Impact of Sports Anxiety on Sports Performance of Players

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ABSTRACT
This study aimed to assess the impact of sports anxiety on sports performance of players. The sample was comprised of 110 sports players (68 males, 42 females). The data was collected by using the probability sampling technique of purposive sampling from Sports Players that belong to Bahawalpur and Multan cities of Punjab Province. The age range of the respondents of this cross-sectional research was from 18 to 35years. Demographic information such as age, gender, qualifications, Area, marital status, socioeconomic status and which kind of sport they play were also asked from them. Two questionnaires were utilized for the purpose of data collection, one was a 15-item, The Sport Competition Anxiety Test and the second was a 6-item, Athlete’s Subjective Performance Scale. After data collection, SPSS (1.0.0.1406 latest 21 version) was used for the analysis. The findings showed that if the sports anxiety increases, the sports performance of the player will decrease and vice versa (r=-.33). Moreover, sports anxiety was also a significant predictor of sports performance. The results also revealed no significant gender differences in sports anxiety and sports performance.

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1. Introduction
Anxiety is characterized by complicated adverse feeling, comprising of the combination of physical, psychological and cognitive symptoms(Martens, Burton, Vealey, Bump, & Smith, 1990). A lot of researches has been conducted on anxiety where the athletes were the subject of investigation (Sewell & Edmondson, 1996). It can be stated that no other psychological attributes than anxiety is devastating for the overall performance (Martens et al., 1990). Anxiety is assumed to deteriorate the athletes which results in reduction of overall performance (Hanin, 2000; Weinberg & Gould, 2010). This unanticipated dimension of competitive anxiety is getting more attention in psychology of games and exercise. There are many interventions of anxiety are being evidenced for to reduce anxiety level. (Martens et al., 1990).It was found that “sports psychologist have believed that high intensity of anxiety in the course of competition is harmful, worsening performance and even a significant factor to dropout”(Raglin & Hanin, 2000). Usually, anxiety has the propensity to intimidate the well-being of a person because it elevate someone's worries and uncertainties (Landers, 1997). The athletes overall performance in the sports is affected by anxiety (Cox, Qiu, & Liu, 1993; Raglin & Hanin, 2000). The influence of the anxiety is known as the determinant of victory or defeat by the athletes (Sanderson, 1989). “Anxiety and sports activities are deeply related with each other”. It is also stated that anxiety should not always perceived as a bad emotion, rather it could motivate the player to more focused and alert performance (Robinson & Freeston, 2015). A study also concluded that the anxiety could strike more to the female players which could be resulted in low performance (Correia & Rosado, 2019). A balance stage of anxiety can
produce higher result in sports. According to different researcher’s opinion consequences of anxiety could be studied in three perspectives like physical, intellectual and behavioral (Robinson & Freeston, 2015).

Anybody can experience mental problems at any stage of his life, which include pressure, depression and anxiety (Hasanah & Refanthira, 2019). Consequently, despite having mature organized strategies and hard work, athlete can under-perform in the game. Only the physical training or right strategy cannot predict the optimal level of performance. Athletes and their instructors must be cognizant that psychological factors also perform an indispensable part in the whole performance. Psychology is considered as one of the crucial component in gaining overall high performance in sports (Dosil, 2006). A former tennis player, Jimmy Connors stated that 95% of the tennis game depends on mental condition. When a person feels anxiety, his mind and body are involved in reacting in a natural way. In fact brain and body act like alarming devices when hazard or threat is perceived by the individual. When brain respond to the threat, the physical symptoms of anxiety is witnessed. “A negative emotion have an effect on perceptions in sports competitions, where a majority of athletes think about anxiety to be devastating towards performance, which ultimately can lead to decrease in performance” (Raglin & Hanin, 2000; Weinberg & Gould, 2010). Researches confirmed that throughout the game, an athlete used to manage his/her level of anxiety (Humara, 1999). In the field of psychology and sports, anxiety is the most studied paradigm, it has also become the most investigated variable that could impact athlete’s performance (Cox, 2003).

