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Examination of Athletes' Attitudes Towards Being Muscular According to Some Demographic Variables: A Sample of Cycling and Athletics Branches

"Sporcuların Kaslı Olmaya Yönelik Tutumlarının Bazı Demografik Değişkenlere Göre İncelenmesi: Bisiklet ve Atletizm Branşları Örneklemi"

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ABSTRACT

Aim: In this study, it was aimed to examine the attitudes of athletes towards being muscular according to some demographic variables.
Material and Method: The sample of the study consisted of 225 participants, 158 of whom were athletes from cycling and 67 from athletics branches. The research is a quantitative study and was carried out in a descriptive survey model. The data of the research were analyzed using the statistical software program JAMOVI 2.3.16.0. While performing the statistical analysis, the normality distribution of the data was examined first, and since the data were normal, t-Test and One-Way Analysis of Variance (ANOVA) were used to determine the differentiation between the variables, and Post-Hoc tests were used to determine the groups with a difference for the significant F value.
Results: It was determined that the average of the participants' motivation to be muscular was at a moderate level. It was found that there was a significant difference in the athletes' attitudes towards being muscular in favor of the athletes in the branch variable, 26+ in the age variable, single marital status, high school graduates in the educational status variable, and club athletes in the club athlete status variable. In addition, significant differences were found between the groups in terms of the variables of doing sports in summer and winter and the number of races participated.
Conclusion: As a result according to the analyzes, in this study, the attitudes of the athletes in the Cycling and Athletics branches to be muscular and the differentiation status of the participants in terms of some demographic variables were determined.

Keywords: Athlete, Be Muscular, Cyclist, Marathon

ÖZET

Amaç: Bu araştırmada sporcuların kaslı olmaya yönelik tutumlarının bazı demografik değişkenlere göre incelenmesi amaçlanmıştır.
Materyal ve Metod: Araştırmanın örneklemini 158'i bisiklet ve 67'si atletizm branşlarındaki sporculardan oluşan 225 katılımcı oluşturmuştur. Araştırma nicel bir çalışma olup betimsel tarama modelinde gerçekleştirilmiştir. Araştırmanın verileri istatistik yazılım programı JAMOVI 2.3.16.0 kullanılarak analiz edilmiştir. İstatistiksel analiz yaparken ilk olarak verilerin normallik dağılımı incelenmiş ve veriler normal olduğu için değişkenler arasındaki farklılaşmayı belirlemede t-Testi ve Tek Yönlü Varyans Analizi (ANOVA), anlamlı bulunan F değeri için fark olan grupları belirlemede ise Post-Hoc testleri kullanılmıştır.
Bulgular: Katılımcıların kaslı olma dürtüsü tutum ortalamalarının orta düzeyde olduğu belirlenmiştir. Ayrıca Sporcuların kaslı olmaya yönelik tutumlarında 'branş değişkeninde atletlerin, yaş değkeninde 26+, medeni durum bekarların, eğitim durumu değişkeninde lise mezunlarının, kulüp sporcusu olma durumu değişkeninde klüp sporcusu olanların lehine anlamlı faklılık olduğu bulgulanmıştır. Ayrıca yaz-kış spor yapma durumu ile katıldığı yarış sayısı' değişkenleri bakımından da gruplar arasında anlamlı farklılıklar bulunmuştur.
Sonuç: Yapılan analizler doğrultusunda, bu araştırmada bisiklet ve atletizm branşlarındaki sporcuların kaslı olma tutumları ile katılımcıların sahip oldukları bazı demografik değişkenler bakımından farklılaşma durumları belirlenmiştir.

Anahtar Kelimeler: Bisiklet, Kaslı Olma, Maraton, Sporcu

INTRODUCTION

Sports, as a field of science that has been studied and evaluated in different dimensions in recent years, is changing and developing day by day. Within the scope of this study, determining the level of attitudes of athletes, who are an important actor in sports, towards being muscular, is considered as one of the topics that will arouse curiosity. The desire to have an ideal body structure by developing muscle mass in the body is one of the purposes of people doing sports. Being muscular is seen as an important element for success in competition, as it is considered to mean being strong.

