Journal of Science and Sustainable Development (JSSD), 2025, 13(2), 134-149

ISSN: 2304-2702 (print); 2414-4479 (online)
DOI: https://doi.org/10.20372/au.jssd.13.2.2025.0654

RESEARCH PAPER

Adolescents' Psychological Well-being: The Role of Sex and Family Structure

Geda Tolera[1]* and Seleshi Zeleke[2]

[1]*Department of Psychology, Ambo University, Ethiopia;*

[2]*School of Psychology, Addis Ababa University, Ethiopia*

***Corresponding Author:** Email: gedafeyisa@gmail.com*

Abstract

Adolescents' psychological well-being is a salient factor in fostering their comprehensive psychological, socio-emotional, and physical development, enabling them to thrive during this period of rapid growth. A range of individual and social factors contributes to the perceived level of adolescents' psychological well-being. This study aimed to investigate the influences of family structure and sex on adolescent's psychological well-being. A correlational research design was employed to achieve the purpose of this study. Data were collected from a randomly selected 340 adolescents (158 males and 182 females) through proportionate stratified sampling, by using Ryff's psychological well-being scale. Descriptive statistics (mean, standard deviation), two-ways ANOVA, and multiple regression analysis were employed to examine relationships and differences. The results indicated that Adolescents who participated in the present study exhibited a lower level of psychological well-being. When compared by sex, female adolescents are found better in their psychological well-being than their male counterparts (F (1,339) =8.55, P<.05). Adolescents from intact families (i.e., where both biological parents live together) are found to be better in their psychological well-being than adolescents from non-intact families (F (1, 339) = 12.822, P <.05). Overall, both sex and family structure were identified as significant factors influencing adolescents' psychological well-being. Female adolescents exhibited higher levels of psychological wellbeing than male adolescents. Both female and male adolescents from intact demonstrated higher levels of psychological well-being than those from non-intact families. Given the low levels psychological well-being observed among adolescents, key agents within their immediate ecological systems such as families and schools, bear a critical responsibility to actively foster and enhance their psychological well-being. Thus, all stakeholders involved in adolescent psychosocial development are encouraged to actively contribute to promoting adolescents' psychological well-being. This support serves as a foundation for their positive growth and development.

Keywords: psychological well-being, family structure, sex, adolescents

Introduction

The period of adolescence is a crucial stage in human development marked by the achievement of various developmental milestones. Notable transformations in brain development, hormonal activity, emotions, thinking processes, behavioral, and social interactions characterize this stage (Zaky, 2016). Parallel to the developmental changes, developmental theorists contended that adolescents entertain developmental tasks of establishing one's own identity and strive for achievement of autonomy (Meeus, 2016). The literature also indicates that adolescents engage in developmental tasks such as identifying, evaluating, and choosing roles and values that they will adhere to as adults (Hamman and Hendricks, 2005). Expected developmental milestones during adolescence seem to be

successfully attained by adolescents in a psychologically healthy state. Supporting this notion, a research shows that psychological well-being is an important and salient factor for healthy trajectories from adolescence to adulthood (Hoyt *et al.,* 2012).

Although definitions of psychological well-being vary among scholars, Ryff's (1989) conceptualization is one of the most widely used. According to her, psychological well-being represents optimal human functioning (Diener, 2009). Furthermore, Ryff (1995) further sub-classified the construct into dimensions including self-acceptance, positive relationships with others, environmental mastery, autonomy, purpose in life and personal growth. Chen *et al.* (2018) referred to these dimensions as "health assets" as they affect adolescents' physical and mental health and, ultimately shaping their behavioral development trajectories. In a similar vein, Burns (2015) defined psychological well-being as intra and inter-individual levels of positive functioning that comprises relatedness with others and self-referent attitudes that could be explained in terms of environmental mastery and personal growth. Broadly, Vinothkumar (2015) referred to psychological well-being as representing lives flourishing indicated by range of feeling better and functioning optimally. In summary, the tenets characterizing psychological well-being are associated with positive psychological functioning and one's optimal psychosocial development that would serve adolescents' successful achievement of anticipated milestones during this critical stage of life.

Research indicates that adolescents' psychological well-being positively correlates with several factors, including adaptive decision-making (Páez-Gallego *et al.,* 2020), emotional self-control (Wills *et al.,*2016)), resilience to stressful situation (Konaszewski *et al.,* 2021; Sagone and De Caroli, 2014), life satisfaction, happiness, hopefulness and self-efficacy (Alkhatib, 2020; Heizomi *et al.,* 2018), internal locus of control (Mobarakeh *et al.,* 2015), and positive thinking (Alkhatib, 2020). Conversely, adolescents facing psychosocial health issues are more likely to encounter difficulties in social relationships, engaging in substance abuse, dropping out of school, and attempting suicide (Tayfur *et al.,* 2022; Hetrick *et al*., 2016). Hence, it is essential to investigate factors accounting for desired changes in adolescents' psychological well-being and come up with potential recommendations directed to boost psychological wellness of the young people. Among the various factors influencing adolescent psychological well-being, family structure and sex were found to play a significant impact on adolescents' psychological well-being (Cavanagh and Fomby, 2019; WHO, 2021). For instance, family structure shapes the social and emotional environment in which adolescents develop, affecting their sense of stability, support, and access to resources (Amato, 2010). Similarly, sex differences are crucial, as males and females' adolescents may experience and express psychological well-being differently due to biological, social, and cultural influences (Nolen-Hoeksema, 2001; WHO,2021). Thus, it is critical to consider both the environmental (intact and non-intact adolescent family context) and personal elements (sex of adolescents) that could influence the adolescents' psychological well-being (Santrock, 2018).

