Original article

# Psychosocial problems among students in preparatory school, in Dessie town, north east Ethiopia

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**Abstract**

**Background**: The family environment is critical in supporting a healthy adolescent development. With the establishment of preparatory schools, many students of school age move from rural areas to nearby towns leading to changes in their living arrangement and possibly family connectedness. However, whether this phenomenon predisposes adolescents to greater psychosocial problems is not clear.

**Objective**: This study assesses differential vulnerabilities of preparatory school adolescents to psychosocial problems with reference to their living arrangement and parental attachment.

**Method**: A comparative cross-sectional study was conducted on a sample of 667(512 male and 155 female) preparatory school students in Dessie town, north east Ethiopia in 2004 using a pre-tested and structured questionnaire. Qualitative information was also obtained from four focus group discussions.

**Result**: Approximately a quarter of the students included in the study reported feeling of sadness which made them stop performing some regular activities. Six percent of the adolescents also reported having attempted suicide in the 12 months preceding the study. The study revealed that lower family connectedness and having a living arrangement separate from both biological parents (or living with friends, relatives or alone) were associated with increased odds of having a depressive symptom after controlling for observed covariates. Suicide attempts reported in the 12 months preceding the study were linked to having a history of suicide attempt in the family or among friends, female gender and sexual activity but not with family connectedness.

**Conclusions**: The findings indicate that the burden of psychosocial concerns including depressive symptoms, suicidal thoughts and suicide attempts are high and living with both biological parents and good parent-teen connectedness are related to better psychosocial health. [*Ethiop.J.Health* 2006;20(1):47-55]

## Introduction

Adolescence is a period of exploration and experimentation that needs adjustment to physical maturity, changing roles within families and with peers, and the emergence of a more independent lifestyle. Compared to adults, adolescents show higher stress levels and fewer coping resources. The stressful process of differentiation and identity consolidation can result in significant psychological distress. Studies show that at least one in five children and adolescents have a mental health disorder. At least one in 10, or about six million people, globally have a serious emotional disturbance (1).

Globally among young people of 15-24 years of age, suicide is the third leading cause of death, next to unintentional injury and homicide. In 1996, more teenagers and young adults died of suicide in the US than from cancer, heart disease, AIDS, birth defects, stroke, pneumonia and influenza, and chronic lung diseases combined (2). Many of the basic risk factors for adolescent suicidality are well known. Among these, the most important are depression (3-6), exposure to suicide or suicide attempts by family members or friends (7-8), substance or alcohol abuse (9), and having guns in the home (3, 10, 11) .

Intimacy with parents, as well as parental support and guidance are significant determinants of adolescent adjustment. Recent findings indicate that parental warmth/involvement, psychological autonomy-granting, and behavioral control/monitoring, are associated with security of attachment in late childhood and early adolescence and contribute to good psychosocial, academic and behavioral adjustment (12, 13). Parent-teen connectedness has been linked to a wide variety of outcomes including mental health (depression, suicide, adjustment, identity), personal traits (self confidence, coping skills, motivation, overall wellbeing), and social skills (including the quality and stability of peer and intimate relationships) (14).

Previous studies indicate that young people who live with their parents are less likely to have emotional problems, and that their behavior is more likely to be under their parents' control (15). Secure attachment during adolescence is related to fewer mental health problems, including lower levels of depression, anxiety and feelings of personal inadequacy (16-20). Securely attached adolescents also manage the transition to high school more successfully and enjoy more positive relationships with family members and peers (21, 22). They demonstrate less concern about loneliness and social rejection than do insecurely attached adolescents and also display more adaptive coping strategies (16, 23).

Following the opening of technical and preparatory schools for senior high school students in grades 11 and 12 in selected urban sites in Ethiopia, it has become

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necessary for students particularly in rural areas to reside in nearby towns temporarily in order to attend school. Students are deemed eligible to preparatory schools if they score a better grade-point-average in the Ethiopian School Leaving Examination. Upon completion of a two-year preparatory training they are expected to take an entrance examination which determines whether they can join higher learning institutions or not. Preparatory school students, thus, represent the future college students of the nation.

Currently, there is an unresolved concern among public officials whether these groups of students have disproportionately high levels of psychosocial problems possibly as a result of their loose parental guidance and support and exposure to new environment. Clearly, a deeper understanding of some of the correlates of adolescents' underlying psychosocial problems is one of the key pre-requisite information required in designing relevant, effective and comprehensive educational and adolescent health programs.

