



GENDER AND AGE DIFFERENCES IN EMOTIONAL PROBLEMS AMONG ADOLESCENTS IN HUNZA

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ABSTRACT

This paper was meant to explore the gendered and age variation of adolescents in Hunza. A population of 200 teenagers was chosen in the Hunza district, Pakistan and the age ranged between 15-17 years. Emotional problems in adolescents were measured with Depression Anxiety Stress Scale (Lovibond and Lovibond, 1995). Descriptive statistics, independent sample t test and one-way ANOVA that were calculated were used in analyzing the data. The findings indicated that gender differences indicated that females ranked higher in terms of stress than males. During the adolescence stage, high upper-age level adolescents had more problems on emotional issues (depression, anxiety and stress).

I. INTRODUCTION

There are also special psychological issues faced by adolescents in a mountainous area because of the isolation of the area, the critical state of the environment, and the inability to access mental health services. Research has shown that teenagers living in these locations have elevated rates of depression, anxiety, and stress than those in urban locations, usually as a result of factors like climate change impacts, poverty, and social strain (Moryakina and Anzorov, 2024). Research conducted by post-disaster indicates that exposure to natural calamities like landslides and other extreme weather states is our key causative factor towards post-traumatic stress disorder (PTSD), depressive symptoms, and suicidal ideation among teenagers (Yen et al., 2010). Also, social isolation, educational stress, and unfavourable healthcare services play a role in sleep disorders and emotional upset, which worsen mental health problems (Liang, 2021). It is also reported that high-altitude adolescents can experience cognitive impairment and mood disorders because of the hypoxia and the environmental factors (Karamova et al., 2025). These results indicate the necessity of ready mental healthcare services, support networks in the community, and resources for building resilience in adolescents in mountainous areas.

Youth in mountainous areas are often exposed to uncommon environmental and social types of stress that could cause gender disparities in depression, anxiety, as well as stress. It has been studied that female adolescents in those areas indicate considerably higher levels of depression and anxiety than their male peers, mostly through the influence of sociocultural norms, freedom of movement, and additional caregiving burden (Ali et al., 2021). Unfriendly climate, geographical remoteness, and financial limits only make the psychological distress worse, where girls have more emotional symptoms, whereas boys have more externalizing symptoms like aggression

(Khan et al., 2020). Besides, cultural limitations on female engagement in social and leisure activities also increase the level of stress, and males can be able to cope more effectively with physical activity and peer communication (Singh et al., 2021). These disparities are further exacerbated by the lack of access to mental health resources and education, which should be addressed with the help of gender-sensitive mental health interventions (Rahman et al., 2022).

The developmental, environmental, and social differences between age groups also determine the age disparity in depression, anxiety, and stress among adolescents in mountainous regions. Studies show that older adolescents (15-18 years), in comparison with younger adolescents (10-14 years), have more depression and anxiety that is mostly influenced by academic pressure, social expectations, and circumscribed future (Bray et al., 2022). Those who are younger in age and still at the youth stage tend to be more resilient because they are more dependent on the support of their families and the established routines (Moryakina & Anzorov, 2024). Research further notes that stress responses vary over time as older adolescents show greater emotional distress and uncertainty regarding future career opportunities, and the younger adolescents have more challenges in dealing with social isolation and parental pressures (Aldwin et al., 1996). These results indicate that age-discriminated mental health programs are essential in helping to promote the well-being of teenagers in remote mountainous areas.

II. METHOD

Participants

The sample of this study consisted of 200 adolescents from the school and colleges aged 15 to 17 years old. Target population belonged to central Hunza including villages of Hussan Abad, Murtaza Abad Ali Abad, Ganish, Karim Abad, Altit and Hyder Abad. Adolescents who are currently studying at matric and intermediate levels were selected by a convenient sampling technique.

Measures

In the present study, the Depression, Anxiety, and Stress Scale in the Urdu language was used to collect data from adolescents living in Hunza. The DASS contains 42 items and is designed to measure depression, anxiety, and stress. The DASS was developed by Lovibond and Lovibond (1995). Using a 4-point scale that ranges from 3 (applied to me very much or most of the time) to 1 (did not apply to me at all). The ranges of the Depression Anxiety Stress Scale are categorized and given in Table 1.

Table 1: Levels of Emotional Problems in DASS

Levels	Depression	Anxiety	Stress
Extremely severe	28+	20+	34+
Moderate	14-20	10-14	19-25
Severe	21-27	15-19	26-33
Mild	10-13	8-9	15-18
Normal	0-9	0-7	0-14

Procedure

The participants belong to low, middle, and higher socioeconomic classes. After approaching the individual participants, they were informed about the aim of the research, and then they were asked for their willingness for participation. After that, they were told about the procedure to fill out the questionnaire, and the participants showed their interest and signed the consent form. Approximately twenty to twenty-five minutes were taken by each participant in the completion of the questionnaire. The whole process of data collection, though filling out questionnaires from different schools and colleges, took nearly two months.

III. RESULTS

Table 2: Descriptive Statistics of Study Variables

Variables	<i>M</i>	<i>SD</i>	Range	Skew	α
Depression	11.98	7.33	0-37	.77	.80
Anxiety	11.32	6.49	0-31	.60	.75
Stress	18.16	7.53	2-35	.68	.76
DASS Total	41.52	18.85	3-80	.53	.90

Table 2 shows descriptive statistics of study variables. Skewness shows all data are normally distributed. Alpha reliability shows all the scales have satisfactory reliability.

