



Ceyhan, M. A. & Koç, İ. (2023). Examination of the relationship between self-talk and anxiety for individuals attending the special talent examination in sports sciences, *The Online Journal of Recreation and Sports (TOJRAS)*, 12(2), 192-206.

DOI: <https://doi.org/10.22282/tojras.1267308>

ISSN: 2146-9598

Doi Prefix:10.22282

**Makale Türü (ArticleType):**

*Araştırma Makalesi / Research Article*

Gönderi Tarihi (Received): 18/03/2023

Kabul Tarihi (Accepted): 10/04/2023

Online Yayın Tarihi (Published): 30/04/2023

## EXAMINATION OF THE RELATIONSHIP BETWEEN SELF-TALK AND ANXIETY FOR INDIVIDUALS ATTENDING THE SPECIAL TALENT EXAMINATION IN SPORTS SCIENCES

**Mehmet Ali CEYHAN**

*Bayburt University Faculty of Sports Sciences, Bayburt, Turkey*

*mehmetaliceyhan@bayburt.edu.tr*

*Orcid: 0000-0001-6207 8135*

**İsmail KOÇ**

*Ahi Evran University Faculty of Sports Sciences, Kirsehir, Turkey*

*ismail.koc@ahievran.edu.tr*

*Orcid: 0000-0002-1047-79595*

### Abstract

This study examines the relationship between self-talk and anxiety for individuals attending the special talent examination in sports sciences. The study was conducted by using the descriptive and relational research design. A total of 544 student candidates who are composed of 383 male and 161 female students attending the special talent examination (STE) at the Sports Sciences Faculty of Bayburt University in the educational year of 2022-2023, who were chosen by random sampling, became the participants of this study. In the study, the researchers used the Personal Information Form, Self-Talk Questionnaire (S-TQ), Anxiety Inventory in Sports -2 (SAS) and the data obtained from the Track for STE of Sports Sciences at Bayburt University obtained online and based on voluntarism principle. The obtained data is analyzed by the computer program named SPSS 25.0. In the analysis of the data, the researchers used the methods of descriptive, percentage, average, standard deviation and inferential correlation analyses, and t-test analysis in independent samples. In the consequence of the study, it was determined that while the anxiety levels of the participants increased, their track times improved; however there was no relationship between self-talk and track times. Additionally, it was determined that while the ages of participants in the study increased, their levels of self-talk decreased; however there was no relationship between age and level of anxiety, the levels of self-talk and anxiety for the male participants were lower than those of the female participants; and while the self-talk levels of participants increased, their levels of anxiety also increased. However, it was also determined that there was no relationship between self-talk and level of anxiety.

**Keywords:** Faculty of sports sciences, special talent examination (ste), student, performance, self-talk, anxiety.

## SPOR BİLİMLERİNDE ÖZEL YETENEK SINAVINA KATILAN BİREYLERDE İÇSEL KONUŞMA VE KAYGI İLİŞKİSİNİN İNCELENMESİ

### ÖZET

Bu çalışma, spor bilimlerinde özel yetenek sınavına giren bireylerde kendi kendine konuşma ve kaygı arasındaki ilişkiyi incelemektedir. Araştırma, betimsel ve ilişkisel araştırma deseni kullanılarak gerçekleştirilmiştir. 2022-2023 eğitim-öğretim yılında Bayburt Üniversitesi Spor Bilimleri Fakültesi'nde özel yetenek sınavına (STE) giren 383 erkek ve 161 kız öğrenciden rastgele örnekleme yöntemiyle seçilen toplam 544 öğrenci aday yarışmaya katılmıştır. bu çalışmanın katılımcıları. Araştırmada, araştırmacılar tarafından Kişisel Bilgi Formu, Kendi Kendine Konuşma Anketi (S-TQ), Sporda Kaygı Envanteri -2 (SAS) ve Bayburt Üniversitesi Spor Bilimleri STE için Track for STE'den elde edilen veriler çevrimiçi ve internet tabanlı olarak kullanılmıştır. gönüllülük ilkesine dayanmaktadır. Elde edilen veriler SPSS 25.0 adlı bilgisayar programı ile analiz edilmiştir. Verilerin analizinde araştırmacılar betimsel, yüzde, ortalama, standart sapma ve çıkarımsal korelasyon analizleri ile bağımsız örneklemlerde t-testi analiz yöntemlerini kullanmışlardır. Çalışma sonucunda katılımcıların kaygı düzeyleri artarken parkur sürelerinin iyileştiği; ancak kendi kendine konuşma ve parça süreleri arasında bir ilişki yoktu. Ayrıca araştırmaya katılanların yaşları arttıkça kendi kendine konuşma düzeylerinin düştüğü; ancak yaş ile kaygı düzeyi arasında bir ilişki bulunmazken, erkek katılımcıların kendi kendine konuşma ve kaygı düzeylerinin kadın katılımcılara göre daha düşük olduğu; katılımcıların kendi kendine konuşma düzeyleri artarken kaygı düzeyleri de yükselmiştir. Ancak kendi kendine konuşma ile kaygı düzeyi arasında bir ilişki olmadığı da tespit edilmiştir.

**Anahtar Kelimeler:** Spor Bilimleri Fakültesi, öğrenci performans, kendi kendine konuşma, kaygı.

### INTRODUCTION

The self-talk is among the most important cognitive strategies preferred by athletes. The self-talk is at the center of cognitive strategies and behavioral cognitive approaches and lately it is among striking research topics in areas of application for sports psychology. The self-talk is expressed as an internal dialogue that the individual perceives and feels determining the thoughts, feelings and their levels of change along with the instructions set out and given by the individual by himself/herself (Hackfort and Schwenkmezger, 1993). The self-talk is classified as positive self-talk and negative self-talk by the researchers. The positive self-talk is described as self-encouragement and self-praise performed by the individual (Moran, 1996). On the contrary, the negative self-talk creates anxiety. In the contemporary approaches, the self-talk is addressed comprehensively and it is classified as self-dialogue, self-motivation and self-education (Bayköse et al., 2016). And some researchers describe the self-talk as a motivational and instructive situation (Hardy et al., 2015). The motivational self-talk is described as situations that are related with displaying effort, positive mood, and trust. And the instructive self-talk is described as situations that are related with technical information, tactical options and intense focusing.

