who grow up with both biological parents. In line with this finding, Aemero and Lakshim (2013) have indicated that adolescents from intact families are better in their academic motivation and performance than adolescents from single and stepparent families. A study conducted in Nigeria (Kamla, 2008) also indicated that there was a significant difference in academic achievement motivation between female adolescents from intact and single parent families. Female adolescents who were living with their biological parents scored higher than female adolescents who were living with single and stepparent families. Similarly, male adolescents who were living with their biological parents scored higher on academic achievement motivation than male adolescents who were living with single and stepparent families (Kamla, 2008).

In fact, some studies revealed sex differences in achievement motivation. For example, a study conducted on selected high school students in Ethiopia (Gebrekiros, 2004) indicated that male adolescents scored higher on academic achievement motivation than their female counterparts. However, Tafa (1998) and Mustafa (2006) did not find significant sex differences in academic achievement motivation. Similarly, some studies in high schools (Gidey, 2002), junior secondary schools (Seleshi and Sentayehu, 1998; cited in Abesha, 2012), and primary and secondary schools (Habtamu, 2005) found no significant sex difference in academic achievement motivation. In his study on Ethiopian university students' achievement motivation, Abesha (2012) reported that male adolescents in Ethiopia scored higher in academic achievement motivation than their female counterparts.

In the face of such contradicting findings, it wouldn't be possible to draw conclusive remarks regarding the effect of sex difference on academic achievement motivation of high school students. Hence, there is a need for further research in the area.

There are additional reasons justifying the need to revisit research in this area. First, there are research findings suggesting that children in single parent family structures academically perform better than children from intact family structure (Olutola 2006; cited in Kamla, 2008). This is attributed to factors either inherent to the personality of the child or the single parent. Second, reviews of Tefera and Gena (2016) have also mentioned instances that would cast doubts on the apparently established fact that children from intact families are better. For example, differences between stepchildren and children in intact families are small (McLanahan, 1999). Most stepchildren do well in school and do not suffer from emotional or behavioral problems (Amato, 1999). There is a great deal of similarity than differences between children in stepfamilies and children in intact families (Amato, 1999). There are also times that substantial number of stepchildren score higher on adjustment measures than the average child in an intact biological family (Brennan and Shaver, 2012; cited in Tefera and Gena, 2016).

Third, although there is enough conclusive evidence as regards to the benefits of parental involvement on academic achievement at the primary level of education, there are some inconsistencies in about to the impacts of parental involvement in adolescents' school achievement at secondary school level (Epstein 2003; cited in Girma, 2014).

Fourth, parents in intact families as a group are diverse and, hence, treating them alike and draw similar conclusion could be tenuous. Some parents are uneducated, illiterate and unable to grasp the meaning of situations involving their children while others are intelligent and competent people; some are rigid but others are open minded to adjust themselves to the changing needs of the children; and some are better connected, accepting, warm and supporting while others are negligent, rejecting; just to mention examples (Grolnick and Ryan, 1998). There are also differences in educational values, expectations, and standards. Some parents value education, put high regard for it, and become demanding from their children but others consider the education of their children as meant merely for meeting the societal and legal expectations. These and many other differences in intact family profiles would obviously bear differential impacts on children's behaviors and developmental outcomes. For example, research evidences suggest that children from intact families, who evidence problems in their relations with parents, are more likely to exhibit emotional problems and underachievement (Gilford, 2007). Finally, although the home environment has been recognized to bear lots of influences on students' academic achievement motivation, previous studies have concentrated mainly on the issue of parental involvement and parental educational status on adolescents' educational motivation and performance. Other aspects of family environment such as the structure of the family have been grossly neglected.

In an attempt to address the gaps of research raised above, the following research questions were posed: What is the level of students' academic achievement motivation among adolescent high school students in Haramaya area? Is there a statistically significant difference among students from intact, single and stepparent family structures in achievement motivation? And, is there a significant difference

between male and female adolescent students from different family structures in their academic achievement motivation?

