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PLAYERS DURING THE TOURNAMENT

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# EXAMINATION OF THE LEVEL OF STATE ANXIETY POINTS OF THE SOCCER PLAYERS DURING THE TOURNAMENT

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#### ÖZET

Bu çalışmanın amacı, turnuva süresince futbolcularda durumluk kaygı düzeyinin müsabakalara göre incelenmesidir. Araştırmaya, yaş ortalaması 22,59±2,039 (yıl), boy ortalaması 1,77±7,361 (m), vücut ağırlığı ortalaması 70,18±7,544 (kg) ve spor yaşı ortalaması 10,82±1,943 olan Türkiye Üniversite Sporları Federasyonu bünyesindeki, üniversiteler arası futbol B liginde yer alan Selçuk Üniversitesi futbol takımından 22 amatör futbolcu gönüllü olarak katılmıştır. Araştırmada, futbolcuların kaygı düzeyini ölçmek için Spielberger ve arkadaşlarının geliştirdiği Durumluk Sürekli Anksiyete Envanteri (State Trait Anxiety Inventory STAI) kullanılmıştır.

Futbolcuların turnuva öncesi – sonrası, 1. Maç öncesi – sonrası, 2. Maç öncesi – sonrası, 4. Maç öncesi – sonrası, turnuva süresince müsabakalar öncesi ve müsabakalar sonrası durumluk kaygı puanları arasında istatistiksel olarak anlamlı bir farklılık olduğu tespit edilmiştir (P<0,05). 3. ve 5. maçlarda ise maç öncesi ve maç sonrası durumluk kaygı puanlarında istatistiksel olarak anlamlı bir farklılık tespit edilmemiştir (P>0,05).

Sonuç olarak, futbolcularda meydana gelen kaygı seviyesinin müsabakanın önemine göre değiştiği ve müsabaka öncesi süreçte kontrol altına alınması için psikolojik desteğin verilmesi gerektiği düşünülmektedir.

Anahtar Kelimeler: Durumluk kaygı, Futbol, Futbolcu, Turnuva, Yarışma.

#### ABSTRACT

The aim of this study is to investigate the state anxiety level of soccer players during the tournament according to the competitions. To the research, 22 amateur soccer players participated in voluntarily, whose average age is 22,59±2,039(year) and average height is 1,77±7,361 (m) and average weight is 70,18±7,544 (kg) and average sport age is 10,82±1,943 from the soccer team of Selcuk University that takes place in league B among universities which is in constitution of Federation of Turkey University Sports. The soccer league which is organized by the Federation of Turkey University Sports includes leagues A, B and C. Selcuk University soccer team completed league B as the 1st and gained chance to play advancement matches for league A. In the research, State Trait Anxiety Inventory (STAI), which was developed by Spielberger and his friends, was used to determine the anxiety level of the soccer players.

It has been determined that statistically there has been a meaningful difference among the state anxiety points of the soccer players before and after the tournament, before and after the 1st, 2nd and 4th matches during the tournament before and after the competitions. (P<0,05). On the other hand, a statistically meaningful difference hasn't been determined among the state anxiety points before and after the 3rd and 5th matches (P>0,05).

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In conclusion, it is being thought that the level of anxiety of the soccer players differs according to the importance of the competition and it is necessary to give psychological support in the process before the competition.

Keywords: state anxiety, soccer, soccer players, tournament.

#### **INTRODUCTION**

Anxiety contributes to warn the individual against the danger from the physical and social environment, to supply the required adaptation and to carry on living Bell (1991).

Physical changes like perspiring, turning to pale, getting red and shivering, which occur as a result of a stimulant in autonomous system, are the indicators of the individual's stress and restlessness Öner ve LeCompte (1985).

Spielberger (1972) describes the anxiety in the sport atmosphere as an in general state anxiety while dividing the anxiety into two as state and continuous anxiety. State anxiety is a sudden and temporary condition which is specialized with anxiety, fear and tension and it is a form of anxiety that is effective in sport atmosphere Gauron (1982).

Coordinations of the sportsmen are also ruined in excessive pressure and anxiety conditions. Besides, several researches show that their performances in motor skills are corrupted in reasonable levels. Excessive muscle tightness can give harm in reasonable amounts to move the sportsmen controlled and balanced Jones (1991).

Many of the sportsmen are in anxiety, stress, excitement and fear before the competition. They may be seized by ache, pain and negative ideas. They also reflect this situation to the match physically. The cases such as; a goalkeeper' missing a ball that he can keep quite easily, simple passing mistakes and inappropriateness in shoots Özbaydar (1983).