Having a good and ideal body is considered as a desired and necessary condition by the individuals in the society. (Koparan ve ark., 2010). Considering the body image in particular, if the feedback they receive from the individuals around them is not in line with their expectations, it causes them to develop a 'distorted and negative' image. (Baybek ve Yavuz, 2005). The fact that body image does not respond at the desired level can also bring about different psychological problems. Self-image, which is based on physiological foundations, is shaped by the individual's perception of ıtself, as well as by how other individuals around her perceive that individual (Ayaz, 2008).

There are various roles determined by the society in which we live. It is seen that the roles are 'thin and attractive' for women and 'strong and muscular' for men, especially in the society characterized as patriarchal. For this reason, there is an ideal body perception that society has from its foundation. (Murnen ve Don, 2012). These roles assigned to individuals by the society reveal the perception of body image in individuals and the dissatisfaction of those who do not have this body image in various aspects (Chng ve Fassnacht, 2016). Many individuals have a general idea about adapting to the society they live in and how their bodies are perceived by others, thanks to the feedback they receive from their surroundings. From this point of view, each individual's ideal body perception is not only admired by him, but it is also evaluated within the perception that society has attributed separately to men and women.

In general, there is a tendency for men to have a 'muscular and large' body compared to the tendency of women to be 'slim and thin' as a basis for men and women to experience similar dissatisfaction with each other in terms of body image perception. (McCabe ve Ricciardelli, 2004). In a study on the gender roles of female athletes and non-athletes, it was concluded that female athletes had higher masculinity scores than non-athletes (Koca ve Aşçı, 2000).

Especially today, it is seen that many women tend to sports like fitness and bodybuilding in line with various reasons and perceptions. Athletes think that they have an ideal body in the society, and that they can attract attention both in their social lives and in the branches in which they are athletes, by triggering the impulses of the athletes to be muscular and their bodies being more 'muscular and large'. Considering the athletes in particular, the ideal body structure; appears to consist of a strong athletic build and distinctly muscular (Karazsia ve ark., 2017; Labre, 2005).

Elite level athletes create a state of satisfaction on their own bodies as a result of their training continuity, attention to their current health status and having a muscular body. (Bastuğ ve Kuru, 2009). Athletes who think that they cannot reach this ideal in particular develop an attitude of body dissatisfaction due to their negative self-perception. (Wyssen ve ark., 2016).

Athletes have the urge to be muscular for various reasons. Mass media, which is now indispensable, has a great factor in the formation of this dissatisfaction (Thompson ve ark., 1999). For men, muscle mass emphasizes the physical mass of the body. A study in the field revealed that the body type that men desire is the 'mesomorph' body type (Mishkind ve ark., 1986). In another study

conducted in the related field, it was concluded that men with more developed chest muscles are more attractive than men with less developed chest muscles (Tovée ve ark., 1999).

At the point of having a muscular and large body, the physical and genetic factors of each individual are not the same. It is thought that hereditary characteristics are directly effective on the body structure of the individual, and the individual's attempt to create a body that is contrary to ıts own anatomical and genetic structure encourages the use of various muscular bulking agents (Streods, Testosterones). In this study, which aims to examine the significant differentiation of athletes' attitudes towards being muscular in terms of some demographic variables, answers to the following questions were sought.

MATERIAL AND METHOD

Research Model

The research is a quantitative study and was carried out in a descriptive survey model. In this study, it was provided to examine the differentiation status of the athletes' impulses/attitudes towards being muscular in terms of some demographic variables. In this study, consent was obtained from all participants with an “Informed Voluntary Consent Form”.