In the sports world, the contemporary athletes need to organize their behaviors and thoughts in the best possible way and base their behaviors and thoughts to the modeling in this regard for the purpose of displaying their performances in the maximum level. The self-talk is among the frequently used modeling in the sport psychology literature and sport psychology strategies (Öztürk, 2016).

The self-talk is among the most important psychological skills that the athletes perform by themselves. The self-talk is at the center of cognitive methods and behavioral ideational theories. The speaking to the self, namely the self-talk is performed as an inner voicing of the individual's thoughts and perceptions in his/her mind who organizes his/her factors for change, feelings and thoughts along with affirmations and instructions that the individual provides for himself/herself (Hackfort and Schwenkmezger, 1993). The self-talk is addressed as positive and negative self-talk by the sport psychologists. The positive self-talk is associated with encouragement and praise, and the negative self-talk is associated with anxiety, criticism, concern and worry (Moran, 1996).

The negative self-talk that the individual performs by himself/herself causes negative feelings such as anxiety, and cause negative behavior and affect the performance of the athlete negatively. It is possible for the athlete to have negative performance in the consequence of having negative internal dialogues that the person performs by himself/herself due to any reason before, during or after training or matches. At this stage, attention needs to be paid to learning determining negative feelings and attitudes and replacing them with more realistic and positive thoughts. Otherwise, the performance of the athlete would decrease due to negative internal dialogues. The moods of many athletes take place in the consequence of their manner of thinking regarding a particular incident, and they are surprised when they learn that they may have different feelings when their self-talk changes.

Nowadays, it is regarded that in sports excellence in physical capacity may not be enough by itself in increasing the sportive performance to the highest level. The athlete also has a psychological capacity, and this needs to be minded as much as the physical aspect. The fact that the athletes who have emotional changes may not achieve the expected success despite that they are physically ready may arise from this situation (Tavacıoğlu, 1999; Erkan, 1998).

There are certain psychological phenomena affecting sportive performance of individuals. Anxiety is among the most important of those factors. Anxiety may be defined as worry and uneasiness regarding a subjective situation which is uncertain to happen in the future or perhaps which does not have the possibility to happen at the moment. Individuals reject and ignore situations that would cause them pain and tend to find those situations odd. They cut off internal and external contact with those situations and use defense mechanisms. The individual may become anxious and uneasy even under normal circumstances due to unsolved problems and those situations that are pushed into the sub consciousness and suppressed (Erskine, 2015; Kring and Johnson, 2015).

The athlete's level of anxiety is important in his/her achieving the expected or required performance. The level of anxiety may negatively affect the performance and the outcome of the match (Başer, 1998). As the athlete's level of anxiety increases, he/she starts moving away from making correct decisions and displaying his/her talents. Under extreme pressure, the athletes may make certain mistakes. And excessive level of anxiety may cause the athletes to forget the moves that they know best and perform in the training regularly, and cause them to display certain negative behaviors by causing confusion in their feelings (Gümüş, 2002). Within this scope, this

study aims to examine the relationship between self-talk and anxiety for the individuals taking the STE at sport sciences faculty.

## **MATERIALS AND METHODS**

### **Research Model**

In this study which was carried out with the descriptive (screening) and relational research models (correlational and causal comparison) which are among the quantitative research models, the self-talk and levels of anxiety of the individuals taking the STE of the sport sciences faculty in terms of the variables determined by the researcher (sex, age, track times).

As the relational screening models are used for the research models aiming to determine the existence or degree of collective change among two or more variables, they are regarded as appropriate for this kind of research (Cohen, Manion and Morrison, 2007). In the relational scanning model, the researcher attempts to measure the level of relationship between two or more variables by using statistical tests. Within the scope of this study, the self-talk and anxiety of the individuals taking part in the STE are considered as phenomena and this study aimed to examine them in terms of multiple variables.

### **Population and Sampling**

The population of the study is composed of 544 students attending the STE for the educational year of 2022-2023 at the Sport Sciences Faculty of Bayburt University. The sample is composed of a total of 544 volunteer student candidates who are chosen from the population of the study according to random sampling method, who filled out the scale for anxiety and imagery in sports in full and without mistakes whose ages range between 18 and 36 and 70.4% of them were males (n=383) and 29.6% of them were females (n=161).

### **Data Collection Tool**

In the study, the Personal Information Form, Self-Talk Questionnaire (S-TQ), Anxiety Inventory in Sports -2 (SAS) and the data obtained from the Track for STE of Sports Sciences at Bayburt University.

### **Self-Talk Questionnaire (S-TQ):**

The S-TQ which was developed by Zervas, Stavrou and Psychountaki (1998) and adapted into Turkish by Engür (2011) is composed of 11 articles and 2 sub dimensions (motivational function, cognitive function) and it was designed in the five-point Likert Scale (1=Never, 2=Rarely, 3=Sometimes, 4=Frequently, 5=Always). In the reliability study performed by Engür (2011), the Cronbach Alpha values of the study were respectively calculated as 0.93 for motivational function, 0.87 for cognitive function and 0.97 for the S-TQ total.

In the study, the reliability of the scale was tested again and the Cronbach Alpha values for internal consistency were respectively calculated as 0.93 for motivational function, 0.75 for cognitive function and 0.94 for S-TQ total.

