

## Correlation between Anxiety and Mental Skill in University Volleyball Male Players

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### Abstract

*Introduction:* Many athletes who perform well during training or practice can suffer from performance anxiety on game day. *Purpose of the Study:* The purpose of the study was to find out the correlation between Anxiety and Mental skill among University male volleyball players.

*Methodology:* A total of 15 university Volleyball male players were selected as subjects from different colleges affiliated to Karnatak University, Dharwad St: Karnataka, The ages of players were between 20 to 25 years. All the subjects completed Ottawa and SCAT questionnaire for measuring their mental skill and competitive anxiety. *Results:* 't' -test was employed to evaluate the SCAT questionnaire and Pearson correlations method was used to assess the correlation between anxiety and mental skill. The results showed that there was a significant correlation between mental skill and competitive anxiety in university volleyball male players ( $p < 0.05$ ). *Conclusion:* The present study findings shows that it is important that sportsmen are classified according to the type of sport & type of event in order to judge the differences between different games and to identify methods by which they can achieve high levels of performance in their sports. The psychological training needs to be provided by the coaches along with the physical training and under psychological training, it is imperative that players are trained how to face stressful situations occurring during the competitions.

### Introduction

Many athletes who perform well

during training or practice can suffer from performance anxiety on game day. If feelings of nervousness, anxiety or fear

interfere with the sports performance, learning to use a few tips from sports psychology may help them get their anxiety under control and reduce game day nerves. Competition in games put extremely high expectations on the competing athletes regardless of competitors' capacities, reasons for participation and skill levels. An inherent aspect of athletics is the need for players to meet the demands of the competition and to perform well under pressure (Craft et al, 2003). Some of the researchers have explored the roles that situational factors play in mediating the state anxiety of athletes prior to competitions. (Jones, et al, 1991; Matheson and Mathes, 1991).

Anxiety is defined as feelings of nervousness and tension caused by the environment or surrounding expectation that is related to 'arousal'. Those demands are usually stressful and thus may cause an imbalance between the demands and the athlete's ability to fulfill the expectations. These sorts of conditions place high stress loads on the individuals who are competing. The stress presented in competition usually elicits anxiety in athletes, supplying an additional element for them to manage. When anxiety is not directed or construed correctly, athletes lose control and performance levels (Aufenanger, 2005; Bridges and Knight, 2005). All these years, an increase in performance has been the foundation need of what dreamed by all athletes to stand out in their respective sports. Athletes train hard to help their skills and faculty's regardless of the time they take to fulfill

this (Parnabaset al, 2009). When anxiety is not managed or explained correctly, athletes lose control and their performance levels decrease (Weinberg & Gould, 2010). It is not possible that fatigue and anxiety are synonym with sport across different cultures with the kind of stress present in each society. Although there is a lot of information on subjects of fatigue and anxiety, it is only recently that the researchers have initiated performing studies on the correlation between fatigue and perception on anxiety. Anxiety has been one of the most thoroughly inspected topics in sport psychology literature (Khodayari et al, 2011). Among the popular coping strategies used by athletes to deal with anxiety are goal-setting, breath control, imagery, positive self-talk, focus on the present, progressive relaxation, biofeedback, autogenic training, meditation and thought stopping (Parnabas, et al 2009). Therefore, there need to be a positive thinking and better mental skills to solve the problems that may arise because of anxiety. If it is not handled well or misinterpreted, athletes will lose control and their performance will decrease (Gualberto, and Wiggins, 2008).

### Materials & Methods

*Subjects:* A total of 15 university male volleyball players were selected as subjects from different colleges affiliated to Karnatak University, Dharwad St: Karnataka, The ages of players were between 20 to 25 years.

*Administration of Questionnaire & Procedures:* All the subjects completed questionnaires of Ottawa (OMSAT3) and

Rainer and Martin's Sports Competition Anxiety Test (SCAT) for measuring their anxiety a day and 30 minutes before competition.

*Sports Competition Anxiety Test (SCAT)*: This test measures the anxiety of athletes (Marten et al, 1990). This test was used to evaluate the anxiety level of university male volleyball players. The test includes fifteen items which involve 5 spurious items, 8 positive items and 2 negative items. Trait anxiety was measured by Martens' 9 Sport Competition Anxiety Test (SCAT). The SCAT is a 15-item inventory with scores ranging from 10 (low) to 30 (high).

