

# The determination of knowledge levels related to doping in elite athletes

Nevzat DINCER<sup>1</sup>, Hayri DEMİR<sup>2</sup>

<sup>1</sup> Department of Physical Education and Sport, Gazi University, Ankara, Turkey (e-mail: nevatdincer@gmail.com).

<sup>2</sup> Department of Physical Education and Sport, Selcuk University, Konya, Turkey.

## Abstract

The aim of the study was to determine knowledge level related to doping in athletes who performed individual sports. The sample of the research consists of 117 national level athletes (62 wrestlers, 29 taekwondo players and 26 judoists). A personal information form and a questionnaire which aim to determine the athletes' knowledge levels and opinions about doping and ergogenic supply were carried out for the athletes participated in the research as a means of data collection. The reliability and validity of the questionnaire were realized by Eröz. The chi-square test was performed to compare variables. A significant difference was found between the sports branches about whether they intend to use doping for higher performances ( $X^2 = 26.764$ ;  $p < 0.01$ ). A significant difference was found between sport branches about whether the athletes intend to use doping due to the fear of losing ( $X^2 = 43.207$ ;  $p < 0.01$ ). The athletes' views about whether they intend to use doping in order to control their excitement were different between the sport branches ( $X^2 = 59.035$ ;  $p < 0.01$ ). Opinions about whether the athletes had enough knowledge about doping were different between the sport branches ( $X^2 = 16.955$ ;  $p < 0.05$ ). The athletes' opinions about doping damages to health were found to be significant between the sport branches ( $X^2 = 13.742$ ;  $p > 0.05$ ). The athletes, who participated in this study, did not have enough knowledge about doping. Therefore, it may be thought that they are inclined to use doping.

**Key Words:** Elite Athletes, individual sports, doping.

## Elit Sporcuların Doping Bilgi Düzeylerinin Belirlenmesi

### Özet

Bu araştırmanın amacı bireysel sporlarla uğraşan sporcuların doping hakkında bilgi seviyelerinin incelenmesidir. Araştırmanın örneklemini judo, güreş ve taekwondo milli takım kamplarında görev yapan 117 sporcu oluşturmaktadır. Araştırmaya katılan sporculara veri toplama aracı olarak, genel bilgi formu ve sporcuların doping ve ergojenik yardım hakkındaki bilgi düzeylerinin ve görüşlerinin belirlenmesine yönelik sorular oluşan geçerlilik güvenilirlik çalışması Eröz tarafından yapılan bir anket uygulanmıştır. Araştırmanın her bir bağımlı değişkeninin bağımsız değişkenlere göre farklılıklarının incelenmesinde Ki-Kare bağımsızlık testi uygulanmıştır. Ankete katılan sporcuların "Başarılı sporcu daha yüksek performans elde etmek için doping kullanmak ister" sorusuna verdikleri yanıtlar incelendiğinde spor branşına göre istatistiksel olarak anlamlı düzeyde farklı oldukları tespit edilmiştir ( $X^2 = 26.764$ ;  $p < 0.01$ ). "Başarılı sporcu kaybetme korkusunu yok etmek için doping kullanmak ister" sorusuna verilen yanıtlar spor branşına göre karşılaştırıldığında istatistiksel olarak anlamlı farklılık olduğu belirlenmiştir ( $X^2 = 43.207$ ;  $p < 0.01$ ). Sporculara yöneltilen "Başarılı sporcu heyecanını yatıştırabilmek için doping kullanmak ister" sorusuna verilen yanıtlar ki-kare testi sonuçlarına göre spor branşları arasında anlamlı düzeyde farklılık gösterdiği tespit edilmiştir ( $X^2 = 59.035$ ;  $p < 0.01$ ). Ankete katılan sporcuların doping hakkında yeterli bilgiye sahip olup olmama durumları incelendiğinde spor branşına göre istatistiksel olarak anlamlı düzeyde farklılık olduğu tespit edilmiştir ( $X^2 = 16.955$ ;  $p < 0.05$ ). Dopingün sağlığa büyük zararları olup olmadığı hususunda sporcuların görüşleri spor branşına göre karşılaştırıldığında istatistiksel olarak anlamlı farklılık olmadığı belirlenmiştir ( $X^2 = 13.742$ ;  $p > 0.05$ ). Sonuç olarak; çalışmaya katılan sporcuların doping hakkında yeterli bilgiye sahip olmadıkları ve bu bilgi eksikliği yüzünden doping kullanımına eğilimli olabilecekleri söylenebilir.

**Anahtar Kelimeler:** Elit sporcu, bireysel sporlar, doping.

## INTRODUCTION

Performance may be enhanced due to many factors such as physics, skills, condition, coordination, muscle power, endurance and a balanced nutrition. Athletes' desire to increase their performance is a strong one, both economic and social returns of sportive successes, desires to succeed cause problems in health rules as well as moral rules.

Over the centuries human beings have made effort to increase work efficiency, get accomplishments, gain victories or enhance sportive performance. This effort was so clear in ancient resources that they competed for prize and ritual values as well as doing sports for spirit and physical education (2).

In Old Greeks a prize meant a ritual thing rather than a materialistic value. The awards with symbolic images were regarded as sacred things, the champion who had one of these awards, became blessed. For this reason, sports in Old Greeks referred to a ritual and mystical value representing metaphysical power but physical power was a matter of subject. In that period when sportive races were held, the item which made athletes motivated was to have materialistic and metaphysical values. These values absolutely create a will to succeed in an athlete, it is aimed to keep the result of a race under control by using all necessary opportunities (4).

Athletes who achieved in the Olympic Games, were awarded with a gold medal instead of an olive branch in ancient times and provided better life conditions, which made success sustainable. Great interest in sports is seemed to be related with the developments in commercial dimension of sports. When sports and commercial affairs are interlocked with each other, negative aspects are also experienced in sports ethics. The reason for immorality in sports is to regard money as a purpose, not an instrumental value. When sports is included in economic proceedings, chaos may occur more (7).

While a sportive performance artificially obtained with doping pushes an athlete over the top, it prevents him or her from being virtuous, causes his or her honour to be hurt, his or her sportive identity and fair play understanding to be lost. On the contrary to the destruction of this moral rule in all races competition is in question, the concept of fair play which includes an international

understanding, also carries the principles of respect to the opponent and competitive equality as well as compliance to rules. For this reason, athletes should have sports ethics and sports education, and behave in a sportive virtue ethics required by each athlete developing his or her performance based on sportive abilities in accordance with the spirit of sports (5).

A sportive behavior can be accomplished when physical power and skills are integrated with beauty and virtue, not only when a beauty is added into that one. The fair play, mostly seeked outside and driven from outside, is included in the structure of sportive behavior indeed. The fair play is within the sports (2).

Dating from the oldest times known in history, the opinion about affecting a sportive success with foreign intervention illegally has been always discussed. Furthermore, it cannot be undeniable that there were sportsmanlike and gentlemanly behaviors available. Doping applications which cause an athlete's physical and psychological structure to be destroyed, him or her to have an unhealthy life and even result in deaths, corrupt an understanding of a champion and a record holder sportsman as an ideal human being thereby giving rise to financial failures and also removing moral values (5).

The aim of the study was to analyze reasons of athletes involved in individual sports for choosing doping usage in sports and their views about doping usage.

## MATERIAL & METHODS

### Participants

Total 117 athletes involved in national judo, wrestling and taekwondo team camps voluntarily participated in this study. These athletes were 62 wrestlers, 29 taekwondo players and 26 judoists. The participants were aged between 15 and 23.

### Data Collection Tools

Data were collected using the questionnaire method. The aim of the study was given in the upper section of the questionnaire. The questionnaire includes the questions related with information about doping and ergogenic suppliers benefiting from expert opinions. That is, our questionnaire consists of two sections. The first section involves demographical information, the second one also involves questions regarding athletes' views about doping usage and their

opinions about reasons for doping usage. Within the questionnaire prepared for this study, there are 6 questions concerning athletes' personal and socio-cultural characteristics, 8 questions concerning reasons for doping usage in sports and 11 questions concerning athletes' views about doping usage in sports.