#### The Sport Anxiety Scale-2 (SAS):

The SAS which was developed by Smith et al. (1990) was revised again by Smith et al. (2006). The SAS whose Turkish adaptation was made by Karadağ and Aşçı (2020) consists of 15 articles, 3 sub dimensions (somatic anxiety, uneasiness, concentration impairment) and it was designed in four-point Likert Scale (1=Never, 2=Some, 3=More, 4=A Lot). In the reliability study performed by Karadağ and Aşçı (2020), the Cronbach Alpha values of the scale were respectively calculated as 0.65 for somatic anxiety, 0.78 for uneasiness and 0.68 for concentration impairment (Karadağ and Aşçı, 2020).

Examples for the articles of the sub dimensions are provided below:

Uneasiness: I am concerned for disappointing other people.

Somatic anxiety: I feel that my body is tense.

Concentration impairment: I have difficulties in focusing on what I need to do.

The reliability of the inventory was tested again in the study and the Cronbach Alpha values for internal reliability were respectively found as 0.87 for somatic anxiety, 0.84 for uneasiness and 0.68 for concentration impairment.

The obtained findings indicate that the S-TQ and SAS were reliable tools of measurement (Kalaycı, 2010).

#### STS Track of Sports Sciences Faculty at Bayburt University:

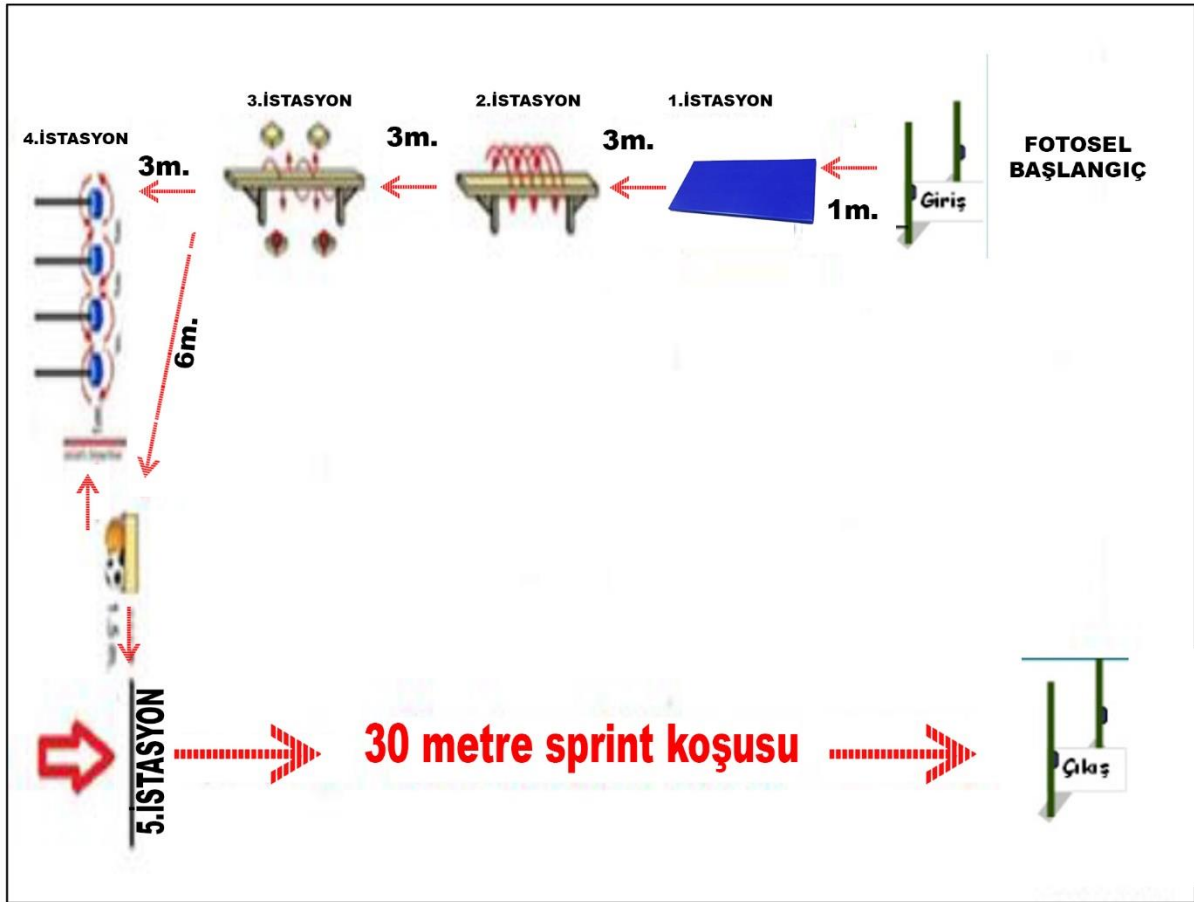
STS Track of Sports Sciences Faculty of KAEÜ: The track is respectively composed of 1- forward roll, 2- bidirectional jump with two feet, 3- changing the places of medicine ball by passing under and over the balancing beam, 4- slalom with basketball and football and 5- sprint for 30 meters (Figure 1).

#### Scoring of the Coordination Track:

The scoring of the coordination track is performed by making separate calculations among male and female candidates after the completion of the examination. The best time in scoring is regarded as full score and the ranking is made accordingly.

The candidates who complete the coordination track with 65 seconds ≤ track score ≤ 70 seconds for females, and 55 seconds ≤ track score ≤ 60 seconds for males receive 1 (one) point for the STS Coordination Track.

The candidates who complete the coordination track with a time over 70 seconds for females and 60 seconds for males receive 0 (zero) point for the STS Coordination Track.



