



Measurement of competition level anxiety of university level players by using scat in north zone in India

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Abstract

Introduction: One of the psychology factors that are believed to have an effect on athletic performance is the level of anxiety experienced prior to an athletic contest. This is referred to in the literature as pre-competitive anxiety (PCA). PCA has both positive as well as negative role in performance.

Objective: The aim of this study is to measure pre-competition anxiety (PCA) level among inter-university women football team of North zone.

Methodology: Study design: Present study was a cross-sectional study. Sample size: 46. Sex: Female. Number of teams: 3.

Protocol: All participants completed SCAT (Sports Competition Anxiety Test) questionnaire for measuring pre-game anxiety. The teams were ranked according to their performance in the tournament (KUK ranked 11, MDU ranked 6 and DU ranked 1).

Statistics: Data were analyzed using IBM SPSS v21.0 software.

Results: All teams had average level of anxiety (SCAT score present between 10 and 25).

Conclusion: the present study supports that every team had moderate level of Pre Competition Anxiety that varies from team to team.

Keywords: PCA, SCAT, team, football

1. Introduction

Athletes experience anxious thoughts just before the important games and tournaments due to the expectation from self, coaches and team management [1, 2]. These thoughts can influence the on-field performance either positively or negatively depending on the personality type of athletes, experience [3], mental skill [4], strength of opponent team [5], strength of own team [6] etc. [7].

Anxiety can be defined as the tensions or worries due to stress team sports- important matches. There are two forms of anxiety trait and state. Trait anxiety is a personality of an individual who respond to the situations in a same manner over the period of time and is stable. Whereas state anxiety is situation-specific that occurs just before the situation. Among the two types, state anxiety plays a significant role on performance especially in important tournaments, games. Literature describes this as pre-competition anxiety (PCA). PCA has both positive as well as negative role on performance of individual players which translates into team performance. Performance of players improves with increasing anxiety, literature describes this as arousal, level up to the extent [8, 9]. If the anxiety crosses certain limits, the player will lose the control and their performance started to decrease [10, 11]. Many researchers conducted experiments to see the association between anxiety and performance [12, 13].

During the 1980s and thereafter, sport-specific trait anxiety has frequently been assessed using the Sport Competition Anxiety Test (SCAT) [14], a uni-dimensional measure that does not distinguish between or measure differences in somatic and cognitive anxiety. The aim of this study is to measure the level

of Pre Competition Anxiety in inter-university women football team players.

2. Methodology

2.1 Study design: Present study was a cross-sectional study.

2.2 Sample size

3 teams of north zone (KUK, Kurushetra, MDU Rohtak and DU, Delhi) were recruited for this study. 46 players of team who participated in all-India inter-university tournament held at GJUST, Hisar, were invited to join this study by explaining the purpose. Prior to contacting players, permission was requested from team coaches. Written informed consent was taken from every player who volunteered to the study.

2.3 Instrument used

Sport Competition Anxiety Test (SCAT) developed by Rainer Martens in 1977 was used to measure sports related competition anxiety.¹⁴ All 46 players were requested to fill SCAT questionnaire independently. SCAT contains 15 items, which include 5 spurious items, 8 positive items and 2 negative items. Each item had three possible responses i.e. (a) Rarely (b) Sometimes (c) Often. 10 measure (item 2, 3, 5, 6, 8, 9, 11, 12, 14, 15) symptoms associated with anxiety. The five spurious questions (1, 4, 7, 10, and 13) are not scored. To make the instruments more relevant to the players in this study, the phrase "sports and games" was replaced with the word "football" etc. The lowest possible score is 10 on this test and the highest possible score is 30. A low score indicates low anxiety and a high score indicates high anxiety.

2.4 Protocol

The procedure and the purpose were briefly explained to all the players before administering the SCAT test. All participants completed SCAT form approximately 2 hours before the game to allow the proper preparation of individual team and require approximately 5 minutes completing the form. The teams were ranked according to their final position in the tournament.

3. Statistics analysis

Data was analyzed using IBM SPSS (version 21.0) software.

4. Results

All 46 players who participated in the study were from North Zones (3 universities) of the country. All teams had moderate level of PCA (SCAT score between 10 and 25). Mean SCAT score 17.7 fell within the lower end of moderate anxiety level (Table 1).

Table 1: Descriptive statistics and spearman's correlation of team SCAT score and rank based on final performance (individual n=46; team n=3)

S. No	Team Code (n)	Zone	Rank	SCAT Mean± SD	Low Score	High Score
4	Team 4 (18)	North	1	17.39±4.03	13	24
5	Team 5 (12)	North	11	21.17±2.08	18	25
6	Team 6 (16)	North	6	14.81±2.14	10	18
		Total		17.79±2.75		

5. Discussion

The aim of this study was to measure the anxiety level and see the relationship between anxiety and performance of each player who participated in the study. Ethiopian university level male football players scored less SCAT score (mean 16.47) than present study (mean 18.7) [15]; Similarly Indian district level male soccer players had mean SCAT score of 17.85 [16]. Generally females show more anxiety than males in different sports partly because of biological factors and societal expectations [17, 18]. Result of this study indicates that there was a moderate negative correlation between PCA and performance. The importance of this study is the association is within moderate level of anxiety in all teams. Literature shows that both low as well as high anxiety will decrease the performance [8-10]. PCA is one of the several psychological factors that are believed to have a significant effect on athletic performance [12, 19].

Our study mean SCAT score supported by in Indian college level volleyball players [20]; Indian university level field hockey players [21, 22]; Indian college level and academy level cricketers [23, 24]. Sports physiotherapists, psychologists and coaches who are having experience in these techniques could be employed to reduce anxiety level just before the important team sports tournaments [25, 26].

6. Conclusion

The result of the present study demonstrates moderate negative correlation between PCA and performance in Indian university level women football players. It is recommended that investigate the level of anxiety and then prove solution to the players so that they achieve their goal.

7. References

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