Universe and Sample

The population of the research consists of athletes from cycling and athletics branches, who actively participate in competitions both in Turkey and abroad in various clubs in Turkey. The sample of the study consisted of 225 participants consisting of athletes from cycling and athletics branches. Data were obtained in October, November and December 2022. Scale forms were sent to the participants on-line via club coaches and individually, and usable feedback was obtained from 225 participants.

Table 1. *Participant information included in the research sample*

Variable	Group	n	%
Branch	Cycling	158	70.2
	Athletics	67	29.8
Age	18-25 age	182	80.9
	26 and up	43	19.1
Marital Status	Single	181	80.4
	Married	44	19.6
Education Status	High School	135	60
	Undergraduate	90	40
Club Athlete?	Yes	135	60
	No	90	40
Do you do Sports in Summer-Winter?	Yes	157	69.8
	No	68	30.2
Weight	55 and down	50	22.2
	56-65 between	83	36.9
	66 and up	92	40.9
Number of Races Participated	1-10 between	68	30.2
	11-20 between	48	21.3
	21-40 between	48	21.3
	41 and up	61	27.1
Total		**225**	**100**

Drive for Muscularity Scale

Drive for Muscularity Scale; McCraery ve Sasse, (2000) It is one of the commonly used scales to measure the desire to be muscular. (McCraery ve Sasse, 2000). The scale was developed by McCreary and Sasse in 2000 to measure behaviors and attitudes towards being muscular. It is a 6-point Likert-type scale consisting of 15 items (1 = never, 6 = always). The scale, Selvi ve Bozo (2019), Adapted to Turkish by. The Cronbach Alpha value of the scale was found to be 0.89. In this study, the Cronbach Alpha coefficient was found to be 0.80.

Data Collection and Analysis

Scale forms were prepared online and sent to the participants to fill out. The data of the research were analyzed using the statistical software program JAMOVI 2.3.16.0. In order to determine the tests to be used in the research, it was examined whether the scores obtained were normally distributed or not by the skewness coefficient method (Büyüköztürk, 2018). As a result of the normality test, the skewness value of the data (in the range of -1, +1) 'Drive for Muscularity Scale' for '.212' as determine. Since the distribution was normal, t-Test and One-Way Analysis of Variance (ANOVA) were used to determine the differentiation between the variables, and Post-Hoc tests were used to determine the groups with a difference for the significant F value.

RESULTS

Table 2. *The arithmetic mean and standard deviation values of the participants' impulse to be muscular.*

Scale	n	Min-Max	X̄	Ss
Drive for Muscularity	225	1-6	3.32	.86

When Table 2 is examined, it is seen that the average of the participants' motivation to be muscular is at a moderate level.

Table 3. *The t-Test findings for unrelated samples, according to the variables of branch, age and marital status of the participants' motivation to be muscular*

Scale	Variables	Group	X̄	Ss	*t*	*p*
Drive for Muscularity	Branch	Cycling	3.19	.81	-3.59	.000*
		Athletics	3.63	.91		
	Age	18-25	3.42	.86	3.74	.000*
		26 +	2.89	.75		
	Marital Status	Single	3.44	.84	4.32	.000*
		Married	2.83	.80		

* p<.05

Table 3 is examined, as a result of the analysis made when, the education status [t(225)=2.27, p<.(05)], club athlete? [t(225)=4.70, p<.(05)] and do you do sports regardless of summer or winter? Statistically significant differences were found in the Drive for Muscularity scale scores of the participants in terms of [t(225)=3.66, p<.(05)] variables. According to the educational status variable, the Drive for Muscularity scores of the participants with high school education were found to be higher than those with undergraduate education. Club athlete? According to the variable, it is seen in the table that the Drive for Muscularity scores of the participants who are club athletes/say yes are higher than those who are not club athletes/say no. Do you do sports regardless of summer or winter?

It is understood from the table that the Drive for Muscularity scores of the participants who said yes were higher than the participants who said no according to the variable.