**Figure 1:** STS Track of Sport Sciences Faculty at Bayburt University for 2022-2023 educational year (sporbf.bayburt, 2022).

*Legend:* Fotosel Başlangıç: Photocell Start, Giriş: Entry, İstasyon: Station, 30 metre sprint koşusu: Sprint for 30 meters, Çıkış: Exit

The track performance of the candidates were recorded in seconds with the assistance of photocell (Smartspeed PT, Australia).

### Collection of Data

The data was collected at the gymnasium where the STE of Sports Sciences at Bayburt University was performed before the track examination obtained online and based on voluntarism principle. During the process for collecting the data, the purpose and contents of the study was explained to the participants and their consent for their volunteer participation into the study was obtained.

### Research Ethics:

For the purpose of conducting the study, permission dated 16.09.2021 and numbered 2021/6/14 was obtained from the Ethical Board of Bayburt University.

### Analysis of Data

During performing the analysis of the data, 8 measurement tools were not included into the study due to wrong coding (such as marking the same option and inconsistent data), and the analyses were performed over the data of 544 student candidates.

Before analyzing the data obtained in the study, the data was tested for whether the data displayed normal distribution or not, and skewness for the S-TQ and its sub dimensions was found between 0.392 and 0.432, and kurtosis for the S-TQ and its sub dimensions was found between 0.519 and 0.741; and skewness for the SAS and its sub dimensions was found between 0.641 and 0.932, and kurtosis for the SAS and its sub dimensions was found between 0.153 and 0.597. According to Tabachnick ve Fidell (2007), the values of skewness and kurtosis between +1.5 and -1.5 were indicated as a criterion for normal distribution. Thus, it was regarded that the data obtained in the study displayed normal distribution, and in the analyses of the data, descriptive analysis (frequency (f), percentage (%), mean ( $\bar{x}$ ), standard deviation ( $\pm$ )), and inferential analysis (correlation (r)) were used; and in the independent samples the t-test (t) analysis method was used. The data is tested at the level of significance of  $\alpha=0.05$ .

### FINDINGS

A total of 544 volunteer student candidates, who took part in the STE for the 2022-2023 educational year for the Sport Sciences Faculty at Bayburt University whose ages ranged between 18 and 36 ( $20,00 \pm 1,99$ ) and whose track times were calculated as ( $45,77 \pm 6,11$ ) seconds for males and ( $56,75 \pm 9,95$ ) seconds for females 70.4% percent of whom were males (n=383) and 29.6% of whom were females (n=161), attended the study

**Table 1.** Results for Correlation Analysis Indicating the Relationships between Age, Track Time, S-TQ and SAS

Scale	Dimensions	$\bar{x}$	SD		1	2	3	4	5	6	7
KBF	1. Age	20	1.99	r	-						
				p							
	2. Track Time	49.02	8.98	r	0.027	-					
				p	0.527						
S-TQ	3. Motivational Function	3.53	1.09	r	<b>-.118**</b>	0.065	-				
				p	0.006	0.128					
	4. Cognitive Function	3.24	0.95	r	<b>-.090*</b>	0.065	<b>.835***</b>	-			
				p	0.036	0.131	0.000				
SAS	5. Somatic Anxiety	1.81	0.1	r	0.060	<b>.109*</b>	-0.067	0.029	-		
				p	0.164	0.011	0.117	0.495			
	6. Uneasiness	1.82	0.71	r	0.082	<b>.133**</b>	-0.040	0.027	<b>.862***</b>	-	
				p	0.055	0.002	0.357	0.524	0.000		
	7. Concentration Impairment	1.99	0.62	r	0.063	<b>.151***</b>	0.040	<b>.143**</b>	<b>.779***</b>	<b>.796***</b>	-
				p	0.140	0.000	0.357	0.001	0.000	0.000	

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

\*1.Age, 2. Track Time, 3. Motivational Function, 4. Cognitive Function, 5. Somatic Anxiety, 6. Uneasiness, 7. Concentration Impairment

In Table 1, the relations between the sub dimensions of S-TQ and SAS, age and track times were examined; and significant relations at the lower level in negative direction were determined between age, S-TQ Motivational Function sub dimension ( $r_{\text{Age-Motivational Function}} = -.118$ ;  $p < 0.01$ ) and Cognitive sub dimension ( $r_{\text{Age-Cognitive Function}} = -.090$ ;  $p < 0.05$ ).

No significant relationship was determined between Age and the sub dimensions of SAS ( $r_{\text{Age-Somatic Anxiety}} = 0.060$ ;  $p > 0.05$ ); ( $r_{\text{Age-Uneasiness}} = 0.082$ ;  $p > 0.05$ ); ( $r_{\text{Age-Concentration Impairment}} = 0.063$ ;  $p > 0.05$ ).

No significant relationship was determined between the STE Track Time and S-TQ Motivational Function sub dimension ( $r_{\text{Time-Motivational Function}} = 0.065$ ;  $p > 0.51$ ) and the sub dimension of Cognitive Function ( $r_{\text{Time-Cognitive Function}} = 0.065$ ;  $p > 0.05$ ).

Significant relations at the lower level in the positive direction were determined between the STE track time and Somatic Anxiety ( $r_{\text{Age-Somatic Anxiety}} = .109$ ;  $p < 0.05$ ), Uneasiness ( $r_{\text{Age-Uneasiness}} = .133$ ;  $p < 0.01$ ), and Concentration Impairment ( $r_{\text{Age-Concentration Impairment}} = .151$ ;  $p < 0.001$ ) which are among the sub dimensions of SAS.