2. Research Methods

As mentioned earlier, the purpose of this study was to examine the level of academic achievement motivation among adolescents from different family structure at Haramaya senior secondary school. In order to obtain the required information, quantitative research design was employed. This section describes, the study site, sampling techniques, instrument of data collection, and procedure followed in data collection.

2.1. Study Site

This study was conducted in a school located in Haramaya Town. Haramaya is an East-Central Ethiopian town located 510 KMs East of Addis Ababa. Located within the Hararghe zone of the Oromia regional state, it has a latitude and longitude of 9°24'N 42°01'E coordinates: 9°24'N 42°01'E with an elevation of 2047 meters above sea level. As per the census conducted by the Central Statistical Agency of Ethiopia (CSA, 2012), Haramaya has an estimated total population of 15,317; of whom 7,796 are men and 7,521 are women. The largest ethnic group reported to live in the area is the Oromo (96.43%); all other ethnic groups making up the remaining 3.57% of the population. Afan Oromo is spoken as the first language by 97.6%. While the overwhelming majority of the inhabitants (98.51%) are Muslims, the remaining few are (orthodox and protestant) Christians. Concerning education, 53% of all eligible children are enrolled in primary school, and 10% in secondary schools. The dominant activity serving the inhabitants as a means of income in this town is cash crop products like khat which in turn may affect students' academic engagement and motivation.

2.2. Participants

The study involved students selected from Haramaya Senior Secondary and Preparatory School. During data collection there were a total of 1,275 (713 male and 562 female) students regularly attending their classes from grade nine to twelve of whom 56.7% were from intact family ($n = 723$) and the remaining 43.3% ($n = 534$) were from non-intact family. Out of the total of adolescent students from intact family ($N = 723$), 112 (56 males and 56 females) were selected randomly. Regarding those from non-intact family, 72 were from single parent family and 54 were from stepparent family. Therefore, the sample consisted of a total of 238 adolescent students. In fact, data analysis was based on 201 participants who provided complete data (see Table 1). Sample size was determined using Drapper and Smith's formula for non-single population (cited in Tefera and Ahmed, 2015). According to Drapper and Smith, sample size (n) is a function of the factors (X_i) and categories (C_k) involved in a research such that a minimum of 10 observations is required for each category of a factor: $n = 10[C_{f1} \times C_{f2} \times C_{f3...} \times C_{fn}]$

Where:

n = sample

Cf1 = number of categories of factor 1

Cf2 = number of categories of factor 2

Cf3 = number of categories of factor 3

Cfn = number of categories of factor n

There are three variables in the present research (i.e., sex, family structure and grade) such that there are two categories in the first factor (male and female), three categories in the second factor (intact, single, and step families), and four categories in the third factor (grade 9, 10, 11 and 12). Hence, a minimum sample size this researcher has to draw is $2 \times 3 \times 4 \times 10 = 240$ students.

After fixing on the total sample size (n) to be drawn from the population (N) using the above formula, then proportional allocation method was used to determine on the amount to be drawn from each of the three family types. For example, the proportion of those from intact family was calculated by multiplying the sample size by p where $P = \frac{n}{N}$. This means $(723/1275) \times 240 = 136$; which was adjusted to 112 in the sampling process for mere practical convenience during stratification. The same procedures were applied for non-intact family.

The procedure of sampling was such that at the beginning preliminary screening questionnaire was administered to 18 sections of grade nine, ten, eleven and twelve students in order to screen out participants' family profile (if they are from intact, single and stepparent families). Then, two sections were randomly selected from each grade level through lottery method. Then, participants in each class were stratified based on their sex in order to give equal chances for both male and female adolescents, and then simple random sampling technique was employed to select adolescents from each family type.

2.3. Instruments of Data Collection

Self-report instruments were used to measure variables of interest. The instruments had two parts. Part one comprised of items about participants' demographic information like sex, age, grade and family structure. The second part of the instrument was about Academic Achievement Motivation Self- Report Inventory (AAM SRI). The inventory has three sub-scales: Task performance, delay of gratification of needs and time orientation. Sample items include "*When I am working, the demand I put on myself are very high; I usually spend a great effort to get my assignments and paper work right*", "*the future is too uncertain for a person to make serious plan, usually I feel that time is going fast while in school*", and "*if I have not attained my goal and haven't done a task well, I usually give up*".

