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## THE EFFECTS OF AGE, SPORTS EXPERIENCE AND PHYSICAL SELF PERCEPTION ON COMPETITION ANXIETY LEVELS OF FEMALE FOOTBALL PLAYERS\*

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### ABSTRACT

The purpose of this study was to determine the effects of age, sport experience and physical self perception on competition anxiety in female football players. 83 female football players in Premier League division of Turkish professional leagues participated in this study voluntarily. Sport Competitive Anxiety Test (SCAT) was used in order to determine the level of competitive anxiety, and the Physical Self-Perception Inventory was used in order to determine sport ability, physical condition, body attractiveness, strength and general physical competence. According to the results of Pearson Product Moment correlation analysis, competition anxiety was negatively correlated with sport experience ( $r=-.218$ ;  $p<0.01$ ), sport ability ( $r=-.486$ ;  $p<0.01$ ), physical condition ( $r=-.461$ ;  $p<0.01$ ), strength ( $r=-.283$ ;  $p<0.01$ ), and general physical competence ( $r=-.360$ ;  $p<0.01$ ). On the other hand age was significantly correlated with sport experience ( $r=.697$ ;  $p<0.01$ ), sport ability ( $r=.327$ ;  $p<0.01$ ), physical condition ( $r=.461$ ;  $p<0.01$ ), body attractiveness ( $r=.551$ ;  $p<0.01$ ), strength ( $r=.224$ ;  $p<0.05$ ), and general physical competence ( $r=.475$ ;  $p<0.01$ ). Similarly sport experience was significantly correlated with sport ability ( $r=.528$ ;  $p<0.01$ ), physical condition ( $r=.519$ ;  $p<0.01$ ), body attractiveness ( $r=.280$ ;  $p<0.01$ ), strength ( $r=.299$ ;  $p<0.05$ ), and general physical competence ( $r=.415$ ;  $p<0.01$ ). As a result of Stepwise Multiple Regression Analyses; age, sport experience, sport ability, physical condition, body attractiveness, strength, general physical competence has caused 37.5% of the competition anxiety. To conclude, the results of the present study pointed out that age, sport experience, sport ability, physical condition, body attractiveness, strength and general physical competence are important factors in determining competition anxiety.

**Key words:** Sports Experience; Physical Self Perception; Competition Anxiety; Female Football Players

### 1. INTRODUCTION

The effect of participation to sport activities on the psychological development of the individuals has long been researched by the scholars. On the other hand discrete emotions in sport are practically very important as these emotions have direct influence in the success of athletes. These emotions which reflect the psychological state of the person can be controlled, directed or neglected when they are related to sport performance. In order to find out the relation between psychological development and practice of different sports, the researchers tried to define the psychological characteristics of athletes. One of the most important psychological traits that researchers have been concentrated on is anxiety, which also has close relation with stress. Therefore a huge amount of researches have focused on this subject in order to increase the athletes' performance during the competition. Competition-induced anxiety experienced by the athletes includes the stress prior to (1-3), during (4, 5), or immediately after competition (6).

Although there has been a wide range of researches in the field of sport which suggest a close relation between performance and anxiety, there are also serious criticisms to the apprehension of anxiety as a linear, one-dimensional, independent and measurable emotional state. Cerin, in a case study, suggested that sport psychologists should avoid basing the assessment of athletes pre-competitive emotional state exclusively on measures of anxiety, the affective phenomenon thought to be the most obvious psychological consequence of an impending competition, and in this study exclusive reliance on anxiety measures is not recommended for two main reasons (7). First, there are other emotions that seem to be perceived as more important in determining perceived functionality of pre-competitive emotional states. Second, measures of anxiety provide insufficient or ambiguous information about the athlete competition relationship and the way the competition is appraised. Even though there are different criticisms on anxiety-performance relation, researchers continue to define and explore it more accurately.

\*Some of the findings of this study were presented in the 12<sup>th</sup> International Sport Sciences Congress, held between 12-14 December 2012, in Denizli, Turkey.