No meaningful relationship was determined between S-TQ Motivational Function sub dimension, SAS Somatic Anxiety ( $r_{\text{Motivational Function-Somatic Anxiety}} = -0.067$ ;  $p > 0.05$ ), Uneasiness ( $r_{\text{Motivational Function-Uneasiness}} = -0.040$ ;  $p > 0.05$ ) and Concentration Impairment ( $r_{\text{Motivational Function-Concentration Impairment}} = 0.040$ ;  $p > 0.05$ )

While no meaningful relationship was determined between S-TQ Cognitive Function sub dimension, SAS Somatic Anxiety ( $r_{\text{Motivational Function-Somatic Anxiety}} = 0.029$ ;  $p > 0.05$ ) and Uneasiness ( $r_{\text{Motivational Function-Uneasiness}} = 0.027$ ;  $p > 0.05$ ),



significant relationship at the lower level in the positive direction was determined between S-TQ Concentration Impairment sub dimension ( $r_{\text{Motivational Function-Concentration Impairment}} = .143$ ;  $p < 0.01$ )

**Table 2.** T-test results For Comparing Average Points Obtained from the S-TQ Sub Dimensions and SAS Sub Dimensions According to the Sex Variable

Scale	Dimensions	Sex	N	$\bar{x}$	SD	t	p	Difference
S-TQ	Motivational Function	<sup>1</sup> Male	383	3.46	1.12	-2.429	0.015*	1<2
		<sup>2</sup> Female	161	3.71	0.99			
	Cognitive Function	<sup>1</sup> Male	383	3.18	0.98	-2.467	0.014*	1<2
		<sup>2</sup> Female	161	3.40	0.88			
	S-TQ Total	<sup>1</sup> Male	383	3.36	1.03	-2.538	0.011*	1<2
		<sup>2</sup> Female	161	3.59	0.91			
SAS	Somatic Anxiety	<sup>1</sup> Male	383	1.75	0.69	-3.074	0.002**	1<2
		<sup>2</sup> Female	161	1.95	0.74			
	Uneasiness	<sup>1</sup> Male	383	1.74	0.69	-3.900	0.000***	1<2
		<sup>2</sup> Female	161	2.00	0.72			
	Concentration Impairment	<sup>1</sup> Male	383	1.94	0.60	-3.186	0.002**	1<2
		<sup>2</sup> Female	161	2.12	0.64			
	SAS Total	<sup>1</sup> Male	383	1.81	0.62	-3.630	0.000***	1<2
		<sup>2</sup> Female	161	2.02	0.65			

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

In Table 2, the average scores of the S-TQ sub dimensions and SAS sub dimensions of the participants were compared based on the sex variable and the average S-TQ scores of male participants were found to be lower at a significant level statistically when compared to those of the female participants ( $t = -2.538$ ;  $p < 0.05$ ). Besides, in terms of the S-TQ sub dimensions, it was found that the average scores of male participants were lower at a significant level statistically when compared to those of the female participants in terms of the Motivational Function sub dimension ( $t = -2.429$ ;  $p < 0.05$ ) and Cognitive Function sub dimension ( $t = -2.467$ ;  $p < 0.05$ ).

In terms of the sex variable, the SAS average scores of male participants were found to be lower at a significant level statistically when compared to those of the female participants ( $t = -3.630$ ;  $p < 0.001$ ). Besides, the average scores of the male participants in terms of the SAS sub dimensions were found to be lower at a significant level statistically when compared to those of the female participants in terms of the Somatic Anxiety sub dimension ( $t = -3.074$ ;  $p < 0.01$ ), Uneasiness sub dimension ( $t = -2.467$ ;  $p < 0.05$ ), and Concentration Impairment sub dimension ( $t = -3.900$ ;  $p < 0.001$ ).

## DISCUSSION AND CONCLUSION

In this study, the relationships between the S-TQ sub dimensions, SAS sub dimensions, age and track times of the student candidates taking part in the STE of the Sport Sciences of Bayburt University are examined and besides, the S-TQ and its sub dimensions and SAS and its sub dimensions are compared according to the variable of sex.

While the findings indicate that there was significant relationships at the lower level in the negative direction between the age variables and S-TQ Motivational Function sub dimension and Cognitive Function sub dimension of the participants, there were no significant relations between the SAS sub dimensions. There are studies in the literature supporting the findings of this study. Civan et al. (2010) determined in their study that there was no significant relationship between the age variable and anxiety status of the participants. In a similar way, the findings of Yücel's (2003) study overlap with this study. Also, Öğüt (2004) reached conclusions that do not support the findings of this study. It is believed that this difference arose from factors such as individual characteristics, place of bringing up and family characteristics of study groups, because we may argue that especially the socio-cultural characteristics of individuals are an important factor for them to cope with anxiety.

While the findings also indicated that there was no significant relationship between the track time variable and S-TQ Motivational Function sub dimension and Cognitive Function sub dimension, there were significant relations at the lower level in the positive direction between Somatic Anxiety, Uneasiness and Concentration Impairment which are among the sub dimensions of SAS. In other words, we may only say that there was no significant relationship between the self-talk levels of participants and their track performance times, however there was a relationship between the decrease of their scores in somatic anxiety, uneasiness and concentration impairment which are the sub dimensions of SAS and the decrease of their track performance times and thusly this caused a positive increase in the track performance of the participants. When the literature is examined, it is indicated that there was no significant relationship between positive self-talk and sportive performance, however there was a relationship in the negative direction between negative self-talk and sportive performance (Van Raalte et al., 1994). However, in another study conducted on young swimmers, it was reported that using the strategy of self-talk did not cause a significant increase in the performance of the athletes in the competition (Hatzigeorgiadis et al., 2014). In their study, Cerit et al. (2013) indicated that there was a significant relationship between the levels of anxiety before the match and the performances of elite female basketball players, and the level of anxiety increased their performance. On the other hand, Jones et al. (1993) stated that the levels of anxiety were determinant on performance. With an inverted-u approach, Gould et al. (1987) indicated that contrary to cognitive anxiety, somatic (physiologic) anxiety was related to pistol shooting performance.

