

**Relationship Between Perceived Social Support and Psychological Distress
Among Adolescent in Chitral.**

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Abstract

Adolescence is a period in which the occurrence of common mental health problems increases, for example, studies have revealed that the rates of depression rise significantly from 1% during early adolescence (around age 12 to 17) to as high as 25% during late adolescence (Andersen et al., 2008). Social support plays a crucial role in enhancing psychological well-being, as it includes the help and care people get from their family, friends, and loved ones. This support is characterized by qualities such as affection, attention, care, and trust (Zimet et al., 1988). It has been established that social support plays a crucial role in adolescent mental health (Cohen & McKay, 1984). Furthermore, social support not only impacts mental health but also contributes to overall mental and physical wellness (Wilks., 2008). The objective of this research was to examine the relationship between perceived social support and psychological distress among adolescents in Chitral. Furthermore, the study sought to determine the prevalence of psychological distress among the 400 study's participants, who were recruited through convenience sampling from various colleges in Chitral. The hypothesis was that there would be a relationship between perceived social support and psychological distress among adolescents. The study utilized the DASS-21 scale to assess psychological distress and the MSPSS-12 to evaluate perceived social support. The findings of this study indicate that psychological distress is prevalent among adolescents in Chitral 74 % suffer from depression, 73% from anxiety and 80% suffer from stress. This result also revealed a negative correlation ($r=-.116^*$) between psychological distress and perceived social support.

Introduction

The World Health Organization (WHO, 2019) indicates that half of all mental health disorders emerge before the age of 14, yet many of these cases go unnoticed and untreated, with depression and anxiety being the most common issues during this period. (Costello et al., 2003; Knopf et al., 2008). A large-scale, community-based study conducted in eleven European nations revealed that 29% of adolescent's experience depression, while 32% experience anxiety (Balazs et al., 2013). Similarly, an extensive study in the USA focusing on adolescents aged 13 to 18 found high rates of psychological health problems, with mood disorders at 13%, behavior disorders at 19%, and anxiety disorders at 31% (Merikangas et al., 2010). Furthermore, research indicates that the prevalence of common mental health issues increases during adolescence. For instance, lifetime rates of depression have been found to rise from 1% at age 12 to 17 to 25% by late adolescence (Andersen et al., 2008). Low- and middle-income countries, where a significant number of adolescents reside, tend to have higher rates of common mental health disorders compared to high-income nations (Patel et al., 2008). Pakistan, classified as a low- and middle-income country with an

estimated population of 220 million, ranks as the world's sixth most populated country (Bureau of Statistics, Government of Pakistan, 2017). The Human Development Report from the United Nations Development Programmed (UNDPHD, 2019) indicated that Pakistan's human development index (HDI) score in 2018 was 0.560, placing it at the lower end of the human development category and ranked 152 out of 189 countries. Given the prevailing challenges in the country, mental health problems receive relatively low priority compared to other developing nations (Bashir, 2018). Despite the increasing prevalence of psychological issues, research in this area remains scarce (Javed et al., 2020). Currently, there is a lack of recent national-level community surveys focused on adolescent mental health in Pakistan. Previous research has predominantly focused on the prevalence of psychological distress among adolescents, which is estimated to be around 9% (Javed et al., 1992). However, these studies have limitations as they are often confined to specific schools, districts, or cities, thereby failing to provide a comprehensive representation of the entire community (Gadit et al., 2006). One study that utilized DSM-standardized interviews among school-aged adolescents aged 12 to 19 reported a 17% prevalence of depression (Qidwai et al., 2010). Nonetheless, it is essential to emphasize that this study's data only represents individuals who have access to mental health services, which may not accurately reflect the entire adolescent population since the majority do not seek such services. Another study focused on medical students in Pakistan revealed that 7% experienced mild stress, 71% experienced moderate stress, and 20% experienced severe stress (Sohail et al., 2013). Similarly, a survey conducted among medical students in Wah, Pakistan, indicated that 47% of students experienced anxiety, and 35% experienced depression (Alvi et al., 2010). Another study by Rizvi et al. (2015) found that 74% of medical students in Islamabad experienced anxiety, 40% reported depression, and 50% reported stress. During the quarantine period, a study conducted among college and university students in Pakistan, using the Kessel psychological distress scale, suggested that psychological distress affected 43% of the participants (Khalid et al., 2021). Furthermore, a study involving DSM-standardized interviews with adolescents aged 12 to 19 found a 17% prevalence of depression (Qidwai et al., 2010). In Karachi, a study conducted among undergraduate students in various fields of study revealed prominent psychological distress across all three fields. Engineering students reported a 25% prevalence of depression, 32% reported anxiety, and 20% reported stress. Among students in the social sciences, 21% reported depression, 30% reported anxiety, and 17% reported stress. It is important to emphasize the need for more comprehensive studies that encompass a wider range of communities and population groups to gain a better understanding of adolescent psychological health in Pakistan. These studies shed light on the prevalence of mental health issues among specific groups in Pakistan, but it is crucial to conduct further research that includes a broader range of participants to better understand the overall psychological well-being of adolescents and students in the country.