State anxiety affects the sportsman's motivation, concentration and coordination, ability to make a decision, self-confidence, physical fitness and coordinative abilities Konter (1997).

Anxious sportsmen may be more nervous and sensitive besides perception disorder in the state of competition. Many of the latest researches clearly show that sports performance not only depends on biomechanical and technical factors like physiological and technique aimed at physical fitness, but also psychological factors such as; anxiety, stress and motivation Jones ve Hardy (1990).

By thinking that the soccer players, whose state anxiety levels are high, may have difficulty in doing what the soccer atmosphere requires them to do, the necessity to prepare them emotionally before the competition can appear. In this direction, it is aimed to investigate the state anxiety levels of the soccer players during the tournament.

## **METHOD**

## **Subjects**

To the research, 22 amateur soccer players participated in voluntarily, whose average age is 22,59±2,039(year) and average height is 1,77±7,361 (m) and average weight is 70,18±7,544 (kg) and average sport age is 10,82±1,943 from the soccer team of Selcuk University that takes place in league B among universities which is in constitution of Federation of Turkey University Sports. The soccer league which is organized by the Federation of Turkey University Sports includes leagues A, B and C. Selcuk University soccer team completed league B as the 1st and gained chance to play advancement matches for league A

Six university teams, Selcuk University, Gazi University, Ankara University, Erciyes University, Istanbul University, and Haliç University, joined to the tournament in which the advancements matches were played. Advancements matches were played according to the single half-time league style. After the matches, Selcuk University soccer team completed the tournament as the 3rd and gained right to advance to league A.

#### **Protocols**

In the research, State Trait Anxiety Inventory (STAI), which was developed by Spielberger and his friends and of which reliance coefficient is among 0,79 and 0,87, was used to determine the anxiety level of the soccer players. This test is a self evaluation inquiry developed with the aim of measuring two kinds of anxiety; state and continuous Spielberger and et al. (1970). Validity and reliance study of this scale, which was developed for being applied to the individuals over 14, for the adaptation to Turkey was performed by Öner (1977) and reliance coefficient was determined among 0,26 and 0,68. With 20 entries that constitute state anxiety scale (STAI form TX-1), it is being tried to find out whether the individual temporarily feels himself anxious or not because of the circumstances that he is in. Subject evaluates himself with a 4 graded scale according to the density of his feelings at that moment. State anxiety scale was applied to the Selcuk University soccer team players during the tournament before and after 30 minutes from the matches.

## **Statistics**

In the evaluation of the data and finding out the calculated values SPSS 13.0 statistics packet programmer was used. Data were summarized by giving average and standard deviations. According to the normality test, -t- test, among the parametric tests, for the data that show normal distribution; in the comparison of the competitions, according to variance – covariance structure, Multivariate and Test of Within-Subject effect tests; and in order to determine from which match the difference originates, for the repeated measures, Benferroni test was used.

# **RESULTS**

**Table 1.** The table that shows the average of the state anxiety points and competition results that Selcuk University soccer team played during the tournament.

Variations	Played Matchs	Match	Point	Anxiety Point	
		Results		Before	After
				Match	Match
1st. Match	Selçuk University – Ankara	0 - 0	1	30,86	39,55
	University				
2nd.	Selçuk University – Haliç	0 - 0	1	33,00	48,41
Match	University				
3rd. Match	Selçuk University – Gazi	1-0	3	34,27	32,45
	University				
4th. Match	Selçuk University – İstanbul	3-0	3	32,33	26,36
	University				
5th. Match	Selçuk University – Erciyes	1 – 1	1	26,14	25,82
	University				

The results and the points that Selcuk University soccer team got during the tournament are seen (Table 1).

**Table 2.** –t- test statistic table about the comparison of the state anxiety points of the soccer players who participated in the research before and after the tournament.

Variations		N	Mean	Std.	Std. Error	t	P
				Deviation	Mean		
State	Before	22	30,86	5,462	1,165	3,654	0,001
Anxiety	Tournament						
	After	22	25,82	4,687	0,999		
	Tournament						

It has been determined that statistically there has been a meaningful difference among the state anxiety points of the soccer players before and after the tournament (P<0,05). In this comparison, state anxiety point before the tournament was found higher than the state anxiety point after the tournament (Table 2).

**Table 3.** –t- test statistic table about the comparison of the state anxiety points of the soccer players who participated in the research before and after the matches during the tournament.