### Scale's Validity and Reliability

In this study, the validity and reliability of the questionnaire used for determining knowledge levels about athletes' doping usage were made by Eröz (3). In accordance with the reliability test, the alpha level was regarded as 0.05, the questionnaire was found to be reliable at the level of 0.797 (3).

### Statistical Analysis

The subjects' descriptive information and their responses to the questionnaire were evaluated with the SPSS 16.0 package program. In evaluation of data the frequency and percentage (%) values were used. In analysis of differences between each dependent variable and independent variables, the Chi-Square Test was applied. The statistical significance level was regarded as 0.05.

## RESULTS

The distribution of the athletes involved in this questionnaire to the branches was given at Table 1 and their distribution to the age and the educational background was also given at Table 2. The distribution of the athletes participated in the questionnaire to the income level and the sports age were presented at Table 3.

Looking at Table 4, the reasons of the athletes participated in the research for doping usage in sports and their comparisons with the branches were given. A significant difference was statistically found in the sports branches when examining the responses to all questions in this proceeding ( $p < 0.05$ ).

**Table 1.** Distribution of athletes to branches.

Branch	Gender		Total
	Female	Male	
Wrestling	0	62	62
Taekwondo	14	15	29
Judo	13	13	26
Total	27	90	117

**Table 2.** Distribution of athletes to age and educational background.

Branch		Age (year)			Educational Background		
		15-17	18-20	21-23	Primary School	High School	University
Wrestling	n	60	1	1	1	58	3
	%	96.8	1.6	1.6	1.6	93.5	4.8
Taekwondo	n	0	11	18	2	14	13
	%	0	37.9	62.1	6.9	48.3	44.8
Judo	n	2	15	9	2	7	17
	%	7.7	57.7	34.6	7.7	26.9	65.4
Total	n	62	27	28	5	79	33
	%	53.0	23.1	23.9	4.3	67.5	28.2

**Table 3.** Distribution of athletes to income level and sports age.

Branch		Income Level				Sports Age (years)		
		500den az	501-999	1000-1500	1501-3000	1-3	4-7	7-11
Wrestling	n	24	20	13	5	21	34	7
	%	38.7	32.3	21.0	8.1	33.9	54.8	11.3
Taekwondo	n	1	9	13	6	2	15	12
	%	3.4	31.0	44.8	20.7	6.9	51.7	41.4
Judo	n	5	12	7	2	2	21	3
	%	19.2	46.2	26.9	7.7	7.7	80.8	11.5
Total	n	30	41	33	13	25	70	22
	%	25.6	35.0	28.2	11.1	21.4	59.8	18.8

**Table 4.** Distribution and comparison of reasons for doping usage in sports to sports branches.

		Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	Chi-Square	P
<i>A successful athlete intends to use doping in order to get higher performance.</i>								
Wrestling	n (%)	32 (51.6)	14 (22.6)	4 (6.5)	9 (14.5)	3 (4.8)	26.764	0.001*
Taekwondo	n (%)	8 (27.6)	8 (27.6)	5 (17.2)	8 (27.6)	0		
Judo	n (%)	2 (7.7)	4 (15.4)	4 (15.4)	13 (50.0)	3 (11.5)		
Total	n (%)	42 (35.9)	26 (22.2)	13 (11.1)	30 (25.6)	6 (5.1)		
<i>A successful athlete intends to use doping in order to overcome fear of losing.</i>								
Wrestling	n (%)	31 (50.0)	16 (25.8)	8 (12.9)	4 (6.5)	3 (4.8)	43.207	0.000*
Taekwondo	n (%)	6 (20.7)	7 (24.1)	6 (20.7)	9 (31.0)	1 (3.4)		
Judo	n (%)	2 (7.7)	3 (11.5)	1 (3.8)	15 (57.7)	5 (19.2)		
Total	n (%)	39 (33.3)	26 (22.2)	15 (12.8)	28 (23.9)	9 (7.7)		
<i>A successful athlete intends to use doping in order to control one's excitement.</i>								
Wrestling	n (%)	32 (51.6)	12 (19.4)	16 (25.8)	1 (1.6)	1 (1.6)	59.035	0.000*
Taekwondo	n (%)	6 (20.7)	8 (27.6)	6 (20.7)	8 (27.6)	1 (3.4)		
Judo	n (%)	2 (7.7)	4 (15.4)	1 (3.8)	10 (38.5)	9 (34.6)		
Total	n (%)	40 (34.2)	24 (20.5)	23 (19.7)	19 (16.2)	11 (9.4)		
<i>A successful athlete intends to use doping with a great desire in order to win.</i>								
Wrestling	n (%)	25 (40.3)	16 (25.8)	4 (6.5)	13 (21.0)	4 (6.5)	31.758	0.000*
Taekwondo	n (%)	5 (17.2)	5 (17.2)	7 (24.1)	7 (24.1)	5 (17.2)		
Judo	n (%)	2 (7.7)	3 (11.5)	1 (3.8)	10 (38.5)	10 (38.5)		
Total	n (%)	32 (27.4)	24 (20.5)	12 (10.3)	30 (25.6)	19 (16.2)		
<i>A successful athlete intends to use doping due to charming financial incentives.</i>								
Wrestling	n (%)	27 (43.5)	9 (14.5)	15 (24.2)	4 (6.5)	7 (11.3)	37.698	0.001*
Taekwondo	n (%)	7 (24.1)	4 (13.8)	9 (31.0)	4 (13.8)	5 (17.2)		
Judo	n (%)	2 (7.7)	3 (11.5)	1 (3.8)	14 (53.8)	6 (23.1)		
Total	n (%)	36 (30.8)	16 (13.7)	25 (21.4)	22 (18.8)	18 (15.4)		
<i>A successful athlete intends to use doping in order to obtain a social status and protect this status.</i>								
Wrestling	n (%)	25 (40.3)	15 (24.2)	11 (17.7)	7 (11.3)	4 (6.5)	32.206	0.000*
Taekwondo	n (%)	9 (31.0)	5 (17.2)	4 (13.8)	6 (20.7)	5 (17.2)		
Judo	n (%)	3 (11.5)	2 (7.7)	0	11 (42.3)	10 (38.5)		
Total	n (%)	37 (31.6)	22 (18.8)	15 (12.8)	24 (20.5)	19 (16.2)		
<i>A successful athlete intends to use doping in order to have a great life standard.</i>								
Wrestling	n (%)	29 (46.8)	11 (17.7)	11 (17.7)	6 (9.7)	5 (8.1)	40.539	0.000*
Taekwondo	n (%)	7 (24.1)	7 (24.1)	8 (27.6)	4 (13.8)	3 (10.3)		
Judo	n (%)	3 (11.5)	2 (7.7)	1 (3.8)	5 (19.2)	15 (57.7)		
Total	n (%)	39 (33.3)	20 (17.1)	20 (17.1)	15 (12.8)	23 (19.7)		
<i>A successful athlete intends to use doping in order to get club support.</i>								
Wrestling	n (%)	29 (46.8)	13 (21.0)	10 (16.1)	7 (11.3)	3 (4.8)	37.473	0.000*
Taekwondo	n (%)	9 (31.0)	4 (13.8)	10 (34.5)	2 (6.9)	4 (13.8)		
Judo	n (%)	3 (11.5)	2 (7.7)	2 (7.7)	4 (15.4)	15 (57.7)		
Total	n (%)	41 (35.0)	19 (16.2)	22 (18.8)	13 (11.1)	22 (18.8)		

\* P &lt; 0.05

The distribution and comparison of responses to the questionnaire prepared for determining the reasons of doping usage in sports among the athletes involved in the research in accordance with the educational background were given at Table 5. Towards the responses for the statement "A successful athlete intends to use doping in order to get higher performance", it was clear that no significant difference was statistically found in the

variable of educational background ( $X^2 = 11.494$ ;  $p > 0.05$ ). Given other responses to other statements, it was seen that the educational background led to statistically significant differences ( $p < 0.05$ ).