The scale consisted of 24 items with 4-point response format ranging from strongly agree to strongly disagree such that the expected mean is 60. The scale was adopted from previous research conducted on high school and college students' academic

achievement motivation (Beena, 1986) with a reliability coefficient of .74. In the Ethiopian context, the instrument was used by Tadese (1992) with a reliability coefficient of .67, and Tafese (1998) and Gebrekiros (2005) with an α level of .71. The adaptation began with backward and forward translation of the scale into the native language of participants (i.e. Afan Oromo). Once equivalence was established in the translations through successive adjustments of phrasing, pilot test was conducted on a randomly selected sample of forty students (20 males and 20 females) from different family structures to check for item clarity as well as internal consistency of the items. Five items were found to have poor inter- item correlation and, therefore, were dropped from the scale; thus improving the reliability coefficient from previous ones to 0.76.

3. Findings

We shall present findings beginning with some background data about participants. Then, the status of academic achievement motivation is statistically described using measures of central tendency and dispersion and then tested through inferential statistics employing one-sample t-test. Given that the level of academic achievement motivation is meaningful, we shall proceed with successive analysis that attempts to explore how sex, age and family structure contribute to the variance in academic achievement motivation employing inter-correlation analysis, regression analysis, and ANOVA. This is followed with Scheffe's pair wise comparison as required. Test of normality and homoscedasticity were checked before conducting ANOVA and regression and were found to tenable in both cases.

3.1. Background of Participants

As indicated in the previous section, the independent variables of interest in the study were sex, age, grade and family structure. The dependent variable of interest is adolescents' academic achievement motivation. The family structure, sex, and age of these participants are summarized in Table 1.

Table 1. Family structure of participants by sex and age

| Family type | Mean Age | Male | Female | Total | Percent |
|---------------|----------|------|--------|-------|---------|
| Intact family | 18.3 | 44 | 41 | 85 | 42.28% |
| Single | 18.1 | 27 | 38 | 65 | 32.33 |
| Step family | 18.2 | 23 | 28 | 51 | 25.37% |
| Total | 18.2 | 94 | 107 | 201 | 100% |

As depicted in Table1, while 42.28% of adolescents were from intact family, the greater majority about 57.7% (i.e. 32.33% from single parent and 25.37% from step-parent families) participating in the study were from non-intact family. As regards to sex, 53% were females. The proportion of the two sexes is comparable for intact family group but a bit more girls were represented for the non-intact family group. The age range of adolescents participating in the study ranges from a minimum of 14

to a maximum of 24 years; with a mean age of 18.2 years and limited score variance (SD=.96).

3.2. Status of Students' Academic Achievement Motivation

The major interest in this research is to learn the level of academic achievement motivation of participants before anything else. For this purpose, one-sample t-test was run and the results are summarized in Table 2.

Table 2. Status of students' academic achievement motivation scores (N=201)

| Academic achievement motivation scores | |
|--|-------|
| Observed mean | 63.96 |
| SD | 10.3 |
| Expected/ hypothesized mean | 60.00 |
| t-value | 4.31 |
| Sig. | .00 |

One-sample mean test yields that the observed mean (63.96) is much higher than the expected mean and this difference is statistically significant ($t_{200} = 4.31$, $P < .01$). This suggests that the adolescents included in our present research have a level of perceived achievement motivation.

Correlation among variables: Before we proceed with the prediction of academic achievement motivation, we need to determine the separate bivariate correlations of predictors with this dependent variable. Table 3 presents the correlation of some of these selected factors/ predictors with academic achievements motivation. Note that the correlation between a dummy variable (i.e. sex (1 = male and 0 = female or family structure (intact = 0 and non-intact = 1) and a continuous variable (e.g. academic achievement motivation) is like conducting t-test of mean differences in achievement motivation between the two groups of the dummy variable. If this correlation yields negative value, it means that the group that is represented by the lesser value (i.e. female is represented by zero) is performing higher than the one represented by the bigger number (i.e. males = 1).

