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ANALYSING SPORTS SUPERSTITION OF STUDENTS RECEIVING SPORTS SCIENCES EDUCATION IN TERMS OF DEMOGRAPHIC VARIABLES[1] [2]

Spor Bilimleri Eğitimi Alan Öğrencilerin Sporda Batıl İnançlarının Demografik Değişkenler Açısından İncelenmesi

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Kübra ÖZDEMİR
Physical Education and Sports, Kazım Karabekir Faculty of Education, Atatürk University, Erzurum
ORCID ID: 0000-0003-1576-2131

Ahmet Gökhan YAZICI
Physical Education and Sports, Kazım Karabekir Faculty of Education, Atatürk University, Erzurum
ID: 0000-0001-7069-304X

Mehmet Ertuğrul ÖZTÜRK
Physical Education and Sports, Kazım Karabekir Faculty of Education, Atatürk University, Erzurum
ORCID ID: 0000-0002-4801-7632

Alptürk AKÇÖLTEKİN
School of Physical Education and Sports, Department of Sport Management, Ardahan University, Ardahan
ORCID ID: 0000-0001-6694-1346

Nihal AKOĞUZ YAZICI
Recep Tayyip Erdoğan University School of Physical Education and Sports, Rize.
ORCID ID: 0000-0002-4766-140X

ABSTRACT

Superstitions that existed centuries ago in the form of myths still continue to have an impact on people today. The purpose of this research, an analysing sports superstition of students receiving sports sciences education in terms of demographic variables. Within the context of this aim, all the students getting their education at the sport departments of the universities of Ardahan, Atatürk, Ağrı İbrahim Çeçen, Recep Tayyip Erdoğan and Iğdır comprise the target population of the study and randomly selected 1000 voluntary students comprise sample group of the study.

In this study, random sampling method was used in sample selection using general survey model. To measure the superstition behavior of athletes in the study, Buhramn et al. (1982) and the Turkish adaptation of Barut (2008), 37-item sports superstition and behavior scale was used, and the Kurtosis - Skewness tests were used when the data obtained showed normal distribution.

As a result, in this study, it was seen that there was a significant difference between the variables of department, gender, sportive success, age and possession of objects that they thought bring good luck with them before the competition and their superstitions

ÖZET

Yüzyıllar önce mit formunda varlığını gösteren batıl inançlar, bugün hala insanlar üzerinde etkisini göstermeye devam etmektedir. Bu araştırmanın amacı, spor bilimleri eğitimi alan öğrencilerin sporda batıl inançlarının demografik değişkenler açısından incelenmesidir. Bu amaçla çalışmanın evrenini, Ardahan, Atatürk, Ağrı İbrahim Çeçen, Recep Tayyip Erdoğan ve Iğdır Üniversitesi spor bölümünde öğrenim gören tüm öğrenciler, örneklemini ise bu Üniversitelerde öğrenim gören ve tesadüfi yolla seçilen 1000 gönüllü öğrenci oluşturmaktadır.

Bu araştırmada genel tarama modeli kullanılarak örneklem seçiminde gelişigüzel örneklem yöntemi kullanılmıştır. Araştırmada sporcuların batıl inanç davranışlarını ölçmek için Buhramn ve ark. (1982) tarafından geliştirilen ve Türkçe uyarlaması Barut (2008) tarafından yapılan 37 maddelik sporda batıl inanç ve davranış ölçeği uygulanmış olup, alınan verilerin normal dağılım gösterip göstermediğinde ise Kurtosis ve Skewness testi yapılmıştır.

Sonuç olarak bu çalışmada spor bilimleri eğitimi alan öğrencilerin bölüm, cinsiyet, sportif başarı, yaş ve

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Again, it was observed that there was no significant difference between the duration of active sports and their superstitions of the students who participated in our study, who were educated in sports sciences, nationality, individual and team athlete or not.

