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## Adolescents Psychological Distress and its Association with Parental Psychological Abuse and Neglect among Adolescents in Illu Abba Bor Zone, Southwest Ethiopia: a Community Based, Cross-Sectional Study

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### Abstract

**Background:** Psychological distress among adolescents is a common mental health problem worldwide. The risk of psychological distress is substantially higher in adolescents who have parental psychological abuse and neglect when compared to the general population. However, there is a scarcity of studies addressing this issue in Ethiopia. Therefore, this study aimed to assess psychological distress and its association with parental psychological abuse and neglect among adolescents in Mettu town, 2020.

**Methods:** A community-based cross-sectional study was conducted among 847 adolescents of Mettu town. Study participants were selected by stratified sampling technique. Data were collected through interviewer-administered questionnaires. Pearson's correlation analysis was used to assess the correlation between variables of the study (psychological distress and parental psychological abuse and neglect). Linear regression analysis was done and statistical significance was declared at  $P < 0.05$ .

**Results:** Out of the total sample, 819 adolescents were involved with a response rate of 96.7%. The overall prevalence of psychological distress was 43.7%. Among the respondents, 192(23.4%) experienced parental psychological abuse, 290(35.4%) experienced emotional neglect, and 247(30.2%) experienced physical neglect. Parental psychological abuse ( $\beta = .65$ ,  $p < .001$ ), emotional neglect ( $\beta = .21$ ,  $p = .003$ ), and physical neglect ( $\beta = .17$ ,  $p = .007$ ) were significantly associated with psychological distress.

**Conclusion:** The prevalence of psychological distress in this study was relatively high, and strongly associated with parental psychological abuse, and neglect during adolescence. Therefore, the promotion of community mental health intervention programs directing at minimizing occurrences of parental psychological abuse and neglect is essential to reduce the incidence of psychological distress among adolescents.

**Keywords:** Parental psychological abuse; Physical neglect; Emotional neglect; Psychological distress; Adolescent; Ethiopia

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**Abbreviations:** K10: Kessler Psychological Distress Scale 10; CTQ-28: Childhood Trauma Questionnaires; HHs: Households; CI: Confidence Interval; SD: Standard Deviation; SE: Standard Error; SPSS: Statistical Package for Social Sciences

### Introduction

Psychological distress is a state of emotional suffering characterized by unspecified combinations of symptoms of depression (e.g. Loss of interest; sad feeling; worthlessness), and

anxiety (e.g. feeling of worry, restlessness, fear) which are usually accompanied by somatic symptoms (e.g. lack of sleep; lack of energy; poor appetite) [1,2].

Psychological distress is a common mental health problem worldwide [3,4]. Globally, approximately 10% to 20% of adolescents are suffering from disabling mental health problems [5]. About half (50%) of all adults with mental illness have their onset in adolescence [6]. The magnitude of psychological distress among adolescents is quietly varied across different

corners of the world. According to a study in south India, about 45% of adolescents had experienced psychological distress [7] and whereas a study in Indonesia showed that about 53.2% of adolescents had experienced psychological distress [8].

Psychological distress has been associated with serious health problems - for instance, a recent longitudinal study in Australia found strong evidence that psychological distress is associated to increased risk of myocardial infarction and stroke [9]. Hence, psychological distress encompassing anxiety symptoms and depression are among the most serious causes of morbidity and mortality in developing countries [10].

Parental psychological abuse (i.e., a term often used synonymously with emotional abuse) is a repeated pattern of parents or caregiver's behavior or extreme incident(s) that impede the children basic psychological needs (e.g. Safety; socialization; emotional support; cognitive stimulation; respect) and convey to children that they are flawed, unloved, unwanted, endangered, or of value only in meeting another's need [11]. It involves an act of commission like verbal assaults (e.g., belittling; screaming; threats; blaming, or sarcasm), exposing the child to domestic violence, over-pressuring through excessively advanced expectations, and encouraging or instructing the child to engage in antisocial activities [12-14].

Parental neglect involves a parent's failure to provide developmentally appropriate and supportive environments, including failures in providing nurturance, love and affection, and approval [15]. Parental neglect tends to include both emotional neglect and physical neglect [12,16]. Parental emotional neglect is explained as an act of omission which involves a parent's failure to act or respond enough to a child's psychological or emotional need [11,12]. Parental physical neglect, on the other hand, is defined as a parent's failure to provide for the child's basic needs including not providing adequate food or clothing, appropriate medical care, supervision [8].