Table 3. Inter-correlations among variables (N = 201)

| Variables | 1 | 2 | 3 | 4 | 5 |
|---------------------------------|-------|------|-----|-----|---|
| Family structure | 1.00 | | | | |
| Sex | .010 | 1 | | | |
| Age | -.031 | .006 | 1 | | |
| Grade | -.02 | .030 | .24 | 1 | |
| Academic achievement motivation | .61* | .022 | .01 | .03 | 1 |

* $p < .05$

Table 3 indicates that it is only family structure that has a significant relationship with academic achievement motivation ($r_{200} = .61, P < 0.05$); sex and age being without significant correlation with academic achievement motivation.

Interaction effects on academic achievement motivation: Although academic achievement motivation may not have a strong correlation with achievement motivation in our present case, it has better correlation value compared to sex and age. Hence, we need to go further and check if sex could play some role by interacting with family structure. Descriptive statistics for gender by family structure is given in Table 4 followed by two way ANOVA analysis in Table 5 respectively.

Table 4. Males’ and females’ academic achievement motivation scores by family structures

| Sex | Single family | | | Step family | | | Intact family | | |
|--------|---------------|------|------|-------------|------|------|---------------|-------|------|
| | N | Mean | SD | N | Mean | SD | N | Mean | SD |
| Male | 27 | 67.3 | 12.2 | 23 | 53.3 | 9.7 | 44 | 81.31 | 10.3 |
| Female | 38 | 62.1 | 11.3 | 28 | 50.2 | 8.53 | 41 | 74.2 | 11.7 |
| Total | 65 | 63.5 | 10.3 | 51 | 53.2 | 9.2 | 85 | 75.2 | 11.4 |

As shown in Table 4, the academic achievement motivation mean score of females from intact families is higher than females from single parent families. Those from stepparent families have the lowest mean score on academic achievement motivation. Regarding male adolescents’ academic achievement motivation, mean scores of males from intact family were the highest, followed by the mean scores of males from single parent family. Those from stepparent family scored the lowest. To determine the significance of these differences and show the interaction effect of family structure by sex on academic achievement motivation, two-way ANOVA was employed (Table 5).

Table 5. ANOVA summary of the effects of family structures and sex on adolescents’ academic achievement motivation

| Source | Sum of squares | Df | Mean squares | F | Sig. |
|------------------------|----------------|-----|--------------|-------|------|
| Corrected model | 17562.32 | 5 | 4324.1 | 34.32 | .000 |
| Sex | 133.12 | 1 | 133.12 | .87 | .347 |
| Family structure | 15815.3 | 2 | 8654.2 | 75.42 | .000 |
| Sex X family structure | 912.32 | 2 | 435.66 | 7.32 | .000 |
| Total | 38763.23 | 200 | 138.54 | | .000 |

The ANOVA result indicated a significant effect of family structure on adolescents’ academic achievement motivation ($F(2,198) = 75.42, p < .000$). There is also a significant interaction effect of sex and family structure on adolescents’ academic achievement motivation ($F(2,198) = 7.32, p < .000$).

3.3. Family Structure Differences in Academic Achievement Motivation

As depicted in Tables 4 and 5, adolescents from intact family have scored the highest on academic achievement motivation (Mean = 75.2) followed by adolescents from single parent family (Mean = 63.5) and stepparent family (Mean = 53.2). Pair- wise comparisons produced results presented in Table 6.