Social support plays a crucial role in promoting psychological well-being. It encompasses the support one receives from family, friends, and significant others, characterized by affection, attention, care, and trust (Zimet et al., 1988). Both academic and personal aspects of students' lives rely on these sources of support (Yasin et al., 2011). Social support has a significant impact on adolescent mental health (Cohen & McKay, 1984) and contributes to overall mental and physical wellness (Wilks, 2008). In various work settings, social support from different sources helps individuals cope with the demands of their tasks (Rees et al., 2009). It also promotes better performance in students' academic and social lives, showing promising effects on their achievements (Trockel et al., 2000; Awang et al., 2014). Increased perceived social support during challenging circumstances is beneficial for mental health, academic success, and effective management of potentially stressful situations. Conversely, a lack of perceived social support can lead to psychological, social, and academic difficulties among students. Previous research has highlighted that low perceived social support significantly impacts the mental and physical health

of young adults and contributes to various mental health issues, such as anxiety and depression (Pedersen et al., 2009; Eskin, 2003). Social support acts as a foundation for happiness within social systems and serves as a buffer against stress (Cohen et al., 1985; Thoits et al., 1986). For children and teenagers, social support is viewed as a sign of social involvement in the community (Ellonen et al., 2008). By fostering social connections and providing emotional, instrumental, and informational assistance, social support plays a vital role in promoting well-being and resilience in individuals across various stages of life. Several studies have highlighted the significant impact of social support on adolescents' emotional well-being (Teoh et al., 2001). Having support from friends, family, and other important individuals can help alleviate emotional problems among adolescents (Calvete et al., 2006). Adolescence is a period characterized by substantial physiological, neurological, intellectual, cognitive, and interpersonal development (Gryphon, 2017). These developmental changes make adolescents more vulnerable to psychological distress. In Pakistan, several factors contribute to poor mental health among adolescents, including low self-esteem (Fiorillis et al., 2019), lack of emotional intelligence (Gulza et al., 2014), lower educational attainment, lower socioeconomic status, and exposure to traumatic life experiences (Khalid, 2019; Najam et al., 2012). Accessing mental healthcare in Pakistan is a significant challenge due to the stigma associated with mental illness, low literacy rates, misconceptions, and a lack of awareness (Khan et al., 2021). Insufficient treatment facilities and a shortage of qualified mental health professionals further contribute to delays in accessing mental health services. Chitral, the largest district in the Khyber Pakhtunkhwa province of Pakistan, has a population of 447,362 according to the Population and Housing Census (2017). It is a isolated valley located in northwest Pakistan, bordering Afghanistan. Chitral faces severe weather conditions and limited resources. Due to the prevalence of stress and psychiatric disorders in the area, mental health issues often go unrecognized, and there is a lack of psychological treatment options. There is a scarcity of research data regarding the mental health of adolescents in this region., although one study conducted by Mumford et al. (1996) found that approximately 46% of women and 15% of males experienced depression and anxiety. More research is needed to gain a comprehensive understanding of the psychological well-being of adolescents in this area and develop appropriate interventions and support systems. The aim of this study was to evaluate the prevalence of psychological distress and its association to social support among adolescents in Chitral. Furthermore, the research sought to investigate the relationship between psychological distress and different demographic factors such as gender, age, family structure, and educational background.

Methodology

Research Design

This was across-sectional survey-based research design conducted in Chitral District.

Setting and Participants

Participants were randomly approached from six different colleges in Chitral. A total of 400 potential participants completed questionnaire with their consent.

Sample Size Calculation:

The sample size was determined using the prevalence estimation approach. A sample size of approximately 400, with a confidence interval of 0.05 and an accuracy of 2.5 percent, was deemed sufficient to identify outcomes with a prevalence ranging from 17% to 21%. The dataset was additionally compared with other pilot datasets from regions in Pakistan, including Karachi and Rawalpindi (Siddiqui et al., 2019; Khalid et al., 2019), to maintain a comparable sample size to earlier studies.

