



**Research Article**

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## Gender differences in athletes' attitudes and familiarity with drugs and unauthorized training methods

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### Abstract

The purpose of the present study was to investigate the differences between men and women regarding the level of familiarity with unauthorized drugs. A 40-question researcher-made questionnaire was used for data collection. The face and content validity of the questionnaire was confirmed by a survey of professors related to the research subject and its reliability was reported to be 0.79 using Cronbach's alpha. The statistical population of the study consisted of all athletes in Kermanshah province. Due to the large number of samples, cluster random sampling method was used. Finally, 700 questionnaires were returned, out of which 431 were used. Data were analyzed using SPSS software. Descriptive statistics (mean, standard deviation, percentage, tables, graphs, etc.) for analysis of data as well as inferential statistics (one-sample t-test, independent sample t-test and variance analysis) and Kolmogorov-Smirnov test was used to determine the normality of the data distribution. The results showed that there was no significant difference between the two groups in terms of familiarity with unauthorized drugs. As a result, men are less familiar with unauthorized drugs than women.

**Keywords:** Women, Men, Dating, Doping.

### INTRODUCTION

Doping The Dutch word for doping in sport dates back to two thousand years BC, where Homer has mentioned in his writings the use of protein-rich fungi by a group of ancient Greek athletes [1]. In general, the use of external materials to increase athletic performance seems to be equivalent to the life of competitive sports. As a symbol of competitive sports, the first Olympic Games took place in Greece in 776 BC. The first recorded use of drugs in the 3rd century BC was mentioned in ancient Olympic games [2, 3]. It has been found that during this period, some athletes used special diets and stimulants such as hallucinogenic fungi and sesame seeds to increase efficiency [4, 5, 6, 7]. The ancient Egyptians used a special beverage to improve their efficiency, which was used to prepare cattle gourds in some vegetable oil [8]. The use of medicines during ancient times is also recorded. Chariot athletes fed certain horses into their horses to run faster, as many gladiators used special materials to win their fights [9]. The use of motifs by medieval knights is also mentioned [8]. Various herbs were also used in the Ancient Greek Olympics for their stimulating effects on speed and endurance. The use of Huang, an extract of Ephedra, was also used as a performance enhancer in China some 5,000 years ago. The term doping was also coined in the late 1800s when a potion containing opium was used in horses [10]. The core of the Olympics is not just about conquering, but about healthy competition. Ethically, this principle has nothing to do with the reality of the sports world today [11]. Athletes have been fooled by doping to improve performance where the millisecond difference can be a determining factor between the winner and the runner. The International Olympic Committee did not start the doping test until 1968 when a Danish cyclist Knud Enemark Jensen died in an accident at the 1960 Olympics, and it was later determined that the athlete had used amphetamine. In 1998, erythropoietin was discovered among many substances banned by police during the Tour de France. During the World Conference on Doping and Sport (1999), the World Anti-Doping Agency was set up to take the initiative to develop standards for a continuous doping control program. The National Anti-Doping Agency (NADA) affiliated with WADA was established in 2009 by the Union government with the vision of non-domain sports [12]. In a study of four professional English soccer players by Waddington *et al.* (2005) [1], they found that 5% were aware of the principles and rules of banned narcotic use while the remaining 2% were unaware [13]. In a report (2011) found similar results in support of the fact that athletes presented and delivered to the World Doping Organization in 2015

