

Unraveling the Link: Effect of Psycho-social Factors on Performance and Quality of Life among Young Athletes

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ABSTRACT

Numerous studies in the past have identified the importance of stress and anxiety management and their effects on the sport performance and quality of life in the field of sports psychology mostly in the western culture. However, this study measured the relationships between sport anxiety and stress, sports performance, and quality of life among young athletes. A cross sectional approach was used to investigate these relationships. The main study employed a purposive convenient sampling method, among 382 young cricket players (226 males, 156 females) aged 19-30. Standardized scales, including the Sport Anxiety Scale (SAS), Perceived Stress Scale (PSS), Athletes' Subjective Performance Scale (ASPS), and Quality of Life Scale (QOLS), were used to collect data. Correlation analysis indicated that sport anxiety and stress negatively impact sports performance and quality of life. Hierarchical multiple regression demonstrated that stress and sport anxiety were found as most pertinent predictors of young athletes' quality of life and sport performance. Independent sample t-test revealed significant gender differences in which women exhibited higher on stress while men reported higher sports performance. These findings provide valuable insights for coaches, sports psychologists, and policymakers, highlighting the need for intervention based programs to enhance sports performance and promote overall well-being among young athletes. It underscores the importance of stress, anxiety management in the field of sports psychology, especially in cultures and context like Pakistan, where such approaches are emerging.

Keywords: Sport Anxiety, Stress, Sports Performance, Quality of life, young athletes, Cricket Players, Gender differences.

INTRODUCTION

Sport anxiety

Sport anxiety is a common phenomenon experienced by athletes and individuals participating in sports and physical activities (Ford J et Al., 2017). It is a complex and multifaceted construct that can have a significant impact on an individual's performance, well-being, and overall sporting experience. In the words of Martens (2015) sport anxiety refers to emotional responses of apprehension and fear that

athletes experience while encountering perceived threats within their competitive environment. Researchers have identified sport anxiety as a complex construct that demonstrates different physical characteristics and psychological effects and behavioral changes that produce significant consequences for performance ability and health. Sport anxiety has three core components which explains as cognitive anxiety and somatic anxiety with behavioral anxiety serving as the third category. Cognitive anxiety consists of extensive unwanted thoughts and unshakeable self-doubts that athletes develop when facing perceived threats or obstacles and this mental state substantially reduces their confidence and distracts them from focus.

Anxiety is described by immoderate tension, agitation, and anticipation related to upcoming incidents or circumstances, frequently with a perception of imminent destruction (American psychiatric Association, 2013). About 600 million individuals globally affected from unhappiness or anxiety, and there's a chance your colleagues, executive and heads or maybe even you may be one of them. It is supposed that anxiety deteriorates the athletes and this leads to reduction of the athletes→general performance (Weinberg & Gould, 2010). Consequently, anxiety could be studied in physical, intellectual and behavioral impact from different researchers (Robinson & Freeston, 2015). Mental problems will occur in anybody at any point of his life which include pressure, depression and anxiety (Hasanah & Refanthira, 2019).

When anxiety occurs it triggers automatic actions from both individuals mind and body. The brain and physical system work together to generate alarms during any situation that causes fear to the individuals. At the moment the brain deals with danger the body shows physical signs of anxiety. Many athletes see anxiety as a major threat to their sporting success that reduces their performance outcome (Weinberg & Gould, 2010). Scientific studies proved that athletes handled their anxiety levels during the entire competition time (Humara, 1999). Sports psychology and sports research recognize anxiety as their major study area because it offers the clearest understanding of its impact on athlete performance (Cox, 2003)

Stress

Stress is an untaught reaction to difficult or harming circumstances. It animates the body's fight or flight reaction, provoking the escape of stress hormones like cortisol and adrenaline. Although severe stress can be adaptable and stimulating, persistent stress can guide to mental dysfunction (McEwen, 2017). Stress can outcome from number of components, involving job associated tensions, economic crises, interpersonal problems, and shocking situation (Cohen et al., 2018). In incorporation to anxiety, sports contests are also linked with stress (Gustafson et al., 2017). The capability to pinpoint traumatic circumstances appropriately is tremendously significant for the players. Being mentally healthy of human in correct frame of thinking could include being capable to deal with stress and accomplish routine works in systematic conditions. It involves to an individuals→psychological capability to perform in an effective and beneficial way. Present research demonstrates the association among stress and other components. The results signify that greater risk of defeat is connected with a favorable relationship with mental stress in players (Gustafsson et al., 2017).

Stress is a pervasive and debilitating experience that can have a profound impact on athletes' performance and overall well-being. According to Lazarus and Folkman (1984), stress is a state of mental or emotional strain caused by adverse circumstances, such as pressure to perform, fear of failure, or lack of control. This definition highlights the complex and multifaceted nature of stress, which can arise from a variety of sources and manifest in different ways. Review studies show various individual dimensions which substantially impact the way competitors experience stress and anxiety subjectively. Research studies show that athletes who display heightened anxiety sensitivity levels face greater competitive stress while those with lower levels of anxiety sensitivity maintain better performance according to (Hanton & Fletcher 2005).