2. Competitive Anxiety

Competitive anxiety is defined as a sentiment of worry when an upcoming situation is perceived as threatening by the individual. A type of anxiety which is perceived due to a state of competition or disagreement is characterized as competitive anxiety (Mellalieu, Hanton, & Fletcher, 2009). When an athlete with low self-esteem feels endangered of being faced by challenges and then he recalls his ability to perform, this scenario is called competitive anxiety (Smith, Smoll, & Schutz, 1990). Competitive Anxiety carries four quantifiable characteristics (Smith et al., 1990):

- Cognitive aspect is characterized by the signs and symptoms of anxiety associated with thought process e.g. inability to concentrate, thinking about irrelevant stuff, problematic and interruptive thoughts.
- Affective aspect is comprised of symptoms of anxiety displayed in the form of feelings e.g. feeling of hopelessness, carelessness and self-loathing.
- Somatic component is related to physiological symptoms of anxiety e.g. heart palpitation, excessive urination, cold or hot flashes or insomnia in extreme cases.
- Motor problem is related to the signs of anxiety resulted in muscular tension, it could include shuddering, frowns, burden on feet, scrambling head or stretched muscles.

3. Components of Anxiety

It has been diagnosed for many years that psychological factors play a crucial function in competition. In this manner, the relationship among anxiety and athletic performance is broadly studied. The multidimensional theory shows that aggressive anxiety consists of two subcomponents, cognitive and somatic, enduring an effect on overall performance (Liebert & Morris, 1967). The first one is cognitive anxiety, described as the mental component of anxiety and in game usually manifested by using negative expectations and negative self-evaluation. There may be a bad linear relation among cognitive anxiety and overall performance. The cognitive elements of anxiety ascends due to worry of bad opinions, fear of failure, and lacking self-esteem (Martens et al., 1990). It is the intellectual element, which is described via poor anticipations about fulfillment or self-evaluation, poor conversation with oneself problems about whole performance, metaphors of failure, incapacity to ponder and disturbed attention (Jarvis, 2006; Martens et al., 1990). Cognitive anxiety is further divided into two types, state and trait anxiety:

- Individual’s feelings about some specific moments are referred to as state anxiety. This is a subjective type of anxiety (Alexander & Krane, 1996; Conroy & Metzler, 2004).
Trait anxiety is an unsightly feeling and is the persona of the athlete and it is felt because athletes are categorized as anxious.

The second one is somatic anxiety which carries the physical components of anxiety e.g. profligate heart rate, sweaty palms, and shortness of breath, stretched muscles and nervousness. It is recommended that the relationship among somatic anxiety and overall performance is inverted u shaped, decreased or increased somatic anxiety is the determinant of high or low performance (Jarvis, 2006; Martens et al., 1990). Another research also suggested that the somatic anxiety is comprised of physiological reactions of the human body, which contains palpitation, respiration and muscular tension. These bodily signs are the result of psychological stress, which create anxiety in the athlete before appearing in the game and results in unsatisfactory performance (Kremer, Lavallee, Williams, & Moran, 2004).

4. **Theoretical Framework**

Five theories are being mentioned here for the explanation of the purposed relationship:

- Inverted-U hypothesis (Yerkes & Dodson, 1908)
- Multidimensional Anxiety Theory(Humara, 1999)
- Catastrophe Theory (Hardy & Parfitt, 1991)
- Drive Theory (Taylor, 1956)
- functioning Hypothesis(Hanin, 2000)

These theories briefly explain the association between sports anxiety and athlete’s performance. Present study is a vital addition in the literature, exploring that the minimization of the anxiety can help in performing better in sports.

5. **Methods**

5.1 **Research design, Sample and sampling strategy**

This study was quantitative in nature and cross sectional research design was used. The data were collected through probability sampling technique purposive sampling. The sample comprised of 110 sports players (68 males, 42 females). The participants were recruited by sending the online survey through various social media channels such as Email, whatsapp etc. So, data were collected from Bahawalpur and Multan cities of Punjab Province. The sports players aged 18-35 years were included in this research only. All those participants who diagnosed with any clinical disorder were excluded from the research.

5.2 **Research Tools**

Following scales was used in the present research:

- the Sport Competition Anxiety Test (SCAT) (Martens, 1977)
- Athlete’s Subjective Performance Scale (ASPS) (Nahum et al., 2016)

5.2.1 **The Sport Competition Anxiety Test (SCAT)**

A 15 item, self-report questionnaire, the Sport Competition Anxiety Test (SCAT) (Martens, 1977) was utilized to evaluate anxiety of athletes in a competitive situation. Response format is a 3 point Likert scale. From overall 15 items, all the 15 items were used to measure anxiety. The score of 15 items was summed up. Less than 17 score indicates low anxiety, scores from 17 to 24 show average anxiety and more than 24 score shows the higher level of anxiety in athletes.