Exposure to parental psychological abuse and neglect during the period of childhood was strongly linked to developing psychological distress during later life [17]. And existing studies have shown that the magnitude of parental psychological abuse is nearly two times as often as physical or sexual abuse [18]. However, majorities of the studies on the predictors of psychological distress among adolescents were mainly focused on factors such as sexual abuse, physical abuse, and socio-demographic factors [7,10,19-22], but little empirical attention has been given to its relationship with parental psychological abuse and neglect. Therefore, the possible mental health consequences of parental psychological abuse and neglect are especially important to focus on.

To the best of our knowledge, this is the first study in Ethiopia to assess psychological distress and its association with parental psychological abuse and neglect among adolescents. Thus, the findings from this study may have health service implications for adolescents, their parents, and health planners. It will guide different sectors such as health sectors, education sectors, and justice sectors in developing a national action plan for the reduction of parental psychological abuse and neglect in

combating psychological distress among adolescents. So, this study aimed to assess psychological distress and its association with parental psychological abuse and neglect among adolescents in Mettu town, Ethiopia, 2020.

## Method and Materials

### Study setting and period

The study was carried out in Mettu town from September 1-30, 2020. Mettu town is the capital town of Illu Abba Bor zone, which is found in Oromia regional state, Southwest Ethiopia. The town is located 600km from Addis Ababa, the capital city of Ethiopia. The total number of households found in Mettu town is around 22,682, and the total adolescent population of the town was 21844 (21.4% of the total population of the town). There are three high schools, one referral hospital, one medical institution, one Health Science College, one teacher's college, one university, and one youth center within the town.

### Study design and population

A community-based cross-sectional study design was carried out among all selected adolescents [10-19] who have lived for at least six months in Mettu town. Adolescents who were critically ill during the data collection period were excluded.

### Sample size estimation

The sample size was determined using single population proportion by considering; the proportion of psychological distress as 50% since there was no published study conducted in the study setting and Ethiopia among adolescents in the community; confidence interval of 95%, 5% margin of error and design effect of 2.0 was used. Then, adding a non-response rate of 10%. Thus, the final sample size required was 847.

### Sampling technique and procedures

A stratified sampling technique was used to select a representative sample of adolescents. In the first stage, a preliminary survey was conducted in the town to identify and code households containing adolescents. Accordingly, 4112, 4250, and 4191 households (HHs) were identified and coded from Abba mole, Kollo korma, and Soor kebeles respectively. Then the allocated sample size was proportionally allocated for the three kebeles based on the number of households containing adolescents. Finally, simple random sampling was utilized to select HHs containing adolescents. In case of more than one eligible adolescent were encountered in the selected household, the Kish grid method was used to determine which adolescent was interviewed [23].

### Data collection tools

Psychological distress was assessed by Kessler psychological distress scale (K10), a self-report instrument comprised of 10-items intended to yield a global measure of distress based on questions about anxiety and depressive symptoms individual experienced over the past 30 days. Items are rated on a five-point ordinal scale [24]. The total K10 score for each respondent was calculated by adding all 10 items, and scores ranged from 10 to 50 [24]. The total scores were then categorized into: less than 20

no psychological distress, score 20-24 mild psychological distress, score 25-29 moderate psychological distress, and score 30 and over severe psychological distress [25]. In this study, a score of <20 on K10, indicates the absence of psychological distress, and a score of  $\geq 20$ , indicates the presence of psychological distress [26].

The K10 has been used global in WHO international studies and is also identified as a cross cultural scale and widely used among adolescents worldwide [27]. Although K10 has not been specifically validated among adolescents in Ethiopia, its Amharic Version was validated among women attending postnatal follow up in Addis Ababa [28]. In the current study, the internal consistency (Cronbach alpha) of K10 was 0.89.