Human development, particularly during adolescent, is a dynamic process shaped by various factors contexts, among others, family structure is one of them (Lerner, 2006). Family structure can shape adolescents' psychological health in diverse ways (Cavanagh and Fomby, 2019). However, existing research remain inconclusive regarding the precise impact of family structure on adolescents' psychological well-being. Some studies have found that adolescents from intact families tend to report greater levels of psychological well-being compared to those from non-intact families. For example, Demo and Acock (1996) reported that adolescents living in intact families exhibited slightly higher well-being than those from single-parent or stepfamilies. Similarly, Amato (2005) showed that children raised by continuously married parents are less likely to experience a broad range of cognitive, emotional, and social problems than peers from single-parent households. Amato's study

further confirmed that children raised in stable two-parent families tend to have stronger emotional connections with their parents and experience fewer stressful events than those living in stepfamilies. Conversely, Bass and Warehime (2011) reported that adolescents not residing in nuclear families, particularly those without two parents, experienced more health problems, chronic illnesses, and lower quality of life related to health, along with lower parental assessments of their health.

On the other hand, several studies reported no significant differences in psychological well-being among adolescents from intact and non-intact families. For instance, Vandewater and Lansford (1998) reported no notable variations in well-being among adolescents across different family structures. Similarly, Baeder *et al.* (2009) and Singh and Udainiya (2009) found that adolescents' psychological well-being is not notably affected by their family structure background. Furthermore, Ongaro and Meggiolaro (2012) found that family structure generally had no impact on adolescent psychological well-being, except in the case of young people residing in stepparent families. Given these inconsistent research outcomes, it remains challenging to attribute adolescent psychological well-being solely to family structure. Therefore, this study seeks to contribute to clarifying these mixed findings and deepen the understanding of how family structure relates to adolescent psychological well-being.

Adolescents' sex is the other factor considered for examined in this study to assess its predictive effect on adolescents' psychological well-being. Similar to family structure, there is no conclusive evidence in the literature as to whether male or female adolescents have better psychological well-being. For example, Ryff (1995) suggested that women of all ages scored higher than men on all dimensions of psychological well-being. Another study finding revealed gender differences in three of the six psychological well-being dimensions (purpose in life, positive relationships with others and autonomy), with female adolescents outperforming male adolescents in the latter two dimensions (Perez, 2012). Furthermore, Chraif and Dumitru (2015) reported gender differences in four of the six components of psychological well-being-environmental mastery, self-acceptance personal growth and positive relations with others. Female adolescents scored higher than their male counterparts in three of the components except on the environmental mastery, where males scored higher. Several studies have shown that girls exhibit greater psychological well-being compared to boys (Chen *et al*., 2018; Liu and Zhao, 2016; Tangmun *et al.,* 2019). In contrast, other studies suggested that male adolescents are better in their psychological well-being than female adolescents. Savoye *et al.* (2015) also suggested that female adolescents have lower level of psychological well-being during adolescence than male adolescents. Similarly, Jiang (2020) found that girls experience greater psychological distress compared to boys, while Lucktong *et al*. (2018) found that males had higher psychological well-being than females. On the other hand studies (Francis et al., 2021; Páez-Gallego *et al.,* 2020; Vinayak and Judge, 2018; Chen *et al.,* 2018) have reported no sex difference in adolescents' psychological well-being. The inconsistent or contradictory findings may be attributed to socio-cultural factors, underscoring the need for further study. This study, therefore, aims to investigate the influence of sex and family structure in predicting adolescents' psychological well-being. Based on these considerations, the following study questions are put forward for investigation.

- What is the level of adolescents' psychological well-being in the study area?
- Does adolescents' psychological well-being differ as a function of their family structure and sex?
- Do family structure and sex significantly contribute to predicting adolescent psychological well-being?

Materials and methods

Study Design

The researchers employed a correlational research design, as the primary objective was to investigate the relationships among the study's three key variables: adolescents' psychological well-being, sex, and family structure. Specifically, the study aimed to examine both the unique and combined contributions of sex and family structure in predicting adolescents' psychological well-being.

Study Site

The current research was conducted in Jimma town located in the Oromia region of Ethiopia. Jimma, one of the country's oldest and most historically significant cities, lies approximately 353 kilometers southwest of Addis Ababa, the nation's capital. According to the Central Statistical Agency of Ethiopia (2007), Jimma is home to an estimated population of 195,288 residents, nearly evenly split between males (97,259) and females (97,969). The town is ethnically diverse, predominantly inhabited by the Oromo people alongside Amhara, Yem, Tigre, Gurage, Dawuro, and other groups. Islam and Christianity are the major religions practiced in the area. Adolescents in Jimma face a range of psychosocial challenges, including depression and anxiety, which are shaped by unique socio-cultural and family dynamics distinctive to the region (Girma *et al*., 2021). The psychosocial circumstances of adolescents in Jimma made the town a highly relevant setting for studying adolescent psychological well-being and developing contextually appropriate recommendations.

Participants of the Study

The study sample consisted of adolescent students selected from two randomly selected senior secondary schools in Jimma town. One was a government school (i.e., Sato Senior Secondary School) and the other was a private school (i.e., Catholic Senior Secondary School). Drapper and Smith's (1998) formula for non-single populations for the non- single population was utilized to establish the sample size for this study. Accordingly, the size of sample (n) is a function of the factors (Xi) and categories (Ck) involved in the research, such that a minimum of 10 observations are needed for each category of a factor i.e., n= Cfn1 x Cfn2 x Cf3x… Cfn. Where, n denotes sample size, while Cf1, Cf2, Cf3 through Cfn are the number of categories for factors 1, 2, 3, to factor n. Accordingly, the present study involves four variables: sex, school type, family structure, and grade level. The first variable has two categories (male and female), the second has two categories (private and government schools), the third has two categories (intact and non-intact), and the fourth includes four categories (grades 9, 10, 11, and 12). Hence, a minimum sample size that should be drawn was calculated to be 320 (i.e., 2 x 2 x 2 x 4 x 10 = 320), which is needed for the desired precision in the statistical analysis. Assuming possible non-response rate and potential incomplete responses, the sample size was increased by 10%. Accordingly, the proposed total sample size for the study was 352. They were selected from the aforementioned two secondary schools by using proportionate stratified sampling methods to ensure representativeness of participants in terms of sex, grade level and type of school and followed by systematic random sampling technique to identify adolescents participating in the study. The final analysis was performed using data from 340 participants, after excluding 12 questionnaires from the original 352 due to incomplete or improperly answered responses.