Variations		N	Mean	Std.	Std. Error	t	P
				Deviation	Mean		
1st. Match	Before Match	22	30,86	5,462	1,165	5,272	0,000
	After Match	22	39,55	8,291	1,768		
2nd. Match	Before Match	22	33,00	7,211	1,537	5,556	0,000
	After Match	22	48,41	12,117	2,583		
3rd. Match	Before Match	22	34,27	8,362	1,783	0,738	0,469
	After Match	22	32,45	11,143	2,376		
4th. Match	Before Match	22	32,23	7,244	1,544	4,728	0,000
	After Match	22	26,36	6,477	1,381		
5th. Match	Before Match	22	26,14	5,768	1,230	0,458	0,652
	After Match	22	25,82	4,687	0,999		

It has been determined that statistically there has been a meaningful difference among the state anxiety points of the soccer players before and after  $1^{st}$ ,  $2^{nd}$  and  $4^{th}$  matches (P<0,05).

In these comparisons, state anxiety points before the  $1^{\rm st}$  and  $2^{\rm nd}$  matches were found lower than the state anxiety points after match. And in the  $4^{\rm th}$  match, state anxiety point before the match was found higher than the state anxiety point after the match. However, statistically there has not been seen a meaningful difference in the state anxiety points of the before and after match of the  $3^{\rm rd}$  and  $5^{\rm th}$  matches (P>0,05) (Table 3).

**Table 4.** The table about the comparison of the state anxiety points of the soccer players who participated in the research during the tournament.

State Anxiety Before the Competitions				State Anxiety After the Competitions		
Type III Sum of Squares	Mean Square	F	P	Mauchly's W	Approx. Chi- Square	P
867,691	216,923	7,716	0,000	0,406	17,509	0,042

It has been determined that statistically there has been a meaningful difference among the state anxiety points of the soccer players before and after the gained matches during the tournament (P<0,05) (Table 4).

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**Table 5.** Multiple comparison test about the comparison of the before match state anxiety points of the soccer players during the tournament

(A) State Anxiety	(B) State Anxiety	Mean Difference (A-B)	Std. Error	P
Before 1st Match	Before 2nd Match	-2,136	1,677	1,000
	Before 3rd Match	-3,409	1,561	0,404
	Before 4th Match	-1,364	1,424	1,000
	Before 5th Match	4,727	1,377	0,025
Before 2nd Match	Before 1st Match	2,136	1,677	1,000
	Before 3rd Match	-1,273	1,742	1,000
	Before 4th Match	0,773	1,963	1,000
	Before 5th Match	6,864	1,579	0,003
Before 3rd Match	Before 1st Match	3,409	1,561	0,404
	Before 2nd Match	1,273	1,742	1,000
	Before 4th Match	2,045	1,607	1,000
	Before 5th Match	8,136	1,478	0,000
Before 4th Match	Before 1st Match	1,364	1,424	1,000
	Before 2nd Match	-0,773	1,963	1,000
	Before 3rd Match	-2,045	1,607	1,000
	Before 5th Match	6,091	1,496	0,005
Before 5th Match	Before 1st Match	-4,727	1,377	0,025
	Before 2nd Match	-6,864	1,579	0,003
	Before 3rd Match	-8,136	1,478	0,000
	Before 4th Match	-6,091	1,496	0,005

It has been determined that statistically there has been a meaningful difference among the state anxiety points of the soccer players before 1<sup>st</sup> and 5<sup>th</sup> matches, 2<sup>nd</sup> and 5<sup>th</sup> matches, 3<sup>rd</sup> and 5<sup>th</sup> matches and 4<sup>th</sup> and 5<sup>th</sup> matches before the gained matches during the tournament (P<0,05). However, statistically there has not been seen a meaningful difference in the before match state anxiety points of the other comparisons (P>0,05). In these comparisons, before match state anxiety points before the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> matches were found higher than the before match state anxiety point of the 5<sup>th</sup> match (Table 5).

# Examination of The Level of State Anxiety Points of The Soccer Players During The Tournament

**Table 6.** Multiple comparison test about the comparison of the after match state anxiety points of the soccer players during the tournament

state anxiety points of the soccer players during the tournament							
(A) State Anxiety	(B) State Anxiety	Mean Difference (A-B)	Std. Error	P			
After 1st Match	After 2nd Match	-8,864	2,607	0,027			
	After 3rd Match	7,091	3,133	0,343			
	After 4th Match	13,182	2,237	0,000			
	After 5th Match	13,727	2,058	0,000			
After 2nd Match	After 1st Match	8,864	2,607	0,027			
	After 3rd Match	15,955	3,335	0,001			
	After 4th Match	22,045	2,932	0,000			
	After 5th Match	22,591	2,729	0,000			
After 3rd Match	After 1st Match	-7,091	3,133	0,343			
	After 2nd Match	-15,955	3,335	0,001			
	After 4th Match	6,091	2,118	0,090			
	After 5th Match	6,636	2,273	0,082			
After 4th Match	After 1st Match	-13,182	2,237	0,000			
	After 2nd Match	-22,045	2,932	0,000			
	After 3rd Match	-6,091	2,118	0,090			
	After 5th Match	0,545	1,558	1,000			
After 5th Match	After 1st Match	-13,727	2,058	0,000			
	After 2nd Match	-22,591	2,729	0,000			
	After 3rd Match	-6,636	2,273	0,082			
	After 4th Match	-0,545	1,558	1,000			
	•	•		•			