The Childhood Trauma Questionnaire (CTQ-28) is a reliable and effective tool for screening a history of childhood neglect and abuse. CTQ-28 is suitable for children and adolescents [29]. It includes 28 items in which participants are required to rate the frequency (0- never true to 5- very often true) of abuse and neglect events that they had experienced during their childhood [30]. The CTQ-28 has five subscales that measure five different types (emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect) of maltreatment. Each subcategory of CTQ is measured using five items and the remaining three items are minimization/denial that screens for the likelihood of underreporting maltreatment experiences.

For this study, 15 items compromised of emotional abuse, emotional neglect, and physical neglect subcategories of CTQ were used to access parental psychological abuse and neglect in the study. A score of  $\geq 13$  on the CTQ emotional abuse subscale, indicates the presence of emotional abuse, and a score of < 13, indicates the absence of emotional abuse; a score of  $\geq 15$  on the CTQ emotional neglect subscale, indicates the presence of emotional neglect, and a score of <15, indicates the absence of emotional neglect; a score of  $\geq 10$  on the CTQ physical neglect subscale, indicates the presence of physical neglect, and a score of <10, indicates the absence of physical neglect [30]. In the current study, the internal consistency (Cronbach's alpha) of overall CTQ was 0.84, emotional abuse subscale 0.85, physical neglect 0.78, and emotional neglect subscale 0.93.

### Data collection procedures and quality control

An interviewer-administered structured questionnaire was used to collect the data. Initially, the questionnaire was developed in the English language and translated into local languages Afan Oromo and Amharic and back to the English language by language experts to check for understandability and consistency of the tool. Data were collected by five psychiatry professionals. The questionnaire consisted of structured questions that can be subdivided into three different categories: socio-demographic related characteristics, Kessler psychological distress scale (K10), and childhood trauma questionnaire.

The data collection process was supervised by two psychiatric nurses. The training was given for data collectors for one day by the principal investigator regarding the techniques and process of data collection. The pretest was done on 5% of the total sample size in the Gore town a week before the actual data collection

period. Based on the pretest, vague and ambiguous questions were revised and modified.

### Data processing and analysis

Data were coded and entered using Epi-data manager version 3.1 and exported to IBM SPSS Version 21.0 for analysis. Descriptive statistics such as frequency, percentage, mean, and standard deviation were computed and presented using tables and charts. Pearson's correlation was used to assess the correlation between psychological distress and parental psychological abuse and neglect among adolescents. Variables statistical significant at bivariate linear regression analysis ( $P < 0.25$ ) were considered as a candidates for the multivariable linear regression. All analyses were conducted at the 0.05 significance level.

## Results

### Socio-demographic and family-related characteristics of respondents

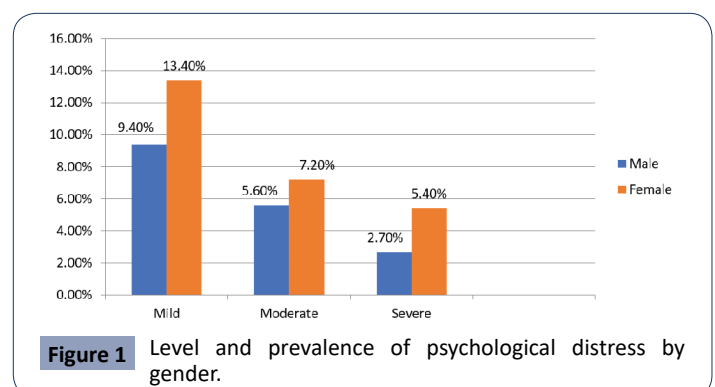
From the total of 847 adolescents, 819 participated in the study giving a response rate of 96.7%. More than half 420(51.3%) of participants were female. The mean age of the study participants was  $14.9 \pm 2.798$  years. Three-fourth of the respondents belonged to the Oromo ethnic group 614 (75%) and more than one-third 309 (37.7%) of the study participants were Orthodox Christian religion followers. About half 423 (51.6%) of the study participants were attended primary school. The majority 774 (94.5%) of participants were living with their families. Most 361 (44.1%) of respondents' mothers were attended primary school (Table 1).

### The prevalence of psychological distress

The overall prevalence of psychological distress in this study was 358 (43.7%) with 95% CI (40.4, 47.3). Among these 145(17.7%) were males and 213 (26.0%) were females (Figure 1).