Another key term in sport psychology is physical self-perception, or physical self. Physical self-perception is a general term that points out all aspects of a person's perceptions of their physical self including evaluative and descriptive elements, such as physical outlook, strength, endurance, etc (8). Physical self perception is closely related to the terms body image and self-esteem. Body image is characterized by an individual's views, emotions, and personal judgment of their body through body size estimate, perceived body attractiveness, and feelings connected to one's body shape and size (9, 10). Since body image is a comprehensive construct, some researchers focused on more specific constructs such as body dissatisfaction, self-esteem, or body-esteem in order to explain destructive body image behaviors (11). Self-esteem is one method used to express self worth, which directly impacts psychological well-being (12, 13). Very often we hear that people who are not pleased with their body image can easily fall into despair as a result of low self-esteem, and try to renew their outlook through different styles of dresses, or even aesthetic operations (14).

Many recent researches have pointed out that there is a significant difference between sexes in physical self-perception and anxiety levels. In many case studies it was found that females have higher anxiety levels and more concern in their physical outlook (15-17). But there are also some other studies in which no significant differences of sexes in anxiety levels found (18, 19).

In this context, the present study aimed to address the lack of general knowledge about the relation between physical self-perception and anxiety. Although there is a general attitude to suppose existence of a parallelism between physical self-perception and anxiety level, various statistical evidences should support this approach.

## 2. MATERIAL AND METHODS

### 2.1. Sample group

83 female football players ( $\bar{X}$  age = 18.3  $\pm$  1.84) in Premier League division of Turkish professional football leagues participated in this study voluntarily.

### 2.2. Data gathering tools

**Physical Self-perception Inventory:** This inventory measures 5 subscales (sports competence, physical condition, body attractiveness, sport ability and general physical competence). Each of these scales is composed of 6 items. All the items have either positive or negative expressions, and these expressions are scored from 1 to 4 points. 4 point shows the highest competence, and 1 shows the lowest. This inventory was translated and applied in Turkish for the first time in 1995 by Asci et al. (20). The test-retest reliability of the inventory ranged from 0.75 to 0.82 and internal consistency ranged from 0.73 to 0.82. The statistical analysis applied for this inventory, zero order and partial correlation analysis supported the hierarchical structure of the inventory, and resulted accordingly to factor structure.

**Sport Competitive Anxiety Test (SCAT-C):** In order to find out the anxiety levels of athletes during competition, SCAT-C test for adults, which is composed of 15 items, was used. 10 of the items in the test are related to the anxiety, and 5 extra items were added in order to decrease the level of subjectivity of answers. Questions were answered with 3 different expressions; "never, sometimes, often".

In order to find out the ages and sport experiences of the participants, the following questions were included in the questionnaire: "How old are you?", "How long have you played football?".

### 2.3. Analysing of the data

The data derived from the test and inventory were evaluated using SPSS 18.0 statistical package programme for windows through descriptive statistics, and in order to find out the relation between anxiety and self perception items Product-Moment Correlation Coefficient and Stepwise Regression Analysis were used. For the statistical significance level p value is taken as 0.05 ( $p < 0.05$ ).

## 3. FINDING

The subscale scores of physical self-perception inventory and the scores of competitive anxiety test are presented in Table 1.

**Table 1.** The age, sport experience, physical self-perception and anxiety levels of female football players

Variables	$\bar{X}$	S
Age	18.3	1.84
Sport experience	4.3	1.6
<b>Physical self-perception level</b>	$\bar{X}$	<b>S</b>
Sports competence	16.06	2.38
Physical condition	16.06	3.14
Body attractiveness	15.68	2.35
Sport ability	17.75	2.71
Strength	15.21	3.45
<b>Anxiety level</b>	$\bar{X}$	<b>S</b>
Competitive anxiety	18.18	3.01

According to the Table 1, the highest subscale of physical self-perception is sport ability (17.75), and the lowest is strength (15.21). Therefore the female football players are more confident about their abilities than their actual physical strength. The anxiety level of the players (18.81) is quite moderate. This shows that the female football players can cope with anxiety at a certain level.

**Table 2.** Correlation between sports experience, physical self perception and competitive anxiety

Female Soccer Players (n=83)	Sport Ability	Physical Condition	Strength	General Physical Competence	Sports Experience
<b>Competitive Anxiety (CA)</b>					
CA	-.486**	p=.000	-.461**	p=.000	-.283**
				p=.010	-.360**
					p=.016
					-.218*
					p=.011

According to Table 2, the Pearson Product Moment correlation analysis points out that competition anxiety was negatively correlated with sport experience and physical self perception. Therefore the increase in sport experience and physical self-perception results with the decrease of competitive anxiety.