Performance

Typically, athletic performance as a notion has comprised engagement in task that link to consistent training and contest of individual's game despite, currently, this has also comprised execution in tasks that connect to athletic injury protection, recovery, and the come back to athletic procedure (Brewer, 2016). The result shows that greater timidity of defeat is connected with a favorable relationship with mental stress in players (Gustafsson et al., 2017). Sports performance represents the level to which athletes show their skills in a specific sport by evaluating physical attributes together with mental capabilities and external elements. Sports performance involves three most important components which involves physical fitness adjacent to technical capabilities and psychological resilience additionally tactical game knowledge and awareness. Athletic success depends significantly on sports performance because it determines both performance quality and competition outcomes and extends professional careers. Sports performance represents the level to which athletes show their skills in a specific sport by evaluating physical attributes together with mental capabilities and external elements. An athlete demonstrates sports performance along with their amalgamated physical endurance level and technical capabilities and psychological toughness along with tactical game understandings. The direct link between an athlete's success together with their competitive edge and professional durability makes sports performance an essential element.

Sport practice is an activity method that goal to acquire the best probable performance under two factors, objective and subjective (Altavilla & Raiola, 2018). These athletic psychology approaches are important to a players→performance in the practice, as they aid to enhance best outcomes and common health (The Lancet Global Health, 2020). To evaluate the aspects that find sport performance, various ways can be utilized, with the objective of getting all that knowledge to analyze one or more variables, indicative of one or more factors (subjective and objective) that are, anyway, associated at the sport performance (Nughes et al., 2017). Players→overall well-being is an essential assistance for their performance and evolution. Players go through various health hazardous aspects than the common people, for example high practice burden, ambitious contests, and a tensed way of living. These health hazardous aspects have been displayed to enhance their sensitivity to psychological issues and lessen their standard of life. As well as, players may be less prone than the people to get psychological well-being due to stigma, a deficiency of mental care within athletics to generalize psychological wellness problems, or a danger of getting assistance as a mark of lacking strength in high-performance sport (HM Government, 2011).

Quality of life

The term "quality of life" is commonly used in everyday language across various contexts without concern for its precise meaning. In academic circles, this concept also garners significant interest, often facing similar challenges. Quality of life is a complex, multidimensional construct that encompasses factors influencing an individual's perception of their environment, emotions, relationships, and interactions within their context and daily activities, including biological and physiological aspects (Minayo et al. 2000). Research on this topic in sports remains limited, and there are several challenges to address. Typically, studies focusing on athletes and quality of life are linked to sports injuries or specific performance conditions (Sauers et al. 2011). Lam et al. (2013), highlighted that athletes represent a distinct population compared to other groups, suggesting that normative values for athletes should be established to enhance understanding of this issue. Another challenge involves the study of quality of life in relation to social factors, which is less common, and the socioeconomic context surrounding an athlete's career may be undervalued (Santi, 2013). This lack of data is particularly noticeable among Brazilian athletes. The importance of this topic is underscored by documents from the International Olympic Committee Athletes' Commission, which emphasizes factors related to quality of life.

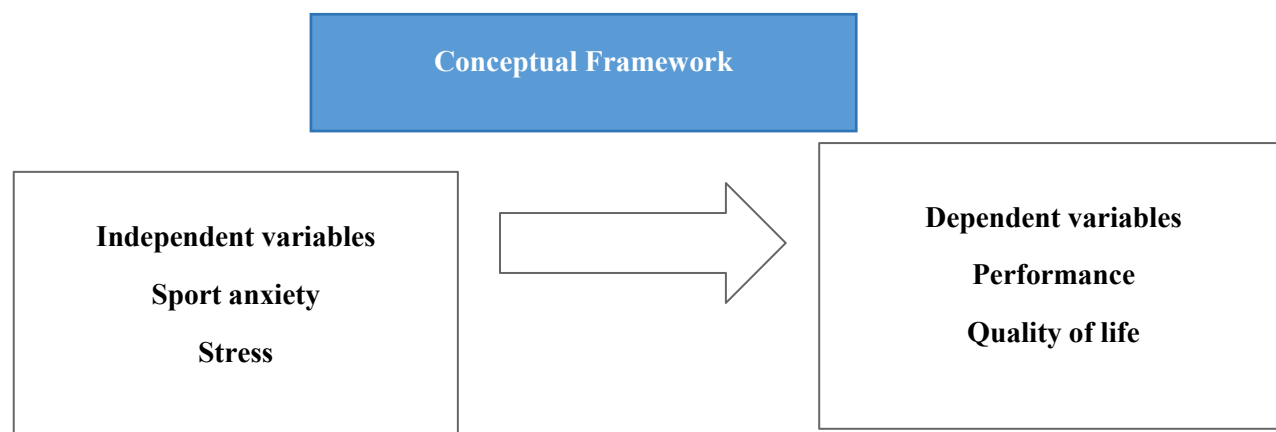
Wylleman and Lavallee (2004), argue that to achieve and sustain a high level of competitive sport, athletes and their support networks must invest in various areas, including physical, social, and economic aspects, over the long term. Throughout their careers, athletes experience multiple stages and transitions across different domains, such as athletic, psychological, social, academic, vocational, and financial development (Wylleman et al. 2013). Ledochowski et al. (2012), found that athletes with a higher quality of life are better equipped to handle stress and challenging situations, which can provide a competitive edge. This focus on the athlete's well-being across various life aspects closely aligns with quality of life studies. Despite the existence of various conceptual frameworks, Castellón and Pino (2003), note that common elements among different quality of life definitions include development and activity, as well as physical, material, social, and emotional well-being.

