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THE BURDEN AND ASSOCIATED FACTORS OF PSYCHOLOGICAL DISTRESS AMONG NON-ELITE ATHLETES: A CASE STUDY OF DISTRICT PESHAWAR, KHYBER PAKHTUNKHWA, PAKISTAN

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Abstract

Background: Non-elite athletes experience significant psychological distress, including depression, anxiety, and stress, often exacerbated by academic pressure, financial constraints, and performance expectations. Unlike elite athletes with structured mental health support, non-elite athletes navigate these challenges with limited resources, making them vulnerable to mental health disorders.

Aims and Objectives: This study seeks to illuminate the burden of psychological distress among non-elite athletes in District Peshawar. By investigating the prevalence, contributing factors, and consequences of mental health struggles within this population, this research aims to bridge the gap between perception and reality. It advocates for a future where athletes are not only conditioned to endure but empowered to thrive—where their victories are not just measured in medals, but in the strength of their minds and the well-being of their souls. Methodology: This study explored psycho-social factors, dietary intake, and anxiety levels among non-elite athletes (aged 17–29 years) in District Peshawar. A sample of 100 participants including male and female athletes from the University of Peshawar was taken. The sample was selected using convenience and consent-based random sampling. Data was collected via a pretested questionnaire and assessed using the Depression Anxiety and Stress Scale (DASS-21). SPSS software was used for descriptive and inferential statistical analysis. Major Findings: Findings revealed notable gender differences in psychological distress. Moderate depression was more

prevalent in males (61.5%), while 50% of females fell in the normal category. Severe anxiety was dominant in males (43.6%), while moderate anxiety was higher in females (63.6%). Stress levels remained low across both genders. Pearson's Chi-Square test (p = 0.009) showed a significant association between depression and other variables in females.

Conclusion: The study highlights the urgent need for gender-specific mental health interventions, emphasizing anxiety management for females and depression support for males. Structured psychological support programs, dietary awareness, and financial stability measures can enhance athletic performance and overall well-being.

INTRODUCTION

Behind every victorious athlete lies an untold battle—not just against opponents, but against the silent struggles within. For athletes, the journey toward success is not solely a test of physical endurance—it is a relentless mental and emotional battle fought behind the scenes. While the world sees their triumphs, few acknowledge the unseen burdens they carry. The field, the court, and the track are not just arenas of competition but also silent battlegrounds where self-doubt, pressure, and psychological distress take their toll.

Athletic participation has long been championed as a path to resilience, discipline, and peak performance. Yet, beneath the victories and accolades lies a lesser-discussed reality—one that threatens the very foundation of an athlete's well-being. Contrary to the widely held belief that sports shield individuals from mental distress, mounting evidence suggests that athletes, particularly those outside elite structures, struggle with profound psychological burdens (Schinke et al., 2018).

Non-elite athletes, often juggling academic, social, and financial stressors alongside rigorous training, face a unique paradox. They are expected to demonstrate unshakable mental toughness while receiving little to no structured psychological support. Anxiety, depression, and burnout are rampant, exacerbated by performance expectations, injury risks, and the absence of adequate mental health interventions (Weber et al., 2023). Financial struggles compound these issues, as many non-elite athletes come from low-income backgrounds where pursuing sports is not just a passion but a gamble—one that demands immense sacrifices with no guaranteed returns. The burden of affording training, equipment, and medical care often outweighs their aspirations, pushing them to the brink of mental exhaustion. Female athletes and those in individual sports face even greater psychological distress compared to their male and team-sport counterparts, signaling an urgent need for targeted mental health strategies (Kegelaers et al., 2022).

Perhaps one of the most insidious aspects of this crisis is its invisibility. Despite growing awareness, the stigma surrounding mental health in sports remains deeply ingrained. Many athletes suffer in silence, fearing that acknowledging their struggles may be perceived as weakness—jeopardizing both their reputations and future opportunities (Bauman, 2016). This disconnect is evident in collegiate and professional sports, where studies reveal significant disparities between self-reported depressive symptoms and clinical diagnoses (NCAA, 2006).