**General objective:**
This study is aimed at assessing the differential vulnerabilities of Dessie preparatory school adolescents to psychosocial problems with reference to their living arrangement and parental attachment.

**Specific objectives:**
1. To determine the extent of psychosocial problems among preparatory school youth.
2. To compare the levels of psychosocial problems between students living with their parents and those living away from parents.
3. To assess the effect of parental connectedness on the psychosocial problems of this group of adolescents.

**Methods**
***Study design*:** A comparative cross-sectional study supplemented with focus group discussions (FGDs) was used in the study.

***Survey site*:** The study took place in Dessie preparatory school, south Wollo zone of Amhara National Regional State. South Wollo zone has three preparatory schools. The one in Dessie town was selected because it has the largest capacity of all and serves a relatively rich mix of students in terms of sex, religion and the number of villages the students come from.

***Study population*:** Adolescents in Hote preparatory school enrolled in the year 2002/2003.

***Sampling*:** A sample size of 720 was determined based on selected outcome variables (the proportion of students who have psychosocial problems among those living with their families and those living away from families of 18% and 28% respectively; approximated from similar studies (18), 80% study power, allocation ratio of 2:1 and a 95% confidence limit using the two-sample proportion formula. From a total of 850 grade 12(10+2) preparatory school students who were enrolled in the year 2002/2003 G.C a sample of 700 (97.2%) students were randomly selected and made to complete the questionnaire. Quantitative data were collected using a pre-tested, structured and self administered Amharic language questionnaire. The questionnaire was originally developed in English and then translated into Amharic with back translation into English to maintain consistency.

Four focus group discussions were carried out among purposely selected students to explain some of the findings from questionnaire interviews using a semi-structured discussion guide. Discussions were gender segregated and divided according to residence (urban and rural). The number of participants in each group ranged from 9-10 individuals. The principal investigator moderated all the focus group discussions. The focus group discussions centered on adolescents' psychosocial problems, and tried to elucidate reasons for some of their concerns.

**Variables;** *Independent variables* include, among others, living arrangement (relationship with guardians) at the time of the survey, socio-demographic factors like age, gender, residence, religious affiliation, academic achievement, perceived family connectedness, as well as *Khat* and alcohol use. *Outcome variables* were 'feeling sad and hopeless almost everyday for two weeks or more in a row such that they stopped doing some usual activities' and 'suicide attempts made in the past 12 months'. The selection of outcome variables was primarily based on their public health importance as well as the availability of previous literature for comparison.

**Operational definition:**
***Family connectedness***
Parent-teen connectedness can be defined as the degree of closeness/warmth experienced in the relationship that teenagers have with their parents. In this paper the term 'connectedness' is used interchangeably with 'attachment'.

Family connectedness was measured using responses to 10 statements on a five point Likert scale ranging from one (strongly disagree) to five (strongly agree), five questions were given about each parent (as shown below).

I feel close to my mother (father)
My mother (father) cares about me
My mother (father) is warm and loving towards me
I am happy with my relationship with my mother (father)
My mother (father) and I are close with each other

**Data processing and analysis**

The scores from the 10 items (of family connectedness) were tallied forming a scale with good reliability (Cronbach's α = 0.92 overall, 0.924 for mother score and 0.951 for father score). Students who answered 'don't know' or 'not applicable' were excluded from the analysis for family connectedness (n=114). Family connectedness scores were analyzed as a continuous variable with possible values ranging from 10 to 50.

The SPSS version 11.01 computer software was used to enter, clean, and analyze the quantitative data. A bivariate analysis was carried out to examine the relationship between the two outcome variables and selected determinant factors. Chi-square and t-tests, and ANOVA were also used as appropriate. Factors for which significant bivariate association were observed were retained for subsequent multivariate analyses using multiple logistic regression method. All focus group discussions were taped and transcribed. The material was reorganized and analyzed according to predetermined themes.

**Ethical consideration**

The study protocol was approved first by the Department of Community Health and later by the Ethical Clearance Committee of the Medical Faculty of Addis Ababa University. The respective education bureau and school officials also expressed their willingness after they were informed about the whole purpose of the research project. Verbal consent was obtained from each study participant. The students were told that their answers would remain anonymous and confidential. A copy of the whole document presenting the results was given to the concerned education bureau so that they can make use of the findings for future plans.