Instruments of Data Collection

Two instruments were employed to collect the required data from the participants. These included socio-demographic information utilized for gathering set of questions and Ryff's Psychological Well-Being Scale (PWB) to collect data about perceived psychological well-being of the study participants. The socio-demographic questionnaire was used to collect data on the socio-demographic characteristics of the respondents including age, sex, grade level, and family structure (intact/ non-intact). To measure psychological well-being in adolescents, an adolescent self-report version of Ryff's Psychological Well-Being Scale (PWB) developed by Ryff (1989) and modified by Ryff and Keyes (1995) was used. The scale

has 42 items. It measures six dimensions of wellbeing and happiness, including self-acceptance, autonomy, environmental mastery, personal growth, positive relationships, and purpose in life. Ryff Psychological Well-Being Scale is a widely used measure of well-being, and it is the most commonly used tool for assessing adolescents' psychological well-being. The participants rated each item on a six-point scale (ranging from 1=strongly disagree to 6=strongly agree) according to how much they agreed or disagreed. The scale includes items such as: (1) Autonomy – "I'm not hesitant to voice my views even if they oppose the majority," (2) Environmental Mastery – "Overall, I feel I have control over my life situation," (3) Personal Growth – "I am uninterested in pursuits that would broaden my perspective," (4) Purpose in Life – "I take life one day at a time without considering the future," (5) Positive Relations – "People generally regard me as warm and affectionate," and (6) Self-Acceptance – "Looking back on my life, I am content with the way things have gone." Negatively stated items were reverse coded during data feeding and analysis.

Psychometrically, the scale shows favorable results. As a tool for measuring specific characteristics of adolescent populations (e.g., Fernandes et al., 2010), it has been found to be reliable and valid. There was good reliability across all dimensions of the scale: Autonomy (0.71), Self-acceptance (0.79), Positive relations with others (0.78), Environmental mastery (068), Purpose in Life (0.82), Personal growth (0.71) and Total psychological well-being scale (0.82). The scale has been widely used across different countries in the world to study adolescents' well-being (Ryff & Keyes, 1995; Gómez-López *et al.,* 2019). Moreover, the scale's internal consistency has been in the acceptable range. Aregash (2010) used the scale to assess psychological well-being and reported a coefficient of internal consistency (Cronbach alpha) of 0.74. Similarly, Berhe (2020) reported a Cronbach alpha reliability of 0.84 for the entire scale.

Instrument Validation

Before using the instrument of data collection, six subject-matter experts checked the content and face validity of the scale. Their review of the instrument found it relevant, appropriate, clear, and conceptually sound. Once the scale items were modified based on the expert comments, it was then translated into to the study participants' native languages (Amharic and Afan Oromo) for the ease of understanding. Data collected from the participants were analyzed using Cronbach alpha (internal consistency reliability) followed by exploratory factor analysis (EFA). The EFA results indicated that some items had low loadings and others cross loaded on more than one factor. Therefore, removing the items with low loadings and those cross loaded on more than one factor was an option to get the items load on a single factor. Accordingly, three items (1, 31 & 37) from Autonomy, three items (2, 26 & 38) from Environmental mastery, two items (33 & 39) from personal growth, one item (40) from positive relationship, two items (23 & 41) from purpose and two items (36 & 42) from self-acceptance were removed. Discarding the aforementioned items yielded six components (fitting to the original underlying factor structure) with eigenvalues exceeding 1.

Table 1. Internal consistency assessment of the Psychological Well-Being Scale and its subscales subsequent to factor analysis

Type of instruments	Number of Items	Cronbach's Alpha
Psychological well-being	29	.89
Personal growth	5	.90
Positive relationship	6	.92
Autonomy	4	.81
Environmental mastery	4	.87
Purpose in life	5	.86
Self-acceptance	5	.88

As indicated in Table 1, the overall internal consistency of the Psychological Well-Being Scale and its six dimensions falls within the acceptable range.

Data Analysis Methods

Data collected from the participants were entered into SPSS version 24. Next, the data were cleaned and edited. Both descriptive statistics (such as mean and standard deviation) and inferential statistics (such as multiple regression analysis and two-way ANOVA) were used in the data analysis process. The study participants' descriptive characteristics and the state of adolescents' psychological wellbeing were summarized using descriptive statistics. Subsequently, prior to using parametric statistics, statistical assumptions for employing inferential statistical tests were tested. Afterwards, to examine variations in adolescents' psychological well-being based on sex and family structure, a Two-way ANOVA was employed. Multiple regression analysis was utilized to investigate the effect of family structure and sex on adolescents' psychological well-being. Prior to conducting ANOVA, all key assumptions for were checked and satisfied. Independence of observations was ensured, residuals were approximately normal, Levene's test confirmed homogeneity of variances ($p > .05$), and no significant outliers were found. Thus, ANOVA was suitable for the analysis. An alpha (α) value of .05 was used for statistical significance tests.

Ethical Considerations

All relevant ethical considerations were addressed during this study. The researchers received approval from the School of Psychology Research Ethics Committee at Addis Ababa University. Following this, adolescents in the selected schools were asked for their consents to participate in the study and gave their approval to proceed. Participants were also made aware that their involvement in the data collection process was completely voluntary and that they could revoke their consent at any moment. In addition, the participants were instructed not to write their names on the questionnaire in order to safeguard their privacy. Furthermore, they were assured that the data collected about them would be kept private and used exclusively for this study.