Inclusion Criteria:

Late Adolescents aged 16 to 19 years enrolled in their first and second year of college.

Exclusion Criteria:

Adolescents who declined to provide permission for the study. Adolescents who are younger than 16 and older than 19 years.

Measurement**The demographic form**

The demographic form included questions about the respondents' identity, such as gender, educational attainment, employment situation, marital condition, family composition, and financial situation.

Depression Anxiety and Stress Scale (DASS-21)

The Urdu variation of the DASS-21 was utilized to assess psychological distress, which include stress, anxiety, and depression items. This scale has shown robust psychometric characteristics within the Pakistani population, evidenced by a dependable Cronbach's alpha of 0.93 for overall psychological distress and also reported positive Cronbach's alpha values of 0.84 for depression sub scales, 0.83 for stress sub scales, and 0.86 for anxiety subscales (Aslam et al., 2017). The components of this scale are evaluated using a 4-point rating system that goes from 0 to 3.

Multidimensional Perceived Social Support Scale (MSPSS-12)

The 12-item Multidimensional Scale of Social Support (MSPSS) was utilized to evaluate social support from family, friends, and significant others (Zimet et al., 1988). For this study, the Urdu version of the MSPSS was used, demonstrating a strong Cronbach's alpha of 0.92 (Akhtar et al., 2010). Respondents rated the items on a scale from 1 to 7. All the Urdu version tools were freely available and used for this study.

Procedure:

After obtaining formal consent and providing a brief explanation of the study's objectives to the college administration, potential participants were approached during class hours. Participants were given the consent form, which outlined the research objectives. The questionnaires were distributed in a classroom setting, and the researchers were available to provide assistance if needed. Participants were acknowledged for their valuable participation.

Ethical Considerations:

This research was granted approval by the University of Karachi's Advances Studies and Research Board. All information about participants will be kept confidential and protected and participants were assured of their right to withdraw from the study at any time, the data collected were solely used for scientific purposes. Every ethical consideration was taken into account during the administration of the measures, ensuring consistency in the sequence and medium of administration across all participants.

Data Security and Confidentiality:

Each participant was assigned a unique identification number (ID), and personally identifiable information were securely stored in locked cabinets accessible only to the researcher. Paper copies of assessment tools were kept secure in lockable filing cabinets. An encrypted and password-protected Excel database store all anonymized data.

Statistical Analysis:

Data from the measures were recorded using a scoring manual and tabulated in a spreadsheet using SPSS version 21. Descriptive statistics, Pearson's correlation, and chi-square test were performed for data analysis.

Results

Table 1

The Multidimensional Scale for Perceived Social Support Scale (MSPSS) and DASS, Reliability Statistic

Scale	Cronbach's Alpha	No of Items
MSPSS	0.789351	12
DASS	0.855377	21

Note. The multidimensional scale for perceived social support's internal consistency (MSPSS) is .789, and DASS is 0.855 which indicates that each item assesses the relevant construct.

Table 2

Participant demographic traits.

	Male (N=197)		Female (N=203)		Total (N=400)	
	N	%	N	%	N	%
Age group						
16	8	4.1	2	1.0	10	2.5
17	113	57.4	127	62.6	240	60.0
18	66	33.5	68	33.5	134	33.5
19	10	5.1	6	3.0	16	4.0
Education						
1st year	118	59.9	36	17.7	154	38.5
2nd year	79	40.1	167	82.3	246	61.5
College						
Government	100	50.8	145	71.4	245	61.2
Private	97	49.2	28	28.6	155	38.8
Marital Status						
Single	192	97.5	196	96.6	388	97.0
Married	5	2.5	7	3.4	12	3.0
Family Status						
Nuclear	105	53.3	148	72.9	253	63.2
Joint	92	46.7	55	27.1	147	36.8

Table 2 presents the demographic characteristics of the 400 participants included in the study. Among the participants, 203 (50.7%) were female, while 197 (49.3%) were male. In terms of college enrollment, 246 participants (61.5%) were in their second year, while 154 participants (38.5%) were in their first year. Regarding the type of institution, 155 individuals (38.8%) attended a private college, while 245 participants (61.2%) attended a government college. Regarding marital status, 12 participants (4.0%) were married, and 388 participants (97.0%) were single. In terms of family structure, 147 individuals (36.8%) belonged to a joint family, while 253 participants (63.2%) belonged to a nuclear family.

Table 3. level of depression, anxiety and stress of participants by using Chi Square test.