Table 4. *The 'educational status of the participants' Drive for Muscularity scale, is it a club athlete? and 'do you do sports in summer-winter?', t-Test findings for unrelated samples*

Scale	Variables	Group	X̄	Ss	*t*	*p*
Drive for Muscularity	Education Status	High school	3.42	.83	2.27	.024*
		Undergraduate	3.16	.89		
	Club Athlete?	Yes	3.53	.82	4.70	.000*
		No	3.00	.82		
	Do you do Sports in Summer-Winter?	Yes	3.45	.82	3.66	.000*
		No	3.01	.88		

* p<.05

Table 4. is examined, as a result of the analyzes made, is the educational status [t(225)=2.27, p<.(05)] a club athlete? [t(225)=4.70, p<.(05)] and do you do sports regardless of summer or winter? In terms of [t(225)=3.66, p<.(05)] variables, statistically significant differences were found in the scores of the participants' muscular drive scale. According to the educational status variable, the motivation to be muscular was higher in the participants with high school education compared to the participants with undergraduate education. Club athlete? According to the variable, it is seen in the table that the participants who are club athletes/who say yes have higher scores on the urge to be muscular than those who are not club athletes/say no. Do you do sports regardless of summer or winter? It is understood from the table that the participants who said yes had higher scores on the urge to be muscular than the participants who said no according to the variable.

Tablo 5. *One-way analysis of variance (ANOVA) results of the differentiation status of the participants according to the 'weight, number of races and area of skill' variables of the Drive for Muscularity scale*

Scale	Variables	Group	X̄	Ss	*F*	*p*	(Scheffe-LCD Test)
Drive for Muscularity Ölçeği	Weight	55 and down (a)	3.51	.77	4.09	.018*	a, b – c
		56-65 between (b)	3.41	.89			
		66 and up (c)	3.13	.85			
	Number of Races Participated	1-10 between (a)	3.00	.87	6.90	.000*	d – a, b
		11-20 between (b)	3.25	.81			
		21-40 between (c)	3.41	.76			
		41 and up (d)	3.65	.85			

* p<.05

Table 5. is examined, weight (F=4.09; p=.018; p<0.05.), number of races (F=6.90; p=.000; p<0.05.) and skill level (F=5.79; p= .000; p<0.05.) variables, statistically significant differences were found in the Drive for Muscularity scale scores of the participants according to the weight status variable, the Drive for Muscularity scores of the participants with a weight of 55 and below and 56-65 were found to be higher than the participants with a weight of 66 and above. According to the variable of the number of races attended, the Drive for Muscularity scores of those who participated in 41 or more races were found to be higher than those who participated in between 1-10 and 11-20 races.

DISCUSSION AND CONCLUSION

In this study, in the context of examining the attitudes of the athletes towards the impulses to be muscular: It was provided to determine the attitudes of the athletes in the Cycling and Athletics branches to be muscular and to examine the differentiation status of the participants in terms of some demographic variables. As a result of the research, it was determined that the average of the Drive for Muscularity attitude of the participants was moderate.

One of the factors affecting the formation of Drive for Muscularity in individuals is the body image formed in the society. Ridgeway ve Tylka (2005) In their studies examining men's ideal body perception, they revealed a physical feature scale that should have low fat ratio, high muscle density, thin waist and wide biceps. In yet another study, Drive for Muscularity revealed that in athletes, they exercise excessively in order to have more muscle mass and still continue to eat food even though they are full (Murray ve ark., 2012; Selvi, 2018).

Çalışkan (2020) When their study titled 'Evaluation of the relationship between the muscularity-focused eating test (MOET) and nutritional status and anthropometric measurements in university students' was examined, it was concluded that the desire to be more muscular in men may cause the development of muscle-oriented malnutrition due to its negative effect on nutritional habits and body satisfaction. has been reached.