It has been determined that statistically there has been a meaningful difference among the state anxiety points of the soccer players after 1st and 2nd matches, 4th and 5th matches, 2nd and 1st, 3rd, 4th and 5th matches and 3rd and 2nd matches, 4th and 1st and 2nd matches, 5th and 1st and 2nd matches, after the gained matches during the tournament (P<0,05). However, statistically there has not been seen a meaningful difference in the after match state anxiety points of the other comparisons (P>0,05). In these comparisons, while after match state anxiety point after the 2nd match was found higher than the after match state anxiety point of the 1st, 3rd, 4th and 5th match, after match state anxiety point of the 1st match was found higher than the after match state anxiety points of the 4th and 5th matches (Table 6).

# **DISCUSSION**

Selcuk University soccer team began the tournament with the aim of advancement to Group A, first two matches resulted with draw and it has been observed a rise on before and after match anxiety points. On the other hand, anxiety points showed tendency to fall after the 3<sup>rd</sup> match which was completed with winning. Furthermore, on the soccer players who guaranteed to advance to Group A with the winning of the 4<sup>th</sup> match, the anxiety points were found in the lowest rate with the 5<sup>th</sup> match during the tournament. With these results, Selcuk University soccer team advanced to Group A.

The researches put forward the necessity to manage the anxiety in competition atmospheres Koruç (1994). In his study, Burton (1998) states that there is a relationship between the state competition anxiety and the performance; cognitive and physical anxiety levels are the best indicators of the performance. Sonstroem and Bernardo (1982) found the result of high leveled competition anxiety is related with low performance.

Hanton and et al. (2004) have done measures in five different times before competitions in their studies (Before 1 week, before 2 days, before a day, before 2 hours and before 30 minutes). At the end of the study, state anxiety points were found higher in the measures which were done before 2 hours from the competition and before 30 minutes before the competition.

Besides the relation between the before competition state anxiety and performance, researches also contain the relation between the after competition state anxiety and incoming performance.

In this study, it has been seen that in the tournament which was played according to single half-time style, the results of the competition affected the next state anxiety when the before and after match anxiety states were examined. The first two matches which were ended with draw affected the team negatively; after match anxiety were found higher and meaningful according to before the match. The anxiety point which was determined after the second match was not only the highest of the after match points, but also the highest of the tournament. Third match gained importance as the determination of the teams that would make grade and the highest before match anxiety point was found during the tournament. It has not been determined a meaningful difference between the before and after game anxiety points of the third match which was ended with winning. The team that won the 4th match has guaranteed to advance to Group A, a fall has been was observed in the after match anxiety point and before match anxiety point has been found meaningful. 5th match ended with draw, it has not been a meaningfulness in the before and after match anxiety points. While this situation shows parallelism with Konter's result that the state anxiety points of the soccer players in the 3rd league change according to the importance of the match and there is an evident rise before important matches Gümüş (2006), it supports the view of Grasso (1999) that the anxiety experienced after the competition puts forward important "clues for the next performances by affecting before game anxiety, and at the same time, it supports that the before

game state anxiety point would be high according to the importance of the competition which will be played.

It is seen that the before tournament anxiety points are high and meaningful when before and after tournament state anxiety points of the soccer players who participated in the study are examined (Table 2). It is matches with the result of Öner ve Le Compte'nin (1985) that there is a rise on the state anxiety levels when the stress is intensive and there is a fall when the stress is removed.

Many studies that show the relationship between the anxiety and performance, put forwards that the sportsmen show high anxiety make more mistakes than the sportsmen who have low anxiety level Halvari ve Gjesme (1995). And this shows parallelism between the studies and obtained result.

According to Spielberger, high level state anxiety affects the performance negatively. On the contrary, the person who has low level state anxiety shows lack of motivation for being successful. Because of this reason, the level of state anxiety should be kept in the normal level Spielberger (1989).

In conclusion, by thinking that the anxiety level of the soccer players change according to the importance of the competition, the state anxiety increases in the competitions that have great importance and the competition result will affect the performance of the next competition by affecting the anxiety, it has been reached to the idea that it is necessary to give psychological support in the before match process to take the anxiety level under control.

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