Table 3: Gender Differences in Study Variables

Variables	Males (<i>n</i> = 100)		Females (<i>n</i> = 100)		<i>t</i> (198)	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Depression	11.79	6.35	12.17	8.23	.37	.70	.05
Anxiety	10.86	6.35	11.79	6.62	1.03	.30	.14
Stress	17.05	7.05	19.27	7.86	1.39	.03	.29
DASS Total	39.71	17.32	43.35	20.21	2.15	.70	.19

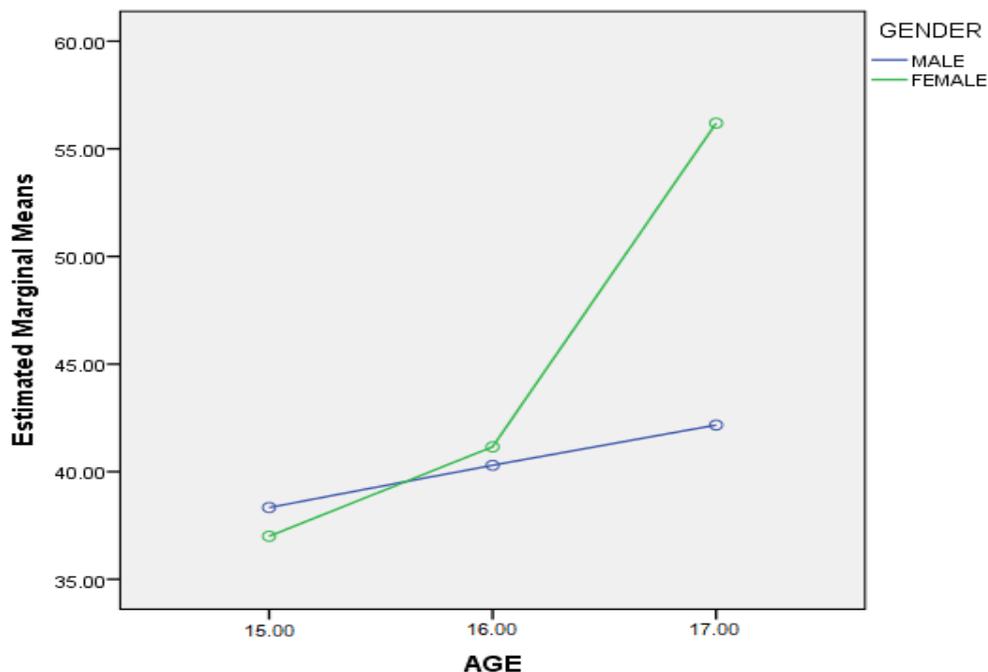
Table 3 shows gender differences in emotional problems. It shows that females scored higher on level of stress compared to male adolescents. Results on depression, anxiety, and DASS total score were non-significant.

Table 4: Age Differences in Study Variables

	15 Years Age (<i>n</i> = 90)		16 Years Age (<i>n</i> = 60)		17 Years Age (<i>n</i> = 50)		<i>F</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Depression	10.80	7.23	11.71	7.61	14.52	6.64	4.36	.01
Anxiety	10.14	6.292	10.86	6.55	14.16	6.05	6.83	.00
Stress	16.73	6.80	18.22	8.37	20.78	7.11	4.87	.00
DASS Total	37.77	17.93	20.13	2.47	49.46	16.63	6.65	.00

Table 4 shows age differences in emotional problems. Emotional problems (i.e., depression, anxiety, and stress) were higher in adolescents aged 17 years old.

Figure 1. The figure indicated that females with 18 years old are higher on emotional problems



IV. DISCUSSION

The objective of the present study was to explore the gender and age differences in emotional problems such as depression, anxiety and stress among the adolescents of Hunza. In the present study, the DASS (depression, anxiety, and stress scale) was used to collect data from adolescents. The reliability of the scale was satisfactory. Therefore, 15- to 17-year-old adolescents were asked to complete the questionnaire. The responses of the adolescents were analyzed according to a statistical procedure. Our first objective is to identify the gender differences in emotional problems. The analysis of the mean score suggests that females have a higher level of stress as compared to males. Recent research indicates that females report higher levels of daily and chronic stress as compared to males (Hogan et al., 2002; Tolin & Foa, 2008). Females more often find themselves in stressful situations than males (McDonough & Walter, 2001). Rudolph (2002) revealed that females report higher level of stressful circumstances including relationships with their parents and partners. Adolescent girls experienced more stress than boys, and girls also became more depressed (Hakin et al., 2007). According to adolescents their own reports, parents have lower expectations for girls, and they have high expectations for boys for achievements. Parents also restrict girls' behaviors more than boys. If girls engage in men's interest activities, for example, participating in sports, etc., they face rejection by their peers (Nolen Hoeksema & Girgues, 1994).

There is ongoing debate as to whether the prevalence of depression increases or decreases with age (O'Connor, 2006). Emotional problems (i.e., depression, anxiety, and stress) were higher in late adolescent. This study investigates the age of about 20% of adolescents who will experience depression by age 18 years (Cohn et al., 1993). According to public health experts, the dangerous activities are the most important threats in adolescence. Most physical and mental problems arise from dangerous activities in which adolescents willingly engage, not from natural causes (Ozer et al., 2002). Actually, mostly adolescents are behaving dangerously at times, in middle and late adolescence (for example, ages 15 to 19). This age is more likely to engage with danger than other ages. They engage in many high risk activities for example use of illegal drugs, careless driving, involve in different crimes, attempt suicide (Kardas & Kardas, 2023; Saladino et al., 2021). These dangerous activities directly or indirectly cause depression in adolescents (Goering & Mrug, 2022).

V. CONCLUSION

Based on the data collected, the findings of the current study indicate that females have a higher level of stress as compared to males. This study has shown higher levels of emotional problems were indicated in female late adolescents (i.e., 17 years).

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