DASS	Male (N=197)		Female (N=203)		Total (N=400)	
	N	%	N	%	N	Sig.
Depression						.001
Normal	57	28.9	46	22.7	103	25.8
Mild depression	36	18.3	18	8.9	54	13.5
Moderate depression	59	29.9	65	32.0	124	31.0
Severe depression	27	13.7	31	15.3	58	14.5
Extremely severe depression	18	9.1	43	21.2	61	15.2
Anxiety						.044
Normal	62	31.5	43	21.2	105	26.2
Mild Anxiety	18	9.1	16	7.9	34	8.5
Moderate Anxiety	47	23.9	52	25.6	99	24.8
Severe Anxiety	34	17.3	32	15.8	66	16.5
Extremely severe Anxiety	36	18.3	60	29.6	96	24.0
Stress						.056
Normal	42	21.3	36	17.7	78	19.5
Mild Stress	58	29.4	66	32.5	124	31.0
Moderate Stress	67	34.0	53	26.1	120	30.0
Severe Stress	27	13.7	36	17.7	63	15.8
Extremely severe Stress	3	1.5	12	5.9	15	3.8

Table 3 summarizes the levels of psychological distress among the 400 study participants. Of these, 78% reported experiencing stress, 73% reported anxiety, and 74% reported depression. Regarding depression severity, 25.8% were classified as normal, 13.5% as mild, 31.0% as moderate, 14.5% as severe, and 15.2% as extremely severe. For anxiety, 26.2% were in the normal range, 8.5% in the mild range, 24.8% in the moderate range, 16.5% in the severe range, and 24.0% in the extremely severe range. With respect to stress, 19.5% were in the normal range, 31.0% in the mild range, 30.0% in the moderate range, 15.8% in the severe range, and 3.8% in the extremely severe range.

Table 4

Pearson Correlation between MSPSS and DASS among participants

Variables (N = 400)	Sig. Other	Family	Friend	Social Support
Depression	-.102*	-.084	-.107*	-.127*
Anxiety	.018	-.046	-.051	-.033
Stress	-.082	-.110*	-.127*	-.137**
DAS total	-.064	-.094	-.111*	-.116*

** Correlation is sig at 0.01 level

*Correlation is sig at the 0.05 level

Table 4 outlines the relationships between the total DASS scores (indicating psychological distress) and various measures of perceived social support (MSPSS). A strong negative correlation ($r = -0.116^*$) was identified between psychological distress and overall social support. Notably, a significant negative correlation was also observed between psychological distress and the friend subscale of social support ($r = -0.111^*$). Conversely, no significant negative correlations were found between psychological distress and family support ($r = -0.094$) or support from a significant other ($r = -0.064$). For the depression subscale, there was a notable negative correlation with friend-provided social support ($r = -0.107^*$), total social support ($r = -0.127^*$), and support from a significant other, ($r = -0.102^*$) while no significant negative correlation was detected with family support ($r = -0.084$). Regarding the anxiety subscale, no significant negative correlations were found with overall social support ($r = -0.033$), friend social support ($r = -0.051$), family social support ($r = -0.046$), or support from a significant other ($r = 0.018$). For the stress subscale, strong negative correlations were noted with friend social support ($r = -0.127^*$), family social support ($r = -0.110^*$), and total social support ($r = -0.137^{**}$), but no significant negative correlation was observed with support from a significant other ($r = -0.082$).

Discussion

This study evaluates the level of psychological distress experienced by Adolescents in Chitral. Psychological distress among adolescents is a significant concern, as indicated by the findings presented in Table 4, which reveal that 74% of adolescent's experience depression, 73% experience anxiety, and 80% experience stress. Comparison with Prior Studies: The results of this research demonstrate that the mental health of students in Chitral is worrisome. These findings significantly surpass the figures reported in previous studies on emotional distress among Pakistani teenagers (Khalid et al., 2021) where the prevalence was 42.7%, and the study by Awais et al. (2021) which reported a prevalence of 65% for mild to severe levels of psychological distress. Furthermore, the prevalence rates observed in Chitral are considerably higher than those reported in studies conducted in Nigeria (24.2%), Tanzania (23.0%), , UAE (28% stress), Beirut, Lebanon (26.1%), India (10.5%), and Canada (35.1%) (Al-Yateem et al., 2020; Hatcher et al., 2016; Arbour et al., 2012; Jaisoorya et al., 2017; Mwakanyamale et al., 2019). Various factors may contribute to the emergence of psychological distress among adolescents. These include inadequate physical activity, insufficient sleep duration, excessive screen usage, and familial illness (Awais et al., 2021). Additionally, several cultural and societal factors impact adolescents, such as the rapid advancement of technology, the overwhelming influx of information through social media,