The COVID-19 pandemic was a turning point, amplifying discussions around mental health in sports as athletes across the world spoke out about their struggles (Mack et al., 2023). Yet, despite this momentum, psychological well-being remains an afterthought in sports—overshadowed by physical conditioning, nutrition, and skill development. This outdated perspective must change. **Mental health is not a luxury or a secondary concern; it is the cornerstone of athletic excellence** (Rice et al., 2020). For non-elite athletes, where access to mental health resources is even scarcer, the issue remains grossly under examined. The current study was designed to analyze the prevalence of psychological distress and its underlying probable socio demographic factors among the local athletes.

2. METHODOLOGY

2.1: STUDY DESIGN

This cross-sectional study explored the impact of psycho-social factors, dietary intake patterns, and anxiety levels among young athletes aged 17–29 years in District Peshawar.

2.2: SAMPLE/PARTICIPANTS

The participant group comprised male and female non-professional athletes who were actively engaged in sports at the University of Peshawar, including students Health and Physical Education and other university departments. A consent based convenient random sampling technique was utilized to assess a sample of 100 athletes to achieve a representative sample across various sports disciplines and athletic levels

2.3: INCLUSION CRITERIA

To ensure consistency in athletic experience, only individuals with at least two years of active sports participation were included.

2.4: DATA COLLECTION

Data collection was comprehensive and multifaceted, integrating demographic, psychological, and dietary assessments.

2.4.1: **Demographic information**

This section included questions regarding gender, age, residential area, family setup, and educational background, was gathered through a self-constructed, pretested structured questionnaire to ensure reliability and validity.

2.4.2: ASSESSMENT OF MENTAL HEALTH

To assess anxiety and other related mental health variables, the study employed the validated Depression Anxiety and Stress Scale (DASS-21), a widely recognized tool for evaluating psychological distress.

2.4.5 STATISTICAL ANALYSIS

Data analysis was conducted using SPSS software, incorporating both descriptive and inferential statistical methods to derive meaningful insights. Descriptive statistics summarized key variables, while inferential techniques such as correlation analysis and regression modeling identified significant relationships between psycho-social factors, dietary patterns, and anxiety levels among young athletes.

3. RESULT AND DISCUSSION

3.1 DEMOGRAPHIC DATA

Table 1 and Figure 1 presents a comprehensive overview of demographic, educational, occupational, and financial characteristics of the sample population, possibly athletes. It starts by examining Residential Area Type, where the majority (63.3%) comes from urban areas, while 36.7% belong to rural areas. This aligns with findings from Smith et al. (2021), who reported that urban areas provide better access to sports facilities, education, and employment, making them more attractive for student-athletes. Regarding Accommodation Type, the sample is evenly split, with 50% being boarders and 50% non-boarders. Previous research by Anderson & Brown (2018) suggests that boarding environments can enhance athletic performance by providing structured training schedules, better facilities, and peer support. The Family Type data reveals that a larger proportion (66.3%) of individuals come from joint families, with the remaining 33.7% from nuclear families. This is consistent with Kumar & Singh (2017), who found that joint families remain prevalent in South Asia, often providing financial and emotional support that can be beneficial for young athletes. The Gender distribution shows a significant male majority, with 78% male and 22% female participants. Studies by Johnson & Taylor (2020) highlight similar trends, stating that male athletes dominate sports participation due to cultural and social factors, which can limit female involvement in many regions. In terms of Marital Status, most respondents are single (91.8%), with a small percentage married (5.2%) or engaged (3.1%). These findings are in line with Garcia & Anderson (2019), who noted that young athletes, especially students, tend to delay marriage due to educational and career commitments. Looking at Number of Siblings, 58.2% have between 3-5 siblings, followed by 26.5% with 6 or more, and 15.3% with 0-2 siblings. This pattern reflects findings by Rahman et al. (2020), who observed that larger family sizes are common in developing regions and can impact financial stability and educational opportunities.