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the use of inhaled substances in sport. They need to know more about doping information. In order to understand athlete doping in sport, they used a questionnaire among 2 athletes from 5 English-speaking countries (Australia, Canada, United Kingdom, and the United States) who had to answer 2 questions regarding punishment knowledge. Respond through doping and the consumption of banned substances. Overall, 50.5% of them knew that the use of inhumane drugs included offenses that violated the law. The terms related to the Supervision and Control Program and the List of Specific Prohibited Substances were clear for 43.3% and 67.5% of the respondents, respectively. Specific prohibited substance use conditions in the list were fully and accurately detectable by 35.1% of participants. Interestingly, younger athletes (less than 5 years of age) were generally less aware of adult athletes about the use of banned drugs, although this difference was not statistically significant [14]. On the other hand, Mutram *et al.* (2008), in a study of four elite athletes who represented the Olympics in ten sports, found that active athletes in cycling and weightlifting were more familiar with the doping rules. Other athletes have other sports [15]. In this regard, Thomas *et al.* (2010) pointed out that improving Internet access to reliable information is the only useful and effective way for athletes to understand the effects of doping. Therefore, it is suggested that it is important for individuals to be close to educated athletes, since they are influential. People who support the use of athlete banned substances should also be considered. However, if trained, they can search for appropriate information sources and the like [16]. In addition, Diskamb *et al.* (2010) noted that among athletes who used Nutritional Supplements (63.72%), none of the early compounds related to these supplements (39.63, 9 61.6%) and their possible side effects (36.63%, 57.1%) were unaware of their use (34.63%, 54%). Also, (36/63)% stated that they wanted to find out more about these supplements (52/63) 52.4% and only wanted compounds to be aware of the compounds of these dietary supplements. Find [17]. (2011) conducted a study on Greek athletes who were 8 and found that their knowledge of doping rules and the list of banned substances was appropriate. They conclude that athletes should better support international law and equip better training opportunities for their technical staff in training for acquaintance with doping [18]. Also, Diskamb *et al.* (2010) concluded that athletes taking Nutritional Supplements (63.72) had only (1/57) 57% knowledge of their possible side effects [17]. Although athletes generally seem to be aware of doping, it is thought that it is important that managers or athletic federations are aware of the fact that everything needs to be standardized and in some cases This needs to be matched by sports competition in order to maintain the athlete's health. For example, this may require the length and duration of exercise stages to provide cycling events, providing a longer doping test between the stages and their duration. When this is done, the importance of the tactical and technical aspects and aspects of the sport becomes more apparent in terms of its physical dimensions and aspects. In fact, it seems that since the speed of cycling tournaments on large tours has shown recent efforts in the field of anti-doping activities, cycling is therefore related to changes in doping policy and performance. It is gradually changing [19]. As reported by Strigel *et al.* (2010), the dominant methods suggested to improve the knowledge of athletes increase their awareness. Their knowledge is to increase awareness of the use of websites and to provide them with a list of dietary supplements and acceptable medications [20]. A recent poll released in 1997 by Sports Illustrated showed that over 95% of athletes were willing to use reinforcing materials to ensure victory, and the same survey found that 50% of athletes were Consume these items. They won five years and they were ready to die. This shows that athletes are willing to cross every boundary for victory. Doping is a global problem, but knowing the true prevalence of doping in sports is almost impossible. The incorrect estimate is that about 14% -39% of athletes intentionally use performance enhancers [21]. A review of existing research shows that there is no general consensus on how people's attitudes to doping are related to sport and how there are no effective (or set of) inhibitors (or strategies) to control or reduce it. The research generally seeks to

answer the question of how well people are aware of the doping issue, what inhibitory responses they suggest for this negative phenomenon, and how men and women ultimately respond to this. Thoughtful.

## METHODOLOGY

The present research is a descriptive-survey and field study. A researcher-made questionnaire with 40 questions was used to collect data. The face and content validity of the questionnaire was confirmed by a survey of professors related to the research topic and its reliability was reported 0.79 using Cronbach's alpha. The statistical population of the study consisted of all athletes in Kermanshah province. Due to the size of the sample, cluster random sampling method was used. Finally, 700 questionnaires were returned, out of which 431 were used. Data were analyzed using SPSS software. Descriptive statistics (mean, standard deviation, percentage, tables, graphs) as well as inferential statistics (one-sample t-test, independent sample t-test and analysis of variance) were used to analyze data. Data were analyzed using Kolmogorov-Smirnov test.

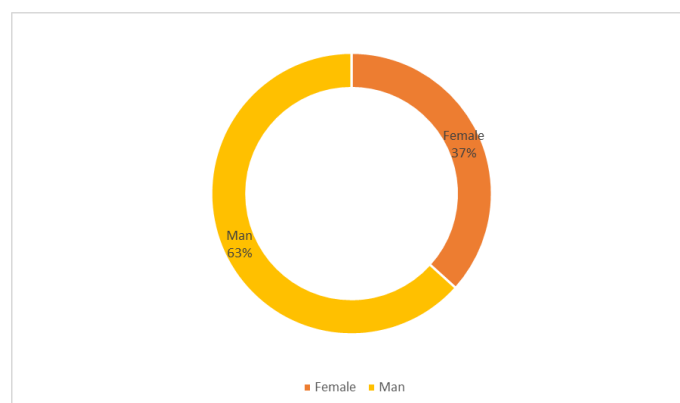
## Findings

**Gender:** As shown in Table 1, out of the returned questionnaires, 431 questionnaires were accepted, of which 273 were male and 158 were female.

**Table 1:** Frequency distribution and percentage of respondents by gender

Percent	Abundance	Gender
63/3	273	Man
36/7	158	Female
100%	431	Total

As shown in the table above, the majority of respondents were male (63.3%) and the rest were female (36.7%).



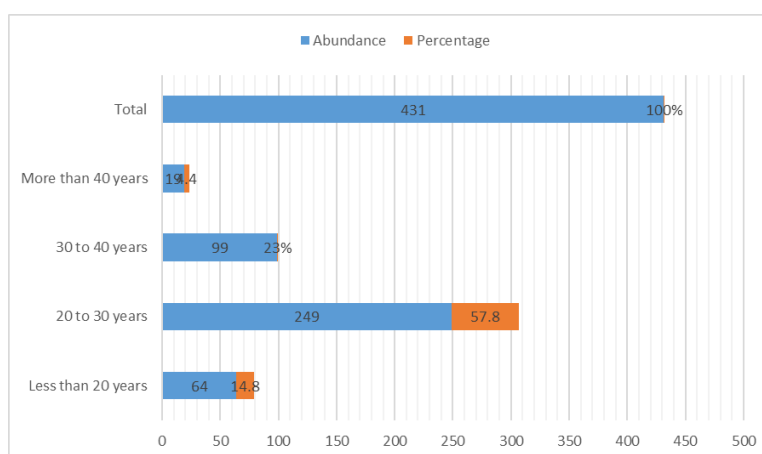
**Graph 1:** Percentage of respondents by gender

**Age:** Table 2 shows the frequency distribution of the subjects by age

**Table 2:** Percentage of respondents by age

Percentage	Abundance	Age
14/8	64	Less than 20 years
57/8	249	20 to 30 years
23	99	30 to 40 years
4/4	19	More than 40 years
100%	431	Total

As can be seen in the table above, the highest percentage of respondents was between 20-30 years old with 57.8% and the lowest percentage was over 40 years old with 4.4%.