It was determined that the athletes' income level (Table 6) and sports ages (Table 7) did not significantly affect their views about the reasons of doping usage ( $p > 0.05$ ).

**Table 5.** Distribution and comparison of reasons for doping usage in sports to educational background.

		Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	Chi-Square	p
<i>A successful athlete intends to use doping in order to get higher performance.</i>								
Primary School	n (%)	1 (20.0)	1 (20.0)	0	1 (20.0)	2 (40.0)	11.494	0.110
High School	n (%)	33 (41.8)	18 (22.8)	8 (10.1)	18 (22.8)	2 (2.5)		
University	n (%)	8 (24.2)	7 (21.2)	5 (15.2)	11 (33.3)	2 (6.1)		
Total	n (%)	42 (35.9)	26 (22.2)	13 (11.1)	30 (25.6)	6 (5.1)		
<i>A successful athlete intends to use doping in order to overcome fear of losing.</i>								
Primary School	n (%)	1 (20.0)	0	0	2 (40.0)	2 (40.0)	20.641	0.002*
High School	n (%)	32 (40.5)	20 (25.3)	12 (15.2)	11 (13.9)	4 (5.1)		
University	n (%)	6 (18.2)	6 (18.2)	3 (9.1)	15 (45.5)	3 (9.1)		
Total	n (%)	39 (33.3)	26 (22.2)	15 (12.8)	28 (23.9)	9 (7.7)		
<i>A successful athlete intends to use doping in order to control one's excitement.</i>								
Primary School	n (%)	1 (20.0)	0	0	3 (60.0)	1 (20.0)	31.119	0.000*
High School	n (%)	34 (43.0)	16 (20.3)	19 (24.1)	9 (11.4)	1 (1.3)		
University	n (%)	5 (15.2)	8 (24.2)	4 (12.1)	7 (21.2)	9 (27.3)		
Total	n (%)	40(34.2)	24(20.5)	23(19.7)	19(16.2)	11(9.4)		
<i>A successful athlete intends to use doping with a great desire in order to win.</i>								
Primary School	n (%)	1 (20.0)	0	0	2 (40.0)	2 (40.0)	21.029	0.002*
High School	n (%)	26 (32.9)	20 (25.3)	7 (8.9)	21 (26.6)	5 (6.3)		
University	n (%)	5 (15.2)	4 (12.1)	5 (15.2)	7 (21.2)	12 (36.4)		
Total	n (%)	32(78.1)	24 (37.4)	12 (24.1)	30 (8.8)	19 (82.7)		
<i>A successful athlete intends to use doping due to charming financial incentives.</i>								
Primary School	n (%)	1 (20.0)	1 (20.0)	0	1 (20.0)	2 (40.0)	10.933	0.130
High School	n (%)	28 (35.4)	11 (13.9)	20 (25.3)	12 (15.2)	8 (10.1)		
University	n (%)	7 (21.2)	4 (12.1)	5 (15.2)	9 (27.3)	8 (24.2)		
Total	n (%)	32(27.4)	24(20.5)	12(10.3)	30(25.6)	19(16.2)		
<i>A successful athlete intends to use doping in order to obtain a social status and protect this status.</i>								
Primary School	n (%)	1 (20.0)	1 (20.0)	0	1 (20.0)	2 (40.0)	18.988	0.004*
High School	n (%)	30 (38.0)	16 (20.3)	14 (17.7)	11 (13.9)	8 (10.1)		
University	n (%)	6 (18.2)	5 (15.2)	1 (3.0)	12 (36.4)	9 (27.3)		
Total	n (%)	37(31.6)	22(18.8)	15(12.8)	24(20.5)	19(16.2)		
<i>A successful athlete intends to use doping in order to have a great life standard.</i>								
Primary School	n (%)	1 (20.0)	1 (20.0)	0	2 (40.0)	1 (20.0)	16.816	0.011*
High School	n (%)	32 (40.5)	15 (19.0)	15 (19.0)	8 (10.1)	9 (11.4)		
University	n (%)	6 (18.2)	4 (12.1)	5 (15.2)	5 (15.2)	13 (39.4)		
Total	n (%)	39(33.3)	20(17.1)	20(17.1)	15(12.8)	23(19.7)		
<i>A successful athlete intends to use doping in order to get club support.</i>								
Primary School	n (%)	1 (20.0)	1 (20.0)	2 (40.0)	0	1 (20.0)	16.462	0.013*
High School	n (%)	34 (43.0)	14 (17.7)	14 (17.7)	9 (11.4)	8 (10.1)		
University	n (%)	6 (18.2)	4 (12.1)	6 (18.2)	4 (12.1)	13 (39.4)		
Total	n (%)	41(35.0)	19(16.2)	22(18.8)%	13(11.1)	22(18.8)		

\* p &lt; 0.05

		Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	Chi- Square	P
<i>A successful athlete intends to use doping in order to get higher performance.</i>								
501-999 TL	n (%)	27 (38.0)	12 (16.9)	7 (9.9)	21 (29.6)	4 (5.6)	6.598	0.561
1000-1500 TL	n (%)	12 (36.4)	8 (24.2)	4 (12.1)	7 (21.2)	2 (6.1)		
1501-3000 TL	n (%)	3 (23.1)	6 (46.2)	2 (15.4)	2 (15.4)	0		
Total	n (%)	42 (35.9)	26 (22.2)	13 (11.1)	30 (25.6)	6 (5.1)		
<i>A successful athlete intends to use doping in order to overcome fear of losing.</i>								
501-999 TL	n (%)	25 (35.2)	17 (23.9)	8 (11.3)	17 (23.9)	4 (5.6)	4.751	0.797
1000-1500 TL	n (%)	11 (33.3)	5 (15.2)	5 (15.2)	9 (27.3)	3 (9.1)		
1501-3000 TL	n (%)	3 (23.1)	4 (30.8)	2 (15.4)	2 (15.4)	2 (15.4)		
Total	n (%)	39 (33.3)	26 (22.2)	15 (12.8)	28 (23.9)	9 (7.7)		
<i>A successful athlete intends to use doping in order to control one's excitement.</i>								
501-999 TL	n (%)	27 (38.0)	14 (19.7)	11 (15.5)	11 (15.5)	8 (11.3)	10.647	0.192
1000-1500 TL	n (%)	10 (30.3)	5 (15.2)	9 (27.3)	8 (24.2)	1 (3.0)		
1501-3000 TL	n (%)	3 (23.1)	5 (38.5)	3 (23.1)	0	2 (15.4)		
Total	n (%)	40 (34.2)	24 (20.5)	23 (19.7)	19 (16.2)	11 (9.4)		
<i>A successful athlete intends to use doping with a great desire in order to win.</i>								
501-999 TL	n (%)	23 (32.4)	14 (19.7)	6 (8.5)	17 (23.9)	11 (15.5)	9.304	0.293
1000-1500 TL	n (%)	8 (24.2)	7 (21.2)	2 (6.1)	11 (33.3)	5 (15.2)		
1501-3000 TL	n (%)	1 (7.7)	3 (23.1)	4 (30.8)	2 (15.4)	3 (23.1)		
Total	n (%)	32 (27.4)	24 (20.5)	12 (10.3)	30 (25.6)	19 (16.2)		
<i>A successful athlete intends to use doping due to charming financial incentives.</i>								
501-999 TL	n (%)	22 (31.0)	8 (11.3)	16 (22.5)	14 (19.7)	11 (15.5)	3.996	0.878
1000-1500 TL	n (%)	11 (33.3)	4 (12.1)	6 (18.2)	6 (18.2)	6 (18.2)		
1501-3000 TL	n (%)	3 (23.1)	4 (30.8)	3 (23.1)	2 (15.4)	1 (7.7)		
Total	n (%)	36 (30.8)	16 (13.7)	25 (21.4)	22 (18.8)	18 (15.4)		
<i>A successful athlete intends to use doping in order to obtain a social status and protect this status.</i>								
501-999 TL	n (%)	25 (35.2)	11 (15.5)	10 (14.1)	12 (16.9)	13 (18.3)	4.677	0.809
1000-1500 TL	n (%)	9 (27.3)	7 (21.2)	4 (12.1)	8 (24.2)	5 (15.2)		
1501-3000 TL	n (%)	3 (23.1)	4 (30.8)	1 (7.7)	4 (30.8)	1 (7.7)		
Total	n (%)	37 (31.6)	22 (18.8)	15 (12.8)	24 (20.5)	19 (16.2)		
<i>A successful athlete intends to use doping in order to have a great life standard.</i>								
501-999 TL	n (%)	26 (36.6)	11 (15.5)	9 (12.7)	10 (14.1)	15 (21.1)	4.945	0.780
1000-1500 TL	n (%)	10 (30.3)	5 (15.2)	8 (24.2)	4 (12.1)	6 (18.2)		
1501-3000 TL	n (%)	3 (23.1)	4 (30.8)	3 (23.1)	1 (7.7)	2 (15.4)		
Total	n (%)	39 (33.3)	20 (17.1)	20 (17.1)	15 (12.8)	23 (19.7)		
<i>A successful athlete intends to use doping in order to get club support.</i>								
501-999 TL	n (%)	27 (38.0)	8 (11.3)	13 (18.3)	9 (12.7)	14 (19.7)	6.836	0.551
1000-1500 TL	n (%)	12 (36.4)	6 (18.2)	6 (18.2)	3 (9.1)	6 (18.2)		
1501-3000 TL	n (%)	2 (15.4)	5 (38.5)	3 (23.1)	1 (7.7)	2 (15.4)		
Total	n (%)	41 (35.0)	19 (16.2)	22 (18.8)	13 (11.1)	22 (18.8)		