Additionally, the findings indicated that there were no significant relations between Motivational Function sub dimension which is among the sub dimensions of the S-TQ and Somatic Anxiety, Uneasiness and Concentration Impairment which are among the sub dimensions of SAS. Besides, while the findings of the study indicated that there were no meaningful relations between the S-TQ Cognitive Function sub dimension and Somatic Anxiety and Uneasiness which are among the sub dimensions of SAS, there were significant relations at the lower level in the positive direction between S-TQ Concentration Impairment. When the literature is examined, in a study conducted on athletes from many different branches, it was reported that there were significant relations in the positive direction between S-TQ Cognitive Function sub dimension and Somatic Anxiety and Concentration Impairment which are among the sub dimensions of SAS, and there were no significant relations between the

total scores of self-talk and total scores of anxiety (Hocaoğlu, 2017). In another study, it was indicated that no significant relationship was found between the cognitive anxiety levels and the level of using self-talk by the athletes (Spak, 2014).

The average S-TQ scores of male participants according to the variable of sex indicated that in terms of the Total, Motivational Function sub dimension and Cognitive Function sub dimension, the male participants had lower scores than the female participants at a significant level, and in terms of average SAS scores, Total, Somatic Anxiety sub dimension, Uneasiness sub dimension and Concentration Impairment sub dimension, the male participants had lower scores than the female participants at a significant level statistically. When the literature is examined, it was indicated that there were studies that do not support the findings of this study, and in those studies, there were no significant relations between the variable of sex and anxiety levels of the athletes (Özbekçi, 1989; Engür, 2002; Civan et al., 2010). It is believed that the difference may arise from the characteristics of the place where the study was conducted and personal characteristics of the participants.

Besides, we may also say that there were studies supporting the findings of this study: in their study, Başaran et al. (2009) determined that the male participants had higher levels of anxiety than the female participants. In a similar manner, in their study Metin et al. (2008) also indicated that the male participants had higher levels of anxiety than the female participants. In their study, Segal and Weinberg (1989) determined that female participants had higher levels of anxiety than the male participants. When the findings of the studies are evaluated, we may argue that more studies need to be conducted with different sampling groups for the purpose of determining whether the level of anxiety displayed significant differences according to the variable of sex.

#### Consequently;

- While the anxiety levels of participants (Somatic Anxiety, Uneasiness, Concentration Impairment) increase, their track times improve, however their self-talk (Motivational and Cognitive Function) and track times are not related.
- While the ages of participants increase, their levels of self-talk (Motivational and Cognitive Function) decrease, however age and anxiety are not related.
- The level of self-talk and anxiety of male participants is lower than that of the female participants.
- While the self-talk levels of participants (Cognitive Function) increase, their levels of anxiety (Concentration Impairment) increase. However, self-talk (Motivational Function sub dimension) and anxiety (Somatic Anxiety, Uneasiness and Concentration Impairment) are not related.
- Lastly, the results of the study are limited by the STE of Sport Sciences Faculty of Bayburt University for the educational year of 2022-2023. Therefore, the obtained results may be generalized only within this framework. Addressing the relationship between self-talk, anxiety and physical performance in performance sports may contribute to the validity and generalizability of the findings.

## Ethics Text

In this article, during the research process, journal writing rules, publication principles, research and publication ethics rules, journal ethics rules were followed. Responsibility for any violations that may arise regarding the article belongs to the author. University Ethics Decision Number 195

**Conflict of Interest:** There is no personal or financial conflict of interest among the authors in this study.

**Author Contribution Rate:** In this study, the contribution rate of the first author is 50%, while the contribution rate of the second author is 50%.

## Resources

- Başaran, M.H., Taşğın, Ö., Sanioğlu, A. ve Taşkın, A.K. (2009). Sporcularda durumluk ve sürekli kaygı düzeylerinin bazı değişkenlere göre incelenmesi. S.Ü. Sosyal Bilimler Enstitüsü Dergisi, 21.
- Başer, E. (1998). *Uygulamaları spor psikolojisi*. Ankara: Bağırğan Yayınevi.
- Bayköse, N., Civar Yavuz, S., Çoban, M., Şahan, H., & Certel, Z. (2016). Role of self talk in prediction of passion level in physical education class environment. Turkish Online Journal of Educational Technology, 2016, 445-452.
- Cerit, E., Gümüşdağ, H., Evli, F., Şahin, S., & Bastık, C. (2013). Elit kadın basketbol oyuncularının yarışma öncesi kaygı düzeyleri ile performansları arasındaki ilişki. *Sport Sciences*, 8(1), 26-34.
- Civan, A., Arı, R., Görücü, A., Özdemir, M., (2010), Bireysel ve takım sporcularının müsabaka öncesi ve sonrası durumluluk ve sürekli kaygı düzeylerinin karşılaştırılması. Uluslararası İnsan Bilimleri Dergisi. 7:1.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th edition). USA: Routledge.
- Engür, Mustafa (2002). *Elit Sporcularda Başarı Motivasyonun, Durumluk Kaygı Düzeyleri Üzerine Etkisi*, Yüksek Lisans Tezi, Ege Üniversitesi Sağlık Bilimleri Enstitüsü, İzmir.
- Engür, M. (2011) Performans Başarısızlığı Değerlendirme Envanteri ve Kendinle Konuşma Anketinin Türk Sporcu Popülasyonu'na Uyarlanması ve Uygulanması. Ege Üniversitesi, Sağlık Bilimleri Enstitüsü. Sporda Psikososyal Alanlar Anabilim Dalı. Doktora Tezi, İzmir.
- Erkan, U. (1998). *Sporcular için zihinsel antrenör rehberi*. Ankara: Bağırğan Yayınevi
- Erskine, R. G. (2015). *Relational Patterns, Therapeutic Presence "Concepts and Practice of Integrative Psychotherapy"*, London: Karnac Books Ltd.
- Gümüş, M. (2002). *Profesyonel Futbol Takımlarında Puan Sıralamasına Göre Durumluk Kaygı Düzeylerinin İncelenmesi*, Yüksek Lisans Tezi, Sakarya Üniversitesi Sosyal Bilimler Enstitüsü, Sakarya.
- Gould, D., Petlichkoff, L., Simons, J., & Vevera, M. (1987). Relationship between Competitive State Anxiety Inventory-2 subscale scores and pistol shooting performance. *Journal of Sport and Exercise Psychology*, 9(1), 33-42.
- Hackfort, D., & Schwenkmezger, P. (1993). Anxiety In RN Singer, M. Murphey, & LK Tennant,(Eds.). *Handbook of research on sport psychology* (pp. 328–364).
- Hardy, J., Begley, K., & Blanchfield, A. W. (2015). It's good but it's not right: instructional self-talk and skilled performance. *Journal of Applied Sport Psychology*, 27(2), 132-139.
- Hocaoğlu, M. (2017). *Sporcularda kendinle konuşma ve spor kaygı düzeyi arasındaki ilişkinin incelenmesi*. Yüksek Lisans Tezi, Sağlık Bilimler Enstitüsü, İstanbul.