**Results**

***Socio-demographic characteristics***

The socio-demographic characteristics of the respondents are shown on Table 1. Overall, 700 students (97% of the estimated sample size) completed the questionnaire. Leaving out 33 samples, which were not filled out completely, the final sample totaled 667 (a response rate of 93%). Out of the 667 students 308 (46.2%) were permanent residents of Dessie (urban); 512 (76.8%) were males; and 647 (99.0%) were non married. A significantly higher proportion of rural than urban (53.8% versus 46.2%; p-value= 0.048) and males than female students (76.8% versus 23.2%; p-value<0.0001) were represented in the sample.

Table 1: **Percentage distribution of students by selected socio-demographic characteristics and residence, Dessie, Ethiopia, 2004.**

| Variable | Urban (%) | Rural (%) | Total (n, %) | p-value |
|---|---|---|---|---|
| **Total** | 46.2 | 53.8 | 667(100.0%) | |
| **Age** | | | | |
| 15-19 | 97.4 | 89.7 | 622(93.3) | <0.001* |
| 20-25 | 2.6 | 10.3 | 45(6.7) | |
| **Sex** | | | | |
| Male | 65.9 | 86.1 | 512(76.8) | <0.001* |
| Female | 34.1 | 13.9 | 155(23.2) | |
| **Living arrangement** | | | | |
| With both biological parents | 51.6 | 0.3 | 160(24.0) | <0.001* |
| With one biological parent only | 22.1 | 2.5 | 77(11.5) | |
| With friends | 0.6 | 52.1 | 189(28.3) | |
| Alone | 4.2 | 22.5 | 94(14.1) | |
| With relatives | 21.4 | 22.5 | 147(22.0) | |

The mean age of the respondents was 18(± 0.98) years. For urban students the most common living arrangements were living with both parents (51.6%) and with one biological parent only (22.1%), while a significant proportion of rural students lived with their friends (52.1%) and alone (22.6%) [P-value<0.0001].

***Sad feelings***

Three hundred eighty-six (57.9%) students reported feeling lonely and depressed at least once in the last three months. As compared to urban students, rural students were found to be significantly more likely to feel lonely and depressed (61.6% versus 53.6%; OR=0.72; 95%CI=0.53, 0.98). No significant difference was found with regards to gender.

One hundred eighty-two (27.3%; 95% CI=23.9, 30.7) students reported feeling sad or hopeless almost everyday for two weeks or more in a row that they stopped doing their usual activities; among them females and students living alone, and those with friends and relatives being more likely to have the symptoms [OR=1.60; 95%CI= 1.09, 2.36, OR=2.21; 95%CI=1.22, 4.01, OR=2.09; 95%CI=1.25, 3.48, and OR=2.29; 95%CI=1.34, 3.90 respectively]. A complete breakout of the data is given in Table 2.

In the binary logistic regression analysis, female gender, not living with both biological parents, having a lower grade-point average and less family connectedness were

Table 2: **Reports of sad feelings and suicide attempt by residence, Dessie preparatory school, Ethiopia, 2004**