<b>Table 7.</b> Distribution and comparison of reasons for doping usage in sports to sports age.								
		Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	Chi-Square	p
<i>A successful athlete intends to use doping in order to get higher performance.</i>								
1-3 Years	n (%)	11 (44.0)	7 (28.0)	1 (4.0)	4 (16.0)	2 (8.0)	5.529	0.706
4-7 Years	n (%)	25 (35.7)	13 (18.6)	9 (12.9)	20 (28.6)	3 (4.3)		
7-11 Years	n (%)	6 (27.3)	6 (27.3)	3 (13.6)	6 (27.3)	1 (4.5)		
Total	n (%)	42 (35.9)	26 (22.2)	13 (11.1)	30 (25.6)	6 (5.1)		
<i>A successful athlete intends to use doping in order to overcome fear of losing.</i>								
1-3 Years	n (%)	10 (40.0)	6 (24.0)	4 (16.0)	2 (8.0)	3 (12.0)	7.054	0.437
4-7 Years	n (%)	23 (32.9)	14 (20.0)	10 (14.3)	19 (27.1)	4 (5.7)		
7-11 Years	n (%)	6 (27.3)	6 (27.3)	1 (4.5)	7 (31.8)	2 (9.1)		
Total	n (%)	39 (33.3)	26 (22.2)	15 (12.8)	28 (23.9)	9 (7.7)		
<i>A successful athlete intends to use doping in order to control one's excitement.</i>								
1-3 Years	n (%)	10 (40.0)	6 (24.0)	7 (28.0)	2 (8.0)	0	7.812	0.447
4-7 Years	n (%)	24 (34.3)	12 (17.1)	12 (17.1)	14 (20.0)	8 (11.4)		
7-11 Years	n (%)	6 (27.3)	6 (27.3)	4 (18.2)	3 (13.6)	3 (13.6)		
Total	n (%)	40 (34.2)	24 (20.5)	23 (19.7)	19 (16.2)	11 (9.4)		
<i>A successful athlete intends to use doping with a great desire in order to win.</i>								
1-3 Years	n (%)	7 (28.0)	5 (20.0)	2 (8.0)	9 (36.0)	2 (8.0)	3.314	0.921
4-7 Years	n (%)	20 (28.6)	14 (20.0)	7 (10.0)	16 (22.9)	13 (18.6)		
7-11 Years	n (%)	5 (22.7)	5 (22.7)	3 (13.6)	5 (22.7)	4 (18.2)		
Total	n (%)	32 (27.4)	24 (20.5)	12 (10.3)	30 (25.6)	19 (16.2)		
<i>A successful athlete intends to use doping due to charming financial incentives.</i>								
1-3 Years	n (%)	9 (36.0)	2 (8.0)	8 (32.0)	3 (12.0)	3 (12.0)	5.067	0.766
4-7 Years	n (%)	20 (28.6)	10 (14.3)	12 (17.1)	15 (21.4)	13 (18.6)		
7-11 Years	n (%)	7 (31.8)	4 (18.2)	5 (22.7)	4 (18.2)	2 (9.1)		
Total	n (%)	36 (30.8)	16 (13.7)	25 (21.4)	22 (18.8)	18 (15.4)		
<i>A successful athlete intends to use doping in order to obtain a social status and protect this status.</i>								
1-3 Years	n (%)	8 (32.0)	4 (16.0)	5 (20.0)	6 (24.0)	2 (8.0)	6.255	0.626
4-7 Years	n (%)	23 (32.9)	13 (18.6)	6 (8.6)	13 (18.6)	15 (21.4)		
7-11 Yıl	n (%)	6 (27.3)	5 (22.7)	4 (18.2)	5 (22.7)	2 (9.1)		
Total	n (%)	37 (31.6)	22 (18.8)	15 (12.8)	24 (20.5)	19 (16.2)		
<i>A successful athlete intends to use doping in order to have a great life standard.</i>								
1-3 Years	n (%)	11 (44.0)	1 (4.0)	8 (32.0)	2 (8.0)	3 (12.0)	11.529	0.159
4-7 Years	n (%)	22 (31.4)	13 (18.6)	9 (12.9)	9 (12.9)	17 (24.3)		
7-11 Years	n (%)	6 (27.3)	6 (27.3)	3 (13.6)	4 (18.2)	3 (13.6)		
Total	n (%)	39 (33.3)	20 (17.1)	20 (17.1)	15 (12.8)	23 (19.7)		
<i>A successful athlete intends to use doping in order to get club support.</i>								
1-3 Years	n (%)	10 (40.0)	4 (16.0)	5 (20.0)	4 (16.0)	2 (8.0)	5.244	0.745
4-7 Years	n (%)	24 (34.3)	11 (15.7)	11 (15.7)	8 (11.4)	16 (22.9)		
7-11 Years	n (%)	7 (31.8)	4 (18.2)	6 (27.3)	1 (4.5)	4 (18.2)		
Total	n (%)	41 (35.0)	19 (16.2)	22 (18.8)	13 (11.1)	22 (18.8)		

The distribution and comparison of athletes' views about doping usage in sports in accordance with the sports branches were given at Table 8. On issues about whether leading to unfair competition when using doping in sports, going to great lengths in order to succeed, giving damage to fair-play spirit when using doping, using doping as long as the one is not caught, being known by athletes, coaches and managers about doping, doing state's parts in order

to prevent doping in sports, raise awareness, give information about damages of doping, unfair competition and negative aspects of doping to sports ethics, using doping for success of a country and using it when having a drug with an important side effect leading to a world championship, it was observed that views were statistically found to be significant in the sports branches ( $p < 0.05$ ).