LITERATURE REVIEW

Numerous researches performed within the last decennial have drop attention on these complex association. A great level of psychological anxiety will upshot in poor execute. However, the most of the learning and concern in sport's cognitive characteristics has concentrated on the anxiety outcomes (Frias, 2015). A present Pakistani study was performed on athletes of local cricketers that exhibit inverse correlation among sports anxiety with emotional regulation and quality of life (Ahmad & Safdar, 2020). A research of (Rice et al., 2019), which displays that emotional intelligence and QOL are inversely influenced by sports anxiety. Another research performed in Pakistan also disclosed the inverse correlation of sports anxiety on EI and QOL on university students→(khan, 2013).

A distressed experience of stress determine that the body does not act in a definite or mechanized way, which hides athletic performance and may be a cause for poor game outcomes (Nowicki, 2004). Another research evaluating the association between stress and players performance among present pent athlete before their involvement in each beginning demonstrate an unfavorable relationship in the stress-sporting outcomes correlation (Samełko & Guszowska, 2016). Stress is a condition that is promptly documented about in studies dedicated to issues influencing players. The stressors that influence players can be distributed into actual, but also environmental. While actual stressors truly harm and disturb the quality of life of players, environmental stressors are associated to the capability to value and strength that they provoke the similar somatic reaction as an actual stressor (Kaplánová, 2020).

Conceptual framework



METHODS

Objectives of the study

On the basis of above mentioned literature review, theoretical perspective and rationale of the study following objectives were formulated for this research.

The primary objective of the study was to assess the relationship of sport anxiety and stress with performance and quality of life. The main aim was further divided into following objectives

1. To assess level of sport anxiety and stress among young athletes.
2. To investigate the level of performance and quality of life among young athletes.
3. To measure the relationship of sport anxiety and stress with performance and quality of life among young athletes.
4. To identify the most significant predictor of performance and quality of life among young athletes after controlling for demographic variables.
5. To explore the gender differences in term of sport anxiety and stress among young athletes.

Hypothesis of the Study

H1: There would be a negative relationship of sport anxiety and stress with sport performance.

H2: There would be a negative relationship of sport anxiety and stress with quality of life.

H3: sport anxiety and stress would be identified as most significant predictors of performance and quality of life among young athletes after controlling for demographic variables.

H4: There would be a significant gender differences in terms of performance and stress among young athletes.

Instruments

Informed consent

The participants received Appendix A informed consent form for review and to provide formal written permission to show their voluntary enrollment in the research study. The provided form delivered an in-depth description regarding the study design together with its objectives as well as outlining its potential advantages and threats. The study participants received direct confirmation about the exclusive research use of their data collection and the absolute confidentiality of their shared information while maintaining their anonymity. Participants learned that their identity would stay hidden from disclosure and that their data would get stored safely to stop unauthorized entry. The participants received an explicit notice about their complete freedom to leave the study at any time without facing any penalties or liabilities or repercussions so they maintained control throughout the research period.

Demographic sheet

The research utilized Appendix B to obtain detailed demographic information about participants through its uniquely constructed demographic chart. A detailed questionnaire included various demographic variables for the research which contained Gender, Age, Educational qualification, Marital status, Family system (e.g., nuclear, joint), Monthly household income, Number of siblings, History of psychiatric

illness, Experience of traumatic events, Cricket experience (e.g., duration) Physical medical conditions (e.g., chronic illnesses, disabilities) Current medication use (if applicable).