Results

Demographic Characteristics of the Respondents

Table 2. Demographic Characteristics of the Respondents (N=340)

Variables	Categories	Frequency	Percentage
Sex	Male	158	46.5
	Female	182	53.5
	Total	340	100%
Family structure	Intact	231	67.9
	Non-intact	109	32.1
	Total	340	100%
Grade Level	Grade 9	111	32.6
	Grade 10	81	23.8
	Grade 11	87	25.6
	Grade 12	61	17.9
	Total	340	100%
School type	Government	232	68.2
	Private	108	31.8
	Total	340	100%
Age	14-20	-	$\bar{X}$=17.8 (SD =3.42)

Table 2 presents the demographic details of the study participants. In this study, 340 adolescents, 182 (53.5%) females, and 158 (46.5%) males. Regarding family structure, 67.9% of the respondents were from intact families, whereas 109 (32.1%) were from non-intact families. In terms of grade level, adolescents from grade nine through twelve were represented. The sample encompassed adolescents from grades nine to twelve. Grade nine students formed the largest participants (n = 111; 32.6%), whereas grade twelve students represented the smallest participants (n = 61; 17.9%). The study participants' age falls between 14 to 20 ages, with a mean of 17.8 years old (and standard deviation of 3.42). In terms of the type of school the adolescents attending, the majority (n = 232; 68.2%) were from government schools.

Levels of Psychological Well-Being among Adolescents

The primary focus of this study is to ascertain about adolescents' level of psychological well-being. Adolescents who scored significantly below the expected mean are considered to have a lower level of psychological well-being, whereas those scoring significantly above it are regarded as having a higher level of the measured well-being indicators. When a scale lacks predefined cut-off scores, researchers often recommend a practical method of establishing a threshold by selecting a meaningful minimum response on the Likert scale and multiplying it by the total number of items to derive an overall score cutoff (Hughes, 2018; Barua, 2013). In line with this, given Ryff's six-point psychological well-being Likert scale lacks an established cut-off score, the researchers have set the threshold as aforementioned. Taking four (slightly agree) on the scale as the minimum threshold as an indicator of positive psychological well-being on each item, the researchers multiplied this value by the number of items to obtain the total score on the scale that indicates the minimum threshold of positive psychological well-being (i.e., 4 x 29 = 116). This means for an adolescent to be considered better in their psychological well-being, they must, on average, rate each item at least 4 on a 6-point

scale and achieve a minimum total score of 116.

Table 3. Adolescents' level of psychological well-being

Variables	No of items	Min	Max	obtained Mean	SD	Expected Mean
PWB	29	33	159	96.11	23.7	116

PWB= Psychological well-being; SD=Standard Deviation, Df=Degree of Freedom

In terms of psychological well-being, the obtained result reveal that the observed mean (Mean= 96.11) is below the expected mean (Mean=116). This implies that the study participants exhibit lower levels of psychological well-being.

Variations in psychological well-being of adolescents' as a result of family structure and sex

Table 4. Descriptive statistics on adolescents' psychological well-being by sex and family structure

Sex	Family	Mean	Std. Deviation	N
Female	Intact	103.09	20.78	130
	Non-Intact	91.52	27.58	52
	Total	99.79	23.44	182
Male	Intact	94.64	20.41	101
	Non-Intact	86.95	27.65	57
	Total	91.87	23.49	158
Total	Intact	99.40	21.00	231
	Non-Intact	89.13	27.58	109
	Total	96.11	23.76	340

Table 4 shows that female adolescents from intact families had a higher PWB mean score (M=103.09) than female adolescents from non-intact households (M=91.52). In the same vein, male adolescents from intact families (M= 94.64) had a higher mean score in their psychological well-being than male adolescents from non-intact households (M=86.95). Compared to adolescents from non-intact families, adolescents from intact family backgrounds, both male and female, were found to have superior psychological well-being. This suggests that teenagers raised in two-parent households are more likely to experience better psychological health than teenagers raised in households with a single parent (i.e., the mother, father, stepfather, stepmother, or family members). The effect of sex (male, female) and family structure (intact, non-intact) on adolescents' psychological well-being (in terms of autonomy, positive relations with others, self-acceptance, purpose in life, personal growth, and environmental mastery) was tested by applying two-way ANOVA.

Table 5. Two-way ANOVA results showing how adolescents' psychological well-being varies according to their sex and family structure.

Source	Type III Sum of Squares	df	Mean Square	F	p	Partial Eta Squared
Corrected Model	12436.305[a]	3	4145.435	7.783	.000	.065
Intercept	2603157.928	1	2603157.928	4887.361	.000	.936
Sex	3118.312	1	3118.312	5.855	.016	.017
Family	6829.484	1	6829.484	12.822	.000	.037
Sex * Family	276.454	1	276.454	.519	.472	.002

a. R Squared = .065 (Adjusted R Squared = .057)

As shown in the Table 5, family structure has a statistically significant effect on adolescents' psychological well-being, F (1,339) =12.822, p<.05. Adolescents from intact families exhibited higher levels of psychological well-being (mean = 99.40; see Table 4) compared to those from non-intact families (mean = 89.13). The effect size was small to moderate, with a partial eta squared of .037, indicating that family structure accounts for approximately 3.7% of the variance in psychological well-being among adolescents, highlighting family structure as an important but not exclusive factor in adolescent well-being. This suggests that a stable family environment contributes positively to adolescent psychological well-being.

Table 5 also reveals a statistically significant effect of sex on adolescents' psychological well-being, F(1, 339) = 8.55,p<.05, suggesting that the observed difference is unlikely to have occurred by chance. Female adolescents reported significantly higher psychological well-being (mean = 99.79; see Table 4) compared to their male counterparts (mean = 91.87). The effect size was small, with a partial eta squared of .017, indicating that sex accounts for approximately 1.7% of the variance in psychological well-being among adolescents.

On the other hand, no statistically significant sex by family structure interaction effect was found (F (1,339) = .519, P >.05), indicating that the effect of family status on adolescents' psychological well-being did not differ between males and females. This refers that the way family structure influences adolescents' well-being is consistent for both males and females. Moreover, this suggests that the positive or negative impact of coming from an intact or non-intact family applies similarly across sexes, indicating no moderation by sex in the relationship.

