
SPORTIVE

Journal of SPORTIVE

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The Investigation of State Anxiety Levels of Volleyball Players

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Original Article

Date Of Sending:03.05.2019

Acceptance Date: 26.06.2019

Online Release Date:02.09.2019

Abstract

The aim of the study is to determine the state anxiety levels of sub-elite volleyball players. In this study, 85 male and 36 female totally 121 volleyball players which were participated to Turkish Universities Volleyball Championships in Kayseri, were participated volunteerly. Socio-demographic Data Form which was included 4 personal questions and The State Anxiety Inventory were applied to athletes a hour before competition in the sport fields. Data were analyzed by using SPSS (version 20.0). The t-test for comparison between two independent groups and ANOVA for analysis of more than two groups were used. Post Hoc Tukey test was used to find the statistical difference among groups. The level of statistical error was 0.05. According to statistical analysis, statistically significant difference was not observed in gender, and age parametres of volleyball players. Statistically significant difference was observed in sport age and league level parametres of volleyball players. In conclusion, the game stress had an effect on high level of state anxiety scores of volleyball players who participated in our study. It was thought that trainers should develop training programmes which contains psychological states of volleyball players and these trainings could be helpfull for reaching the expected anxiety levels of volleyball players.

Keywords: *Anxiety, Volleyball, Turkey Universities Volleyball Championships*

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INTRODUCTION

It has developed as a branch of science in the last century with the increasing participation of sport in community life (Karakuş et al, 2018). Success at sport requires high level of physiological, motoric and psychological factors. According to our review of literature, there are many studies on examining psychological performance factors of different groups (Karaoğlu, Turan&Koç 2018, Konter 2005, Koç et al 2019).

It has been recognized for many years that psychological factors, in particular anxiety, play an important role in competition (Likuzza et al 2005). In sport psychology, anxiety refers to an unpleasant emotion which is characterized by vague but persistent feelings of apprehension and dread (Cashmore, 2002). Spielberger describes the anxiety in the sport atmosphere as an in general state anxiety while dividing the anxiety into two as state and continuous anxiety (Spielberger, 1972).

One approach is that increases in competition anxiety, and particularly cognitive symptoms, always have a detrimental effect on performance. Another approach have suggested that the relationship with performance should be determined at a more individual level and that athletes possess optimal levels or zones of anxiety within which their performance will be maximized. A third perspective is based on the principle that high levels of anxiety may be interpreted in a positive way and actually benefit sport performance (Brewer, 2009).

The State Anxiety Inventory is one of the most long-standing and frequently used measures of anxiety. that has been translated into numerous languages (Bieling et al, 1998), also has been studied on many people includes athletes from different branches, different types of works and disability people or their families (Polat et al 2010, Tavas&Öztürk 2016, Erbil, Kahraman&Bostan 2006, Acet et al 2011, Doğru&Arslan 2008). Although the studies in the literature on anxiety levels of athletes found to be common, the effects of competition stress on psychological symptoms are restricted. Therefore, the aim of this study is to determine state anxiety levels of sub-elite volleyball players.

MATERIAL AND METHOD

Participants

In this study, 85 male and 36 female totally 121 volleyball players which were participated to Turkish Universities Volleyball Championships in Kayseri, were participated voluntarily

Socio-demographic Data Form which was included 4 personal questions and The State Anxiety Inventory were applied to athletes a hour before competition in the sport fields.

Data collection method

Socio-Demographic Form: This form was included 4 personal questions as age, gender, sport age, and league level

State Anxiety Inventory: Spielberger,Gorsuch&Lushene (1970) were originally developed this inventory to separately determine state- trait anxiety levels. It was adopted to Turkish by Öner and Le Compte (1983), who also conducted reliability and validity studies. This inventory contains 20 questions are for state anxiety. Participants rated each feeling item on a 4-point scale ranging from 1 (never) to 4 (always). Participants answer to this interval for each question. In the questionnaire 1, 2, 5, 8, 10, 11, 15, 16, 19 and 20th items are reverse expressions. The others items are direct expressions. The points respondents give for each question are summed to find reverse and direct expressions. The total point of reverse expressions is subtracted from the total point of direct expressions. Finally, 50 point is added to the obtained score. This result is state anxiety score (Polat et al 2010).