- Jones, G., Swain, A., & Hardy, L. (1993). Intensity and direction dimensions of competitive state anxiety and relationships with performance. *Journal of sports sciences*, 11(6), 525-532.
- Karadağ D, Aşçı FH. The reliability and validity of the Sport Anxiety Scale-2 for adolescent athletes. 3rd International Exercise and Sport Psychology Congress Proceedings Book. 23-25 October, 2015. İstanbul, Turkey. p.54.
- Kring, A. M. ve Johnson, S. L. (2015). *Anormal Psikoloji*, Muzaffer Şahin (Çev. Ed.), Ankara: Nobel.
- Metin, Ö., Özkoç, Ş., Özer, F.G., ve Beydağ, D. (2008). Denizli çıraklık eğitim merkezine devam eden gençlerin Kaygı düzeyinin belirlenmesi, *TSK Koruyucu Hekimlik Bülteni*, 7 (2).
- Moran A. P. (1994). *Sport And Exercise Psychology: A Critical Introduction*. 2nd Edition. Publisher: Routledge; 165-200.
- Öğüt, F. (2004). *Sosyal Uyum ile Sürekli Kaygı Arasındaki İlişki*, Yüksek Lisans Tezi, Kocaeli Üniversitesi Sağlık Bilimleri Enstitüsü, Kocaeli
- Özbekçi, F. (1989). *Farklı spor dallarında yaşanan müsabaka stres düzeylerinin araştırılması*. Yayımlanmamış Yüksek Lisans Tezi. M.Ü. Sosyal Bilimler Enstitüsü. İstanbul.
- Öztürk, A. (2016). *Bireysel ve Takım Sporlarındaki Temel Becerilerin Performansa Etkisinin İçsel Konuşma (Self-Talk) Tekniği ile İncelenmesi*. Doktora Tezi. Kocaeli Üniversitesi, İzmit.
- Smith RE, Smoll FL, Cumming SP, Grossbard JR. (2006). *Measurement of multidimensional sport performance anxiety in children and adults: The Sport Anxiety Scale-2*. *J Sport Exerc Psychol*. 28(4):479-501.
- Spak, J. K. (2014). The Examination of Self-talk and Cognitive Anxiety Among Collegiate Athletes. Ithaca College.
- Tabachnick, BG. and Fidell, LS. (2007). *Using multivariate statistics*. Allyn & Bacon/Pearson Education.
- Tavacıoğlu, L. (1999). *Spor psikolojisi-bilişsel değerlendirmeler*. Ankara: Bağırğan Yayımevi.
- Van Raalte, J. L., Brewer, B. W., Rivera, P. M., & Petitpas, A. J. (1994). *The relationship between observable self-talk and competitive junior tennis players' match performances*. *Journal of Sport and Exercise Psychology*, 16, 400-415.
- Yücel, E.O. (2003). *Taekwondocuların Durumluk ve Sürekli Kaygı Düzeyleri ve Müsabakalardaki Başarılarına Etkisi*, Yüksek Lisans Tezi, Gazi Üniversitesi Sağlık Bilimleri Enstitüsü Beden Eğitimi ve Spor Anabilim Dalı, Ankara.
- Zervas, Y., Stavrou N. ve Psychountaki M. (2007). Development and Validation of The Self-Talk Questionnaire (S-Tq) For Sports. *Journal Of Applied Sport Psychology*, 19, 142-159.

## GENİŞLETİLMİŞ ÖZET

**Çalışmanın Amacı:** Bu çalışmada spor bilimlerinde özel yetenek sınavına katılan bireylerde içsel konuşma ve kaygı arasındaki ilişkileri ortaya koymak ve bu psikolojik yapıları bazı demografik değişkenlere göre karşılaştırmak amaçlanmıştır.

**Araştırma Soruları:** ÖYS Katılan bireylerin, içsel konuşma ve kaygı düzeyleri arasında ilişki var mıdır?

ÖYS Katılan bireylerin, yaş ve parkur süreleri ile içsel konuşma ve kaygı düzeyleri arasında ilişki var mıdır?

ÖYS Katılan bireylerin, içsel konuşma ve kaygı düzeyleri cinsiyet değişkenine göre farklılaşmakta mıdır?

