



Determination of Attitudes and Opinions of Triathlon Athletes Regarding Doping as a Moral Issue

Evrin Celebi^{1*}, Cemal Gundogdu² and Sakir Tufekci³

¹*Firat University Health Science Faculty, 23100, Elazig, Turkey*

²*Inonu University Physical Education and Sports School, 44280, Malatya, Turkey*

³*Malatya Youth Services and Sports Provincial Directorate, Malatya, Turkey*

E-mail: ¹<ecelebi_5@hotmail.com>, ²<cmlgundogdu@hotmail.com>,

³<sakir_-44@hotmail.com>

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ABSTRACT This study aims to determine the attitudes and opinions of triathlon athletes on the use of doping in sports as a moral issue. This descriptive study was conducted on 92 athletes. The data were collected using a questionnaire. Regarding the attitudes and opinions of athletes included in the research regarding the use of doping were looked through, the athletes were found to “agree” with the statements of “Use of doping in sports gives an unfair advantage” (98.9%), “Doping is a very serious problem in the world of sports” (97.8%), “Doping causes severe damage to health” (93.5%), “The use of doping is contrary to the ethics of sport” (91.3%), nevertheless the athletes were found to “disagree” with the following statements: “The use of doping in sports should be allowed” (90.2%), “I’ll use doping for the success of my country in an international organization” (92.4%), “I’ll use doping as long as it goes unnoticed” (91.3%). As a result, the majority of athletes thinks that doping leads to unfair competition in sports, damages health and it’s a serious problem for the sports world, as well as being contradictory with the ethics of sport.

INTRODUCTION

For thousands of years, people have benefited from various chemicals in order to improve their lives in different ways (Greydanus and Patel 2010). As people go towards sporting activities in order to increase their strength and performance, they also appeal to these chemical substances to raise their strength to the upper limits. The quest for natural remedies in the form of drinking some boiled herbs in the earliest periods of history has lost its innocence since the time medicine advanced and sports activities became an international competition, and this has now become a very important issue for the sports in the world (Baysaling 2000). Today, these drugs offered in a wide range are used by athletes -including adolescent athletes- to boost their performance (Giraldi et al. 2015). Scientists

working on the issue report that the rate of drug abuse among athletes in high schools is as serious health problem as the one among the professional athletes (Kurdak 1996). The use of doping both in competitive and recreational sports continues to be an important issue in terms of public health; and, evidence about the adverse effects of doping on health is increasing gradually (Barkoukis et al. 2015).

Doping is the use of substances or other methods that have a detrimental effect on both physical and mental health of athletes and players who try to enhance their performance artificially during a competition or preparing for a game, contrary to sports ethics (Doping 2008). According to the definition of doping by the World Anti-Doping Agency (WADA), doping refers to the evidence on performance-enhancing drugs found in athlete’s body or methods used potentially harmful to health, contrary to spirit of sports (Isik 2015). In addition, medical stimulation of the natural substances in the body in order to increase physical and mental condition of the athletes is also considered as doping (Baysaling 2000).

*Address for correspondence:

Evrin Celebi

Health Science Faculty,

Firat University, 23100, Elazig, Turkey

Phone: 0090505-8527278,

Fax: 0090424-2128891,

E-mail: ecelebi_5@hotmail.com

The most fundamental and significant principle of sports is the fairness. Doping is contrary to the principle of fairness in sports, and this is clearly a violation of the principle. From this point of view the use of doping in sports damages the sport ethics (Yoncalik and Gundogdu 2007). The physical and mental risks on the health of athletes, and the discrepancy with the principles of sportsmanship as well as spirit of sport can be seen as the main reasons of the opposition against doping worldwide. It's extremely worrying that many substances produced for the purpose of human health are used out of purpose in sports contrary to the philosophy of sports and healthy living. The desires of athletes to enhance their performance is a strong desire, and both economic and social returns of sporting success lead to violation of ethical codes. Being contrary to sports ethics and fair play, doping paves the way to an unfair advantage as well (Baysaling 2000; Aksoy 2015).

Hence, this study aims to determine the attitudes and opinions of triathlon athletes on the use of doping in sports.

METHODOLOGY

This descriptive study was conducted on 92 athletes who participated in Tasucu Triathlon and Istanbul Salcano Triathlon Series present in the activity schedule of the Turkish Triathlon Federation. Personal information form and information form of statements to determine attitudes and opinions towards the use doping in sports were used for data collection. Athletes were asked to answer by selecting one of the "Agree" or "Disagree" options in relation with the reasons regarding the use of doping. The

statements were as following: "The use of doping in sports gives an unfair advantage," "Doping is a very serious problem in the world of sports," "Doping causes severe damage to health," "The use of doping is contrary to the ethics of sport," "The use of doping in sports should be allowed," "I'll use doping for the success of my country in an international organization," "I'll use doping as long as it goes unnoticed."