<b>Table 8.</b> Athletes' views about doping usage in sports to branches.								
		Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	Chi-Square	P
<i>Doping usage in sports causes unfair competition.</i>								
Wrestling	n (%)	13(21.0)	3(4.8)	6(9.7)	11(17.7)	29(46.8)	26.070	0.001*
Taekwondo	n (%)	3(10.3)	9(31.0)	7(24.1)	6(20.7)	4(13.8)		
Judo	n (%)	1(3.8)	2(7.7)	4(15.4)	10(38.5)	9(34.6)		
Total	n (%)	17(14.5)	14(12.0)	17(14.5)	27(23.1)	42(35.9)		
<i>I go to great lengths in order to become successful in sports.</i>								
Wrestling	n (%)	19(30.6)	23(37.1)	7(11.3)	4(6.5)	9(14.5)	47.617	0.000*
Taekwondo	n (%)	1(6.7)	6(40.0)	6(40.0)	1(6.7)	1(6.7)		
Judo	n (%)	0	4(15.4)	12(46.2)	10(38.5)	0		
Total	n (%)	20(17.1)	37(31.6)	33(28.2)	17(14.5)	10(8.5)		
<i>Doping usage in sports gives damage to fair-play spirit.</i>								
Wrestling	n (%)	11(17.7)	4(6.5)	22(35.5)	11(17.7)	14(22.6)	25.006	0.002*
Taekwondo	n (%)	1(3.4)	9(31.0)	10(34.5)	5(17.2)	4(13.8)		
Judo	n (%)	1(3.8)	1(3.8)	5(19.2)	9(34.6)	10(38.5)		
Total	n (%)	13(11.1)	14(12.0)	37(31.6)	25(21.4)	28(23.9)		
<i>Doping usage in sports must be allowed.</i>								
Wrestling	n (%)	33(53.2)	9(14.5)	11(17.7)	5(8.1)	4(6.5)	11.945	0.126
Taekwondo	n (%)	9(31.0)	11(37.9)	5(17.2)	4(13.8)	0		
Judo	n (%)	8(30.8)	7(26.9)	5(19.2)	5(19.2)	1(3.8)		
Total	n (%)	50(42.7)	27(23.1)	21(17.9)	14(12.0)	5(4.3)		
<i>I use doping as long as I am not caught.</i>								
Wrestling	n (%)	34(54.8)	7(11.3)	10(16.1)	6(9.7)	5(8.1)	28.758	0.000*
Taekwondo	n (%)	6(20.7)	10(34.5)	9(31.0)	3(10.3)	1(3.4)		
Judo	n (%)	1(3.8)	8(30.8)	11(42.3)	4(15.4)	2(7.7)		
Total	n (%)	41(35.0)	25(21.4)	30(25.6)	13(11.1)	8(6.8)		
<i>Doping is completely known by athletes, coaches and managers.</i>								
Wrestling	n (%)	14(22.6)	5(8.1)	13(21.0)	14(22.6)	16(25.8)	20.577	0.008*
Taekwondo	n (%)	7(24.1)	9(31.0)	9(31.0)	3(10.3)	1(3.4)		
Judo	n (%)	2(7.7)	2(7.7)	6(23.1)	8(30.8)	8(30.8)		
Total	n (%)	23(19.7)	16(13.7)	28(23.9)	25(21.4)	25(21.4)		
<i>State does its part in order to prevent doping in sports, raise awareness, give information about damages of doping, unfair competition and negative aspects of doping to sports ethics.</i>								
Wrestling	n (%)	20(32.3)	7(11.3)	21(33.9)	7(11.3)	7(11.3)	26.284	0.000*
Taekwondo	n (%)	6(20.7)	9(31.0)	2(41.4)	1(3.4)	1(3.4)		
Judo	n (%)	2(7.7)	1(3.8)	8(30.8)	11(42.3)	4(15.4)		
Total	n (%)	28(23.9)	17(14.5)	41(35.0)	19(16.2)	12(10.3)		
<i>I use doping for my country's success in an international organization.</i>								
Wrestling	n (%)	28(45.2)	11(17.7)	15(24.2)	5(8.1)	3(4.8)	23.453	0.002*
Taekwondo	n (%)	8(27.6)	8(27.6)	11(37.9)	2(6.9)	0		
Judo	n (%)	0	5(19.2)	17(65.4)	3(11.5)	1(3.8)		
Total	n (%)	36(30.8)	24(20.5)	43(36.8)	10(8.5)	4(3.4)		
<i>Doping usage in sports is an important issue.</i>								
Wrestling	n (%)	7(11.3)	7(11.3)	13(21.0)	20(32.3)	15(24.2)	10.587	0.226
Taekwondo	n (%)	6(20.7)	7(24.1)	6(20.7)	3(10.3)	7(24.1)		
Judo	n (%)	5(19.2)	1(3.8)	4(15.4)	9(34.6)	7(26.9)		
Total	n (%)	18(15.4)	15(12.8)	23(19.7)	32(27.4)	29(24.8)		
<i>When I have a drug with an important side effect leading to a world championship, I use it without any hesitations.</i>								
Wrestling	n (%)	25(40.3)	11(17.7)	18(29.0)	6(9.7)	2(3.2)	20.930	0.004*
Taekwondo	n (%)	7(24.1)	6(20.7)	7(24.1)	6(20.7)	3(10.3)		
Judo	n (%)	1(3.8)	3(11.5)	15(57.7)	6(23.1)	1(3.8)		
Total	n (%)	33(28.2)	20(17.1)	40(34.2)	18(15.4)	6(5.1)		
<i>I read journals about doping.</i>								
Wrestling	n (%)	17 (27.4)	9 (14.5)	17 (27.4)	12 (19.4)	7 (11.3)	13.537	0.095
Taekwondo	n (%)	7(24.1)	8(27.6)	6(20.7)	5(17.2)	3(10.3)		
Judo	n (%)	1(3.8)	2(7.7)	10(38.5)	10(38.5)	3(11.5)		
Total	n (%)	25(21.4)	19(16.2)	33(28.2)	27(23.1)	13(11.1)		

\* p &lt; 0.05

The distribution and comparison of athletes' views about doping usage in sports in accordance with the educational background were also given at

Table 9. When examining the participants' views about whether doping usage in sports causes unfair competition, it was statistically found that there was

a significant difference in their educational background ( $p < 0.05$ ). When the athletes' views were compared in their educational background in terms of using every trick in the book in order to become successful, a significant difference was statistically observed ( $p < 0.05$ ). When the views of athletes participated in the questionnaire were compared in

their educational background, saying that I use doping as long as I am not caught, there were significant differences ( $p < 0.05$ ). Given the opinions about whether using doping for success of one's country in an international organization in accordance with their educational background, a significant difference was observed here ( $p < 0.05$ ).