**Chart 2:** Frequency distribution and percentage of respondents by age

As can be seen in the table above, the highest percentage of respondents is between 20-30 years old with 57.8% and the lowest percentage is over 40 years old with 4.4%.

**Table 3:** Shows the frequency distribution of the subjects surveyed by sport interest

Percentage	Abundance	Sports interest	Percentage	Abundance	Sports interest
0/9	4	Wushu	13/8	58	Bodybuilding
0/5	2	Parkour	0/5	2	weightlifting
0/5	2	Judo	½	5	Physical emulsion
1/9	8	Tennis	6/7	29	Karate
2/1	9	badminton	0/5	2	Pilates
0/2	1	Zurkhaneh	8/6	37	Volleyball
2/6	11	physical readiness	7/7	33	Soccer
0/5	2	rugby	11/4	49	FILA
0/9	4	Boating	4/2	18	body building
0/5	2	skate	0/2	1	Kung Fu
0/2	1	water polo	2/1	9	Track and Field
0/5	2	Liver	3/5	15	basketball
6	26	Kickboxing	7/9	34	Swim
0/9	4	Shooting	3/5	15	boxing
1/2	5	Futsal	1/2	5	Handball
0/5	2	Aerobic	1/2	5	Thakra Sepak
1/2	5	Gymnastics	0/5	2	riding bike
100%	431	Total	5/1	22	Taekwondo

As shown in the table above, the highest percentage of respondents were interested in bodybuilding with 13.5% and the lowest water polo and kung fu with 0.2%.

**Table 4:** Frequency Distribution and Percentage of Respondents by Knowledge of Illicit Drugs and Doping

Percent	Abundance		questions
0	0	Yes	Dietary supplements, vitamins and minerals
100	431	No	
0/7	3	Yes	Dietary supplements that help in recovery and quick recovery after intense exercise
99/3	428	No	

100	431	Yes	Erythropoietin and other substances that improve endurance
0	0	No	
100	431	Yes	Steroids, growth hormones and similar substances that increase muscle mass
0	0	No	
99/8	429	Yes	Amphetamines and similar drugs that increase endurance training
0/2	2	No	

**Table 5:** the differences between men and women in terms of their level of familiarity with the doping category are presented.

Independent t-test statistic df = 429 (p value)	Significance level of variance equality	Standard deviation	Average	group	Component
0/216 (0/829)	0/941	0/91	9/53	Men	Level of familiarity with doping
		0/76	9/51	Women	

According to the table of significance level in the variance equality section is equal to 0.941 and is greater than the alpha value of 0.05, so the variance equality is accepted, if the equality of variances is assumed to be the level of significance We look at the first row, otherwise we see the second row. So here in the mean equality table we have a significant level equal to 0.829 than the alpha value which is more than 0.05 so the assumption of zero is accepted meaning the difference is not significant and assuming equality of the mean of the familiarity component. The doping category is accepted by both men and women. Also, t-values equal to or greater than 2 are significant, which was not the case in this test and the difference is not significant. As a result, men are not more familiar with doping than women, meaning that there is no significant difference in doping between men and women.

## CONCLUSION

The results showed that the mean level of significance was equal to 0.829 which was higher than the alpha value of 0.05 which means that there is no significant difference in the level of familiarity with doping in both men and women. As a result, men are less familiar with doping than women. These results are in line with the research by Alireza Sargolzaei (2001) who, with his research on the level of awareness of doping drugs in Zahedan university students, concluded that the level of awareness of the effects of doping drugs was not significantly related to sex [22] was in line with the results of the study by Radfredd *et al.* (2008), which concluded that, by researching athletes in Lorestan province, men were more aware of women [23]. Alaranta *et al.* (2006) found that attitudes to their own reports that were evaluated and evaluated by five Finnish elite athletes; 6% believed that banned drugs had performance-enhancing effects. Also, 7.3% of athletes indicated that they would use performance enhancing substances if permitted to use them (9.2% of men versus 7.3% of women,  $p = 0.05$ ). Interestingly, 96.9% of athletes indicated that it would not be possible to reach the highest international levels in sports without consuming energy [24]. Another study by Sas Navasilsky *et al.* 2008 stated that among Polish athletes ( $n = 6$ ) who had relatively moderate ideas, their attitudes toward anti-doping controls were stronger than those that tended to ban them. Also, women were significantly less likely to consume these substances than their men [25].

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