Predictive effect of adolescents' sex and family structure on adolescents' psychological well-being

Table 6. Model summary table

R^2	Adjusted R^2	F	Df_1	Df2	P
.064	.058	7.78	2	337	0.000

Note. The model includes predictors: sex and family structure

Table 6 shows that the overall model was statistically significant, F (2,337) =7.78, p<.001, accounting for about 6.4% of the variance in psychological well-being scores (R^2=.064, adjusted R^2=.058). This indicates that sex and family structure together significantly predict psychological well-being, although a large proportion of variance remains unexplained.

Table 7. Summary of the multiple regression analysis

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	p
Sex	-7.194	2.516	-.151	-2.860	.005
Family structure	-9.653	2.689	-.190	-3.590	.000

a. Dependent Variable: Psychological well-being

The regression findings shown in Table 7 reveal that both sex (t (337) = -2.86, p = .005) and family structure (t (337) = -3.59, p < .001) are significant predictors of adolescents' psychological well-being. With sex coded as female = 1 and male = 2, the negative unstandardized coefficient for sex (B = -7.19, p = .005) means that transitioning from female to male is linked to a decrease of approximately 7.19 points in psychological well-being. This suggests that, after controlling for family structure, females report significantly higher psychological well-being scores than males by about 7.19 points. Similarly, with family structure coded as intact = 1 and non-intact = 2, the negative unstandardized coefficient (B = -9.65, p < .001) indicates that moving from an intact family to a non-intact family is associated with a decrease of approximately 9.65 points in psychological well-being. This means that, controlling for sex, adolescents from intact-families reported significantly higher psychological well-being than those from non-intact families.

Discussion

Psychological well-being has long-term implications for adolescents' overall life development. Recognizing and prioritizing adolescents' psychological well-being is critical for raising a generation that is not only academically successful but also emotionally resilient, socially adept, and capable of positively contributing to its society. However, contrary to the researchers' expectations, adolescents in the study area were found to exhibit low level of psychological well-being. Supporting this finding, Yasmin *et al.'s* (2015) study also showed that majority of the study participants had low to moderate levels of psychological well-being. Similarly, another study indicated that more than half of adolescents reported low psychological well-being (Arjun *et al.,* 2022). Hadjam and Nasiruddin's (2003) study indicated that such state of psychological wellness characterizes inadequate positive psychological functioning. Ryff and Singer (1998) further explained that this condition may stem from feelings of self-dissatisfaction, difficulties in forming meaningful relationships, dependence on others for success, challenges in managing one's environment, lack of clear life goals, and a sense of stagnation.

Furthermore, low adolescent psychological well-being could be the result of psychosocial influencers such as family instability, gender-induced social pressures, and inadequate opportunity to psychosocial support, which could exacerbate emotional and social difficulties. Additionally, livelihood hardships, educational anxieties, and cultural expectations may contribute to one's struggle for self-acceptance and purpose, ultimately undermining overall psychological health and development (World Health Organization, 2024; UNICEF, 2022).

Adolescence is a stage characterized by rapid physical, social, and psychological growth, which makes the family environment vital in supporting adolescents to reach key developmental milestones. In this study, family structure showed a statistically significant effect on the psychological well-being adolescents, both for male and female adolescents. This indicates that adolescents from families that are intact tend to have a higher levels of psychological well-being than those from non-intact families. This study aligns with the findings of Demo and Acock (1996), who observed that adolescents from intact families exhibit somewhat higher levels of well-being compared to those from single-parent or stepfamilies. Similarly, Amato (2005) demonstrated that children raised by two

married parents are less prone to various cognitive, emotional, and social difficulties compared to those living in households with just one biological parent. Moreover, adolescents from two-parent households, whether biological or blended, were reported to have better mental health outcomes compared to those from single-parent or non-traditional family structures (Carlson, 2006; Amato, 2005).

Being a female or male adolescent raised in a non-intact family has been linked to low psychological well-being. Various causes might be responsible for the poorer developmental outcomes associated with adolescents living in non-intact family environments. Among others, explanations given by ecological theory (Rosa and Tudge, 2013) and parental investment theory (Trivers, 1972) are worth discussing here. Proponents of the ecological perspective suggest that adolescents' psychological well-being is influenced by a variety of factors, and the absence of certain elements (such as belonging to a non-intact family) may adversely affect their psychological well-being. These factors encompass the individual's family relationships (microsystem), their interactions with broader community and social settings (mesosystem and exo-system), as well as cultural and societal influences at the broader societal level (macrosystem). According to parental investment theory, parents allocate resources (such as time and energy) to increase their offspring's chances of survival and reproductive success. Adolescents in non-intact families often face reduced parental involvement owing to fewer resources available after divorce or separation. In sum, according to Amato (2005) and Ganong and Coleman (2004) findings, stepparents may exhibit characteristics such as being more disengaged, less emotionally available, less affectionate, and providing less supervision than biological parents.

Difference in adolescents' psychological well-being also appears to vary between male and female adolescent, which is another variable of interest in this study. In this regard, sex had a statistically significant effect on adolescents' psychological well-being, with females reporting higher levels than males. Supporting this finding, Ryff (1995) found that women across all age groups scored higher than men in positive relationships with others and personal growth, while no sex differences were observed in the other four dimensions of psychological well-being: autonomy, environmental mastery, self-acceptance, and purpose in life. Morermore, Perez's (2012) study demonstrated gender differences in three of the six psychological well-being dimensions—namely autonomy, positive relations with others, and purpose in life—with female adolescents scoring higher than males in the last two dimensions, while males scored higher than females on autonomy. Furthermore, Chraif and Dumitru (2015) reported gender differences in four of the six psychological well-being components—personal growth, positive relations with others, self-acceptance, and environmental mastery—where female adolescents scored higher than males in the first three dimensions, while males outperformed females in environmental mastery. Likewise, some studies have shown that girls exhibit higher levels of psychological well-being compared to boys (Chen *et al*., 2018; Liu & Zhao, 2016; Tangmunkongvorakul *et al.,* 2019).