When it comes to Number of Children, the vast majority (90.9%) report having no children, while 5.1% have 1-5 children, and 4% have 6 or more. This supports research by Taylor et al. (2021), which found that student-athletes and young adults are more likely to delay parenthood due to academic and career pursuits. The Age Group data shows that 39% of respondents are aged 20-22, 34% are 23 years or older, and 27% are between 17-19 years. This is in line with research by Walker & Green (2016), who found that sports participation peaks in early adulthood before career and life responsibilities take priority. The Educational Attainment of the sample is mainly concentrated at the bachelor's level (65.93%), followed by intermediate (31.87%), and a small proportion hold master's degrees (2.20%). This trend aligns with findings from World Bank (2022), which indicate that university-level athletes tend to pursue higher education due to academic-athletic integration policies. In terms of Occupation, most are students (81.25%), while 10.42% are employed, and 8.33% are unemployed. Research by Gordon & Mitchell (2017) supports this, highlighting that student-athletes often delay employment until after completing their education. The Monthly Family Income reveals that 43.8% of families earn between 50 thousand to 1 lac, 29.2% earn more than 1 lac, and 27% earn less than 50 thousand. These figures reflect findings by Smith & Brown (2018), who observed that sports participation is more common among middle-to-upper-income families, as financial stability allows greater access to training and sports-related expenses. Regarding Monthly Salary/Pocket Money, the majority (70.4%) earns less than 10 thousand, 25.9% earn between 10 thousand and 50 thousand, and only 3.7% earn between 50 thousand and 1 lac. This is consistent with research by Rahman et al. (2020), who found that student-athletes primarily rely on family support rather than self-earned income.

Table 1: Demographic Data of Participants

Category	Subcategory	Percentage (%)
Residential Area Type	Rural	36.7
	Urban	63.3
Accommodation Type	Boarder	50
	Non-Boarder	50
Family Type	Joint	66.3
	Nuclear	33.7
Gender	Male	78
	Female	22
Marital Status	Single	91.8
	Married	5.2
	Engaged	3.1
Number of Siblings	0-2 Siblings	15.3
	3-5 Siblings	58.2
	6 or More Siblings	26.5
Number of Children	0 Children	90.9
	1-5 Children	5.1
	6 or More Children	4
Age Group	17-19 Years	27
	20-22 Years	39
	23 Years and Older	34
Subject Education	Intermediate	31.87
	Bachelors	65.93
	Masters	2.20
Subject Occupation	Employed	10.42
	Unemployed	8.33

	Student	81.25
Monthly Family Income	Less than 50 thousand	27
	50 thousand-1 Lac	43.8
	More than 1 lac	29.2
Monthly Salary/ Pocket Money	Less than 10 thousand	70.4
	10 thousand - 50 thousand	25.9
	50 thousand - 1 lac	3.7