Keywords: Sports, Superstition, Auspicious Object

müsabaka öncesi yanlarında uğur getirdiğini düşündükleri nesneleri bulundurma değişkeni ile batıl inançları arasında anlamlı bir fark bulunduğu görülmüştür.

Yine çalışmamıza katılan spor bilimleri eğitimi alan öğrencilerin millilik, bireysel ve takım sporcusu olup/olmama aktif spor yapılan süre değişkeni ile batıl inançları arasında anlamlı bir fark bulunmadığı görülmüştür.

Anahtar Kelimeler: Spor, Batıl İnanç, Uğurlu Nesne

1. INTRODUCTION

Superstitions that emerged thousands of years ago in the form of myths still continue to have an impact on people today. The curiosity impulse that the secrets of life create on people, the desire to cope with misfortunes, and the expectation of having better in every situation or overcoming desperation constitute the basis of individuals' need for superstitions (Akova, 2011). However, many people turn to their superstitions and practices in their daily lives in order to gain good luck (Aghayeva, 2019).

There is no generally accepted definition of the concept of superstition and behaviour because what someone regards as strange and as false, others may see as normal phenomena and habitual situations. Moreover, what few people believe today could become the widely accepted belief in the future. Superstitions cover a wide range of disciplines (Lewis, 1918). Superstitions, also known as beliefs and actions, in which erroneous assumptions are made about their causes and effects, are generally rejected by modern science. Nevertheless, they are considered as popular beliefs and practices that have existed for a long time in many narratives (Martin, 2004). The concept of superstition, which is defined as the tendency to attribute events in nature to supernatural powers even if it has been scientifically proven, is defined as claiming the existence of such a relationship between phenomena and objects that have no cause-effect relationship with each other (Maller and Lunden 1933).

The most important factor that ensures the continuity of superstitions is that people think they benefit them. Individuals tend to maintain behaviours that they consider themselves beneficial even if they know that it is against reason and science. Reasons such as fear and despair in people, desire to know the future, trust, desire to achieve success ensure the continuity of these beliefs and rituals today. In this respect, there are many sociological, psychological and cultural factors in the emergence of superstitions. Basically, it is possible to mention some psychosocial reasons (Ayten and Köse, 2012). The first social scientists interested in superstition and behaviour defined superstition as a tendency to explain an event with natural cause for supernatural, mysterious and scientifically denied causes or reasons (Rudski, 2003).

When we consider superstitions and behaviours as a whole, we understand that they are a mixture of emotional, cognitive and behavioural elements.

Emotional dimension includes emotional states and processes experienced in connection with situations such as fear, anxiety, anger, excitement, joy, surprise and wonder.

Cognitive dimension is represented by processes such as perception, thinking, imagination, memory and attention.

The behavioral dimension is related to rituals and symbolic behaviour (Saenko, 2005).

Superstition behaviours can be expressed as beliefs that enable the individuals to protect themselves against unfamiliar forces and feel at peace by establishing a connection with certainty in order to cope with uncertainty, fear, risk and complexities, and reducing anxiety and discomfort (Odabaşı, 2016).

Sports significantly contributes to the mental, psychological and physical development of individuals of all ages (Yazıcı *et al,* 2016). Sport has always existed in human life. The interaction

of sports, which is affected by every development in the world, with different disciplines is inevitable (Murathan and Murathan, 2019). According to Womack, the definition of the concept of superstition in sports is the situation where the actions are different from the repetitive, formal, sequential and technical performance in situations where the athletes feel strong in the control of chance and other external factors. He stated that the level of competition, social expectation, and pressure can drive the athlete to use superstitions to gain a sense of control about the competition (Womack 1992).