5.2.2 **Athlete’s Subjective Performance Scale (ASPS)**

Athlete’s Subjective Performance Scale (ASPS) (Nahum et al., 2016) is a 6-items scale which appraise the subjective assessment of athlete about his or her performance in the team. The response format is a 10 point Likert scale, ranging from 1=not at all and 10=completely satisfied. The obtained scores were summed up to determine the subjective performance.

6. **Results**

The results in the Table 1 revealed significantly negatively correlation between sports anxiety and sports performance. The results in the Table 2 reveal that sports anxiety is strong
predictor of sports performance ($R^2 = .110, p < .01$). The results in the Table 3 show that mean score of sports anxiety and sports performance is higher among female sports players.

| Table 1: Correlation between Sports Anxiety and Sports Performance (N=110) |
|-------------------------------------------------|-----------------|-----------------|
| Variables                                      | Sports Anxiety  | Sports Performance |
| Sports Anxiety                                 | -               | -.331            |
| Sports Performance                             | 1               | -               |

**p < .01

Table 2: Regression analysis of sports anxiety and sports performance (N=110)

| Predictors                        | Model 1 $\beta$ | Sports Performance, 95% CI |
|-----------------------------------|-----------------|---------------------------|
| Constant                          | 10.623          | [8.766, 12.480]           |
| Sports Anxiety                    | -2.853          | [-4.402, -1.303]          |
| $R^2$                             | .110            |                           |
| F                                 | 13.313          |                           |

**p < .01; $\beta$ = Unstandardized regression coefficient; CI = Confidence interval

Table 3: Independent Sample t-test for gender difference between Sports anxiety and Sports performance (N=110)

| Variable                     | Male (n=68) | Female (n=42) | t     | LL    | UL    |
|------------------------------|-------------|---------------|-------|-------|-------|
| Sports Anxiety               | 1.152 (.212)| 1.229 (.179)  | 2.036 | .002  | 1.151 |
| Sports Performance           | 7.059 (1.739)| 7.57 (1.723)   | 1.499 | -.166 | 1.183 |

Note: CI = Confidence interval, LL = Lower Limit, UL = Upper Limit

7. Discussion

The results showed that sports anxiety and sports performance are negatively correlated with each other. The supports anxiety increases the performance of athlete decreases. Some studies contradict the findings of this study, stating that there may be a linear relationship among sports performance and sports anxiety (Martens et al., 1990). The results findings also showed a significant impact of sports anxiety on sports performance. The results of this study are supported by the previous literature in which a study showed significant positive correlation between sports anxiety and sports performance of players. Furthermore most of the athletes interpret anxiety as a negative factor for their overall performance (Duda, 1998). Athletes also consider anxiety as a deterioration of performance (Raglin & Hanin, 2000; Weinberg & Gould, 2010). Therefore, to gain the maximum performance, athletes should overcome their anxiety.

Findings showed significant differences regarding gender differences that in sports anxiety and sports performance. Thus the mean scores of sport anxiety and performance is higher among female players as compare to male players. The results of this study are also supported by the previous literature in which a study showed that female athletes showed more anxiety than males and higher level of competitive anxiety and worries (Kristjánsdóttir, Erlingsdóttir, Sveinsson, & Saavedra, 2018; O'Donoghue & Neil, 2015; Yang et al., 2007), while male players indicated disruptive attention (Grossbard, Smith, Smoll, & Cumming, 2009). The reaction towards anxiety among players varies among different players (Raglin & Hanin, 2000). Consequently, according to the results and the above discussed literature, sports anxiety and sports performance is higher among females as compared to males.

8. Conclusion

According to the findings it was concluded that there is a significant negative relationship between sports anxiety and sports performance among the players. This study concludes that sports anxiety is significant predictor of sports performance among sports players. It was also concluded that female players have high level of sports anxiety and are have more subjective performance as compared to male sports players. On the basis of findings and conclusion the researcher recommended for future implication that:

- Different awareness program may be conducted about anxiety and its effects on performance
Athlete may be kept aware about different psychological factors affecting their performance
Athlete may be kept aware about different physiological factors affecting their performance
Athlete may be kept aware about different behavioral factors affecting their performance.

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