**Table 9.** Athletes' views about doping usage in sports to educational background.

		Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	Chi-Square	P
<i>Doping usage in sports causes unfair competition.</i>								
Primary School	n (%)	1(20.0)	0	0	1(20.0)	3(60.0)	18.090	0.006*
High School	n (%)	15(19.0)	5(6.3)	12(15.2)	15(19.0)	32(40.5)		
University	n (%)	1(3.0)	9(27.3)	5(15.2)	11(33.3)	7(21.2)		
Total	n (%)	17 (14.5)	14 (12.0)	17 (14.5)	27 (16.1)	42 (35.9)		
<i>I go to great lengths in order to become successful in sports.</i>								
Primary School	n (%)	1(20.0)	0	1(20.0)	1(20.0)	2(40.0)	21.785	0.001*
High School	n (%)	18(22.8)	27(34.2)	17(21.5)	9(11.4)	8(10.1)		
University	n (%)	1(3.0)	10(30.3)	15(45.5)	7(21.2)	0		
Total	n (%)	20(17.1)	37(31.6)	33(28.2)	17(14.5)	10(8.5)		
<i>Doping usage in sports gives damage to fair-play spirit.</i>								
Primary School	n (%)	1(20.0)	0	0	2(40.0)	2(40.0)	14.460	0.032*
High School	n (%)	12(15.2)	8(10.1)	29(36.7)	14(17.7)	16(20.3)		
University	n (%)	0	6(18.2)	8(24.2)	9(27.3)	10(30.3)		
Total	n (%)	13(11.1)	14(12.0)	37(31.6)	25(21.4)	28(23.9)		
<i>Doping usage in sports must be allowed.</i>								
Primary School	n (%)	3(60.0)	0	1(20.0)	1(20.0)	0	9.018	0.266
High School	n (%)	35(44.3)	14(17.7)	15(19.0)	10(12.7)	5(6.3)		
University	n (%)	12(36.4)	13(39.4)	5(15.2)	3(9.1)	0		
Total	n (%)	50(15.1)	27(57.1)	21(54.2)	14(41.7)	5(6.3)		
<i>I use doping as long as I am not caught.</i>								
Primary School	n (%)	1(20.0)	0	3(60.0)	1(20.0)	0	22.440	0.001*
High School	n (%)	36(45.6)	11(13.9)	16(20.3)	9(11.4)	7(8.9)		
University	n (%)	4(12.1)	14(42.4)	11(33.3)	3(9.1)	1(3.0)		
Total	n (%)	41 (35.0)	25 (21.4)	30 (25.6)	13 (11.1)	8 (6.8)		
<i>Doping is completely known by athletes, coaches and managers.</i>								
Primary School	n (%)	1(20.0)	0	2(40.0)	1(20.0)	1(20.0)	1.868	0.998
High School	n (%)	15(19.0)	11(13.9)	18(22.8)	17(21.5)	18(22.8)		
University	n (%)	7(21.2)	5(15.2)	8(24.2)	7(21.2)	6(18.2)		
Total	n (%)	23 (19.7)	16 (13.7)	28 (23.9)	25 (21.4)	25 (21.4)		
<i>State does its part in order to prevent doping in sports, raise awareness, give information about damages of doping, unfair competition and negative aspects of doping to sports ethics.</i>								
Primary School	n (%)	2(40.0)	0	2(40.0)	0	1(20.0)	8.561	0.303
High School	n (%)	23(29.1)	12(15.2)	25(31.6)	12(15.2)	7(8.9)		
University	n (%)	3(9.1)	5(15.2)	14(42.4)	7(21.2)	4(12.1)		
Total	n (%)	28(23.9)	17(14.5)	41(35.0)	19(16.2)	12(10.3)		
<i>I use doping for my country's success in an international organization.</i>								
Primary School	n (%)	1(20.0)	1(20.0)	1(20.0)	1(20.0)	1(20.0)	15.701	0.020*
High School	n (%)	30(38.0)	13(16.5)	25(31.6)	8(10.1)	3(3.8)		
University	n (%)	5(15.2)	10(30.3)	17(51.5)	1(3.0)	0		
Total	n (%)	36(30.8)	24(20.5)	43(36.8)	10(8.5)	4(3.4)		
<i>Doping usage in sports is an important issue.</i>								
Primary School	n (%)	1(20.0)	1(20.0)	0	1(20.0)	2(40.0)	6.027	0.624
High School	n (%)	9(11.4)	11(13.9)	17(21.5)	21(26.6)	21(26.6)		
University	n (%)	8(24.2)	3(9.1)	6(18.2)	10(30.3)	6(18.2)		
Total	n (%)	18(15.4)	15(12.8)	23(19.7)	32(27.4)	29(24.8)		
<i>When I have a drug with an important side effect leading to a world championship, I use it without any hesitations.</i>								
Primary School	n (%)	1(20.0)	1(20.0)	1(20.0)	2(40.0)	0	11.610	0.074
High School	n (%)	27(34.2)	16(20.3)	23(29.1)	9(11.4)	4(5.1)		
University	n (%)	5(15.2)	3(9.1)	16(48.5)	7(21.2)	2(6.1)		
Total	n (%)	33(28.2)	20(17.1)	40(34.2)	18(15.4)	6(5.1)		
<i>I read journals about doping.</i>								
Primary School	n (%)	2(40.0)	1(20.0)	0	2(40.0)	0	6.134	0.609
High School	n (%)	17(21.5)	13(16.5)	23(29.1)	15(19.0)	11(13.9)		
University	n (%)	6(18.2)	5(15.2)	10(30.3)	10(30.3)	2(6.1)		
Total	n (%)	25(21.4)	19(16.2)	33(28.2)	27(23.1)	13(11.1)		

\*  $p < 0.05$

The distribution and comparison of athletes' views about doping usage in sports in accordance with the income level were presented in Table 10. When comparing the athletes' views about the effect

of doping usage on fair-play spirit in sports with the Chi-Square test, it was determined that there were significant differences in accordance with the income levels ( $X^2=16.423$ ;  $p<0.05$ ).

Table 10. Athletes' views about doping usage in sports to income level.		Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	Chi-Square	P
<i>Doping usage in sports causes unfair competition.</i>								
501-999 TL	n (%)	12(16.9)	5(7.0)	10(14.1)	19(26.8)	25(35.2)		
1000-1500 TL	n (%)	5(15.2)	6(18.2)	5(15.2)	5(15.2)	12(36.4)		
1501-3000 TL	n (%)	0	3(23.1)	2(15.4)	3(23.1)	5(38.5)	7.696	0.448
Total	n (%)	17(14.5)	14(12.0)	17(14.5)	27(23.1)	42(35.9)		
<i>I go to great lengths in order to become successful in sports.</i>								
501-999 TL	n (%)	12(16.9)	20(28.2)	18(25.4)	12(16.9)	9(12.7)		
1000-1500 TL	n (%)	5(15.2)	14(42.4)	9(27.3)	4(12.1)	1(3.0)		
1501-3000 TL	n (%)	3(23.1)	3(23.1)	6(46.2)	1(7.7)	0	7.123	0.510
Total	n (%)	20(17.1)	37(31.6)	33(28.2)	17(14.5)	10(8.5)		
<i>Doping usage in sports gives damage to fair-play spirit.</i>								
501-999 TL	n (%)	11(15.5)	3(4.2)	25(35.2)	18(25.4)	14(19.7)		
1000-1500 TL	n (%)	1(3.0)	9(27.3)	9(27.3)	5(15.2)	9(27.3)		
1501-3000 TL	n (%)	1(7.7)	2(15.4)	3(23.1)	2(15.4)	5(38.5)	16.423	0.023*
Total	n (%)	13(11.1)	14(12.0)	37(31.6)	25(21.4)	28(23.9)		
<i>Doping usage in sports must be allowed.</i>								
501-999 TL	n (%)	32(45.1)	14(19.7)	14(19.7)	9(12.7)	2(2.8)		
1000-1500 TL	n (%)	13(39.4)	10(30.3)	4(12.1)	4(12.1)	2(6.1)		
1501-3000 TL	n (%)	5(38.5)	3(23.1)	3(23.1)	1(7.7)	1(7.7)	4.239	0.848
Total	n (%)	50(42.7)	27(23.1)	21(17.9)	14(12.0)	5(4.3)		
<i>I use doping as long as I am not caught.</i>								
501-999 TL	n (%)	26(36.6)	14(19.7)	17(23.9)	8(11.3)	6(8.5)		
1000-1500 TL	n (%)	9(27.3)	6(18.2)	11(33.3)	5(15.2)	2(6.1)		
1501-3000 TL	n (%)	6(46.2)	5(38.5)	2(15.4)	0	0	6.474	0.581
Total	n (%)	41(35.0)	25(21.4)	30(25.6)	13(11.1)	8(6.8)		
<i>Doping is completely known by athletes, coaches and managers.</i>								
501-999 TL	n (%)	12(16.9)	12(16.9)	17(23.9)	15(21.1)	15(21.1)		
1000-1500 TL	n (%)	7(21.2)	2(6.1)	8(24.2)	8(24.2)	8(24.2)		
1501-3000 TL	n (%)	4(30.8)	2(15.4)	3(23.1)	2(15.4)	2(15.4)	4.016	0.876
Total	n (%)	23(19.7)	16(13.7)	28(23.9)	25(21.4)	25(21.4)		
<i>State does its part in order to prevent doping in sports, raise awareness, give information about damages of doping, unfair competition and negative aspects of doping to sports ethics.</i>								
501-999 TL	n (%)	18(25.4)	9(12.7)	22(31.0)	16(22.5)	6(8.5)		
1000-1500 TL	n (%)	6(18.2)	6(18.2)	14(42.4)	2(6.1)	5(15.2)		
1501-3000 TL	n (%)	4(30.8)	2(15.4)	5(38.5)	1(7.7)	1(7.7)	7.693	0.447
Total	n (%)	28(23.9)	17(14.5)	41(35.0)	19(16.2)	12(10.3)		
<i>I use doping for my country's success in an international organization.</i>								
501-999 TL	n (%)	21(29.6)	18(25.4)	24(33.8)	5(7.0)	3(4.2)		
1000-1500 TL	n (%)	9(27.3)	5(15.2)	185(45.5)	3(9.1)	1(3.0)		
1501-3000 TL	n (%)	6(46.2)	1(7.7)	4(30.8)	2(15.4)	0	5.682	0.668
Total	n (%)	36(30.8)	24(20.5)	43(36.8)	10(8.5)	4(3.4)		
<i>Doping usage in sports is an important issue.</i>								
501-999 TL	n (%)	10(14.1)	11(15.5)	13(18.3)	23(32.4)	14(19.7)	6.720	0.567
1000-1500 TL	n (%)	5(15.2)	3(9.1)	7(21.2)	8(24.2)	10(30.3)		
1501-3000 TL	n (%)	3(23.1)	1(7.7)	3(23.1)	1(7.7)	5(38.5)		
Total	n (%)	18(15.4)	15(12.8)	23(19.7)	32(27.4)	29(24.8)		
<i>When I have a drug with an important side effect leading to a world championship, I use it without any hesitations.</i>								
501-999 TL	n (%)	19(26.8)	16(22.5)	24(33.8)	8(11.3)	4(5.6)		
1000-1500 TL	n (%)	9(27.3)	4(12.1)	10(30.3)	8(24.2)	2(6.1)		
1501-3000 TL	n (%)	5(38.5)	0	6(46.2)	2(15.4)	0	7.949	0.408
Total	n (%)	33(28.2)	20(17.1)	40(34.2)	18(15.4)	6(5.1)		
<i>I read journals about doping.</i>								
501-999 TL	n (%)	16(22.5)	13(18.3)	17(23.9)	17(23.9)	8(11.3)		
1000-1500 TL	n (%)	5(15.2)	5(15.2)	10(30.3)	8(24.2)	5(15.2)		
1501-3000 TL	n (%)	4(30.8)	1(7.7)	6(46.2)	2(15.4)	0	5.669	0.693
Total	n (%)	25(21.4)	19(16.2)	33(28.2)	27(23.1)	13(11.1)		