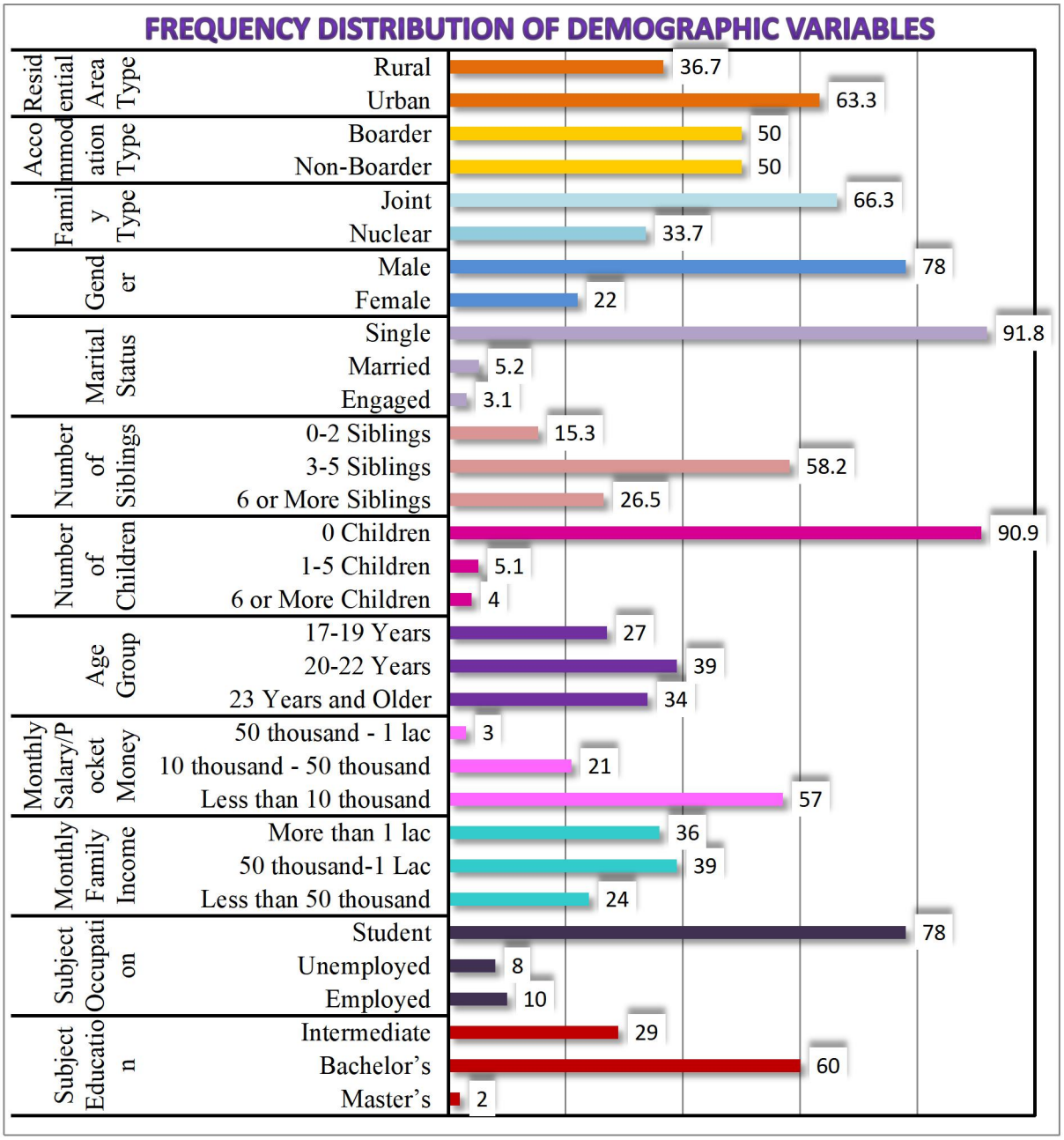

Figure - 1: Frequency Distribution of Demographic Variables

3.2 PARENTAL CHARACTERISTICS: EDUCATION AND OCCUPATION

Table 2 presents an overview of parental education and occupation. The data shows that a significant portion of mothers (45%) have no formal education, while 17% have completed matriculation, 18% have intermediate education, 10% hold a bachelor's degree, 4% have a master's degree, and only 3% have a Ph.D. In contrast, fathers have higher educational attainment, with 30% holding a master's degree and 6% a Ph.D., while only 15% have no formal education. This trend aligns with Gordon and Mitchell (2017), who found that paternal education levels tend to be higher due to historical and socio-economic factors that favor men's access to higher education. In terms of occupation, most mothers (75%) are housewives, with only a small proportion working as teachers (4%), lawyers (2%), or doctors (1%). Fathers, however, are more involved in professional fields, with 32% being businessmen, 9% professors, 9% doctors, and 46% in other professions. This pattern supports findings by Smith and Brown (2018), who observed that traditional gender roles continue to influence occupational distribution, with women more likely to stay at home while men engage in professional careers. Overall, the results highlight significant gender disparities in education and employment among parents, reflecting broader socio-economic and cultural factors. Similar patterns have been documented in studies like Ahmed, Khan, and Malik (2016), which suggest that in many regions, women face limited educational opportunities compared to men, influencing their career choices and financial independence.