**Literatür Araştırması:** Literatür incelendiğinde mevcut çalışmanın bulgularını destekleyen çalışmaların olduğu görülmektedir (Segal ve Weinberg, 1989; Başaran vd., 2009; Metin vd., 2008) Başaran ve arkadaşları çalışmalarında erkek katılımcıların kadın katılımcılara göre kaygı düzeylerinin daha yüksek olduğunu belirlemişlerdir. Benzer şekilde Metin ve arkadaşlarının çalışmasında da erkek katılımcıların kaygı düzeylerinin kadın katılımcılara göre yüksek olduğu bildirilmiştir. Segal ve Weinberg ise kadın katılımcıların erkek katılımcılara göre kaygı düzeylerinin daha yüksek olduğunu saptamışlardır. Ayrıca Yücel'in (2003) çalışmasının bulguları da mevcut çalışmamız ile örtüşmektedir.

Araştırma kapsamında ulusal ve uluslararası yazın incelendiğinde mevcut çalışmanın bulgularını desteklemeyen çalışmaların olduğu da görülmektedir (Özbekçi, 1989; Engür, 2002; Civan vd., 2010). Yapılan çalışmalarda sporcuların cinsiyet değişkeni ile kaygı düzeyleri arasında anlamlı ilişkiler olmadığı aradaki farklılığın çalışmaların yapıldıkları bölge ve katılımcıların kişisel özelliklerinden kaynaklandığı düşünülmektedir. Ögüt'ün (2004) çalışmasında da mevcut çalışmanın bulgularını desteklemeyen sonuçlara ulaşılmıştır. Bu farklılığın çalışma gruplarının bireysel özelliklerinden, yetiştikleri bölge ve aile özellikleri gibi etkenlerden kaynaklandığı düşünülmektedir. Zira özellikle sosyo kültürel özelliklerin bireylerin kaygı ile baş etmelerinde önemli bir unsur olduğu söylenebilir.

**Yöntem:** Araştırmada betimsel ve ilişkisel araştırma deseninden gerçekleştirilmiştir. Araştırmanın örneklem grubunu, tesadüfi örnekleme yöntemi ile seçilen Bayburt Üniversitesi Spor Bilimleri Fakültesi'nde 2022-2023 eğitim-öğretim yılında ÖYS'e katılan 383 erkek, 161 kadın toplamda 544 öğrenci aday katılımcı olmuştur. Araştırmada veri toplama araçları olarak "Kişisel Bilgi Formu", "Kendinle Konuşma Ölçeği (KKÖ)", "Sporda Kaygı Ölçeği-2 (SKÖ)" ve "Bayburt Üniversitesi Spor Bilimleri Fakültesi Özel Yetenek Sınavı (ÖYS) Sonuçları" kullanılmıştır. Veriler online ve gönüllülük esasına göre elde edilmiştir. Elde edilen veriler SPSS 25.0 bilgisayar programı ile analiz edilmiştir. İlişkisel veri analizi işe koşulmadan önce elde edilen verilerin homojenliğe bakılmış ve verilerin normal dağılım gösterdiği saptanmıştır. Buradan hareketle verilerin çözümlenmesinde betimsel istatistiklerden (frekans (f), yüzde (%), ortalama ( $\bar{x}$ ) ve standart sapma (Ss)) ve ilişkisel istatistiklerden (t testi, pearson momentler çarpımı korelasyon katsayısı) yararlanılmıştır. İstatistiksel anlamlılık derecesi  $p < 0,05$  olarak ele alınmıştır.

**Sonuç ve Değerlendirme:** Çalışmada katılımcıların kaygı düzeyleri artarken parkur sürelerinin iyileştiği, ancak kendinle konuşma ile parkur sürelerinin ilişkili olmadığı saptanmıştır. Ayrıca çalışmada katılımcıların yaşları artarken kendinle konuşma düzeylerinin azaldığı, bununla birlikte yaş ile kaygı düzeyinin ilişkili olmadığı, erkek katılımcıların kendinle konuşma ve kaygı düzeylerinin kadınlardan düşük olduğu, katılımcıların kendinle konuşma düzeyleri artarken kaygı düzeylerinin de arttığı belirlenmiştir. Bununla birlikte kendinle konuşma ile kaygı arasında ilişki olmadığı tespit edilmiştir. Sonuç olarak; Katılımcıların kaygı düzeyleri (Somatik Kaygı, Endişe, Konsantrasyon Bozukluğu) düzeyleri artarken parkur süreleri iyileşmekte ancak kendinle konuşma (Motivasyonel ve Bilişsel İşlev) ile parkur süreleri ilişkili değildir. Katılımcıların yaşları artarken kendinle konuşma (Motivasyonel ve Bilişsel İşlev) düzeyleri azalmakta ancak yaş ile kaygı ilişkili değildir. Erkek katılımcıların kendinle konuşma ve

kaygı düzeyleri kadınlardan düşüktür. Katılımcıların kendinle konuşma (Bilişsel İşlev) düzeyleri artarken kaygı (Konsantrasyon Bozukluğu) düzeyleri artmaktadır. Ancak kendinle konuşma (Motivasyonel İşlev alt boyutu) ile kaygı (Somatik kaygı, Endişe ve Konsantrasyon Bozukluğu) ile ilişkili değildir. Son olarak; araştırma sonuçları 2022-2023 eğitim-öğretim yılı Bayburt Üniversitesi Spor Bilimleri Fakültesi ÖYS ile sınırlıdır. Dolayısıyla elde edilen sonuçlar sadece bu çerçevede genellenebilir. Kendinle konuşma, kaygı ve fiziksel performans arasındaki ilişkiyi performans sporlarında ele almak bulguların geçerlik ve genellenebilirliğine katkı sağlayabilir.