Table 6. Scheffe's pair wise comparison test results in academic achievement motivation among adolescents from different family structures

| Family structures (I) | Family structures (J) | Mean difference (I-J) | Standard error | Sig. |
|-----------------------|-----------------------|-----------------------|----------------|------|
| Single-parent family | Step- parent | 10.3 | 1.98 | .001 |
| | Intact family | -11.7 | 2.32 | .000 |
| Step-parent family | Single parent | -10.3 | 1.98 | .001 |
| | Intact family | -22 | 2.73 | .000 |
| Intact family | Single parent | 11.7 | 2.32 | .000 |
| | Step-parent | 22 | 2.73 | .000 |

The results of the pair wise comparisons in Table 6 have shown showed significant differences between all pairs of comparisons. Thus, there is a significant mean difference on academic achievement motivation between adolescents from single and stepparent families. Likewise, there is a statistically significant mean difference in academic achievement motivation between adolescents from single parent family and adolescents from intact family; favoring those who have come from intact family. Furthermore, academic achievement motivation is found to significantly differ between adolescents from intact family and stepparent family; those from intact family scoring higher. In general, as has been observed in the above pair wise comparison tests, the directions of group mean difference favors adolescents from intact families.

Prediction of academic achievement motivation: Multiple regression analysis was conducted to determine the combined effects of predictor variables on students' academic achievement motivation. It is found that about 9.1% ($R^2 = 0.091$) of the variance in students' academic achievement motivation is explained by all the predictors together. In fact, it is only family structure again that has brought a significant contribution to the variance in academic achievement motivation score ($t_{200} = 7.23$, $P < 0.003$) as it can be referred from Table 7.

Table 7: Multiple regression analysis of predictors' on dependent variables

| Predictors | Regression coefficient | Standard error | Beta coefficient | t-value | Sig. |
|------------------|------------------------|----------------|------------------|---------|------|
| Family structure | 7.53 | 2.13 | .24 | 7.23 | .003 |
| Age | -.26 | 1.21 | -.02 | .92 | .78 |
| Sex | .132 | 1.34 | -.041 | .54 | .91 |
| Grade level | .021 | .92 | .031 | .63 | .71 |

As shown earlier in the ANOVA summary table, the effect of adolescents' sex on their academic achievement motivation is of course not significant ($F(1,199) = .87, p = .347$). This indicates that sex by itself has no significant effect on the academic achievement motivation of adolescents from different family structures. Moreover, alike the correlation and ANOVA tables, the regression result has indicated a significant effect of family structure on adolescents' academic achievement motivation ($t(2,198) = 7.23, p < .003$).

4. Discussion

Unlike our expectation that the academic achievement motivation of adolescent students around Haramaya could be lower because of rural orientation that would possibly lessen the value for education, being a cash crop area suggesting an alternative way of making life for young people from early age, and perceived prevalence of 'khat' consumption that would put many young people off purpose, the findings of this research tend to suggest that academic achievement motivation in the area is encouragingly within the range of reasonable acceptance (Table 2). In fact, contrary to our expectations, this could be because less educated people may feel a sense of incompleteness educationally and urge their children engage in an activity that would help materialize unfulfilled dreams through encouraging their children develop an appetite for educational advancement. Explanations such as these ones, that underscore the role of social-familial factors in promoting academic achievement motivation, seem more meaningful than such personal factors as age, sex, or grade. This is mainly because alike many previous research elsewhere (e.g. Kamla, 2008; Magnuson and Berger, 2006; cited in Aemero and Lakshim, 2013; Thomson and McLanahan, 1994; cited in Donna and Robert, 2004; Lamb, 1999; cited in Wise, 2003) as well as those in Ethiopia (Aemero and Lakshim, 2013; Tefera and Gena, 2016) suggesting the exceedingly supportive role intact family plays in the health and development of children, the present finding indicates that adolescents from intact family exhibit significantly higher achievement motivation than the non-intact group. Kamla (2008) reported that compared to adolescents from intact family, those from non-intact family score low in their academic achievement motivation and performance which could be related to parental deprivation of economic resources, less parental involvement and encouragement and less emotional support from their families. Magnuson and Berger (2009; cited in Aemero and Lakshim, 2013) also stated that adolescents from intact families have an advantage over others probably because the latter have less access to all these advantages which in turn negatively affect adolescents' academic achievement motivation. Thomson and McLanahan (1994; cited in Donna and Robert, 2004) have reported that single parent and stepparent families are most likely associated with incomplete parenting or reduced supervision and control, and these characteristics of parenting styles may adversely affect child development and academic achievement. Consistent with the above results, Lamb (cited in Wise, 2003) states that life in single and stepparent family is full of challenges not only because of economic strain but also because of lack of concrete and emotional support in the face of socio-emotional stress which in one