Katra, Günar, Korkmaz ve Özçelik (2022), In their study on 'Drive for Muscularity levels according to the ergogenic aid use of men who do bodybuilding exercises', it has been revealed that individuals who have a large amount of Drive for Muscularity tend to use more ergogenic aids. However, this situation is thought to be a fact that cannot be ignored in terms of sports, as it brings with it different types of health risks.

In the current study, the Drive for Muscularity scores of the participants whose branch was athletics were found to be higher than the participants whose branch was cycling, according to the branch variable. Although cycling is one of the strength sports, it is considered that cyclists who have the sprinter feature have an incentive in this direction to pass the finishing part of the race more effectively and effectively.

According to the age variable, it was concluded that the Drive for Muscularity scores of the participants in the 18-25 age group were higher than the group aged 26 and over. In this case, it can be said that the younger athletes, that is, less experienced in sports, have more incentives to be muscular in order to show themselves superior than the more experienced athletes, that is, older.

According to the marital status variable, it was determined that the Drive for Muscularity scores of the single participants were higher than the married participants. This situation is thought to be due to the fact that single athletes may be in a critical period in terms of 'mate selection' and they try to appear more attractive to the opposite sex by showing themselves muscular. Contrary to the present study, Katra et al. (2022) in their study on “Drive for Muscularity levels according to the ergogenic aid use status of men doing bodybuilding exercises” concluded that Drive for Muscularity did not change according to marital status.

According to the educational status variable, the Drive for Muscularity scores of the participants with high school education were found to be higher than those with undergraduate education. This situation is thought to decrease the Drive for Muscularity in the sport that the athlete does due to the increase in ıts education level. This result is also closely related to the age variable result above and the findings overlap with each other.

According to the variable "Are you a club athlete?", it was concluded that the Drive for Muscularity scores of the participants who were club athletes / said yes were higher than those who were not club athletes / said no. In this situation, it is thought that the urge to be muscular is higher in order to show that they are physically superior to the other athletes who make up their own team due to the competition within the club. It may be caused by the psycho-social factor that occurs in the environment.

According to the variable "Do you do sports regardless of summer or winter?", it was determined that the Drive for Muscularity scores of the participants who said yes were higher than the participants who said no. It is thought that the Drive for Muscularity of the athletes who exercise indoors is higher due to the continuity of the athlete's training and adverse weather conditions in the winter months. Katra et al., (2022), in their study, found that, similar to the current study, training behaviors for being muscular differed significantly according to the number of weekly exercise days. In a similar study by Çağlayan and Mitat (2020), it was concluded that there was no significant difference between the frequency of doing sports and muscle deprivation.

According to the weight status variable, the Drive for Muscularity scores of the participants with a weight of 55 and below and 56-65 were found to be higher than the participants with a weight of 66 and above. We can express this situation as the Drive for Muscularity decreases as the body weight increases. As a result, the decrease in the weight of the athletes in strength sports may increase the tendency of them to have more Drive for Muscularity, since they think that they are less muscular than the athletes who are overweight in terms of physical appearance.

According to the variable of the number of races attended, the Drive for Muscularity scores of those who participated in 41 or more races were found to be higher than those who participated in between 1-10 and 11-20 races. It can be said that Drive for Muscularity increases as the number of races participated increases.

In this case, it can be said that the urge to be muscular is higher because the athletes whose number of races increase, especially those whose sprint direction is more dominant, think that being muscular in the stages involving sprint gives them an advantage in this aspect. As a result, the success of the athlete rather than the physical appearance of the athlete should be at the forefront for the athlete.

Suggestions;

✓ While determining the training program of the athletes, the training program should be determined for the targeted purposes.

✓ In the athlete, excessive muscle hypertrophy and antrophy will affect the athlete's performance. At this point, it is recommended that the trainers follow the athletes carefully and train them in the most accurate system.

✓ Coaches with longer working hours have high values of respect, value, democratic attitude and general communication.

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