\* p &lt; 0.05

A statistical difference was found at a doping usage in sports causes unfair competition significant level in accordance with the age variables ( $p < 0.01$ ; Table 11). when examining the athletes' views about whether

<b>Table 11.</b> Athletes' views about doping usage in sports to sports age.								
		Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	Chi-Square	P
<i>Doping usage in sports causes unfair competition.</i>								
1-3 Years	n (%)	5(20.0)	0	3(12.0)	3(12.0)	14(56.0)	19.330	0.008*
4-7 Years	n (%)	11(15.7)	6(8.6)	12(17.1)	19(27.1)	22(31.4)		
7-11 Years	n (%)	1(4.5)	8(36.4)	2(9.1)	5(22.7)	6(27.3)		
Total	n (%)	17(14.5)	14(12.0)	17(14.5)	27(23.1)	42(35.9)		
<i>I go to great lengths in order to become successful in sports.</i>								
1-3 Years	n (%)	8(32.0)	10(40.0)	2(8.0)	2(8.0)	3(12.0)	14.655	0.051
4-7 Years	n (%)	9(12.9)	19(27.1)	22(31.4)	14(20.0)	6(8.6)		
7-11 Years	n (%)	3(13.6)	8(36.4)	9(40.9)	1(4.5)	1(4.5)		
Total	n (%)	20(17.1)	37(31.6)	33(28.2)	17(14.5)	10(8.5)		
<i>Doping usage in sports gives damage to fair-play spirit.</i>								
1-3 Years	n (%)	4(16.0)	2(8.0)	8(32.0)	3(12.0)	8(32.0)	12.244	0.140
4-7 Years	n (%)	8(11.4)	6(8.6)	24(34.3)	19(27.1)	13(18.6)		
7-11 Years	n (%)	1(4.5)	6(27.3)	5(22.7)	3(13.6)	7(31.8)		
Total	n (%)	13(11.1)	14(12.0)	37(31.6)	25(21.4)	28(23.9)		
<i>Doping usage in sports must be allowed.</i>								
1-3 Years	n (%)	13(52.0)	3(12.0)	5(20.0)	3(12.0)	1(4.0)	5.329	0.726
4-7 Years	n (%)	28(40.0)	16(22.9)	13(18.6)	10(14.3)	3(4.3)		
7-11 Years	n (%)	9(40.9)	8(36.4)	3(13.6)	1(4.5)	1(4.5)		
Total	n (%)	50(42.7)	27(23.1)	21(17.9)	14(12.0)	5(4.3)		
<i>I use doping as long as I am not caught.</i>								
1-3 Years	n (%)	12(48.0)	2(8.0)	4(16.0)	2(8.0)	5(20.0)	12.414	0.108
4-7 Years	n (%)	21(30.0)	17(24.3)	20(28.6)	9(12.9)	3(4.3)		
7-11 Years	n (%)	8(36.4)	6(27.3)	6(27.3)	2(9.1)	0		
Total	n (%)	41(35.0)	25(21.4)	30(25.6)	13(11.1)	8(6.8)		
<i>Doping is completely known by athletes, coaches and managers.</i>								
1-3 Years	n (%)	6(24.0)	3(12.0)	4(16.0)	7(28.0)	5(20.0)	5.929	0.666
4-7 Years	n (%)	11(15.7)	8(11.4)	20(28.6)	15(21.4)	16(22.9)		
7-11 Years	n (%)	6(27.3)	5(22.7)	4(18.2)	3(13.6)	4(18.2)		
Total	n (%)	23(19.7)	16(13.7)	28(23.9)	25(21.4)	25(21.4)		
<i>State does its part in order to prevent doping in sports, raise awareness, give information about damages of doping, unfair competition and negative aspects of doping to sports ethics.</i>								
1-3 Years	n (%)	6(24.0)	5(20.0)	8(32.0)	3(12.0)	3(12.0)	9.058	0.325
4-7 Years	n (%)	18(25.7)	6(8.6)	25(35.7)	15(21.4)	6(8.6)		
7-11 Years	n (%)	4(18.2%)	6(27.3)	8(36.4)	1(4.5)	3(13.6)		
Total	n (%)	28(23.9)	17(14.5)	41(35.0)	19(16.2)	12(10.3)		
<i>I use doping for my country's success in an international organization.</i>								
1-3 Years	n (%)	12(48.0)	3(12.0)	6(24.0)	1(4.0)	3(12.0)	12.605	0.090
4-7 Years	n (%)	16(22.9)	17(24.3)	28(40.0)	8(11.4)	1(1.4)		
7-11 Years	n (%)	8(36.4)	4(18.2)	9(40.9)	1(4.5)	0		
Total	n (%)	36(30.8)	24(20.5)	43(36.8)	10(8.5)	4(8.4)		
<i>Doping usage in sports is an important issue.</i>								
1-3 Years	n (%)	3(12.0)	3(12.0)	3(12.0)	6(24.0)	10(40.0)	9.132	0.323
4-7 Years	n (%)	9(12.9)	9(12.9)	18(25.7)	21(30.0)	13(18.6)		
7-11 Years	n (%)	6(27.3)	3(13.6)	2(9.1)	5(22.7)	6(27.3)		
Total	n (%)	18(15.4)	15(12.8)	23(19.7)	32(27.4)	29(24.8)		
<i>When I have a drug with an important side effect leading to a world championship, I use it without any hesitations.</i>								
1-3 Years	n (%)	9(36.0)	2(8.0)	8(32.0)	5(20.0)	1(4.0)	6.311	0.607
4-7 Years	n (%)	17(24.3)	16(22.9)	25(35.7)	9(12.9)	3(4.3)		
7-11 Years	n (%)	7(31.8)	2(9.1)	7(31.8)	4(18.2)	2(9.1)		
Total	n (%)	33(28.2)	20(17.1)	40(34.2)	18(15.4)	6(5.1)		
<i>I read journals about doping.</i>								
1-3 Years	n (%)	5(20.0)	4(16.0)	10(40.0)	4(16.0)	2(8.0)	7.047	0.545
4-7 Years	n (%)	12(17.1)	12(17.1)	20(28.6)	18(25.7)	8(11.4)		
7-11 Years	n (%)	8(36.4)	3(13.6)	3(13.6)	5(22.7)	3(13.6)		
Total	n (%)	25(21.4)	19(16.2)	33(28.2)	27(23.1)	13(11.1)		