way or another negatively influences adolescents' academic achievement motivation. In contrast to the present results, Apia and Olutola (2007; cited in Kamla, 2008) argued that if families of adolescents from single and stepparent rendered what is all valuable for their children's education, adolescents from single and stepparent family might perform equally or higher than adolescents from intact family. Consistent with this idea, Oslon and Defrain (cited in Aemero and Lakshim, 2013) have argued that life in step parenting is characterized by lack of constructing successful emotional relationship with step children and such type of family most of the time gives special advantages to their own children over their step-children which negatively affects step children's academic achievement motivation.

As it can be noted from the analysis, post hoc comparison is found to show not only that academic achievement motivation score of adolescents from intact family is the highest, but still important is the fact that from the non-intact family groups the mean score of single parent adolescent students is significantly higher than adolescents from stepparent family background. Our present finding appears to disprove the previous findings that differences between stepchildren and children in intact families are small (McLanahan, 1999), most children fare adequately well in stepfamilies (Ganong and Coleman, 2004; Hetherington, 2005), there is a great deal of similarity than difference between children in stepfamilies and children in intact families (Amato, 1999), substantial number of stepchildren actually score higher on adjustment measures than the average child in an intact biological family (Brennan and Shaver; cited in Tefera and Gena, 2016), and even if stepchildren exhibit problems mainly during a transition period or immediately after their parent's remarriage, most show considerable resilience, and three-quarters have no long-term problems (Hetherington and Kelley, 2002). Most of the adjustment difficulties occur within the first three years and if stepfamilies stay together, difficulties are usually resolved after five to seven years (Adler- Baeder and Higginbotham, 2004; Ganong and Coleman, 2004; Papernow, 2008).

A number of explanations can be given for adverse effects of growing up in a stepfamily. The most common explanations involve the ecological theory, socio-cultural theory, and evolutionary-biological theory. The ecological perspective, for example, stresses that a range of factors impact on the academic achievement motivation of adolescent students including the background and characteristics of the individual (ontogenetic level), family relations (micro system level), family interactions with elements outside the family (community or mesosystem and exosystem level), and socio-cultural variables at the macro system level.

Upholding genetic benefits that arise from parenting and investing in one's own natural children rather than on stepchildren (ontogenetic level), the evolutionary theory suggests that step children are more likely to be disadvantaged compared to children from biological parent because stepparents are genetically less inclined to investing time and resources on their non-biological or stepchildren's education, or more disengaged, less emotionally available, less affectionate, and provide less supervision than biological parent (Amato, 1999; Ganong and Coleman, 2004). For attachment theorists, this reluctance of stepparent to invest on a non- biological child

would result in the adolescent children's feeling of resentment, confusion, insecurity, indifference and sense of despair (Amato, 1999; Ganong and Coleman, 2004) that would still mean lesser academic achievement motivation under performance and school dropout.

The co-parenting relationship and the stepparent-stepchild relationship, which are microsystems and ecosystems; the lack of support from in-laws, which is an element of the exosystem; and community bias in favor of first families, which is an element of the macro system (cited in Tefera and Gena, 2016) are other factors nested one after the other eventually influencing adolescent students' academic achievement motivation. To consider the macro-level explanation as an example, the socio-cultural view holds that stepfamilies have been the most maligned groups throughout history and across cultures; thus biological parents benefiting from a positive bias regarding parenting their children (Stewart and Brentano, 2006). Stepparents are more likely to be perceived negatively to such an extent that when some biological parents fail to be affectionate or show some signs of stringent rules, people tend to comment, "is s/he a stepparent to do so?" Stories are abundant in the Ethiopian cultures narrating in fairy tales of "wicked stepmothers" and "cruel stepfathers." The view that stepfamilies are deviant and potentially harmful for children is not only common in popular tales. According to cognitive *behavioral theory*, negative stereotypes of stepparents would still translate and reproduce themselves through practice by influencing parental attitudes and behaviors towards step children and vice-versa (Crohn, 2010); negative social beliefs and expectations preempting dysfunctional step parent-step child relationships (Cummings *et al.*, 2006).