**Table 3.** Correlation between age and physical self perception

Female Soccer Players(n=83)	Sports Experience	Sport Ability	Physical Condition	Body Attractiveness	Strength	General Physical Competence
<b>Age (A)</b>						
A	.697**	p=.000	.327**	p=.003	.461**	p=.000
					.551**	p=.000
					.224*	p=.039
					.475**	p=.000

According to Table 3, there is positive correlation between age and physical self perception. Therefore when the age increases, the values of physical self perception subscales also increase.

**Table 4.** Correlation between sports experience and physical self perception

Female Soccer Players (n=83)	Sport Ability	Physical Condition	Body Attractiveness	Strength	General Physical Competence
<b>Sports Experience (SE)</b>					
SE	.528**	p=.000	.519**	p=.000	.280*
					p=.011
					.299*
					p=.006
					.415**
					p=.000

Table 4 points out that sports experience and physical self perception is positively correlated. This shows that more experienced players are more satisfied with their physical self perception. In other words, practicing sport results with satisfaction in individuals' physical self perception.

**Table 5.** Correlation between age, sports experience and physical self perception with competitive anxiety

Female Soccer Players (n=83)	R	R Square	Adjust R Square	$\beta$	Std. Error of Estimate
<b>Competitive Anxiety (CA)</b>					
CA	.614*	.375	.318	.180	2.48737

\*Predictors: Age, Sport Experience, Sport Ability, Physical Competence, Body Attractiveness, Strength, General Physical Competence

In Table 5, the Stepwise Regression Analysis points out that 37.5% of competitive anxiety is directly caused by age, sport experience, sport ability, physical competence, body attractiveness, strength and general physical competence.

#### 4. DISCUSSION AND CONCLUSIONS

The findings of this study, in terms of the relation between sport experience and physical self perception, are parallel to the findings of previous researches. Many researchers have pointed out that participation to sports practices have positive effect on physical self perception. For example Ascii (21), in her research on players of junior national basketball team, found that the athletes have higher scores in their physical self perception when compared to their peers who do not attend to regular sport practices. In another research, Yaman et al. (14) stated that different sports have different effects on physical self perception scores. Therefore this study will be helpful for coaches, teachers, parents, pedagogy specialists, athletic trainers, and fitness instructors in assessing individuals who struggle with low self-esteem in relation to their physical abilities, physical outlook and movements.

The main conclusion of this study is that there is a close relation between sport experience, physical self perception and competitive anxiety. However, the relation between sport experience, physical self perception and competitive anxiety is negatively correlated, but the relation between physical self perception and sport experience

is positively correlated. Whenever the sport experience and the physical self perception scores increase, it is normal to see the anxiety levels of the athletes would decrease. There have been many researches concentrating on controlling the anxiety levels in order to increase athletic performance. To perform at top level, the athletes should cope with high pressure. It is therefore not surprising that psychological characteristics such as motivation, confidence, anxiety control, mental preparation, team emphasis, and concentration often distinguish elite from non-elite performers (22,23). Excellent psychological skills can not only play a decisive role in an important match; they are also needed to develop a successful sports career. Commitment from the performers is required since engagement in training is not inherently motivating (24, 25). In a study, Ozbekci (26) compared the track field athletes, basketball and volleyball players, and found that track field athletes experience competitive anxiety more than others. In another study, even, the effect of acupuncture treatment was applied to see whether it helps controlling the anxiety levels of athletes, and reached to positive findings (27).

In conclusion, this study suggests that sport researchers should concentrate on various other effects which may also be influential on the competitive anxiety levels of athletes. This research was limited by the sample size and the valid responses of the participants; which is inherent in survey research. Results of this research can only apply to this population and should not be generalized to other populations, genders or age groups. Therefore many other case studies should be carried out in order to generalize the findings on this subject. Otherwise exclusive reliance on the currently available anxiety measures will not be useful for athletic performance as the measures of anxiety provide insufficient and ambiguous information about the athlete competition relationship and the way the competition is appraised.

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