Perceived Stress Scale (PSS-10)

PSS represents a psychological stress assessment instrument which Cohen et al. established in 1983 and remains popular for current research use. The tool contains 10 self-report questions ranging from 0 (never) to 4 (very often). The scoring method for items 4, 5, 7 and 8 requires inversion to generate valid results because they declare positive conditions. The calculation of PSS scores begins with reversing the responses of four positively stated items (items 4, 5, 7, & 8) through the substitution of numbers (0 = 4, 1 = 3, 2 = 2, 3 = 1 & 4 = 0) before summing all scale items. A shortened version of the PSS 10 item scale consists of four items which use questions 2, 4, 5 and 10. Higher values on the scale show greater stress perception by participants. The original alpha reliability value of 0.70 was upgraded to 0.78 in this study.

Sport Anxiety Scale (SAS)

The Sport Anxiety Scale (SAS) which continues to gain broad recognition and withdraw extensive use as a psychological tool for measuring athletic competition-related anxiety. Athletes can assess their competitive anxiety before or during competition through a 21-item questionnaire developed by Smith et al. in 1990 which uses a four-point Likert scale from 1 (not at all) to 4 (very much). The SAS measures anxiety through separate dimensions that evaluate physical symptoms and worry alongside concentration problems to capture broad athletic anxiety patterns in sports performance. This study demonstrates that the SAS measure displays a solid psychometric quality through its reliability coefficient value of 0.96.

Athlete's Subjective Performance Scale (ASPS)

The ASPS serves as an evaluation tool for sports performance which Nahum et al. created in 2016 to assess three dimensions: general performance with team contribution accompanied by personal ability. The satisfaction level rates are recorded by participants on a scale that ranges from 1 (not at all satisfied) to 10 (fully satisfied). Researchers developed the ASPS by identifying essential performance elements while including two statements that evaluate general performance alongside team contribution and personal ability. The instrument consists of six items focused on athletes' ratings of their achievements in team sports. The reliability coefficient determined for this study reaches 0.92.

Quality of Life Scale (QOLS)

The original 15-item instrument evaluated five different conceptual domains including material and physical wellbeing as well as personal development and fulfillment alongside relationships with others and social, community and civic activities and recreation. The survey instrument underwent development through descriptive research which asked people with chronic illnesses to share their quality of life perceptions to become a 16-item instrument with an added section: Independence, as the ability to do things independently. The current version of the Quality of Life Scale consists of a total of 16 items. The quality of life scale totals its items scores to provide a single instrument measure score. Scores can range from 16 to 112. The scoring and administration process for the 1970s Quality of Life scale developed by Flanagan cannot be automated because the original purpose was to evaluate material well-being and personal development and independence through social relationship measurements in four domains. Survey participants use a seven point scale beginning at "delighted" and ending at "terrible" for their responses to the current version containing sixteen items. The reliability measurements for this measure range between 0.92 since the scale displays strong internal consistency. The reliability value of this study reaches 0.92.

Demographic characteristics of the sample

Table 1

Demographic characteristics of sample N=382

| Variable | <i>f</i> | % |
|-----------------------------------------------|----------|------|
| Age | | |
| 19-24 | 292 | 76.4 |
| 25-30 | 90 | 23.6 |
| Gender | | |
| Men | 226 | 59.2 |
| Women | 156 | 40.8 |
| Marital Status | | |
| Single | 351 | 91.1 |
| Married | 31 | 8.1 |
| Qualification | | |
| Matric | 74 | 19.4 |
| Intermediate | 113 | 29.6 |
| Graduate | 183 | 47.9 |
| Other | 12 | 3.1 |
| Variable | <i>f</i> | % |
| Family System | | |
| Nuclear | 171 | 44.8 |
| Joint | 211 | 55.2 |
| Family Monthly Income | | |
| 20,000-50,000 | 79 | 20.7 |
| 51,000-100,000 | 150 | 39.3 |
| Above 100,000 | 153 | 40.1 |
| Do you have any psychiatric history? | | |
| Yes | 20 | 5.2 |
| No | 362 | 94.8 |
| Do you had face any traumatic event? | | |
| Yes | 75 | 19.6 |
| No | 307 | 80.4 |
| How long you have been playing cricket? | | |
| 1-2 years | 99 | 25.9 |
| 3-4 years | 86 | 22.5 |
| 5-6 years | 98 | 25.7 |
| More than 6 years | 99 | 25.9 |
| Do you have any medical condition in present? | | |
| Yes | 26 | 6.8 |
| No | 356 | 93.2 |
| Are you having any medication at present? | | |

| | | | | |
|--------------------|-----|------|------|------|
| Yes | 17 | 4.5 | | |
| No | 365 | 95.5 | | |
| Variable | Min | Max | M | SD |
| Number of Siblings | 0 | 15 | 4.24 | 2.03 |