Statistical Analysis

Data were analyzed by using SPSS (version 20.0). The t-test for comparison between two independent groups and ANOVA for analysis of more than two groups were used. Post Hoc Tukey test was used to find the statistical difference among groups. The level of statistical error was 0.05.

FINDINGS

Table1. Group Comparison According to Gender

Anxiety	Gender	N	Mean±SD	t	P
State-Anxiety	Male	85	38,78±10,15	1,92	,157
	Female	36	35,00±9,31		

As shown in Table 1, statistically significant difference was not observed in state anxiety levels of volleyball players according to gender ($p>0,05$).

Table 2. Group Comparison According to Age

Anxiety	Age	N	Mean±SD	F	P	Difference
State-Anxiety	18-21 ^a	56	37,18±9,70	2,27	,108	-
	22-25 ^b	51	36,73±10,45			
	26-30 ^c	14	42,93±8,62			

According to Table 2, statistically significant difference was not observed in state anxiety levels according to age ($p>0,05$).

Table 3. Group Comparison According to Sport Age

Anxiety	Sport Age	N	Mean±SD	F	P	Difference
State-Anxiety	Under 5 ^a	7	37,18±9,70	5,25	,007	b-c
	6-9 ^b	47	36,73±10,45			
	Above 10 ^c	67	42,93±8,62			

In table 3, while statistically significant difference was observed in state anxiety levels of 6-9 and above 10 years, statistically significant difference was not observed in other sport age groups ($p>0,05$).

Table 4. Group Comparison According to League Level

Anxiety	League Level	N	Mean±SD	F	P	Difference
State-Anxiety	1st league ^a	39	34,00±10,75	2,794	,043	a-b
	2nd league ^b	45	39,93±10,94			
	3rd league ^c	27	38,44±8,37			
	Regional ^d	10	39,50±8,11			

According to Table 4, statistically significant difference was observed in state anxiety levels of a and b. Statistically significant difference was not observed in other groups.

DISCUSSION AND RESULT

The state anxiety levels of sub-elite volleyball players were determined in relation to demographic variables in this study.

Statistically significant difference was not observed in state anxiety levels of volleyball players according to gender (Table 1). Dönmez (2010) were studied on state levels of basketball players who participated in inter-university 1st League basketball competitions and found significant difference according to gender. In a not her study, Civan et al (2010) were stated that gender was not an affecting factor of state anxiety levels among sportsmen doing individual and team sports. Both studies were reported that female athletes had higher state anxiety scores than male athletes. In our study, state anxiety scores of female volleyball players were lower than male volleyball players. This is an unexpected situation at this study. The findings don't suggest any statistical difference between age and state anxiety levels of volleyball players (Table 2). Yücel (2003) stated that age was not an affecting factor of state anxiety levels among sportsmen doing taekwondo. In another study, Erbaşı and Küçük (2012) were studied on state anxiety of elite basketball players and didn't find significant difference at age parametre. Many studies at literature reported that age had a negative relation with state anxiety level (Dönmez 2010, Civan et al 2010, Yücel 2003) but in our study, 26-30 aged volleyball players showed higher anxiety level than other age groups. It was thought that older players were playing in high league levels of Turkish Volleyball Federation.

Volleyball were a job for these players. Because of that situation, they felt fear of an unexpected injure which could affecttheir volleyball carrier negatively.

According to sport age groups, statistically significant difference was observed in state anxiety levels of 6-9 years and above 10 years (Table 3). Yücel (2003) studied on sportsmen doing taekwondo and found that high or low level of state anxiety did not depend on the year of experience in that sport. In another study, Başaran et al (2009) were studied on state anxiety levels of sportsmen who participated in different types of sports such as basketball, volleyball, handball, taekwondo and wrestling and found significant relationship in results. These different results indicate that it is necessary to do further studies on different sport age groups.

According to league level groups, statistically significant difference was observed in state anxiety levels of 1st league and 2nd league players (Table 4). Competitive sport can make even the world's most successful athlete feel nervous. Many factors such as expectations, perfectionism, fear of failure, lack of confidence, induce feelings of anxiety in athletes (Moran, 2004).

In conclusion, the game stress had an effect on high level of state anxiety scores of volleyball players who participated in our study. It was thought that trainers should develop training programmes which contains psychological states of volleyball players and these trainings could be helpfull for reaching the expected anxiety levels of volleyball players.

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