The Cronbach's alpha value of the items was found to be 0.72. Data were evaluated by a statistical software package, and presented with numbers, percentages and means. Chi-square test was used in analysis of the data. A probability level of $p < 0.05$ was used to indicate statistical significance.

RESULTS

The findings obtained from the research data are presented in this section.

Regarding the attitudes and opinions of athletes included in the research regarding the use of doping, the athletes were found to "agree" with the statements of "Use of doping in sports gives an unfair advantage" (98.9%), "Doping is a very serious problem in the world of sports" (97.8%), "Doping causes severe damage to health" (93.5%), "The use of doping is contrary to the ethics of sport" (91.3%), on the athletes were found to "disagree" with the following statements: "The use of doping in sports should be allowed" (90.2%), "I'll use doping for the success of my country in an international organization" (92.4%), "I'll use doping as long as it goes unnoticed" (91.3%) (Table 1).

No significant difference was found between the opinions of triathletes about doping in sports

Table 1: Distribution of attitudes and opinions of triathlon athletes regarding doping

	<i>Agree</i>		<i>Disagree</i>	
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>
The use of doping in sports gives an unfair advantage	91	98.9	1	1.1
Doping is a very serious problem in the world of sports	90	97.8	2	2.2
Doping causes severe damage to health	86	93.5	6	6.5
The use of doping is contrary to the ethics of sport	84	91.3	8	8.7
The use of doping in sports should be allowed	9	9.8	83	90.2
I'll use doping for the success of my country in an international organization	7	7.6	85	92.4
I'll use doping as long as it goes unnoticed	8	8.7	84	91.3

Table 2: The distribution of opinions of triathlon athletes about doping in terms of age (I)

	Age groups						χ^2	P
	13-19 years		Over 20 years		Total			
	N	%	N	%	N	%		
<i>The Use of Doping in Sports gives an Unfair Advantage</i>								
I agree	31	96.9	60	100.0	91	98.9	1.896	0.348
I disagree	1	3.1	0	0.0	1	1.1		
<i>Doping is a Very Serious Problem in the World of Sports</i>								
I agree	31	96.9	59	98.3	90	97.8	0.209	1.000
I disagree	1	3.1	1	1.7	2	2.2		
<i>Doping causes Severe Damage to Health</i>								
I agree	28	87.5	58	96.7	86	93.5	2.876	0.178
I disagree	4	12.5	2	3.3	6			
<i>The Use of Doping is Contrary to the Ethics of Sport</i>								
I agree	28	87.5	56	93.3	84	91.3	0.894	0.442
I disagree	4	12.5	4	6.7	8	8.7		
Total	32	34.8 ¹	60	65.2 ¹	92	100.0		

¹ Line percentage , the others are column percentages

Table 3: The distribution of opinions of triathlon athletes about doping in terms of age (II)

	Age groups						χ^2	P
	13-19 years		Over 20 years		Total			
	N	%	N	%	N	%		
<i>The Use of Doping in Sports Should Be Allowed</i>								
I agree	2	6.3	7	11.7	9	9.8	0.694	0.488
I disagree	30	93.8	53	88.3	83	90.2		
<i>I'll Use Doping for the Success of my Country in an International Organization</i>								
I agree	3	9.4	4	6.7	7	7.6	0.218	0.691
I disagree	29	90.6	56	93.3	85	92.4		
<i>I'll Use Doping as Long as it goes Unnoticed</i>								
I agree	4	12.5	4	6.7	8	8.7	0.894	0.442
I disagree	28	87.5	56	93.3	84	91.3		
Total	32	34.8 ¹	60	65.2 ¹	92	100.0		

¹ Line percentage , the others are column percentages

according to age groups (Tables 2 and 3) ($p>0.05$).

Doping related opinions of triathletes participated in the study were compared in terms of gender (Tables 4 and 5), and it was found that responses of female and male athletes have a similar distribution, without any significant difference ($p>0.05$).

Distribution of doping related opinions of athletes who agreed to participate in the study

is shown in Tables 6 and 7 according to their level of education. No significant difference was found between the opinions of athletes at different educational levels ($p>0.05$).

Doping-related opinions of triathlon athletes were examined in terms of sports age (Tables 8 and 9), and it was observed that sports age had no significant effect on the opinions of triathletes ($p>0.05$).