### The prevalence of parental psychological abuse and neglect

Out of the 819 participants, 192 (23.4%) experienced parental psychological abuse, 290 (35.4%) experienced emotional neglect, and 247 (30.2%) experienced physical neglect. Comparing females and males, the prevalence of parental psychological abuse was higher in female participants (26.4%) than male participants (20.8%). Similarly, emotional neglect was also higher among



**Table 1** Socio-demographic and family related characteristics of adolescents in Mettu town (N=819).

Variables	Frequency(n)	Percentage (%)
<b>Sex</b>		
Male	399	48.7
Female	420	51.3
<b>Age</b>		
10-13	282	34.4
14-16	255	31.1
17-19	282	34.4
<b>Ethnicity</b>		
Amhara	100	12.2
Tigre	67	8.2
Gurage	18	2.2
Oromo	614	75.0
Others	20	2.4
<b>Living condition</b>		
Live alone	774	3.9
Live with family	32	94.5
Live with relative	12	1.6
<b>Level of education</b>		
No formal education	51	6.2
Primary school	423	51.6
High school and above	345	42.2
<b>Occupation of mother</b>		
House maker	256	31.3
Merchant	134	16.4
Government employee	192	23.4
Unemployed	47	5.7
Daily laborer	135	16.5
Private sector employee	55	6.7
<b>Occupation of father</b>		
Government employee	237	28.9
Daily laborer	187	22.8
Merchant	158	19.4
Farmer	130	15.9
Unemployed	46	5.6
Private sector employee	61	7.4
<b>Parents marital status</b>		
Separated /divorced	73	8.9
Married	690	84.2
Widowed	56	6.8

**Notes:** Other ethnicities: = Kaffa, Wolaita, Silte, and Agnuak.

female participants (35.9%) than male (34.8%) participants.

### Bivariate linear regression analysis

Bivariate linear regression analysis was done to examine how much each socio-demographic variable predicts psychological distress. Many socio-demographic variables were significantly associated with psychological distress at the bivariate level and these variables include sex (female), age, educational level (no formal educational and primary school), living condition (living alone and living with family), Parents marital status(married) and parents occupation (house maker, farmer, and government employee) (**Table 3**).

### Correlation between psychological distress and parental psychological abuse and neglect

Pearson's correlation analysis was used to determine the correlation between psychological distress and parental psychological abuse and neglect. The result indicated that there was a significant correlation between psychological distress and parental psychological abuse and neglect. The finding of this study shows a strong positive correlation between parental psychological abuse and psychological distress ( $r=0.42, p<0.001$ ). Also, the study found that the correlation between parental emotional neglect and psychological distress was weak but significant ( $r=0.16, p<0.001$ ). Similarly, the finding of this study indicated the correlation between parental physical neglect and psychological distress was weak but significant ( $r=0.12, p<0.001$ ). Accordingly, the correlation between parental psychological abuse, neglect, and psychological distress was significant at the level of  $P<0.01$  (**Table 4**).

Bivariate linear regression analysis was also used to assess how much parental psychological abuse and neglect predict psychological distress. At the bivariate level, parental psychological abuse and neglect were significantly associated with psychological distress.

The findings in **table 5**, shows bivariate linear regression of psychological distress with parental psychological abuse and neglect.

The result indicated that parental psychological abuse positively and significantly affected psychological distress ( $\beta = .70, P<0.001$ ). Parental physical neglect significantly and positively influenced psychological distress ( $\beta=0.22, p<0.005$ ). Parent emotional neglect also significantly and positively influenced psychological distress ( $\beta=.31, p<0.004$ ).

**Table 2** Prevalence of parental psychological abuse and neglect by gender and age group among adolescents in Mettu town, September 2020 (n=819).

	Total N=819	Psychological abuse 192 (23.4%)	Emotional neglect 290(35.4%)	Physical neglect 247 (30.2 %)
<b>Gender</b>				
Male	399(48.7)	81(9.9)	139(17.0)	136(16.6)
Female	420(51.3)	111(13.5)	151(18.4)	111(13.5)
<b>Age in years</b>				
10-13	282(34.4)	68(8.3%)	111(13.5)	90(11.0)
14-16	255(31.2)	54(6.6)	85(10.4)	73(8.9)
17-19	282(34.4)	70(8.5)	94(11.5)	84(10.3)

**Table 3** Bivariate linear regression analysis result of socio-demographic characteristics among adolescents in Mettu town, September 2020 (n = 819).