Note. f = Frequency; % = Percentage, M = mean, SD = Standard deviation

The table 1 presents the demographic characteristics of the sample. The age distribution of the athletes is not balanced, with (74.6%) from 19-24 and (23.6%) from 25-30. A slight majority of the athletes were men 292 (59.2%) and women 156 (40.8%). Single athletes were maximum in number (91.1%) and those of married athletes were minimum (8.1%). The educational level of the athletes were varied athletes who done matric are (19.4%), intermediate (29.6%), graduate 47.9% and others were (3.1%). Those who follow a nuclear family system (44.8%), while 55.2% live in joint family systems. Athletes having household monthly income ranges from 20,000-50,000 were 20.7%, those ranges from 52,000-10, 0000 were 39.3% and those having above 100,000 were 40.1%. Athletes reported having psychiatry history were 5.2% and those who don't have any psychiatry history were 94.8%. Athletes going through some traumatic events were 19.6% and those who didn't receive any trauma in their lives were 80.4%. The duration of athletes cricketing experience were 1-2 years 25.9%, 3-4 years 22.5%, 4-5 years 25.9%, 5-6 year or more 25.7%. Those having any physical medical disease were 6.8% while those who are medically fit were 93.2%. Athletes those using any kind of medicine were 4.5% while those who don't use any medicine were 95.5%. The average number of the siblings is 4.2 ($SD = 2.03$).

Psychometric properties of scales

The following table explains the psychometric properties of the scale sport anxiety scale, temperament and character inventory, perceived stress scale, quality of life scale and athletes subjective performance scale $N=382$

Table 2

Psychometric properties of scales $N=382$

| VAR | | K | α | M | SD | Range | | Skew | Kurt |
|----------------------------------------|--|----|----------|-------|-------|--------|-----------|------|-------|
| | | | | | | Actual | Potential | | |
| Sport Anxiety Scale | | 21 | .96 | 50.68 | 20.41 | 21-84 | 21-84 | .41 | -1.10 |
| Temperament and Character inventory | | 15 | .80 | 21.80 | 3.78 | 15-30 | 15-30 | .23 | -.45 |
| Perceived Stress Scale | | 10 | .78 | 32.80 | 7.88 | 12-50 | 12-50 | .17 | .38 |
| Quality Of Life Scale | | 16 | .96 | 44.72 | 23.29 | 16-110 | 16-112 | .09 | .25 |
| Athlete's Subjective Performance Scale | | 6 | .92 | 31.50 | 15.41 | 6-60 | 6-60 | -.02 | -1.21 |

Note: VAR=Variable, k= no of items, SAS=Sports Anxiety Scale, TCI= Temperament and Character Inventory, PSS= Perceived Stress Scale, QOLS=Quality of Life Scale, ASPS=Athletes subjective Performance Scale

The descriptive statistics and alpha reliability coefficients for the overall instruments employed in study are presented in Table 2. According to Loewenthal (2001), reliability above .60 is considered acceptable. In the present study, the reliability coefficients range from .78 to .96 for the scales. Evidently, the alpha coefficient for reliability estimates for all the measures are at an acceptable level, demonstrating the internal consistency of the scale items and their precision. Indices of skewness and kurtosis show normal distribution of the data within the range -2.96 & +2.96 as per the criteria given by Field (2009).

Correlation among study variables

The following table explain the association between the dependent variables (performance, quality of life) and independent variables (temperament, sport anxiety and stress) N=382

Table 3

Correlation among study variables N=382

| VAR | 1 | 2 | 3 | 4 | 5 |
|------------------------------------------|--------|--------|--------|--------|---|
| 1 Sport Anxiety Scale | - | | | | |
| 2 Quality Of Life Scale | -.51** | - | | | |
| 3 Temperament and Character Inventory | .37** | -.45** | - | | |
| 4 Perceived Stress Scale | .60** | -.45** | .33** | - | |
| 5 Athlete's Subjective Performance Scale | -.60** | .31** | -.55** | -.51** | - |

Note: VAR=Variable, k= no of items, SAS=Sports Anxiety Scale, TCI= Temperament and Character Inventory, PSS= Perceived Stress Scale, QOLS=Quality of Life Scale, ASPS=Athletes Subjective Performance Scale, * $p < .05$, ** $p < .01$.

Table 3 represents the coefficients of correlation among study variables. Results show that sport anxiety is significantly negatively correlated with quality of life ($r = -.51$, $p < .01$). Sport anxiety is negatively correlated with sport performance ($r = -.60$, $p < .01$). Temperament is negatively correlated with quality of life ($r = -.45$, $p < .01$). Temperament is significantly negatively correlated with sport performance ($r = -.55$, $p < .01$). Stress is significantly negatively correlated with quality of life ($r = -.45$, $p < .01$). Stress is negatively correlated with sport performance ($r = -.51$, $p < .01$).

Hierarchical regression analysis

The research used hierarchical regression analysis to determine important psycho-social factors (temperament, sport anxiety and stress) affecting performance and quality of life among young athletes.

Hierarchical Regression Analysis predicting Performance

The following table explain the hierarchical multiple regression between the independent variables (temperament, sport anxiety and stress) and the performance N=382.