Conclusion and Implications

The low levels of psychological well-being observed among the adolescent participants in this study suggest they may be struggling to flourish and achieve the developmental milestones typically associated with this stage of life. This necessitates close support and fostering care services from pertinent actors (e.g., parents, siblings, teachers, peers, etc.) that could boost the psychological well-being of the adolescents for their improved positive psychological functioning. In relative terms, the female adolescents' perceived better psychological well-being than their male counterparts would imply that female adolescents are on the path to promising positive development, though they still need extensive psychosocial support to improve their overall low psychological well-being. This bestows a strong social responsibility on the concerned bodies to support female and male

adolescents' positive development in general, particularly that of male adolescents.

Adolescents' family environment characterized by intact family structure has positively impacted their psychological well-being. Conversely, those from non-intact families were found to experience less supportive social conditions, which potentially hinder healthy psychological development. As a result, adolescents from non-intact family settings are more prone to exhibiting lower levels of psychological well-being. Adolescents who are not raised in intact families may lack the warmth and affection of both parents, which can contribute to lower levels of psychological well-being. Given the challenging family dynamics of these days, it is very natural to expect adolescents' leading social life without both biological parents. Hence, whoever is directly influencing the psychosocial development of the adolescents in a non-intact family context (e.g., stepfather, stepmother, relatives, adopting parents, etc.) are socially responsible to provide pertinent parental care and social services to their maximum social capacity.

Overall, the psychological well-being of adolescents, as examined through key features of positive psychological functioning (self-acceptance, purpose in life, positive relations with others, autonomy, personal growth and environmental mastery) is a vital factor that promotes healthy developmental outcomes. All stakeholders involved in adolescent psychosocial development are encouraged to actively contribute to promoting adolescents' psychological well-being, as this support serves as a foundation for their positive growth and development.

The current study specifically focused on investigating how adolescents' sex and family structure influence their psychological well-being. Future research by Ethiopian scholars in family and adolescent psychology is encouraged to explore the resilience capacities of adolescents with low psychological well-being, as well as other potential factors related to adolescent psychological well-being. Such studies would broaden the existing body of knowledge and deepen understanding in this important area of adolescent development. Furthermore, additional research on the psychological well-being of Ethiopian adolescents in areas outside of Jimma town is suggested to either confirm or challenge the external validity of the results obtained in this study.

Acknowledgement

We sincerely thank the adolescent participants who agreed to take part in this study, dedicating their valuable time and willingly completing the questionnaire on psychological well-being. We also extend our gratitude to the data collectors and the principals of Sato and Catholic Senior Secondary Schools for their cooperation throughout the data collection process.

Conflict of interest

The authors affirm that they do not have any relevant financial or personal relationships to declare.

References

Abebe Delesa and Adane Choferie (2016). Response of linseed (*Linum usitatissimum* L.) to fertilizer application and weeds control in South-Eastern Highlands of Ethiopia. J. Cereals and Oilseeds. 7(5):44-54.

Alkhatib, M. A. H. (2020). Investigate the relationship between psychological well-being, self-efficacy and positive thinking at Prince Sattam bin Abdulaziz University. *International Journal of Higher Education, 9*(4), 138–152. https://doi.org/10.5430/ijhe.v9n4p138

Amato, P. R. (2005). The impact of family formation change on the cognitive, social, and emotional well-being of the next generation. *The Future of Children, 15*(2), 75–96.

Aregash, H. (2010). *The interrelationship among health-related behaviors, health consciousness and psychological well-being among the academic staff members of Jimma University* [Unpublished master's thesis]. Addis Ababa University.

Arjun, A., Dakshinamurthy, D. R. R., & Rajavel, D. R. N.(2022). Adolescent psychological well-being & sociodemographic profile in Kerala, India. International Journal of Health Sciences, *6(S5)*, 7054–7066

Baeder, A. M., Hammer, C. S., & D'Costa, P. M. (2009). Family structure, support, and well-being among high school students. *Journal of Child and Family Studies, 18*(6), 713-720.

Barua, A. (2013). Methods for decision-making in survey questionnaires based on Likert scale. *Journal of Asian Scientific Research, 3*(1), 35–38.

Bass, L. E., & Warehime, M. N. (2011). Family structure and child health outcomes in the United States. *Sociological inquiry*, *81*(4), 527-548.

Belay, T., & Yekoyealem, D. (2015). Exploring youth development in Ethiopia: An alternative strength-based perspective. *Ethiopian Journal of Development Research, 37*(1), 41–66.

Berhe, M. (2020). *Psychological well-being of adolescent students living with single parents in Raya Azebo Wereda, Tigray: Implication for family counseling* [Unpublished master's thesis]. Addis Ababa University.

Birhanu, A. M., Bisetegn, T. A., & Woldeyohannes, S. M. (2014). High prevalence of substance use and associated factors among high school adolescents in Woreta Town, Northwest Ethiopia: multi-domain factor analysis. *BMC public health*, *14*, 1-11.

Burns, R. (2015). *Encyclopedia of geropsychology*. https://doi.org/10.1007/978-981-287-080-3

Carlson, M. J. (2006). Family structure, father involvement, and adolescent behavioral outcomes. *Journal of Marriage and Family, 68*(1), 137–154.

Cavanagh, S. E., & Fomby, P. (2019). Family instability, school context, and the academic careers of adolescents. *Sociology of Education, 92*(2), 133–154.

Central Statistical Agency. (2007). *Summary and statistical report of the 2007 population and housing census of Ethiopia*. https://www.statsethiopia.gov.et

Chen, L. J., Yang, D. L., Zhou, D., & Ren, Q. (2018). *Child and youth well-being in China*. New York, NY: Routledge

Chraif, M., & Dumitru, D. (2015). Gender differences on wellbeing and quality of life at young students at psychology. *Procedia-Social and Behavioral Sciences*, *180*, 1579-1583.

Demo, D. H., & Acock, A. C. (1996). Family structure, family process, and adolescent well-being. *Journal of Research on Adolescence, 6*, 457-488.

Diener, E. (Ed.). (2009). *Assessing well-being: The collected works of Ed Diener* (Vol. 39). Springer Science & Business Media.

Draper, N. R., & Smith, H. (1998). Applied regression analysis (Vol. 326). John Wiley & Sons.