Socio-demographic Variables	Unstandardized $\beta$ coefficient	SE	t value	P-value	95% confidence interval	
					Lower bound	Upper bound
<b>Sex</b>						
Female	2.15	.49	4.33	.000	1.17	3.13
<b>Age</b>	.22	.09	2.45	.015	.044	.395
<b>Educational level</b>						
No formal educational	-2.4	1.04	-2.37	.018	-4.48	-.42
Primary school	1.05	.50	2.10	.04	.069	2.04
High school and above	-.49	.51	-.96	.34	-1.49	.507
<b>Living condition</b>						
Live alone	2.49	1.29	1.93	.054	-.047	5.03
Live with family	-2.07	1.10	-1.90	.060	-4.22	.09
Live with relative	.90	2.01	.448	.654	-3.04	4.84
<b>Parents marital status</b>						
Married	-1.29	.69	-1.87	.062	-2.63	.06
Separated/divorced	1.22	.88	1.38	.167	-.51	2.94
Widowed	1.13	.994	1.133	.258	-.825	3.076
<b>Occupation of mother</b>						
House maker	.020	.54	.036	.971	-1.04	1.082
Merchant	-1.16	.68	-1.72	.087	-2.49	.17
Government employee	.064	.59	.11	.915	-1.10	1.23
Unemployed	-1.36	1.08	-1.26	.209	-3.47	.76
Daily laborer	1.06	.67	1.57	.118	-.27	2.38
Private sector employee	1.14	1.00	1.13	.257	-.83	3.10
<b>Occupation of father</b>						
Government employee	.466	.55	.84	.400	-.62	1.55
Daily labourer	.776	.63	1.2	.222	-.47	2.02
Merchant	.272	.59	.45	.649	-.90	1.44
Farmer	-1.051	.68	-1.53	.126	-2.39	.295
Unemployed	-1.26	1.10	-1.15	.249	-3.39	.88
Private sector employee	-.84	.96	-.87	.382	-2.71	1.04

**Predictor variables:** Socio-demographic variables  
**Dependent variable:** psychological distress

**Table 4** Correlation between psychological distress, parental psychological abuse, and neglect among adolescents in Mettu town, Southwest Ethiopia, (n=819).

Variables	M $\pm$ SD	Psychological distress	Psychological abuse	Physical neglect	Emotional neglect
Psychological distress	18.6 $\pm$ 7.2	1	--	--	--
Psychological abuse	9.1 $\pm$ 4.6	0.42	1	--	--
Physical neglect	7.8 $\pm$ 3.9	0.12	0.20	1	--
Emotional neglect	12.4 $\pm$ 5.9	0.16	0.17	0.29	1

\*\*Correlation is significant at the 0.01 level (2-tailed).  
\*\*P < .001 M: Mean, SD = Std. Deviation.

**Table 5** Bivariate linear regression analysis of psychological distress and parental psychological abuse and neglect among adolescents in Mettu town, September, (n=819).

Predictor variables	Unstandardized $\beta$ coefficient	SE	P-value	95% confidence interval	
				Lower bound	Upper bound
Psychological abuse	.70	.056	.000	.595	.814
Physical neglect	.22	.063	.005	.068	.385
Emotional neglect	.31	.082	.004	.151	.472

**Predictor variables:** Parental psychological abuse and neglect  
**Dependent variable:** psychological distress

### Multivariable linear regression analysis

All variables with P-value <0.25 at bivariate analysis were entered

into the multivariable linear regressions model and backward elimination was used to identify factors that best predict

psychological distress. From socio-demographic variables, sex, age, and level of education were significantly predicted psychological distress. Parental psychological abuse, emotional neglect and physical neglect were also significantly predicted psychological distress.

Since this study aimed to assess the association between parental psychological abuse, neglect, and psychological distress, other variables were adjusted for or controlled. In controlling for other factors, the association between parental psychological abuse and neglect and psychological distress decreased ( $\beta$  value decreased) indicating that variables other than parental psychological abuse and neglect partially mediate the association between parental psychological abuse and neglect and psychological distress. To identify the contribution of parental psychological abuse, emotional neglect, and physical neglect, we looked at what parental psychological abuse and neglect uniquely contribute when controlling for all the other factors. By controlling the effects of the socio-demographic data, the researcher then determined how well the parental psychological abuse and neglect predicted psychological distress.