| Variable | Urban (#,%) | Rural (#, %) | OR (95%CI) |
|---|---|---|---|
| ***Ever have any of the following in the past 3 months*** | | | |
| **Feeling lonely, depressed** | | | |
| Yes | 165 (53.6) | 221 (61.6) | 0.72 (0.53, 0.98)* |
| No | 143 (46.4) | 138 (38.4) | |
| **Being worrisome, can't sleep or don't sleep well** | | | |
| Yes | 150 (48.7) | 197 (54.9) | 0.78 (0.58, 1.06) |
| No | 158 (51.3) | 162 (45.1) | |
| **Mentally incoherent, moody and stressful** | | | |
| Yes | 156 (50.6) | 205 (57.1) | 0.77 (0.57, 1.05) |
| No | 152 (49.4) | 154 (42.9) | |
| **Being bored with life and the world around you** | | | |
| Yes | 166 (53.9) | 175 (48.7) | 1.2 (0.90, 1.70) |
| No | 142 (46.1) | 184 (51.3) | |
| **Befuddled, having a headache with no obvious cause** | | | |
| Yes | 147 (47.7) | 202 (56.3) | 0.71 (0.52, 0.96)* |
| No | 161 (52.3) | 157 (43.7) | |
| **Ever felt so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities in the past 12 months** | | | |
| Yes | 74 (24.0) | 108 (30.1) | |
| No | 234 (76.0) | 251 (69.9) | 0.74 (0.52, 1.04) |
| **Ever seriously considered attempting suicide** | | | |
| Yes | 15 (4.9) | 27 (7.5) | 0.63 (0.33, 1.21) |
| No | 293 (95.1) | 332 (92.5) | |
| **Ever planned how you would attempt suicide** | | | |
| Yes | 10 (3.2) | 26 (7.2) | 0.43 (0.20, 0.91) |
| No | 298 (96.8) | 333 (02.8) | |
| **Ever attempted suicide in the past 12 months** | | | |
| Yes | 14 (4.5) | 25 (7.0) | 0.64 (0.33, 1.25) |
| No | 294 (95.5) | 334 (93.0) | |
| **Ever attempted suicide** | | | |
| Yes | 17 (5.5) | 27 (7.5) | 0.72 (0.38, 1.35) |
| No | 29 (94.5) | 332 (92.5) | |

*=Statistically significant

Table 3: **Factors associated with feeling sad or hopeless almost everyday for 2 weeks in a row that they stopped doing some usual activities, Dessie preparatory school, Ethiopia, 2004.**

| Variable | Ever felt sad or hopeless | | OR[95%CI]** | OR[95%CI]*** |
|---|---|---|---|---|
| | Yes (#, %) | No (#, %) | | |
| **Sex** | | | | |
| Male(r) | 128 (25.0) | 384 (75.0) | 1.00 | 1.00 |
| Female | 54 (34.8) | 101 (65.2) | 1.96 (1.18, 3.23)* | 1.75 (1.07, 2.86)* |
| **Place of residence** | | | | |
| Rural(r) | 108 (30.1) | 251 (69.9) | | 1.00 |
| Urban | 74 (24.0) | 234 (76.0) | | 0.66 (0.43, 1.03) |
| **Living arrangement** | | | | |
| Both biological parents(r) | 28 (17.5) | 132 (82.5) | 1.00 | |
| One biological parent only | 18 (23.4) | 59 (76.6) | 1.19 (0.45, 3.15) | |
| Friends | 58 (30.7) | 131 (69.3) | 3.16 (1.66, 5.00)* | |
| Alone | 30 (31.9) | 64 (68.1) | 2.15 (1.04, 4.46)* | |
| Relatives | 48 (32.7) | 99 (67.3) | 2.52 (1.28, 4.95)* | |
| **Ever had sex** | | | | |
| Yes | 60 (34.9) | 112 (65.1) | 1.29 (0.81, 2.07) | 13.6 (0.86, 2.17) |
| No(r) | 122 (24.6) | 373 (75.4) | 1.00 | 1.00 |
| **Grade in E.G.S.L.C.E[a].** | | | | |
| 1.8-2.5 | 24 (8.7) | 251 (91.3) | 1.82 (0.99, 3.33) | 1.81 (0.99, 3.31) |
| 2.6-3.0 | 6 (4.2) | 138 (95.8) | 1.93 (1.01, 3.71)* | 1.96 (1.03, 3.74)* |
| 3.1-4.0(r) | - | 11 (100) | 1.00 | |
| Family connectedness | | | 0.96 (0.94, 0.99)* | 0.97 (0.95, 0.99)* |

*- statistically significant. ** -Place of residence excluded ***- Living arrangement excluded

[a] - Ethiopian General Secondary School Leaving Certificate Examination.

r- reference category

associated with depressive symptoms (Table 3). Introduction of place of residence instead of living arrangements revealed that it is not a significant predictor, although it had no effect on the other variables. The inclusion of both living arrangements and place of residence as covariates was deferred to avoid the problem of collinearity.