Unlike family structure, age/ gender and sex appear less important factors. In fact, alike many psychological characteristics that consolidate during childhood and remain stable in later years (as psychologists commonly hold that childhood is a foundation period in life), achievement motivation would possibly be shaped in the early ages and grades; thus predicting latter experiences. The effect of sex in fact takes a different texture in our present finding hopefully resolving inconsistencies in previous research. That is, although the main effect (adolescents' sex on their academic achievement motivation) is less significant, gender really matters when interacting with family structure; boys from intact families showing a considerably bigger motivation score particularly compared to girls from stepparent family. From this vantage point, it can be said that the inconsistencies in the findings of previous research would basically be attributed to this distinct role of gender in achievement motivation. For instance, consistent with the main effects of gender in our present finding, Torki (1985; cited in Tafese, 1998) found no significant difference in need for achievement score between male and female students. Similarly, Tafa (1998) and Mustafa (2006) did not find significant sex differences in the achievement motivation of high school students. In contrast to these findings, Worthman and Lotus (1985; cited in Gebrekiros, 2004), Adsul and Kamble, (2008), and Fortes, Rodriguez and Tchanchane, (2010) concluded that male adolescents are better in academic achievement motivation than their female adolescent counterparts. In fact, the third group of researchers (Khan 1991; cited in Tafese, 1998) and (Baker, 1997; Brouse,

1993; Vallerand and Bissonnette, 2007; Wintre and Yaffe, 2004; cited in Abesha, 2012) have even reported that female adolescents are better in academic achievement motivation than their male adolescent counterparts. We believe that inconsistencies in research findings would also be attributed to differences in the socio-cultural setting of participants on top of some possible inconsistencies observed because of the type of effect (main effect, interaction effect or no effect), on top of possible differences in the type of effect (main effect, interactive effect) gender was used to bear on academic achievement motivation.

5. Conclusion

The findings of this research generally suggest the following major conclusions regarding the academic achievement motivation of adolescent students in Haramaya area of the Oromia regional state.

1. Adolescent students have a reasonably acceptable level of academic achievement motivation score.

2. Family structure significantly affects academic achievement motivation in the sense that those from intact family retain the highest AAM followed by those from single parents. Adolescents from stepfamily background are with the lowest mean score in academic achievement motivation.

3. Age and grade did not seem to impact on academic achievement motivation possibly suggesting that they could be the making of early experiences and becoming relatively stable in adolescence.

4. The interaction of sex with family structure is significant such that boys from intact family stood in sharp contrast mainly to girls from step family background; i.e., girls from the step family background were the lowest of all the groups.

The following suggestions would address the gaps noted:

5. Educational psychologists/ school counselors, teachers, and school directors need to provide life skill training particularly to female adolescent students from non-intact families to build their academic achievement motivation. The national life skill training framework (MoYCS, 2011a; Tefera, 2015) and manual of this framework (MoYCS, 2011b) would be of much relevance for this purpose. The life skill category that focuses on personal socio-emotional domain is more specifically related to academic achievement motivation and, hence, more attention be paid to this aspect in the event that training is envisaged to be offered to this group.

6. Orientation and training be given to parents of adolescent students particularly from single and stepparent families on how to treat their children with warmth and affection to facilitate the conditions which are essential to foster their children's achievement motivation.

7. Laws about remarriage need to be redrafted to ensure that stepparents consenting for remarriage need to get into a legal agreement that they will consider the stepchildren as their own children. In fact, legal authorities need to ensure that there is an informed consent of stepchildren before legal commitments are entered between the remarrying partners. In fact, it is still suggested that the responsible legislative

bodies include psychological orientation program as part of the package before remarriage.

8. Further research need to be conducted on the role of sex in academic achievement motivation to clear possible inconsistencies noted in this and many other research.

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