Accordingly, multivariable linear regression analyses show that parental psychological abuse significantly and positively influenced psychological distress ( $\beta=.65$ ,  $p<.001$ ). This can be interpreted as a one-unit increase in parental psychological abuse results in an average of 0.65 unit increases in psychological distress. Parental emotional neglect significantly and positively influenced psychological distress ( $\beta=.21$ ,  $p=0.003$ ). The interpretation is a one-unit increase in parental emotional neglect leads to an average of 0.21 unit increase in psychological distress. The result also showed that parental physical neglect significantly and positively influenced psychological distress ( $\beta=.17$ ,  $p=.007$ ). It means that a one-unit increase in parental physical neglect results in an average of 0.17 unit increases in psychological distress (Table 6).

## Discussion

This study aimed at examining psychological distress and its association with parental psychological abuse and neglect among adolescents in Mettu town. The overall prevalence of psychological distress among adolescents in this study was found to be 43.7% (95% CI; 40.2, 47.1). This finding is in line with the studies conducted in Tanzania [19] and south India [10], where 40.6% and 45% of the study participants were found to be psychologically distressed respectively [31-35].

However, this finding is much higher than the results from studies in Mekele, Benin, Morocco, India, and the study done in four low and middle-income countries in Asia (i.e., Laos, Mongolia, Nepal, and Sri Lanka) with the prevalence rate of 34.9% [36],

10.8% [27], 23.3% [37], 20.8% [38], and 32.9% [39] respectively. The possible explanation for this difference might be due to various social changes that occurred in this year (i.e. coronavirus outbreak, school shutdown, and limited social contact) that cause detrimental effects on adolescent's psychological wellbeing. Moreover, it might be also due to the difference in socio-cultural and environmental factors.

On the other hand, this study finding is lower than the findings of studies done in Indonesia (53.2%) [11] and China (70.5%) [40]. The difference could be due to partially covered adolescence age range (middle and late adolescence) in their studies, while our study covered the whole age range of adolescence (early, middle and late). In addition, the difference could also be explained by data collection methods used where their studies used self-administered questionnaires, while the current study used face-to-face interviews.

The magnitude of parental psychological abuse in this was 23.4%. This finding is consistent with a study conducted in Tanzania, where 24.7% of the study participants had reported psychological abuse [27]. However, the finding of this study is higher than the results from studies in Germany [31], and the USA [32], where 10.2% and 7.6% of the study participants had reported psychological abuse respectively. The possible reason for the variations in the magnitude of parental psychological abuse might be due to differences in the study area, in which there might be strict adherence to child welfare policy in USA and Germany. The difference might also be due to socio-cultural differences (i.e., in a few African societies, violent behavior including child abuse is more common and broadly acknowledged as a method of child-rearing). Nevertheless, this finding is lower than the findings of a study Multiple Indicator Cluster Surveys (MICS) performed in 28 developing and transitional countries, where 92%, 90%, 87%, and 86 of the study participants had reported psychological abuse in Yemen, Viet Nam, Co<sup>^</sup>te d'Ivoire, and Cameroon respectively [33].

The magnitude of emotional neglect in this study was 35.4%. This finding is consistent with a study conducted in Western China, where 28.1 of the study participants had experienced emotional neglect [34]. However, this is finding is lower than the finding of a study done in Tanzania, where 51.9% of the study participants had emotional neglect [27]. On the other hand, this finding is higher than the findings of the studies done in Germany [31] and Jamaica [35] where 10.2% and 20.1% of the study participants developed emotional neglect respectively.

The magnitude of physical neglect in this study is 30.2%. This finding is consistent with a study conducted in Western Herzegovina, where 30% of the respondents were neglected [36]. This finding is lower than the finding in a study done in Germany,

**Table 6** Summary of multivariable linear regression for psychological distress among adolescents in Mettu town, September, (n=819).

