



## Competitive State Anxiety among College Football Players

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Received Dec 28, 2017; Accepted Jan 23, 2018; Published Jan 25, 2018

### Abstract

The aim of the present study was to evaluate the levels of intensity and direction of the competitive state anxiety in university football players prior to a competition and to investigate any possible differences between male and female players, as well as in relation to their athletic experience. The sample of the study consisted of 115 football players. For the data collection, the model used was the Competitive State Anxiety Inventory-II (CSAI-II, Martens, Burton, Vealey, Bump & Smith, 1983; Martens et al., 1990; Jones & Swain, 1992). All players filled in the questionnaire 30 minutes before the competition. The results showed that male football players reported lower scores of cognitive anxiety, which was facilitative to performance. On the other hand, females displayed a higher score in cognitive anxiety, which was rather debilitating to performance. Furthermore, male football players displayed higher self-confidence, with positive effects on their performance, while female football players stated lower self-confidence, which was neither facilitative nor debilitating to performance. In relation to years of experience, the results revealed that players with four to six years of experience showed higher self-confidence with facilitating direction, while players with less years of experience displayed lower self-confidence, with neither facilitative nor debilitating effects on their performance. In conclusion, the psychological preparation of college football players must be taken into serious consideration, during the coaching procedure. Nonetheless, further investigation is needed for the generalisation of the results in college football.

**Key Words** -State Anxiety, Football Players.

### **1. Introduction:**

It is generally recognized that psychological factors are of crucial importance in high-level competitive sports. The relation between anxiety and performance has been the subject of many thorough researches (Craft, Magyar, Becker & Feltz, 2003; Parfitt & Pates, 1999; Martens, Vealey & Burton, 1990). Cognitive anxiety is characterised by negative concerns and worries about performance, inability to concentrate, and disrupted attention (Krane, 1994). Somatic anxiety consists of an individual's perceptions, which are characterised by indications such as sweaty palms, butterflies, and shakiness (Martens, Burton, Vealey, Bump & Smith, 1990). Research has also been done on the gender differences concerning state anxiety levels. Self-confidence tends to decrease in females on the day a competitive event is to occur. Male young athletes typically display lower levels of anxiety and higher self-confidence than female athletes (Scanlan & Passer, 1979; Wark & Witting, 1979). Krane and Williams (1994) found no gender differences for cognitive anxiety. They also demonstrated that the more experienced college player would show lower levels of cognitive and somatic anxiety than the less experienced player. As far as football is concerned, Roguli, Nazor, Srhoj and Bozin (2006) supported that it is a sport, which includes complex and accurate motor skills, and they suggested that psychological factors play an even more decisive role in a competition, differentiating between successful and less successful teams. The purpose of the present study was to evaluate the levels of intensity and direction of the competitive state anxiety in college football players prior to a competition and to investigate any possible differences between male and female players, as well as in relation to their athletic experience.

### **2. Materials & Methods:**

#### **2.1 Sample of the Study:**

The sample of the study consisted of 115 football players, members of football teams of different colleges (five male and five female), which participated in the Inter- college Football Championships held at Kurukshetra University, Kurukshetra in 2010. The age of the participants was between 17 and 25 years. The participants voluntarily and anonymously took part in the research, with the consent of their coaches and managers. For functional needs, 61 of the

players were males and 54 females. For the needs of the research, the sample was divided according to athletic experience: (a) up to 3 years (n = 55) and (b) 4 to 6 years (n = 60).

**2.2 Data Collection:**

For the data collection, the model used was the Competitive State Anxiety Inventory-II (CSAI-II, Martens, Burton, Vealey, Bump and Smith, 1983; Martens et al., 1990; Jones & Swain, 1992). The specific instrument measures cognitive, somatic anxiety and self-confidence, as well as the direction of this state anxiety. The scale consists of 15 items (three 5-item subscales arranged on a 4-point Likert-type scale ranging from 1 (none) to 4 (very much) for intensity. Also, it includes a 7-point Likert-type bipolar scale ranging from -3 (hinders performance) to +3 (facilitates performance), which was used to evaluate intensity symptoms as either debilitating or facilitative. All players filled in the questionnaire just prior to the warm-up phase, approximately 30 minutes before the competition.