\*  $p < 0.05$

## DISCUSSION

When examining the questions related to the determination of the reasons of athletes participated in the research for doping usage in sports, some differences were observed in the sports branches. This difference was considered to occur due to the fact that the wrestlers responded to the questions in such a way "disagree". The average ages of the wrestlers involved in this research were lower than ones in other branches, which may be a factor affecting the result.

Eröz (3) suggested that from athletes, wrestlers, judoists and weight lifters doing sports at a national level 39.2 % stated that they strongly agree while 15 % also stated that they strongly disagree with that situation, and 13.3 of them explained to be uncertain about whether a successful athlete intends to use doping in order to obtain a social status and protect this status in total. About whether a successful athlete intends to use doping in order to overcome fear of losing, 55.0 % of athletes, wrestlers, judoists and weight lifters strongly agree with that one, 17.5 % of them strongly disagree with it and 13.3 % were uncertain. About whether a successful athlete intends to use doping in order to control excitement, 15.8 % strongly agree while 63.3 strongly disagree with that situation, and 8.3 % were uncertain. In Eröz's opinion (3), of athletes, wrestlers, judoists and weight lifters 67.5 % said that they strongly agree it, 16.7% also stated that they strongly disagree it and 7.5% said that they were uncertain about whether a successful athlete intends to use doping in order to obtain a great life standard as a total. 56.7 % stated that they strongly agree with that, 16.7 % o strongly disagree with that and 8.3 % stated that they were uncertain about whether a successful athlete intends to use doping in order to get club support in total (3).

As similar to the results of this study, Özel's research (6) showed that 65 % of the athletes uses drugs to join a national team with a desire to win, 47.5 % of them uses them due to an increase in financial incentives.

When examined the distribution of doping usage to the educational background, it was determined that the successful athletes' views about overcoming fear of losing, controlling excitement, having a desire to win, getting a social status and protecting this status, having a great life standard and getting a club standard differ in their educational background. This situation may be

considered to be related that the athletes graduated from high school mostly say that they strongly disagree.

When observing the athletes' doping usage to the income level, it was found that the reasons for doping usage were not related with low or high income level.

It was analyzed whether there was a relation between the starting age for sports of the athletes participated in the study and their reasons for doping usage, and it was found that the reasons for doping usage were not related with the starting age for sports.

Towards the branches of the athletes participated in the research, the wrestlers can be said to strongly agree that doping usage in sports gives damage to fair play and doping is mostly known by athletes, coaches and managers, strongly disagree that doping usage in sports gives rise to unfair competition, that each way must be experienced for being successful, that I try each way as long as I am not caught, use doping for success of my country in an international organization, without hesitation when I have a drug with an important side effect leading to the world championship, and to be uncertain that the state does its part in order to prevent doping in sports, raise awareness, give information about damages of doping, unfair competition and negative aspects of doping to sports ethics.

According to Eröz (3), with the statement that doping usage in sports causes unfair competition 80.8 % strongly agree, 13.3 % strongly disagree and 4.2 % are uncertain, with the statement that each way must be experienced for being successful 10.8 % strongly agree, 50.8 % strongly disagree and 12.5 % are uncertain. Furthermore, with the statement that doping usage in sports gives damage to fair play (sporting behavior) spirit, 81.7 % strongly agree, 5.0 % strongly disagree and 6.7 % are uncertain, and with the statement that I use doping as long as I am not caught, 35.8 % strongly agree, 50.8 % strongly disagree and 8.3 % are uncertain. Although a great majority claims to be uncertain, the number of persons saying to strongly agree is seemed to be considerable.

In Bozkurt et al.'s study (1) for the question "In your opinion, is the doping issue completely known by athletes, managers and coaches?" the participants' views are informed to be "no" with a

percentage of 56 and “partly” with a percentage of 28.4.

Yüce (8) claims that anti-doping propagandas are not enough in Turkey and Turkish public and at a very small level, and the total 50 relevant participants are not involved in any propagandas on this issue.

Eröz’s study (3) shows that among athletes, wrestlers, judoists and weight lifters doing sports at a national level with the idea that I use doping for success of my country in an international organization 15.8 % strongly agree, 55 % strongly disagree and 10.8 are uncertain.

When observed views of athletes participated in the research about doping in sports in accordance with the educational background, it was observed that there were different responses to the statements mentioned in the questionnaire, that I use doping as long as I am not caught, and for success of my country in an international organization, go to great lengths in order to become successful, that doping usage in sports results in unfair competition and brings damages to fair play spirit.

Sinan et al.’s study also indicates that the athletes involved in the study gave an answer “yes” to the question “Even you know that you will die at last, do you use a drug guaranteeing your championship?”. In other study, with the view “In an international organization for success of my country I use doping” 15.8 % strongly agree and 55 % strongly disagree, and 10.8% are uncertain about this issue (Eröz 2007). It was seen that with the view that doping usage tends to unfair competition 80.8 % strongly agree, 13.3 strongly disagree and 4.2 % are uncertain (3).

One of the purposes given in this research was to determine the effect of income level of athletes on their views about doping usage in sports. Considering that the athletes’ doping usage gives damage to fair play spirit in accordance with the income level, the views differ from each other, this can be thought to be related that the responses of the athletes having high income level, saying that I am strongly agree, that doping usage in sports results in damage to fair play spirit. When the income level increases in athletes, they can be said to adopt fair play idea.

For the issue that whether doping usage in sports gives damage to fair play (sporting behavior) spirit among the athletes, wrestlers, judoists and

weight lifters doing sports at a national level a percentage of 81.7 strongly agrees, a percentage of 5.0 % strongly disagrees and 6.7 % of them are uncertain (3).

Given the subjects’ views about doping usage in sports to the sports age, the views regarding that doping usage in sports causes unfair competition are different. A great majority of the athletes agree that doping usage results in unfair competition, but when classified into the sports ages of the athletes involved in the research, most athletes having sports ages of 1-3 years and 4-7 years strongly agree that doping usage causes unfair competition, on the contrary to this, the athletes having sport ages of 7-11 years do not agree with this opinion. When the sports age increases, the athletes give importance to unfair competition and win becomes a more important event than unfair competition.

As similar to the findings of this study, among the athletes, wrestlers, judoists and weight lifters doing sports at a national level with the view that doping usage in sports leads to unfair competition, it is informed that 80.8 % strongly agree, 13.3 % strongly disagree and 4.2 % are uncertain.

In conclusion, it can be said that the athletes participated in the study do not have enough information about doping and may have tendency to doping usage due to lack of information. That is why, it has a great importance of giving education to coaches, managers, athletes’ families and athletes about negative effects of doping usage on an athlete and a sports community.

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