If we talk about the events in the past, Uruguayan writer Eduardo Galeano's book "Soccer in the Shadow and the Sun" says that the superstitious behaviours performed in sports, especially the athletes in the football branch. For instance, what happened to the Vasco Da Gama Club in 1937, one of the legendary clubs, is incredible. The supporter of a team that Vasco beat with a different score like 12-0 started with the curse of "If there is a god, Vasco cannot be champion for 12 years", burying a frog with a mouth sewn in Vasco's field. Thereupon, the managers of the Vasco team dug up the whole field to find the frog, but they could not find it. Thus the belief that the evil spirits started to dominate soccer became dominant and the Vasco team did not become the champion for 11 years. One year before the end of the spell, Vasco becomes champion and the club president revealed the seriousness of the incident by saying "God forgave our punishment for a year" (Galeano 1997).

Again, there are also such different superstition as Japanese equestrian Yoshiaki Oiwa throws salt on himself and his horse before each race, Olympic medal record holder US swimmer Michael Phelps opens his arms in the air three times each time before jumping into the pool and many athletes a bring luck plush animals or "totems" by carrying them to the Olympics (Url 1, 2020). Serena Williams, one of the leading female names in tennis; ties shoelaces in the same way every time, and in each match, Nadal lists two bottles of water side by side with the labels facing him. (Url 2, 2020) Turkish National Gymnast Ferhat Arıcan does not have a ritual but says that he likes to listen to calmer music before competitions (Url 3, 2020).

The objective of this study is to analyse the superstitions of sports science students in terms of demographic variables.

In accordance with this purpose, answers have been sought for the sub-problems stated below.

1. Is there a statistical difference between the students' departments and their superstitions?
2. Is there a statistical difference between being a national athlete of the students and their superstitions?
3. Is there a statistical difference between students' superstitions and whether they have a branch or not?
4. Is there a statistical difference between the variable of having the objects that students bring for good luck with them before the competition and their superstitions?
5. Is there a statistical difference between students' beliefs about the importance of sportive success and their superstitions?
6. Is there a statistical difference between the duration of active sports and their superstitions?

2. METHOD

The method has been designed and planned using the general survey model. Survey models are a suitable model for studies that aim to describe a past or current situation as it exists. Descriptive survey models are divided into two parts. These sections are general surveys and case studies. Correlational scanning model is a method that is included in the general survey method.

In a universe consisting of many elements, General survey models is the survey arrangements made on the whole of the universe or a group of samples or samples taken from it in order to reach a general judgment about the universe (Karasar, 2006).

The accidental sampling method has been used in the sample selection of the study. In this method; the researcher chooses a part of the universe in any way according to the determined sample size. Going to any school and sampling a number of students (such as 100 students) without probability is accidental sampling (Dawson and Trapp, 2001).

3. POPULATION AND SAMPLE

The population of the study has been composed of students studying School of Physical Education and Sports and Faculties of Sports Sciences in 2018-2019 at Atatürk University, Ardahan University, Ağrı İbrahim Çeçen University, Iğdır University and Recep Tayyip Erdoğan University. On the other hand, the sample of the study includes randomly selected 1000 people from the universe.

4. DATA COLLECTION TOOLS

In the data collection tool used in the study, "Superstition and Behaviour Inventory in Sports" has been used to measure the superstition behavior of the participants as well as demographic information.

Originally named "Superstitiuos Ritual Questionnaire" develeoped by Buhramn et al. (1982) is used to measure the superstition behavior of athletes and the superstition and behavior inventory's Turkish adaptation was done by Barut (2008). The test-retest correlation coefficient has been calculated as 0.95. The inventory is a 5-point Likert type inventory with 37 items and consists of 7 separate categories. These are superstitions related to clothing and appearance, objects deemed auspicious, behaviours used before games and encounters, behaviours used during games and encounters, superstition used as a team and praying respectively.

Regarding to what extent the questions under this category are effective in their own sports life; they are requested to answer as such: (1) Not effective at all, (2) Less effective (3) Occasionally effective (4) Effective (5) Very effective. In the evaluation of the scale, 5-point Likert type value ranges have been used. Accordinly; 1-1.8 means very low, 1.81-2.6 low, 2.61-3.4 medium, 3.41-4.2 high and 4.21-5 very high superstitious behaviour average.