Table 5

Hierarchical Regression Analysis predicting Performance (N = 382)

| Variables | B | 95%CI | | SE B | R ² | ΔR^2 |
|-----------|---|-------|----|------|----------------|--------------|
| | | LL | UL | | | |
| Model 1 | | | | | .08 | .08 |

| <i>Constant</i> | 35.55** | 12.24 | 58.86 | 11.85 | | |
|--------------------------------------------------------------|----------|--------------|-----------|-------------|----------------------|-----------------------|
| Age | -6.77** | -11.30 | -2.24 | 2.30 | | |
| Gender | -4.54** | -8.26 | -.82 | 1.89 | | |
| Marital status | 3.14 | -3.26 | 9.56 | 3.26 | | |
| Qualification | 1.52 | -.61 | 3.66 | 1.08 | | |
| Number of Siblings | .35 | -.47 | 1.19 | .42 | | |
| Family System | 3.17 | -.28 | 6.64 | 1.76 | | |
| Family Monthly Income | 2.70* | .47 | 4.93 | 1.13 | | |
| <i>Do you have any psychiatric history?</i> | 7.09 | -1.33 | 15.51 | 4.28 | | |
| <i>Do you have any traumatic event?</i> | -.35 | -4.90 | 4.19 | 2.31 | | |
| <i>From how long, you are playing cricket?</i> | .08 | -1.41 | 1.58 | .76 | | |
| <i>At present, do you have any physical medical disease?</i> | -7.40 | -15.48 | .67 | 4.10 | | |
| <i>At present, are you at any medication?</i> | -3.35 | -13.23 | 6.51 | 5.02 | | |
| <i>Variables</i> | <i>B</i> | <i>95%CI</i> | | <i>SE B</i> | <i>R²</i> | <i>ΔR²</i> |
| | | <i>LL</i> | <i>UL</i> | | | |
| <i>Model 2</i> | | | | | .41 | .32 |
| <i>Constant</i> | 79.68*** | 59.28 | 100.07 | 10.37 | | |
| Age | -.46 | -4.24 | 3.31 | 1.92 | | |
| Gender | -1.63 | -4.69 | 1.43 | 1.55 | | |
| Marital status | -.34 | -5.56 | 4.86 | 2.61 | | |
| Qualification | .94 | -.81 | 2.69 | .89 | | |
| Number of Siblings | -.08 | -.76 | .59 | .34 | | |
| Family System | 3.18*** | .38 | 5.99 | 1.42 | | |
| Family Monthly Income | 1.84* | .01 | 3.66 | .92 | | |
| <i>Do you have any psychiatric history?</i> | 3.94 | -2.88 | 10.78 | 3.47 | | |
| <i>Do you have any traumatic event?</i> | 2.30 | -1.41 | 6.02 | 1.89 | | |
| <i>From how long, you are playing cricket?</i> | .94 | -.27 | 2.16 | .61 | | |
| <i>At present, do you have any physical medical disease?</i> | -2.41 | -9.04 | 4.20 | 3.36 | | |

| | | | | |
|----------------------------------------|----------|--------|------|------|
| At present, are you at any medication? | -7.05 | -15.09 | .99 | 4.09 |
| SAS | -.25*** | -.34 | -.17 | .04 |
| TCL | -1.28*** | -1.68 | -.89 | .20 |
| PSS | -.28** | -.44 | -.12 | .08 |

Note. CI= Confidence Interval, LL= Lower limit, UL= Upper limit

* $p < .05$. ** $p < .01$. *** $p < .001$.

A hierarchical regression analysis predicted subjective performance through the data provided by 382 young cricket players. Subjective performance had an 8% explained variance through demographic predictors (Model 1: $R^2 = .08$, $p < .05$). The significant predictors for subjective performance included age ($B = -6.77$, $p < .01$) and gender ($B = -4.54$, $p < .01$) together with family monthly income ($B = 2.70$, $p < .05$). The model received additional explanatory power with the addition of psychological measurements ($R^2 = .41$; $\Delta R^2 = .32$; $p < .001$) in Model 2. Subjective performance in athletes depends significantly on SAS as well as TCL and PSS according to the results (SAS $B = -.25$, $p < .001$; TCL $B = -1.28$, $p < .001$; PSS $B = -.28$, $p < .01$).