Table 4: The distribution of opinions of triathlon athletes about doping in terms of gender (I)

	Gender						χ^2	P
	Female		Male		Total			
	N	%	N	%	N	%		
<i>The Use of Doping in Sports gives an Unfair Advantage</i>								
I agree	25	100.0	66	98.5	91	98.9	0.377	1.000
I disagree	0	0.0	1	1.5	1	1.1		
<i>Doping is a Very Serious Problem in the World of Sports</i>								
I agree	25	100.0	65	97.0	90	97.8	0.763	1.000
I disagree	0	0.0	2	3.0	2	2.2		
<i>Doping causes Severe Damage to Health</i>								
I agree	23	92.0	63	94.0	86	93.5	0.123	0.661
I disagree	2	8.0	4	6.0	6			
<i>The Use of Doping is Contrary to the Ethics of Sport</i>								
I agree	23	92.0	61	91.0	84	91.3	0.021	1.000
I disagree	2	8.0	6	9.0	8			
Total	25	27.2 ¹	67	72.8 ¹	92	100.0		

¹ Line percentage , the others are column percentages

Table 5: The distribution of opinions of triathlon athletes about doping in terms of gender (II)

	Gender						χ^2	P
	Female		Male		Total			
	N	%	N	%	N	%		
<i>The Use of Doping in Sports Should Be Allowed</i>								
I agree	1	4.0	8	11.9	9	9.8	1.301	0.435
I disagree	24	96.0	59	88.1	83	90.2		
<i>I'll Use Doping for the Success of my Country in an International Organization</i>								
I agree	2	8.0	5	7.5	7	7.6	0.007	1.000
I disagree	23	92.0	62	92.5	85			
<i>I'll Use Doping as Long as it goes Unnoticed</i>								
I agree	2	8.0	6	9.0	8	8.7	0.021	1.000
I disagree	23	92.0	61	91.0	84	81.3		
Total	25	27.2 ¹	67	72.8 ¹	92	100.0		

¹ Line percentage , the others are column percentages

DISCUSSION

The study results were discussed in accordance with the literature in this section.

Looking at the opinions and attitudes of athletes included in the study regarding the use of doping, it's seen that almost all (98.9%) of the athletes think that doping leads to an unfair com-

petition in sports (Table 1). This percentage was found to be fifty-nine percent in Dincer's (2010) study, which is quite lower than the researchers' findings. In Sargin's (2007) study, 84.2 percent of the students thought that doping damages the spirit of fair play in sports. In a study by Morente-Sanchez et al. (2015), almost all of the students stated that they completely disagree

Table 6: The distribution of opinions of triathlon athletes about doping in terms of educational level (I)

	Education level								χ^2	P
	Secondary school-high school student		University student		University degree		Total			
	N	%	N	%	N	%	N	%		
<i>The Use of Doping in Sports gives an Unfair Advantage</i>										
I agree	33	97.1	16	100.0	42	100.0	91	98.9	1.443	0.230
I disagree	1	2.9	0	0.0	0	0.0	1	1.1		
<i>Doping is a Very Serious Problem in the World of Sports</i>										
I agree	33	97.1	15	93.8	42	100.0	90	97.8	0.851	0.356
I disagree	1	2.9	1	6.3	0	0.0	2	2.2		
<i>Doping causes Severe Damage to Health</i>										
I agree	30	88.2	15	93.8	41	97.6	86	93.5	2.716	0.102
I disagree	4	11.8	1	6.3	1	2.4	6	6.5		
<i>The Use of Doping is Contrary to the Ethics of Sport</i>										
I agree	30	88.2	15	93.8	39	92.9	84	91.3	0.476	0.490
I disagree	4	11.8	1	6.3	3	7.1	8	8.7		
Total	34	37.0 ¹	16	17.4 ¹	42	45.7 ¹	92	100.0		

¹ Line percentage , the others are column percentages**Table 7: The distribution of opinions of triathlon athletes about doping in terms of educational level (II)**

	Education level								χ^2	P
	Secondary school-high school student		University student		University degree		Total			
	N	%	N	%	N	%	N	%		
<i>The Use of Doping in Sports should be Allowed</i>										
I agree	3	8.8	3	18.8	3	7.1	9	9.8	0.091	0.763
I disagree	31	91.2	13	81.3	39	92.9	83	90.2		
<i>I'll Use Doping for the Success of my Country in an International Organization</i>										
I agree	3	8.8	3	18.8	1	2.4	7	7.6	1.272	0.259
I disagree	31	91.2	13	81.3	41	97.6	85	92.4		
<i>I'll Use Doping as Long as it goes Unnoticed</i>										
I agree	4	11.8	3	18.8	1	2.4	8	8.7	2.260	0.133
I disagree	30	88.2	13	81.3	41	97.6	84	91.3		
Total	34	37.0	16	17.4	42	45.7	92	100.0		