5. DATA ANALYSIS TECHNIQUES

Before starting the analysis of the data obtained as a result of the research, the skewness and kurtosis values of data have been analysed in order to determine whether the data showed normal distribution or not, and the obtained values are presented in Table 1.

Table 1: Skewness and Kurtosis Values of the Data

Overall Average	N	X	SS	Skewness		Kurtosis	
	1000	,161	,071	,866	,077	,459	,155

When Table 1 is analysed, it has been determined that the skewness value of the scale data is -, 866 and the cortosis value is 459, the data show a parametric distribution and parametric analysis techniques will be used in the analysis of the data. When Kurtosis and Skewness values are between -1.5 and +1.5, it is accepted to be a normal distribution (Tabachnick and Fidell, 2013).

In the analysis of the sub-problems of the research, while ANOVA will be used on the 1st, 4th, 7th and 8th sub-problems in the analysis of the obtained data; LSD test, one of the Post Hoct multiple comparison tests, will be used to determine which groups are caused by the statistical difference between the groups in these sub-problems. The t-test will be used in the analysis of the 2nd, 3th, 5th and 6th sub-problems of the research.

6. FINDINGS

Table 2: Findings of the Athletes Participating in the Study Regarding the Demographic Features

	N	%
Gender		
Female	355	35.5
Male	645	64.5
Age		
17- 21	561	56.1
22-26	410	41.0
27-31	22	2.2
31 and above	7	.7
Department		
Physical Education and Sports Teaching	619	15,2
Sport Management	254	15,2
Coaching	127	11,4
Being National Athlete		
Yes	93	30.3
No	907	49.2
Type of Sports		
Individual Sports	480	15,2
Team Sports	520	15,2
Sports Age		
0-5 Year(s)	527	30.3
5-10 Yıl Years	342	49.2
10-15 Years	104	10.4
15 Years and above	27	2.7

When the data in Table 2 have been analysed, we see findings of the athletes participating in the study regarding the demographic features.

Table 3: ANOVA test results on whether there is a statistical difference between students' departments and their superstitions.

Genel	N	$\bar{x}$	Ss		Sum of Squares	df	Average of Squares	F	p	Difference
1.	619	,1660	,07416	Intergroup	,044	2	,022			2>1
2.	254	,1502	,06608	In-group	,002	1	,002	4,376	,013*	
3.	127	,1615	,06694		,016	1	,016			
Total	1000	,1614	,07154		5,068		,005			

1: Physical Education and Sports Teaching, 2: Sports Management, 3: Coaching

When the data in Table 3 have been analysed, it has been understood that there is a statistically significant difference between the student's department variable and their superstitions ($F = 4.376$; $p < 0.05$). As a result of the LSD test done in order to determine which groups the awareness originated from if there was a statistical difference between the 2nd group and the 1st group, it was in favour of the 2nd group.

Table 4: T-test results on whether there is a statistical difference between students' gender and their superstitions.

	Variable	**N**	**$\bar{x}$**	**Ss**	**t**	**df**	**p**
Superstition	**1**	355	,155	,068	-2,077	998	,038*
	2	645	,164	,073			

1: Female 2: Male.

When the data have been analysed in Table 4, it is clear that there is a statistically significant difference between the students' gender variable and their superstitions ($t = -2.077$; $p < 0.05$).

Table 5: T-test results regarding whether there is a statistical difference between students' being national athlete status and their superstitions.

	Variable	**N**	**$\bar{x}$**	**Ss**	**t**	**df**	**p**
Superstition	**1**	93	,1549	,068	-,921	998	,357
	2	907	,1621	,071			

1: National Athlete, 2: Not National Athlete

In Table 5, it has been observed that there is no statistically significant difference between students' being national athlete variable and their superstitions regarding the third sub-problem of the research (t = -, 921; p> 0.05).