globalization, the development of a personal philosophies of life, , peer pressure ,academic pressure, complex family dynamics, conflicts between individual roles within the family, lack of family involvement, and economic barriers, inadequate healthcare services, stigma associated with seeking psychological treatment, and socioeconomic disparities. Unique Challenges in Chitral: In Chitral, the majority of families face limited resources, making it difficult for them to fulfill their children's needs. This leads to feelings of inferiority among adolescents and contributes to psychological distress. Furthermore, the challenging climatic conditions in the region, particularly during winter when outdoor activities are limited, negatively impact the mental health of adolescents. Another contributing factor is the prevalence of a competitive academic environment in schools and colleges, which is encouraged by parents and teachers. This places significant pressure on students, leading to psychological distress. Unfortunately, mental health receives limited attention in the area, and parents and teachers may overlook the psychological needs of students or unintentionally subject them to excessive psychological pressure. This study examines the association between perceived social support and psychological distress, as measured by the DASS (Depression, Anxiety, and Stress Scale) total score. Additionally, the study explores the correlations between specific subscales of social support and psychological distress. Table 4 presents the results of the correlation analysis, revealing a strong negative association ($r = -.116^*$) between psychological distress, and perceived social support. Specifically, the subscale of social support from friends demonstrates a significant negative correlation ($r = -.111^*$) with psychological distress. However, the correlations between psychological distress and support from family ($r = -.094$) and support from a significant other ($r = .064$) are not statistically significant. An analysis of the psychological distress subscales demonstrates a substantial negative correlation between the depression variable and perceived social support ($r = -.127^*$). Similarly, the subscales for social support from friends ($r = -.102^*$) and significant others ($r = -.107^*$) exhibit negative correlations with depression. However, family social support does not demonstrate a significant negative correlation with depression ($r = -.084$). The findings of this study are consistent with those of Siddiqui et al. (2019), who reported a adverse association between psychological discomfort and perceived social support. Similarly, Bukhari and Afzal (2017) found an inverse correlation between perceived social support and stress, anxiety, and depression among University Malaysia Sabah students. These findings suggest that strong and sufficient social support may mitigate the effects of psychological issues in adolescents, facilitating a healthy adjustment process and reducing the prevalence of psychological problems (Rawson et al., 1994; Lakey et al., 2000; Toa et al., 2000).It has been demonstrated that social support is crucial for promoting wellness and health, acting as a buffer against life difficulties (Dollete et al., 2014). Moreover, social support has been shown to assist students in developing problem-solving skills, leading to a reduction in problem severity and mitigating the negative impacts of stress (Wang et al., 2014). Therefore, individuals who perceive social support are less likely to experience negative emotions and are more likely to develop self-efficacy and confidence (Ozbay et al., 2007). Consequently, students who receive help and guidance from their social support network are better equipped to manage challenges and cope with psychological issues such as stress, anxiety, and depression.

Limitations and Recommendations

This study has several limitations that need to be recognized. Firstly, the cross-sectional survey design employed in this study restricts the ability to establish causation and ascertain the direction of the relationship between social support and psychological distress. To gain a comprehensive understanding of this relationship, future research employing a longitudinal design would be beneficial. Additionally, the absence of a qualitative component in this study is a limitation. Including qualitative interviews or focus groups would have provided valuable insights into the specific issues faced by students and contributed to a deeper understanding of adolescent problems.

Factors such as financial hardship, dysfunctional relationships, learning challenges, bullying, body image concerns, and the college environment may all play a role in students' distress and should be explored in future studies. Moreover, this study's findings are specific to the sample of students from seven colleges in Chitral and cannot be generalized to the entire population. A more representative sample that includes students from various colleges and upper secondary schools in the region would yield more accurate and applicable results.

Conclusion and Implications of the Study

The findings of this study highlight the high occurrence of psychological distress among adolescents in Chitral, with 74% experiencing depression, 73% experiencing anxiety, and 80% experiencing stress. The study provides valuable insights into the social support received and utilized by teenagers to cope with various stressors and life changes. The results also demonstrate a negative correlation between psychological distress and perceived social support, emphasizing the importance of strengthening students' social support networks to prevent or reduce psychological problems. These findings have implications for interventions and support programs aimed at promoting the psychological well-being of adolescents in Chitral. By fostering and enhancing social support systems, schools and communities can create environments that help students cope with stress and improve their overall mental health.

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