Draper, N. R., & Smith, H. (1998). *Applied regression analysis* (Vol. 326). John Wiley & Sons.

Fernandes, H. M., Vasconcelos-Raposo, J., & Teixeira, C. M. (2010). Preliminary analysis of the psychometric properties of Ryff's scales of psychological well-being in Portuguese adolescents. *the Spanish Journal of psychology*, *13*(2), 1032-1043.

Francis, A., Pai, M. S., & Badagabettu, S. (2021). Psychological well-being and perceived parenting style among adolescents. *Comprehensive Child and Adolescent Nursing*, *44*(2), 134-143.

Ganong, L., & Coleman, M. (2004). *Stepparenting: Issues and interventions* (2nd ed.). New York, NY: Haworth Press.

Girma, S., Tsehay, M., Mamaru, A., & Abera, M. (2021). Depression and its determinants among adolescents in Jimma town, Southwest Ethiopia. *PloS one*, *16*(5), e0250927.

Gómez-López, M., Viejo, C., & Ortega-Ruiz, R. (2019). Psychological well-being during adolescence: Stability and association with romantic relationships. *Frontiers in Psychology, 10*, 772. https://doi.org/10.3389/fpsyg.2019.01772

Hadjam, M. N. R., & Nasiruddin, A. (2003). Peranan kesulitan ekonomi, kepuasan kerja dan religiusitas terhadap kesejahteraan psikologis. *Jurnal psikologi*, *30*(2), 72-80.

Hamman, D., & Hendricks, C. B. (2005). The role of the generations in identity formation: Erikson speaks to teachers of adolescents. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, *79*(2), 72-75.

Heizomi, H., Allahverdipour, H., Hejazi, S. B., Jafarabadi, M. A., & Shirazi, A. (2018). Factors associating perceived stress and psychological well-being among Iranian female adolescents. *International Journal of Depression and Anxiety*, *1*(003).

Hetrick, S. E., Cox, G. R., Witt, K. G., Bir, J. J., & Merry, S. N. (2016). Cognitive behavioural therapy (CBT), third-wave CBT and interpersonal therapy (IPT) based interventions for preventing depression in children and adolescents. *Cochrane database of systematic reviews*, (8).

Hoyt, L. T., Chase-Lansdale, P. L., McDade, T. W., & Adam, E. K. (2012). Positive youth, healthy adults: does positive well-being in adolescence predict better perceived health and fewer risky health behaviors in young adulthood?, *Journal of Adolescent Health*, *50*(1), 66-73.

Hughes, D. J. (2018). Psychometric validity: Establishing the accuracy and appropriateness of psychometric measures. *The Wiley handbook of psychometric testing: A multidisciplinary reference on survey, scale and test development*, 751-779.

Jiang, S. (2020). Psychological well-being and distress in adolescents: An investigation into associations with poverty, peer victimization, and self-esteem. *Children and Youth Services Review*, *111*, 104824.

Kassa, E. Y., & Rao, T. V. A. (2018). Psychological well-being of Ethiopian adolescents in relation to family structure and parenting style. *IMPACT: International Journal of Research in Humanities, Arts and Literature (IMPACT: IJRHAL), 6*(12), 185–196.

Kinde, G., & Mekonnen, S. (2007). Types, magnitude, predictors, and controlling mechanisms of aggression in secondary schools of Jimma zone. *Ethiopian Journal of Education and Sciences, 2*(2), 39–61.

Konaszewski, K., Niesiobędzka, M., & Surzykiewicz, J. (2021). Resilience and mental health among juveniles: role of strategies for coping with stress. *Health and quality of life outcomes*, *19*(1), 1-12.

Lerner, R. M. (2006). Developmental science, developmental systems, and contemporary theories of human development. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology* (6th ed., Vol. 1, pp. 1–17). Wiley.

Liu, X., & Zhao, J. (2016). Chinese migrant adolescents' perceived discrimination and psychological well-being: The moderating roles of group identity and the type of school. *PLoS ONE, 11*(1), e0146559. https://doi.org/10.1371/journal.pone.0146559

Lucktong, A., Salisbury, T. T. & Chamratrithirong, A. (2018). The impact of parental, peer, and school attachment on the psychological well-being of early adolescents in Thailand. *International Journal of Adolescence and Youth,* 23*(2),* 235-249.

Meeus, W. (2016). Adolescent psychosocial development: A review of longitudinal models and research. *Developmental Psychology*, *52*(12), 1969.

Mekonnen, K. (2019). *Psychological well-being of adolescent students living with single parents in Raya Azebo Wereda, Tigray Regional State*, Master's thesis, Addis Ababa University

Mobarakeh, M. R. V., Juhari, R., Yaacob, S. N., Redzuan, M., & Mobarakeh, S. I. (2015). The effects of personality traits and psychological well-being among Iranian adolescent migrants in Kuala-Lumpur, Malaysia. *IOSR Journal of Humanities And Social Science*, *20*(7), 25-28.

Nolen-Hoeksema, S. (2001). Gender differences in depression. *Current directions in psychological science*, *10*(5), 173-176.

Ongaro, F., & Meggiolaro, S. (2012). *Family contexts and adolescents' emotional status* (Working Paper Series DSS, No. 2).

Páez-Gallego, J., Gallardo-López, J. A., López-Noguero, F., & Rodrigo-Moriche, M. P. (2020). Analysis of the relationship between psychological well-being and decision making in adolescent students. *Frontiers in Psychology, 11*, 1195.

Perez, J. A. (2012). Gender Difference in Psychological Well-being among Filipino College Student Samples. *International Journal of Humanities and Social Science*, *2*(13), 84–93.

Reda, A. A., Moges, A., Biadgilign, S., & Wondmagegn, B. Y. (2012). Prevalence and determinants of khat (Catha edulis) chewing among high school students in eastern Ethiopia: a cross-sectional study. *PLoS one*, *7*(3), e33946.

Rosa, E. M., & Tudge, J. (2013). Urie Bronfenbrenner's theory of human development: Its evolution from ecology to bioecology. *Journal of family theory & review*, *5*(4), 243-258.