***Suicidal ideation and attempts***

Forty-two (6.3%) students seriously considered suicide; 36(5.4%) planned suicide, and 39(5.8%; 95% CI =4.0, 7.6) attempted suicide in the 12 months preceding the survey. Forty four (6.6%) reported suicide attempts at least once in their life time. More females (9.0%) than males (4.3%) and rural (7.2%) than urban (3.2%) students planned methods of attempting suicide [OR=0.45, 95%CI=0.23, 0.91 and OR=0.43, 95%CI=0.20, 0.91 respectively]. However, there was no significant difference by gender, living arrangement, family connectedness, religious affiliation and residence for actual suicide attempt.

Among those who reported attempting suicide in the 12 months preceding the survey, 21(53.8%) attempts resulted in injuries serious enough to require professional treatment. Attempted suicide rates didn't differ significantly according to religious attachment. One hundred twenty two (18.3%) adolescents reported knowing a friend who had attempted suicide while 97 (14.5%) reported that they knew someone among the family who had attempted suicide.

Controlling for observed covariates in multiple logistic regression, female gender, history of suicide attempts among friends and family members, being bored with life and the world around them and being sexually active continued to predict suicide attempt in the 12 months preceding the survey (Table 4). A different model run using place of residence instead of living arrangements also showed similar effects except that gender has become marginally not significant.

During group discussions, students generally agreed that psychosocial problems are important issues of concern for students of either sex or residence in preparatory schools. Among concerns that worry adolescents very much; academic achievement, risk of unwanted pregnancy, contracting HIV/AIDS and getting the right

Table 4: **Correlates of suicide attempt in the past 12 months, Dessie preparatory school, Ethiopia, 2004.**

| Characteristics | Attempted suicide | | OR[95%CI]** | OR[95%CI]*** |
|---|---|---|---|---|
| | Yes (#, %) | no (#, %) | | |
| **Sex** | | | | |
| Male(r) | 28 (5.5) | 487 (94.5) | 1.00 | 1.00 |
| Female | 11 (7.1) | 144 (92.9) | 2.60 (1.05, 6.48)* | 2.14 (0.91, 5.02) |
| **Place of residence** | | | | |
| Rural(r) | 27 (7.5) | 332 (92.5) | | 1.00 |
| Urban | 17 (5.5) | 291 (94.5) | | 1.07 (0.49, 2.35) |
| **Living arrangement** | | | | |
| Both biological parents(r) | 6 (3.8) | 154 (96.3) | 1.00 | |
| One biological parent | 3 (3.9) | 74 (96.1) | 0.68 (0.11, 4.15) | |
| Friends | 12 (6.3) | 177 (93.7) | 0.79 (0.23, 2.64) | |
| Alone | 7 (7.4) | 87 (92.6) | 1.04 (0.28, 3.91) | |
| Relatives | 11 (7.5) | 136 (92.5) | 1.65 (0.49, 5.59) | |
| **Anyone in the family tried to kill themselves** | | | | |
| Yes | 16 (16.5) | 81 (83.5) | 2.59 (1.09, 6.15)* | 3.43 (1.60, 7.36)* |
| No(r) | 23 (4.0) | 547 (96.0) | 1.00 | 1.00 |
| **Any of your friends tried to kill themselves** | | | | |
| Yes | 19 (15.6) | 103 (84.4) | 4.32 (1.88, 9.94)* | 3.57 (1.68, 7.59)* |
| No(r) | 20 (3.7) | 525 (96.3) | 1.00 | 1.00 |
| **Ever had sex** | | | | |
| Yes | 21 (12.1) | 151 (87.8) | 3.00 (1.27, 7.11)* | 2.23 (1.00, 4.97) |
| No(r) | 18 (3.6) | 477 (96.4) | 1.00 | 1.00 |
| ***Ever being bored with life and the world around you in the past 3 months:*** | | | | |
| Yes | 29 (8.5) | 312 (91.5) | 2.59 (1.04, 6.39)* | 2.78 (1.26, 6.12)* |
| No(r) | 10 (3.1) | 316 (96.9) | 1.00 | 1.00 |
| **Perceived family connectedness** | | | 1.02 (0.97, 1.07) | 1.01 (0.97, 1.06) |

* = statistically significant. r = reference category ** -Place of residence excluded***- Living arrangement excluded

Note. Except for gender and living arrangement, variables which were significantly associated in bivariate analyses were included in the logistic regression.

romantic partner who could be trusted were mentioned by many of them. When asked whether urban or rural students are more affected, participants had divergent views. Many of them, however, commented that rural adolescents bear the additional burden of economic constraints and lack of family support when they face problems and hence are more prone to psychosocial problems.