Table 6: ANOVA and LSD test results on whether there is a statistically significant difference between students' age variable and their superstitions.

Overall	N	x̄	Ss		Sum of Squares	df	Average of Squares	F	p	Difference
1.	561	,164	,072	Intergroup	,052	3	,017			1>4 1>3
2.	410	,159	,069	In-group	,047	1	,047	3,399	,017*	2>4
3.	22	,145	,068		,026	2	,026			
4.	7	,084	,010		,026	2	,013			
Total	1000	,161	,071		5,061		,005			

1: 17-21 Age, 2: 22-26 Age, 3: 27-31 Age, 4: 31 and above.

When the data has been considered in Table 6, it has been determined that there is a statistically significant difference between the age variable of the students and their superstitions regarding the fourth sub-problem of the study (F = 3.399; p <0.05). As a result of the LSD test conducted to determine from which groups the difference stem, it is clear that there is a statistically significant difference between the students in the 1st group and the students in the 3rd and 4th groups and the differences are in favour of the students in the 1st group. In addition, it is discovered that there is a statistically significant difference between the students in the 2nd and 4th groups, and this difference is in favour of the students in the 2nd group.

Table 7: T-test results on whether there is a statistical relationship between the students' individual and team athletes or not and their superstitions.

	Variable	**N**	**x̄**	**Ss**	**t**	**df**	**p**
Superstition	**1**	480	,156	,071	-1,953	998	,051
	2	520	,165	,070			

1: Individual Athlete, 2: Team Athlete

When the data in Table 7 have been analysed, it has been determined that there is no statistically significant difference between the students' individual and team athlete or not and their superstition (t = -1.953; p> 0.05).

Table 8: T-test results regarding whether there is a statistical difference between the students' possession of the objects that they think bring good luck with them before the competition and their superstitions.

	Variable	**N**	**x̄**	**Ss**	**t**	**df**	**p**
Superstition	**1**	340	,197	,078	12,247	998	,000*
	2	660	,143	,059			

1: Yes, 2: No

When the data have been analysed in Table 8, it is clear that there is a statistically significant difference between the students' superstitions and the variable of having objects that they thought bring good luck with them before the competition or not (t = 12.247; p <0.05).

Table 9: ANOVA and LSD test results on whether there is a statistical difference between students' beliefs about the importance of sporting success and their superstitions.

Overall	N	x̄	Ss		Sum of Squares	df	Average of Squares	F	p	Fark
1.	29	,156	,086	Intergroup	,043	3	,014			
2.	20	,143	,076	In-group	,003	1	,003	2,830	,037*	4>3
3.	197	,150	,064		,027	1	,027			
4.	754	,165	,072		,016	2	,008			
Total	1000	,161	,071		5,069	999	,005			

1: Not important, 2: Less important, 3: Important, 4: Very Important.

In Table 9, it has been concluded that there is a statistically significant difference between students' beliefs about the importance of sportive success and their superstitions regarding the seventh sub-problem of the research (F = 2,830; p <0.05). As a result of the LSD test conducted to determine

from which groups the difference stem, it has been understood that there is a statistically significant difference between the students in the 4th and 3rd groups, and this difference in favour of the students in the 4th group.

Table 10: ANOVA and LSD test results on whether there is a statistically significant difference between the duration of active sports and their superstitions

Overall	N	$\bar{x}$	Ss		Sum of Squares	df	Average of Squares	F	p	Difference
1.	527	,159	,074	Intergroup	,012	3	,004			
2.	342	,163	,067	In-group	,002	1	,002	2,740	,068	
3.	104	,167	,065		,002	1	,002			
4.	27	,149	,082		,010	2	,005			
Total	1000	,161	,071		5,101	996	,005			

1: 0-5 Year(s), 2: 5-10 Years, 3: 10-15 Years, 4: 15 Years and above.