Hierarchical Regression Analysis predicting Quality of Life

Table 4

Hierarchical Regression Analysis predicting Quality of Life (N = 382)

| <i>Variables</i> | <i>B</i> | <i>95%CI</i> | | <i>SE B</i> | <i>R²</i> | <i>ΔR²</i> |
|------------------------------------------------|----------|--------------|-----------|-------------|----------------------|-----------------------|
| | | <i>LL</i> | <i>UL</i> | | | |
| <i>Model 1</i> | | | | | .04 | .04 |
| <i>Constant</i> | 45.02*** | 12.06 | 77.97 | 16.75 | | |
| Age | -8.34** | -14.75 | -1.93 | 3.25 | | |
| Gender | -.77 | -6.02 | 4.48 | 2.67 | | |
| Marital status | 4.72 | -4.35 | 13.79 | 4.61 | | |
| Qualification | .85 | -2.16 | 3.87 | 1.53 | | |
| Number of Siblings | .26 | -.91 | 1.44 | .60 | | |
| Family System | -1.92 | -6.81 | 2.97 | 2.48 | | |
| Family Monthly Income | 3.42** | .27 | 6.56 | 1.60 | | |
| <i>Do you have any psychiatric history?</i> | .61 | -11.31 | 12.54 | 6.06 | | |
| <i>Do you have any traumatic event?</i> | -4.41 | -10.89 | 2.07 | 3.29 | | |
| <i>From how long, you are playing cricket?</i> | -1.85 | -3.98 | .27 | 1.08 | | |

| At present, do you have any physical medical disease? | -4.77 | -16.20 | 6.65 | 5.81 | | |
|-------------------------------------------------------|-----------|--------------|-----------|-------------|----------------------|-----------------------|
| At present, are you at any medication? | 10.37 | -3.60 | 24.34 | 7.10 | | |
| <i>Model 2</i> | | | | | .37 | .32 |
| <i>Constant</i> | 103.70*** | 74.74 | 132.65 | .00 | | |
| Age | -.13 | -5.51 | 5.24 | .96 | | |
| Gender | 3.56 | -.78 | 7.91 | .10 | | |
| Marital status | -.20 | -7.61 | 7.20 | .95 | | |
| Qualification | .00 | -2.47 | 2.49 | .99 | | |
| Number of Siblings | -.51 | -1.48 | .45 | .29 | | |
| <i>Variables</i> | <i>B</i> | <i>95%CI</i> | | <i>SE B</i> | <i>R²</i> | <i>ΔR²</i> |
| | | <i>LL</i> | <i>UL</i> | | | |
| Family System | -1.38* | -5.36 | 2.60 | .49 | | |
| Family Monthly Income | 2.64 | .05 | 5.22 | .04 | | |
| <i>Do you have any psychiatric history?</i> | -3.95 | -13.68 | 5.76 | .42 | | |
| Do you have any traumatic event? | -1.717 | -7.04 | 3.61 | .52 | | |
| From how long, you are playing cricket? | -.726 | -2.46 | 1.01 | .41 | | |
| At present, do you have any physical medical disease? | 3.281 | -6.13 | 12.70 | .49 | | |
| At present, are you at any medication? | 4.382 | -7.05 | 15.82 | .45 | | |
| SAS | -.25*** | -.37 | -.13 | .00 | | |
| TCL | -1.22*** | -1.78 | -.66 | .00 | | |
| PSS | -.77*** | -1.00 | -.55 | .00 | | |

Note. CI=Confidence Interval, LL= Lower limit, UL= Upper limit, * $p < .05$. ** $p < .01$. *** $p < .001$.

The demographic variables in the hierarchical multiple regression analysis evaluated future quality of life levels for 382 young cricket players. Quality of life demonstrated changes amounting to 4% due to demographic factors ($R^2 = .04$, $p < .05$). Quality of life scores were reduced by -8.34 when participant age values increased independently while quality of life scores increased by 3.42 based on family monthly income in statistical terms of $p < .01$ and $p < .05$ respectively. The combination of demographic data with psychological factors SAS, TCL and PSS in Model 2 boosted the model prediction abilities to reach $R^2=.37$ ($\Delta R^2=.32$ $p<.001$). Quality of life prediction results show high correlation from SAS ($-.25$ $p < .001$) as well as TCL (-1.22 $p < .001$) together with PSS ($-.77$ $p < .001$) indicating psychological factors exert substantial impact on athletes' life quality.

Mean differences across GENDER of study variables (independent sample t-test)

The following table explain the mean differences across gender of the study variables N=382

Table 6

Mean differences across GENDER of study variables N=382

| Variable | Men | | Women | | | | | | |
|----------------------------------------|-------|-------|-------|-------|--------|-----|-------|-------|-----------|
| | N=226 | | N=156 | | 95% CI | | | | |
| | M | SD | M | SD | t(382) | p | LL | UL | Cohen's d |
| Perceived Stress Scale | 31.15 | 10.36 | 33.27 | 9.17 | -2.09 | .03 | -4.10 | -1.31 | .21 |
| Athlete's Subjective Performance Scale | 33.07 | 15.10 | 29.25 | 15.62 | 2.39 | .01 | .67 | 6.96 | .24 |

Note: M = Mean; SD = Standard deviation; p =significance level; LL = Lower limit; UL = Upper limit

Table 6 shows independent samples t-test is conducted to compare athlete gender (men and women) scores across study variables. The results revealed significant gender differences for stress and sports performance. Men scored (M=31.15, SD=10.36) higher than women (M=33.27, SD= 9.17) in [t (382) =-2.09, p=.03]. The value of Cohen's d is .21 which indicates a small effect size. Like wisely, men also scored (M=33.07, SD=15.10) higher than women (M= 29.25, SD= 15.62) on subjective sports performance scale [t (382) =2.39, p=.01]. The value of Cohen's d is .24 that indicated small effect size.