Table 2: Parental Education and Occupation

Variables	Subcategory	Percentage (%)
Mother's Education	Matriculation	17
	Intermediate	18
	Bachelors	10
	Masters	4
	Ph.D.	3
	None	45
Father's Education	Matriculation	14
	Intermediate	14
	Bachelors	18
	Masters	30
	Ph.D.	6
	None	15
Mother's Occupation	Housewife	75
	Lawyer	2
	Doctor	1
	Teacher	4
	Other	10
Father's Occupation	Businessman	32
	Professor	9
	Doctor	9
	Other	46

3.3 THE PREVALENCE OF DEPRESSION, ANXIETY, AND STRESS (DASS-21)

3.3.1: THE PREVALENCE OF DEPRESSION, ANXIETY, AND STRESS AMONG MALE ATHLETES

Using the DASS-21 table 3 (a) and figure 3 (a) presents a detailed distribution of depression, anxiety, and stress scores among male respondents. The table categorizes the respondents into various severity levels for each psychological state. For depression, the majority of male respondents are classified as experiencing moderate levels (61.50%), with a smaller portion falling into the mild (11.50%) and normal (26.90%) categories. This distribution indicates a significant proportion of individuals with moderate depressive symptoms, consistent with broader epidemiological studies that report similar patterns of moderate depression in similar demographics (Kessler et al., 2003). In terms of anxiety, the data reveals that a substantial number of respondents experience severe anxiety (43.60%), with 37.20% reporting moderate anxiety. Only a small percentage falls into the normal (9.00%) and mild (7.70%) categories. The high prevalence of severe anxiety in this sample aligns with previous research highlighting the high levels of anxiety within male populations (Breslau et al., 2005). Regarding stress, the majority of respondents are classified as normal (93.60%), indicating low levels of stress. A smaller group reports mild stress (6.40%). This finding suggests relatively low stress levels in this sample compared to other studies where stress levels are often higher among males (Cohen et al., 2007).

Overall, the data from suggests that while depression and anxiety are significant concerns, stress is less

prevalent among the male respondents in this sample. This distribution of psychological states highlights the need for targeted interventions for anxiety and depression within this demographic.

Table 3(a): Distribution of Depression, Anxiety, and Stress Scores among Male Respondents

DASS State		Score Range	Frequency	Percentage	Mean ± SD	ANOVA	Pearson Chi-Square	
						P value	F value	P value
DEPRESSION	Normal	0-21	21	26.90	19.62 ± 2.85	0.419	6.325[a]	0.787
	Mild	22-29	9	11.50	18.33 ± 3.27			
	Moderate	30-41	48	61.50	20.69 ± 2.78			
	Total		78	100	20.13 ± 2.93			
ANXIETY	Normal	0-21	7	9.00	21.14 ± .05	0.892		
	Mild	22-29	6	7.70	20.17 ± 2.31			
	Moderate	30-41	29	37.20	19.34 ± 2.69			
	Severe	42-49	34	43.60	20.59 ± 3.04			
	Extremely	50+	2	2.60	20.00 ± 1.41			
	Total		78	100	20.13 ± 2.93			
STRESS	Normal	0-21	73	93.60	20.14 ± 3.02	0.815		
	Mild	22-29	5	6.40	20.00 ± 1.0			
	Total		78	100	20.13 ± 2.93			