*Ottawa Mental Skill Assessment Tool-3 (OMSAT-3)*: OMSAT-3 is used to measure a wander of mental skills. The OMSAT-3 involves 48 items and 12 mental skill groups, which are grouped under three main general idea components. They are 1) Goal Setting 2) Self Confidence 3) Commitment 4) Stress Reactions 5) Fear Control 6) Activation 7) Relaxation 8) Imagery 9) Mental Practice 10) Focusing 11) Refocusing and 12) Competition planning. A 7-point Likert scale is used, ranging from strongly agree to strongly disagree with a neutral option available.

*Statistical Analysis*: Values are presented as mean values and SD. T-test was employed to evaluate the SCAT questionnaire and Pearson correlations method were used to assess the correlation between anxiety and mental skill. The significance level was determined as

$p < 0.05$ . Data was analyzed using SPSS Version 16.0 (Statistical Package for the Social Sciences, version 16.0, SSPS Inc, Chicago, IL, USA).

**Table 1: Results from descriptive statistic and correlation between mental skills and anxiety**

Mental skills and their subscale	Mean	± SD
Activation	0.57	±6.25
Cognitive Skills	0.39	±3.55
Commitment	0.89	±4.62
Competition Planning	1.09	±7.52
Fear Control	1.02	±3.82
Focusing	1.07	±3.63
Foundation Skills	0.65	±7.10
Goal Setting	0.62	±5.08
Imagery	1.21	±6.86
Mental Practice	0.78	±6.11
Mental Skills	0.34	±3.67
Psychosomatic Skills	0.48	±3.25
Refocusing	0.88	±4.81
Relaxation	0.79	±6.71
Self Confidence	0.61	±6.96
Stress Reactions	0.92	±3.26

## Results

The results show that there is a significant correlation between mental skills and anxiety ( $p < 0.05$ ). There were significant correlation between anxiety and subscales of mental skills, mental practice, refocusing, fear control, goal setting, focusing, self confidence, psychosomatic skill, cognitive skills and mental skill ( $p < 0.05$ ). There was no significant correlation between anxiety and subscales of mental skills, stress reactions, Commitment, relaxation, activation, imagery, competition planning, foundation

skills ( $p>0.05$ ). High level correlation was found between self-confidence and anxiety ( $r=0.519$ ) and low correlation was found between commitment and anxiety ( $r=0.121$ ). Higher level of correlation, among psychosomatic skills subscales was found between stress control and anxiety ( $r=0.529$ ) and low correlation was found between activation and anxiety ( $r=0.179$ ). Higher level of correlation of cognitive skills subscales was found between focusing and anxiety ( $r=0.673$ ) and a low level correlation was found between image and anxiety ( $r=0.316$ ). Higher level of correlation mental skills subscales (psychosomatic skill, cognitive skills and foundation skills) was between cognitive skills and mental skills ( $r=0.612$ ) and a low level correlation was found between foundation skills and mental skills ( $r=0.289$ ). This cross sectional study examined the correlation between mental skills and anxiety in university male volleyball players. As a corollary analysis, the correlation between mental skills and the intensity of anxiety was measured by the SCAT and OMSAT-3. As a major finding in this study, there were correlations between the mental skills and anxiety of female athletes. Because all athletes were examined together in this phase to see how different mental skills might affect the ways in which athletes interpret their feelings of anxiety. Because of the small sample size, the three types of mental skills that measured by the OMSAT were examined partly in relation to the SCAT subscales representing anxiety [Filino et al, 2009]. It is found that a

significant correlation exists between mental skills and anxiety ( $p<0.05$ ). The main finding of this study was consistent to research results from Filino et al. (2009). Aufenanger (2005), in their study showed that a correlation exists between mental skills and anxiety were predictive athletes' interpretation of anxiety and self-confidence as facilitator to their performance

*Conclusion and Suggestions:* It is confirmed that there is a correlation between mental skills and anxiety of university male volleyball players. Further studies in this respective field & other games should be performed in deeper and wider contexts that will consider athletes from other organizations. It is important that researchers categorize athletes based on the type of sport, in order to determine differences between different sports and to identify methods by which they can achieve high levels of performance. The psychological training has to be provided by the coaches along with the physical training and under psychological training, it is imperative that players are trained how to face stressful situations occurring during the competitions.

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