Predictor variables	Unstandardized $\beta$ coefficient	SE	P-value	95% confidence interval	
				Lower bound	Upper bound
Psychological abuse	.65	.054	<.001	.517	.737
Physical neglect	.17	.064	.007	.046	.295
Emotional neglect	.21	.039	.003	.084	.338

Dependent variable: Psychological distress

where 48.1% of the respondents had physical neglect [31]. The variation might be due to the difference in the study population; the German study covered the age groups between 14 to 90 years, whereas our study covered the age group between 10 to 19 years. Nevertheless, this finding is higher than the finding of a study done in Albania, where 6.5% of the respondents experienced physical neglect [37]. The difference might be also due to the difference in data collection instruments to assess physical neglect.

In this study, both parental psychological abuse and emotional neglect were higher among female adolescents than male adolescents. In contrast, parental physical neglect is higher among male adolescents than female adolescents. These findings are in agreement with previously been reported studies in Germany [38] and Tanzania [27]. The reason for this gender disparity is unclear and not studied well, and this needs further investigation.

The finding of this study showed that parental psychological abuse is a significant predictor of psychological distress. This finding was consistent with studies conducted in Tanzania [27] and Canada [39]. The association might be due to the rejection, humiliation, verbal assaults, lack of love, affection, and/or threatening behavior that characterizes psychological abuse directly predicts insecure attachment, which is expected to provide the foundation for the development of psychological distress [40]. This Insecure attachment interferes with the development of a stable mental foundation; diminish resilience in coping with stressful life situations and predisposes an individual to break down psychologically in times of emergency crisis [41]. Thus, Attachment insecurity can be viewed as a general proneness to mental disorders, with the symptomatology depending on genetic, developmental, and environmental factors. It might also be because; parental psychological abuse and neglect hurt early brain development and in turn, result in negative mental health outcomes into adolescence and adulthood. The instant emotional impact of parental psychological abuse and neglect includes isolation, fear, and an inability to trust; which can lead to lifelong consequences, including low self-esteem, depression, and distress [42].

In this study, emotional neglect and physical neglect were also found to be independent predictors of psychological distress among adolescents. This is consistent with studies done in Aksum [43], Tanzania [27], and Jamaica [35]. The possible explanation could be the lack of love and affection, nurturance, and approval that marks parental maltreatment may result in emotional dysregulation and the development of negative self-view which leads to the development of distorted self-schemas and the problem with emotional regulation, with negative cognitions mediating the link between parental maltreatment and symptoms of psychological distress [44].

The potential limitations of this study that should be considered in the interpretation of the present findings are: The cross-sectional design of the study limits the ability to conclude

causality or directions of the relationships. The tools we used in this study required recall of history which may be prone to recall bias. Potential underreporting of sensitive issues including parental abuse, and neglect experienced within the family. Social desirability bias may be introduced. We tried to mitigate this by training interviewers to explain to participants the aim of the study, interviewing them in an isolated area to maintain their privacy, and informing them as their responses were anonymous.

## Conclusion

The prevalence of psychological distress was high among Mettu town adolescents and positively associated with parental psychological abuse and neglect. Therefore, it is recommended to enhance activities that help in minimizing psychological distress directed to adolescents with emphasis on effective measures to reduce the likelihood of parental psychological abuse and neglect. Thus, the promotion of mental health programs directing at minimizing occurrences of parental psychological abuse and neglect is essential to reduce the incidence of psychological distress among adolescents. Additionally, there's an ought to make communities enlightenment programs pointed at teaching parents on the impacts of parental psychological abuse and neglect on adolescent's mental wellbeing.

## Ethical Considerations

The ethical clearance was obtained from the institutional review board of Jimma University before actual data collection and a permission letter was obtained from the Mettu town administration. Written informed consent was obtained ethically from major adolescents ( $\geq 18$  years). Written informed assent was obtained from minor adolescents ( $<18$  years) in addition to their parents' informed consent.

## Authors Contributions

HT conceived the study design, collected, analyzed, interpreted data, and drafted the manuscript for important intellectual content; AM and YT conceived the study design, interpreted data, and review the manuscript for important intellectual content.

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This research was funded by Jimma University. The funder had no role in the design of the study, collection, analysis, and interpretation of data, and in the writing manuscript.

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## Competing Interests

The authors declare that they have no competing interests.

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