¹ Line percentage , the others are column percentages

Table 8: The distribution of opinions of triathlon athletes about doping in terms of sports age (I)

	Sport age						χ^2	P
	1-5 years		1-5 years		Total			
	N	%	N	%	N	%		
<i>The Use of Doping in Sports gives an Unfair Advantage</i>								
I agree	43	97.7	28	100.0	71	98.6	0.645	1.000
I disagree	1	2.3	0	0.0	1	1.4		
<i>Doping is a Very Serious Problem in the World of Sports</i>								
I agree		43	97.7	28	100.0	71	98.6	0.645
I disagree	1	2.3	0	0.0	1	1.4		
<i>Doping causes Severe Damage to Health</i>								
I agree	41	93.2	27	96.4	68	94.4	0.344	1.000
I disagree	3	6.8	1	3.6	4	5.6		
<i>The Use of Doping is Contrary to the Ethics of Sport</i>								
I agree	39	88.6	27	96.4	66	91.7	1.360	0.394
I disagree	5	11.4	1	3.6	6	8.3		
Total	44	61.1	28	38.9	72	100.0		

¹ Line percentage , the others are column percentages

^{**} Those who didn't respond were excluded from the analysis

Table 9: The distribution of opinions of triathlon athletes about doping in terms of sports age (II)

	Sport age						χ^2	P
	1-5 years		1-5 years		Total			
	N	%	N	%	N	%		
<i>The Use of Doping in Sports Should be Allowed</i>								
I agree	4	9.1	2	7.1	6	8.3	0.085	1.000
I disagree	40	90.9	26	92.9	66	91.7		
<i>I'll Use Doping for the Success of my Country in an International Organization</i>								
I agree	4	9.1	2	7.1	6	8.3	0.085	1.000
I disagree	40	90.9	26	92.9	66	91.7		
<i>I'll Use Doping as Long as it Goes Unnoticed</i>								
I agree	5	11.4	1	3.6	6	8.3	1.360	0.394
I disagree	39	88.6	27	96.4	66	91.7		
Total	44	61.1	28	38.9	72	100.0		

¹ Line percentage , the others are column percentages

^{**} Those who didn't respond were excluded from the analysis

with the statement of “doping is not cheating because everyone uses”. In a study by Overbye et al. (2013) conducted on 645 elite athletes from different branches, fifty-two percent of the athletes stated that they don't use doping since doping leads to unfair competition. In the researchers' study, it was found that there was no

difference between the responses given to the statement in question in terms of age, gender, educational level and sports age of the athletes (Tables 2, 4, 6 and 8). In a study by Overbye et al. (2013), there was no significant difference between the opinions about the unfair competition caused by doping in terms of age, however,

the difference was significant in terms of gender in that female athletes supported this view more than the male athletes. In Dincer's (2010) study, there was a difference between the opinions regarding the unfair competitive advantage caused by doping in terms of educational level and sports age of the athletes.

The majority (97.8%) of athletes included stated that doping is a very serious problem in the world of sports (Table 1). In Isik's (2015) study, basketball players in the developmental age were asked to answer "whether doping is an important issue?", and 98.7 percent of the athletes responded with "Yes". This percentage was found to be 84.6 percent in Alpak's (2008) study. Unlike researchers' findings, the percentage of athletes stating that use of doping in sports is a significant problem was found to be 52.2 percent in Dincer's (2010) study. It was found that there was no significant difference between the opinions of triathletes who participated in the researchers' research according to demographic variables, indicating that they have similar views in this regard (Tables 2, 4, 6 and 8). Dincer's (2010) study supports researchers' findings. In Pardo's (2014) study conducted on 1575 students, females were found to have more negative attitude against doping compared to males.