DISCUSSION

Furthermore, research conducted in Pakistan on domestic cricketers found a negative relationship between sports anxiety with emotional intelligence and quality of life (Ahmad & Safdar, 2020). Emphasizing that anxiety reduction strategies can be vital in improving athletic performance the result is supported by a study which was conducted on athletes and non-athletes upon gender. The result gathered from the present study are also compatible with a study of (Rice et al., 2019), which shows that emotional intelligence and quality of life are negatively affected by sports anxiety. According to another study conducted in Pakistan also revealed the negative impact of sports anxiety on emotional intelligence and quality of life among university students (khan, 2013). A study was conducted on young Olympic Games participants, which results higher quality of life and emotional intelligence leads to lower anxiety level among Young Olympic Game participants (Ledochowshi et al., 2012) also find that sports anxiety has negative effects on quality of life and negative correlation of sports anxiety and intelligence. Research has indicated that sportspersons with higher levels of anxiety and stress are also likely to experience lower quality of life, i.e., lower self-esteem, social withdrawal, and poorer academic performance (Nicholls et al., 2012).

The influence of sport anxiety on performance has also been widely documented. Studies have consistently found sport anxiety with the highest degree of stress level has been proven to perform badly while under pressure (Hanton et al., 2019). Because of the detrimental effects that sports anxiety has on performance and quality of life, psychological interventions are increasingly visible in sports psychology. Science shows that relaxation, cognitive restructuring, and mindfulness-based interventions have been

found to significantly reduce levels of anxiety in athletes (Baltzell, 2019). Coaches and sports psychologists can employ evidence-based strategies such as positive self-talk and imagery training to support athletes in emotion regulation and resilience (Duda, 2018). Also, developing a positive team culture of healthy communication and positive mental health can result in decreased anxiety levels and improved performance outcomes

The relationship between stress, anxiety, and performance is complex and bidirectional. On one hand, stress and anxiety can unfavorably effect sport performance by impairing cognitive function, decreasing motivation, and reducing physical capabilities. For example, elevated degree of stress and anxiety can direct to decreased focus, increased errors, and reduced reaction time, ultimately affecting an athlete's overall performance (Wilson, 2018).

On the other hand, sport performance can also influence stress and anxiety levels. For example, a poor performance can lead to increased stress and anxiety, while a good performance can decrease stress and anxiety levels (Thomas et Al., 2008). Additionally, players who experience high level of stress and anxiety may be more expected to engage in unhealthy coping techniques, for example dodging or drug addiction, which can more enhance stress and anxiety (Gould, 2019).

Extant research unequivocally highlights significant gender differences in stress and performance, with male athletes generally outperforming their female counterparts in strength-based sports, whereas female athletes tend to excel in endurance and coordination-based sports (Lloyd et al., 2012). Nonetheless, empirical studies suggest that female athletes are disproportionately predisposed to experiencing elevated levels of sports anxiety and stress, largely attributable to sociocultural pressures, body image concerns, and self-perceived competence issues (Krane, 2001).

A recent investigation conducted by Rice et al. (2019) revealed that elite female athletes reported significantly higher anxiety levels and stress as compared to their male counterparts, which may ultimately compromise their ability to perform optimally under pressure.

CONCLUSION

The complex relationship between sport anxiety and stress and their effect on performance and quality of life of young athletes depends on varied psychological and emotional elements and environmental conditions. The results of this research illustrate how sport anxiety and stress and disclose comprehensive functional relationships between cognitive components and performance collectively with quality of life and overall well-being.

The study's findings also highlight the significance of evolution useful managing strategies and stress governing techniques to lessen the unpleasant influences of sport anxiety and stress on sports performance and quality of life. Coaches, trainers, and sports psychologists can play a pivotal role in instructing athletes in essential life skills, such as stress management, emotional regulation, and resilience, and in fostering a positive, supportive, and inclusive team culture that prioritizes athlete well-being. Furthermore, parents, coaches, and sports administrators have a critical responsibility to prioritize the holistic well-being and quality of life of young athletes, rather than solely focusing on their athletic performance and achievements, thereby ensuring that the physical, emotional, and psychological needs of young athletes are met and supported.

Research conclusions provide essential value for the sports industry in advancing plans for whole health promotion of competitive young athletes. Sports organizations achieve aggressive strain reduction in youth athletes through strict athlete training length regulations and competition timetables and travel distance limits. The organizations enact guidance systems which enables sustainable athletic participation opportunities for youth athletes.

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