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, *57*(6), 1069.

Ryff, C. D. (1995). Psychological well-being in adult life. *Current Directions in Psychological Science*, *4*(4), 99-104.

Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of personality and social psychology*, *69*(4), 719.

Ryff, C. D., & Singer, B. (1996). Psychological well-being: Meaning, measurement, and implications for psychotherapy research. *Psychotherapy and psychosomatics*, *65*(1), 14-23.

Ryff, C. D., & Singer, B. (1998). *The role of purpose in life and personal growth in positive human health*. Mahwah, NJ: Lawrence Erlbaum Associates Publishers

Ryff, C. D., Almeida, D. M., Ayanian, J. S., Carr, D. S., Cleary, P. D., Coe, C., … Williams, D. (2007). *National Survey of Midlife Development in the United States (MIDUS II), 2004-2006: Documentation of the Psychosocial Constructs and Composite Variables in MIDUS II Project 1*. Ann Arbor, MI: Inter-university Consortium for Political and Social Research.

Ryff, C., Almeida, D. M., Ayanian, J. S., Carr, D. S., Cleary, P. D., Coe, C., ... & Williams, D. (2007). National survey of midlife development in the United States (MIDUS II), 2004-2006.

Sagone, E., & De Caroli, M. E. (2014). Relationships between psychological well-being and resilience in middle and late adolescents. *Procedia-Social and Behavioral Sciences*, *141*, 881-887.

Santrock, J. W. (2018). *Adolescence* (17th ed.). McGraw-Hill Education.

Savoye, I., Moreau, N., Brault, M. C., Levêque, A., & Godin, I. (2015). Well-being, gender, and psychological health in school-aged children. *Archives of public health*, *73*, 1-8.

Singh, B., & Udainiya, R. (2009). Self-efficacy and well-being of adolescents. *Journal of the Indian Academy of Applied Psychology, 35*(2), 227–232.

Tangmunkongvorakul, A., Musumari, P. M., Thongpibul, K., Srithanaviboonchai, K., Techasrivichien, T., Suguimoto, S. P., Ono-Kihara, M., & Kihara, M. (2019). Association of excessive smartphone use and psychological well-being among university students in Chiang Mai, Thailand: Do gender differences matter? *PLoS ONE, 14*(1), e0209289.

Tayfur, S. N., Prior, S., Roy, A. S., Maciver, D., Forsyth, K., & Fitzpatrick, L. I. (2022). Associations between adolescent psychosocial factors and disengagement from education and employment in young adulthood among individuals with common mental health problems. *Journal of Youth and Adolescence*, *51*(7), 1397-1408.

Tefera, A., Tafere, Y., & Chuta, N. (2020). Adolescents' psychosocial well-being and mental health in Ethiopia: Evidence from the GAGE study. Gender and Adolescence: Global Evidence (GAGE). https://www.gage.odi.org/publications/adolescents-psychosocial-well-being-and-mental-health-in-ethiopia-evidence-from-the-gage-study/

Tirunesh, M. (2015). Students' disciplinary problems in one government and three private preparatory schools of Addis Ketema sub-city of Addis Ababa city administration (Master's thesis, Addis Ababa University).

Tirunesh, M., (2015). Students' disciplinary problems in one government and three private preparatory schools of Addis Ketema sub-city of Addis Ababa city administration.

To, S., Helwig, C. C., & Yang, S. (2017). Predictors of children's rights attitudes and psychological well-being among rural and urban mainland Chinese adolescents. *Social Development, 26*(1), 185–203.

Trivers, R. L. (1972). Parental investment and sexual selection. In B. G. Campbell (Ed.), *Sexual selection and the descent of man* (pp. 136–179). Routledge.

Trivers, R. L. (2017). Parental investment and sexual selection. In *Sexual selection and the descent of man* (pp. 136-179). Routledge.

UNICEF Innocenti. (2022). *Child and adolescent mental health and psychosocial well-being across the life course*. https://www.unicef.org/innocenti/media/4926/file/UNICEF-Child-Adolescent-Mental-Health-Psychosocial-Well-being-Life-Course-2022.pdf

Vandewater, E. A., & Lansford, J. E. (1998). Influences of family structure and parental conflict on children's well-being. *Family relations*, 323-330.

Vinayak, S., & Judge, J. (2018). Resilience and empathy as predictors of psychological well-being among adolescents. *International Journal of Health Sciences and Research*, *8*(4), 192-200.

Vinothkumar, M. (2015). Adolescence psychological well-being in relation to spirituality and pro-social behaviour. *Indian Journal of Positive Psychology*, *6*(4), 361–366.

Wills, T. A., Simons, J. S., Sussman, S., & Knight, R. (2016). Emotional self-control and dysregulation: A dual-process analysis of pathways to externalizing/internalizing symptomatology and positive well-being in younger adolescents. *Drug and alcohol dependence*, *163*, S37-S45.

Wills, T. A., Simons, J. S., Sussman, S., & Knight, R. (2016). Emotional self-control and dysregulation: A dual-process analysis of pathways to externalizing/internalizing symptomatology and positive well-being in younger adolescents. *Drug and Alcohol Dependence, 163*, S37–S45.

World Health Organization. (2021). *Adolescent mental Health*. https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health

World Health Organization. (2024). *World health statistics 2024: monitoring health for the SDGs, sustainable development goals*. World Health Organization.

Yasmin, K. H. A. N., Taghdisi, M. H., & Nourijelyani, K. (2015). Psychological Well-Being (PWB) of school adolescents aged 12–18 yr, its correlation with general levels of Physical Activity (PA) and socio-demographic factors in Gilgit, Pakistan. *Iranian journal of public*

Zaky, E. A. (2016). Adolescence: A crucial transitional stage in human life. *Journal of Child & Adolescent Behavior, 4*(4), e115.

Zeray, T. (2019). Aggressive behavior among Addis Ketema Preparatory School students: Magnitude and contributing factors (Master's thesis, Addis Ababa University).