If the triathlon athletes participated in the survey, 93.5 percent agreed that doping leads to severe damage to health (Table 1). In a study by Gencturk et al. (2009), 94.7 percent of the athletes has stated that doping has a negative effect on the health of athletes, which is very close to the researchers' findings. In Ozturk's (2009) study, 85.8 percent of the athletes was thinking that use of doping may have physiologically and psychologically harmful effects. In Sargin's (2007) study, 81.7 percent of the students thought that doping damages the spirit of fair play in sports. In Dincer's (2010) study, 26.5 percent and 12.5 percent of the athletes had marked the "Agree" and "Strongly agree" responses respectively, regarding the significant harm of doping on health, which is quite lower than the researchers' findings. In Alpak's (2008) study, 67.7 percent of the athletes answered the "Can the damages of doping be ignored for success and money?" with 'No'. In a study conducted in Spain on the students in Sport Sciences University, the vast majority of students disagreed with the statement of "the risks of doping is overrated". In the study by Overbye et al. (2013), ath-

letes were asked about the dissuasive reasons in the decision of not using doping, and seventy-two percent of the athletes responded that unknown long-term side effects had a great impact in making this decision. Athletes participating in researchers' study had no different opinions on this issue according to age group, gender, educational level and sports age variables (Tables 2, 4, 6 and 8). Although a study by Overbye et al.'s (2013) supports the researchers' findings, students' opinions in Dincer's (2010) study-as a different finding- had significantly different distributions in terms of age and educational level.

Of the triathletes, 91.3 percent thought that use of doping is contrary to the ethics of sport (Table 1). In a study by Morente-Sanchez et al. (2015), students were asked about whether they agreed with the "athletes should not feel guilty because of taking performance enhancing drugs and violating the rules" statement, and the majority of the students disagreed with this statement. In the study conducted on athletes and coaches by MacNamara and Collins (2014), the respondents strongly suggested that use of doping be an immoral decision as it is improper and cheating. It was found that opinions of the triathletes participating in researchers' research were not affected by demographic variables (Tables 2, 4, 6 and 8).

Of the athletes having participated in the research, 90.2 percent thinks that the use of doping in sport should not be allowed (Table 1). In Sargin's (2007) study, the subjects were asked to answer the question "should the doping be allowed and 88.2 percent of them responded with 'No'. This percentage was 65.8 percent in Dincer's (2010) study. In Morente-Sanchez et al.'s (2015) study, the vast majority of respondents stated that the legalization of the performance-enhancing drugs would not be beneficial for sports. In researchers' study, responses of the triathletes given to the statement in question were similar in terms of demographic variables (Tables 3, 5, 7 and 9). Dincer's (2010) study supports researchers' research.

Of the athletes included in the study, 92.4 percent stated that they don't agree with the statement of "I'll use doping for the success of my country in an international organization" (Table 1). This percentage was 51.3 percent in Dincer's (2010) study. In Sargin's (2007) study and in a study by Dalli et al. (2014), 45.4 percent

and 39.1 percent of the students, respectively, stated that athletes using doping should not be protected by their countries. In researchers' study, there was no difference between the opinions of athletes in terms of age, gender, educational level and sports age (Tables 3, 5, 7 and 9). There was no significant difference in Dincer's (2010) study in terms of sports age, whereas the difference was significant in terms of educational level.

Of the triathlon athletes, 91.3 percent stated that they don't agree with the statement of "I'll use doping as long as it goes unnoticed" (Table 1). Sargin's (2007) study also asked the same question to the students, and 81.1 percent of the students responded with 'No'. In a study conducted on national athletes, 35.8 percent of athletes stated that they 'strongly agree' with the statement of "I'll use doping as long as it goes unnoticed". In Dincer's (2010) study, 17.9 percent of the athletes responded with "doping can be used as long as you don't get caught". In Yildirim's (2001) study, athletes were asked to answer the question of "If allowed, would you use doping?", and 74.4 percent answered negatively. In a study by Orr et al. (2010) conducted on 122 athletes, 19.7 percent of the athletes stated that they might use a performance-enhancing drug unless doping test result is positive. It was observed that thoughts of the triathletes included in researchers' study did not differ in terms of demographic variables (Tables 3, 5, 7 and 9). In Dincer's (2010) study, there was no significant difference between student opinions in terms of sports age, whereas the difference was significant in terms of educational level.

CONCLUSION

The majority of athletes think that doping leads to unfair competition in sports, damages health and it's a serious problem for the sports world, as well as being contradictory with the ethics of sport. The majority of athletes think that the use of doping in sport should not be allowed. Majority of athletes included in the study, state that they don't agree with the statement of "I'll use doping for the success of my country in an international organization" and "I'll use doping as long as it goes unnoticed". There was no difference between the opinions and attitudes regarding the use of doping in

sports in terms of age, gender, educational level and sports age.

RECOMMENDATIONS

Because of sports today becoming a commercial sector, sporting successes bring financial incentives to athletes and to trainers. The desire of gain turns into ambition and this ambition directs athletes to use all kinds of methods to provide results. Therefore, the researchers' believe that in the first place, coaching and training should be given to the athletes about doping, creating awareness about the protection of value of sports and promotion of health and contribute to the positive change of attitude about doping.

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