In Table 10, it is observed that there is no statistically significant difference between the duration of active sports and their superstitions regarding the eighth sub-problem of the research ($F = 2.740$; $p > 0.05$).

6. DISCUSSION

In this section, the findings obtained from the research are compared with other studies in the literature.

In this study, when the table (3) comparing the superstitions of the students who study sports sciences according to their gender has been analysed, it is understood that males have higher rank average than females, especially in superstition behaviour. In their study in 1981, Neil *et al*., stated that male ice hockey players are more superstitious than female ice hockey players. These findings support our study.

Again, Kurudirek stated in his study in 2018 that men ($\bar{x} = 118.59$) have statistically higher rank average than women ($\bar{x} = 91.45$) in superstition behaviour. In our study, it has been observed that males ($\bar{x} =$, 164) have higher ranks than females ($\bar{x} =$, 155) in superstition behaviour. Our work is in parallel with the work done by Kurudirek.

In his study titled as "Analysing obsession, superstition and thought control of Professional football players playing in Anatolian side football clubs of Istanbul province" in 2019, Kavi found that there is no significant relationship between the duration of playing licensed football and their superstition and behaviour. These findings support our study.

In the study conducted by Bleak and Frederick in 1998, it has been observed that the frequency of developing superstitious behaviours decreased as sportive success gained importance.

No difference has been found between competition or success and superstitious behaviour in another study by Todd and Brown in 2003. These findings are not in line with our study.

In his study in 2019 called "analysing the beliefs, superstitions and different behavior tendencies of professional football players before or during the training", Çakmak has concluded a significant difference in superstitions and behaviours of football players according to whether they are national athletes or not.

In our study, it has been determined in Table 4 that there is no statistically significant difference between students' being national athlete variable and their superstitions regarding the third sub-problem of the study. Çakmak's work and our work are not in the same direction.

7. RESULTS AND RECOMMENDATIONS

In this study, it has been observed that there is a significant difference between the variables of students studying sport sciences department, gender, sportive success, age and possession of objects that they thought bring good luck with them before the competition and their superstitions.

Again, it has been understood that there is no significant difference between the duration of active sports, being national athlete, being a player of an individual and a team athlete and their superstitions of the students who participated in our study, who are stduying in sports sciences.

In fact, superstition is the thoughts that people seek to answer the questions of the incomprehensibility of the human mind that they want to believe. Even if we try to attribute meaning to the superstition and perspective in question on the basis of belief, we can describe the human as a source of motivation for goals with the awareness of their own potential. We can also consider the excess percentage of realizing what every person desires so much as an intellectual action that can motivate the potential of intellectual and intellectual power.

Although intellectual activities that turn into superstitions or behaviours evoke positive concepts and actions from the negative and are considered as external factors and elements that will bring people to their goals, the mind, thoughts, performance and competence of the individual who coordinates and motivates the process. The human organism can also be thought of as anxiety, stress, fear, anxiety and mental struggle towards the goal and success, which arise with stimuli and reactions that can prevent itself from aim and success, with the ability to establish a cause and effect relationship between different stimuli and reactions, and to take actions and thoughts in this direction. In a sense, it can be underlined that our dreams and desires, the intellectual power center that can determine our potential and future, should consider and investigate superstition as an intellectual power that affects behaviour and life.

To sum up, it is worth investigating whether superstition is a belief or a superstitious reflex and reaction. Furthermore, comparing the mental disposition and potential of athletes and sedentary control groups with their superstition perspectives may be a new research topic. The comparison and analysis of the success and performance percentages of the athletes and their superstition levels can be a subject of further research. Comparisons can be made by applying belief and superstition studies to athletes studying in the field of sports at other universities. It can be investigated whether there are superstitions of amateur and professional athletes who are interested in individual and team sports within the Ministry of Youth and Sports and in TOPC centers. We can offer suggestions to the athletes in our country as our work can be adapted to research within the framework of different branches and variables.

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