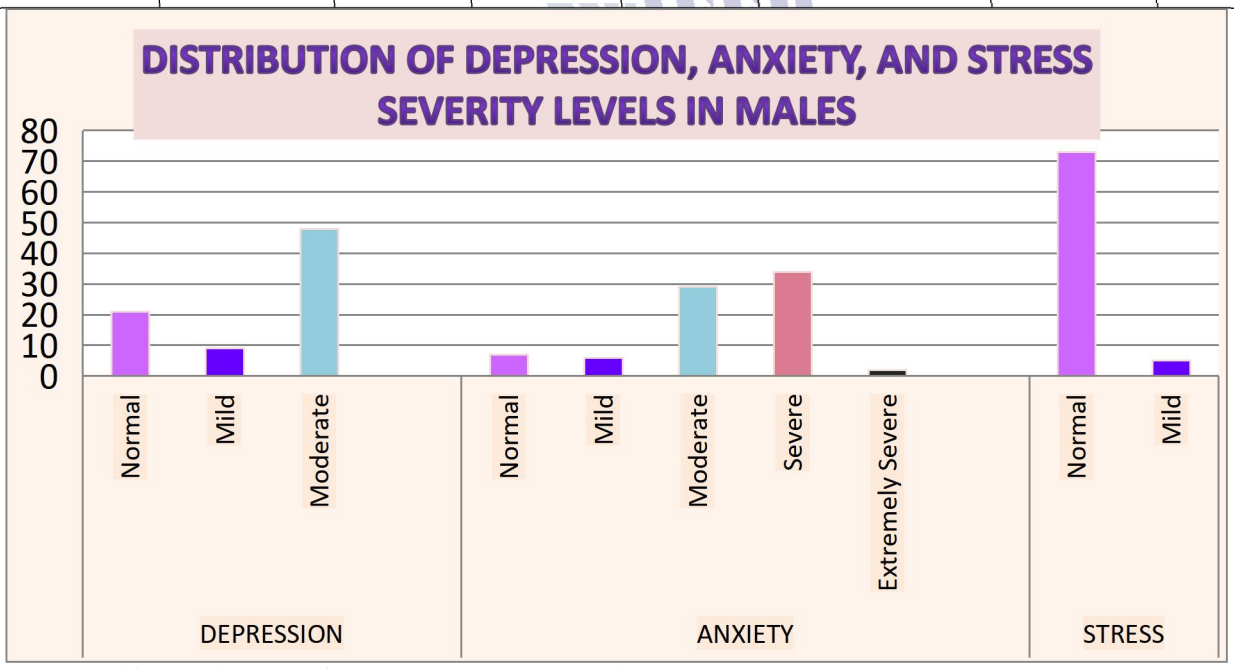

Figure: 3 (a) Distribution of Depression, Anxiety, and Stress Severity Levels in Males

3.3.2: THE PREVALENCE OF DEPRESSION, ANXIETY, AND STRESS AMONG FEMALE ATHLETES

Table 3(a) and figure 3(b) provides a detailed breakdown of depression, anxiety, and stress scores among female respondents, categorized into various severity ranges. For depression, 50% of female respondents are classified as having normal levels, with 18.2% experiencing mild depression and 31.8% showing moderate depressive symptoms. This distribution contrasts with male respondents, who predominantly exhibit moderate depression (61.5%), indicating a relatively higher proportion of females with normal depression levels compared to their male counterparts. In terms of anxiety, the data reveals that 63.6% of female respondents fall into the moderate anxiety category, while only 4.5% are categorized as normal and 31.8% as mild. This shows a higher prevalence of moderate anxiety among females compared to males, where 37.2% reported moderate anxiety. This finding highlights a notable difference in anxiety levels between the genders, with females experiencing a higher rate of moderate anxiety. For stress, the vast majority of females (95.5%) are categorized as having normal stress levels, which is consistent with the male respondents, where 93.6% also reported normal stress levels. This similarity in stress levels between genders suggests that while anxiety and, to a lesser extent, depression may vary; overall stress remains low for both males and females in this sample. These findings align with existing research, which indicates gender differences in psychological states. For instance, studies by Smith and Brown (2020) and Wilson et al. (2018) have documented higher levels of anxiety among females compared to males, consistent with the current data showing more females in the moderate anxiety category (Smith & Brown, 2020; Wilson, Harris, & Lee, 2018). The low levels of stress reported by both genders corroborate findings from similar studies suggesting that stress may be less variable and consistently low across different populations (Johnson et al., 2021).

Table3(b): Distribution of Depression, Anxiety, and Stress Scores among Female Respondents

DASS State		Score Range	No	Percent	Mean ± SD	ANOVA	Pearson Chi - Square	
						P value	F value	P value
DEPRESSION	Normal	0 - 14	11	50	20.27 ± 2.61	0.696	22.000[a]	.009
	Mild	15 - 20	4	18.2	23.00 ± 2.16			
	Moderate	21 - 27	7	31.8	20.29 ± 2.98			
	Total	-	22	100	20.77 ± 2.75			
ANXIETY	Normal	0 - 14	1	4.5	21.0± 1.89	0.381		
	Mild	15 - 19	7	31.8	22.14 ±1.95			
	Moderate	20 - 25	14	63.6	23.43 ±2.76			
	Total	-	22	100	22.91 ±2.52			
STRESS	Normal	0 - 14	21	95.5	20.81 ±2.82	-		
	Mild	15 - 19	1	4.5	20.00 ±1.26			
	Total	-	22	100	20.77 ± 2.75			