**2.3 Statistical Analysis:**

For the statistical analysis of the data, from the SPSS 11.0 statistical package, the methods used were the Factorial analysis, the Reliability analysis and the one-way ANOVA analysis, which was also used in order to determine whether any of the factors were related to gender (male-female) and athletic experience a) up to 3 years (n= 55), b) 4 to six years (n=60). The level of statistical significance was set at  $p < .05$

**3. Results of the Study:**

The factor analysis indicated three factors, which interpreted 57.19% of the total fluctuation on the intensity scale and three factors interpreting 61.87% of the direction of this intensity. The Cronbach’s alpha internal cohesion indicator of the questionnaire was satisfactory. The values that came out were .79 for the cognitive anxiety, .81 for the somatic anxiety and .80 for the self-confidence. For the direction of anxiety, the values were .84, .86, and .91 correspondingly (see Table 1). The one-way ANOVA analysis showed statistically important differences concerning cognitive anxiety and self-confidence and its direction, between the male and female players ( $F_{1, 114} = 9.78; p < .01$ ,  $F_{1, 114} = 30.28; p < .001$ ,  $F_{1, 114} = 42.05; p < .001$ ,  $F_{1, 114} = 37.07; p < .001$ ). Male players presented lower scores on cognitive anxiety. They also had higher scores on self-confidence and its direction, which facilitated their performance. What is more, there were statistically important differences concerning self-confidence and its direction ( $F_{1, 114} = 19.09; p < .001$ ,  $F_{1, 114} = 26.21; p < .001$ ), between players of different years of experience. Players with four to six years of experience reported higher scores on self-confidence and its direction, which facilitated their performance (See Table 1)

**Table: 1**  
**Descriptive statistics and important differences among the factors of the questionnaire**

	Cronbach 's Alfa	Handball Players (male)		Handball Players (Female)		Athletic Experience (Up 3years)		Athletic Experience (4 to six years)	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
<b>Intensity</b>									
Cognitive	0.79	2.10	.48**	2.78	.57	2.63	.68	2.19	.55
Somatic	0.81	1.95	.53	2.05	.74	2.08	.71	1.98	.57
Self Confidence	0.80	3.25	.52***	2.63	.67	2.69	.65	3.20	.55***
<b>Direction of Intensity</b>									
Cognitive	0.84	4.26	.66***	3.20	.71	3.62	.92	3.98	.84
Somatic	0.86	4.12	.69	4.06	.86	3.98	.85	4.16	.75
Self Confidence	0.91	5.72	.72***	4.21	.93	4.69	.62	5.78	.57***

Note 1: M= Mean Prices, S.D= Standard Deviations of factors in relation to the gender and athletic experience

Note 2: Significant \*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ .

**4. Conclusion:**

The results of the research showed that male football players reported lower scores of cognitive anxiety, which was facilitative to performance. On the other hand, females displayed a higher score in cognitive anxiety, which was rather debilitating to performance. Furthermore, male football players displayed higher self-confidence, with positive effects on their performance, while females stated lower self-confidence, which was neither facilitative nor debilitating to performance. In relation to years of experience, the results revealed that players with 4 to 6 years of experience showed higher self-confidence with facilitating direction, while players with less years of experience displayed lower self-confidence, with neither facilitative nor debilitating effects on their performance. These results are consistent with the

findings of similar studies (Scanlan et al., 1979; Wark et al., 1979) which indicates that male athletes typically display lower levels of anxiety and higher self-confidence than female athletes. The above findings seem to support the existing theories on intensity (Mellalieu, Neil & Hanton, 2006; Parfitt & Pates, 1999; Stavrou, Psychoudaki, Zervas, 2006; Woodman & Hardy, 2003; Wilson, & Raglin, 1997) which demonstrates that the more experienced player will show lower levels of cognitive and somatic anxiety than the less experienced player.

In conclusion, the psychological preparation of college football players must be taken into serious consideration during the coaching procedure. Professional help and programming of the psychological preparation of the athletes and observation of their emotional condition before and during a game is necessary to reduce competitive anxiety and contribute to the high effectiveness of football players. Nonetheless, further investigation is needed for the generalization of the results in college football.

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