An 18 year old rural female student remarked. *"Living alone away from families is painful. I used to be a clever student when I was living with my parents. At times I feel lonely and think that I have no one to share my problems with. As a result of this, even my academic performance has decreased dramatically."*

Participants' opinions regarding which group of adolescents have more secure attachment were mixed. Many students underscored the importance of living with both biological parents as a precondition to having a secure attachment. Some rural students, however, have argued that they have good emotional attachment despite the physical separation. Regarding the role of attachment to parents, participants universally agreed on the positive impact of close parent-teen relationship to good psychosocial health.

**Discussion**

This study reveals that a substantial proportion of adolescents in preparatory school have multifaceted psychosocial problems. More than half of the respondents reported feeling lonely and depressed at least once in the past three months. A similar proportion of adolescents also reported experiencing a feeling of being worrisome and being bored with life and the world around them in the past three months. This is grossly comparable with previous findings reported among high school students in Jimma (24) and Addis Ababa (25).

Students living with both biological parents were generally found to fare better than their counterparts living with one biological parent only, friends or alone. Specifically the analysis of the relationship between teenagers' living arrangements and depressive symptoms in this study shows that teenagers living with both biological parents have the most favorable outcomes. Previous research on the effects of living arrangements on adolescent health outcomes has shown that generally adolescents living with both biological parents exhibit the lowest rates of psychological problems (26).

The rates of suicide attempts reported in this study are consistent with some others reported in previous findings (27); but are generally lower than those reported by some other surveys conducted in Ethiopia (28) and elsewhere (29). A study conducted among high school students in Addis Ababa by Kebede and Ketsela (28) reported a lifetime prevalence of suicide attempt of 14.3% in contrast to the 6.6% found by the present study. The fact that this study was restricted to preparatory school youth who have better academic achievement and possibly more hope to join higher institutions might have contributed to the lower prevalence of suicide attempts in the present survey.

In this study a history of suicide among family members and friends, sexual activity, female gender and some depressive symptoms were found to be strong predictors of suicide attempt. This is in accordance with most findings regarding adolescent suicide attempt (3-6). The female preponderance in depressive symptoms (one of the risk factors for suicide attempt) and suicide attempt is consistent with most literature worldwide (30), but contrary to some of the previous reports from Ethiopia (28). Girls are generally more prone to outcomes often referred to as 'internalized or quiet'- such as depression. Boys on the other hand, are prone to react to difficulties by 'externalizing' acting out, by being aggressive and other similar acts (30).

This study didn't show an association between residence, living arrangements, alcohol intake, *khat*-chewing and suicide attempt. The relatively small number of students who have reported attempting suicide might have contributed to the lack of association with these variables.

Consistent with prior research findings (14), it was found in this study that having a better family connectedness was found to be protective against depressive symptoms and suicidal thought. As most of the participants (both from rural and urban) mentioned in the group discussions, less secure attachment to parents may contribute to the development of depressive symptoms among young adolescents. Hence, improving the adolescent-parent relationship could be a focus of interventions both in community service and in clinical work.

Although the results are encouraging, some methodological limitations should be noted. Among these, the fact that the study was restricted to a single population in a specific area utilizing a cross-sectional design warrants discretion in generalization and making causal associations.

In conclusion, the study found that the burden of psychosocial concerns including depressive symptoms, suicidal ideation and suicide attempt is high among this group of youth. It further indicated the presence of several factors that predict depressive symptoms and suicidal ideation. Living with both biological parents and good parent-teen connectedness are also related to better psychosocial health.

Based on the findings, the researchers of this study recommend that governmental and non-governmental partners working with and for youth should support the following initiatives in mental health programming: Public education initiatives that are responsive to gender differences and that enhance recognition and understanding of the importance of parent-teen relationship particularly during periods of transition and potential stress, such as entry to preparatory schools and living away from families. Adolescent programs need to specifically focus on attachment issues and effective parenting strategies for high-risk adolescents (particularly those living away from home and their families), and Further in-depth investigation is also needed with particular emphasis on establishing the temporal relationship using longitudinal study designs that are useful for evidence-based interventions. Future studies also need to investigate parental factors and other mediators related to attachment and adjustment in adolescence in the Ethiopian context.

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