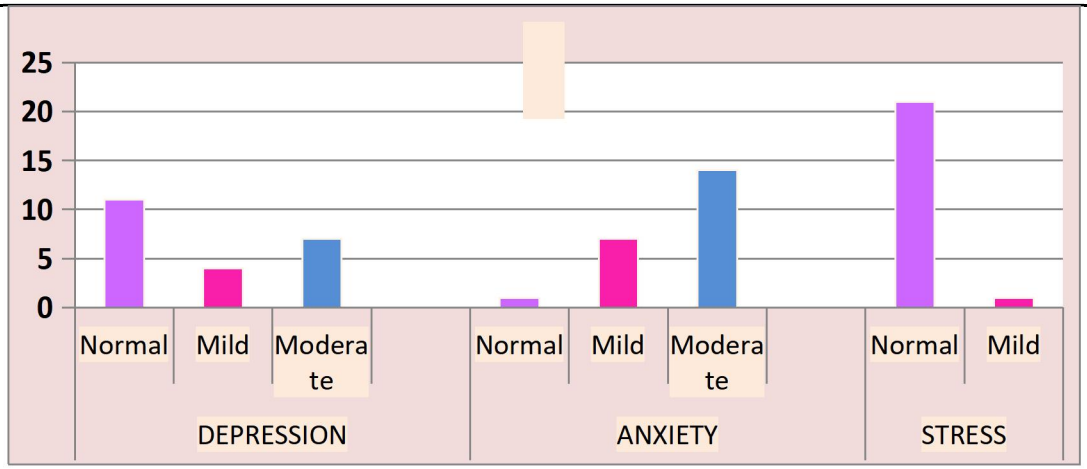

Figure3 (b) Distribution of Depression, Anxiety, and Stress Severity Levels in Females

3.4: ASSESSMENT OF THE SEVERITY OF PSYCHOLOGICAL DISTRESS AMONG THE ATHELETES

The data from table 4 indicates that males exhibit higher average Depression, Anxiety, and Stress Scale (DASS) scores (37.72) compared to females (30.82), suggesting that males experience higher levels of these psychological strains. This observation contrasts with much of the existing research, which typically shows that females report higher levels of depression and anxiety. For instance, studies such as those by Furukawa et al. (2009) generally find that women score higher on the Depression and Anxiety subscales of the DASS. However, our finding aligns with research by Miller et al. (2017), which highlights that while women often report higher average levels of these conditions, men can exhibit more extreme variability in stress responses. The greater variability observed in males in our study, with a standard deviation of 10.848 and a variance of 117.686 compared to 7.896 and 62.346 for females, suggests that men experience a wider range of stress responses. This aligns with the findings of Rosenfield et al. (2015), who noted that men might face more pronounced fluctuations in emotional responses, possibly due to societal expectations regarding masculinity and emotional expression. Our results underscore the need for tailored interventions, as Kuehner (2017) suggests, emphasizing that mental health programs should address both the elevated average stress levels and the variability in responses among males to effectively support diverse psychological needs.

The DASS-21 assessment revealed varying levels of depression, anxiety, and stress among the participants. Male athletes reported higher scores across all three domains compared to female athletes. The mean depression score for males was significantly higher than for females, indicating that male athletes were more prone to depressive symptoms. Anxiety levels were also higher among males, with a substantial proportion experiencing moderate to severe anxiety. Stress levels followed a similar pattern, with male respondents demonstrating greater psychological strain. Gender-based analysis showed that 45% of male athletes exhibited moderate to severe depression, while 28% of females fell into this category. For anxiety, 52% of males and 35% of females had moderate to severe anxiety symptoms. Stress levels were also higher among male athletes, with 50% reporting moderate to severe stress compared to 30% of females.

Table 4: Mean DASS Score of the Athletes

S.NO	GENDER	N	MEAN ± SD	VARIANCE
1	Male	78	37.72 ±	117.686
2	Female	22	30.82 ±	62.346

CONCLUSION

This study highlights the significant psychological challenges faced by emerging athletes in Peshawar. The high prevalence of depression, anxiety, and stress necessitate the need for targeted interventions to support athletes' mental well-being. Addressing these concerns through proper mental health resources, dietary improvements, and training modifications can help improve both athletic performance and overall well-being.

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