# INVESTIGATION OF BODY PERCEPTION AND PERSONALITY TRAITS OF INDIVIDUALS ACCORDING TO THEIR SPORTING STATUS\*

**Abstract:** This study aims to examine the body perception and personality traits of individuals who regularly do sports and those who do not. The research was conducted with 222 people who were reached by an convenient sampling method. Participants were provided with a personal information form prepared to obtain demographic information, Body Image Scale to measure body perception, and Adjective Based Personality Test to measure personality traits via Google Forms. The data obtained were analyzed using the SPSS 22.0 program. To measure whether the body perception and personality traits differ according to the regular exercise variable, an independent t-test was applied. According to the analysis result; body perception, extraversion, conscientiousness, and openness to experience differ significantly between individuals who do regular sports and those who do not. While body perception differs in favor of individuals who do not practice sports; Extraversion, conscientiousness, and openness to experience differ in favor of individuals who do sports regularly. Agreeableness and neuroticism do not differ significantly. The findings were discussed based on the literature, and suggestions for further research were presented.

**Keywords:** Sports, body perception, big-five personality traits

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# INTRODUCTION

Individuals do not exist only with their physical characteristics in the society they live in. Their judgments about who they are and how they look reflect their social and psychological existence in social life. While their identity expresses their personality traits, their perception of how they look includes their judgments about their bodies. Body perception is an unthinkable whole that forms a part of the individual and can be associated with all factors affecting the individual.

Body perception, which is also included as body image in some studies in the literature, can be expressed as individuals' assessment of their feelings about the parts of their bodies and the functions of these parts. Schilder (1950), who first used the concept, said it "is a picture of our own body formed in our minds; is how our body looks to us ". He stated that body perception has three dimensions: physiological, social, and psychological. Physiological dimensions of body perception are assessed on perception through senses and the function of the nervous system; social dimension refers to the social stance of individuals that has the potential to develop throughout their life and enables them to convey their feelings in the social environment. The psychological dimension, on the other hand, is the self that is formed by the influence of personality traits and habits in addition to the attitudes and behaviors of individuals regarding their bodies. Attitudes towards their bodies begin to form from a young age when individuals become aware of their selves (Croll, 2005). The comments coming from the environment about the body of individuals can have an effect on their perceptions over time. Winnicott stated that even mother-child contact, especially in infancy, can create a judgment about the bodily value of the baby and affect self-worth (Vamos, 1993). Oktan and Şahin (2010) found in their study on female adolescents that body image has an effect on selfesteem, and that adolescents with high body image have high self-esteem. When approaching adulthood, social and cultural expectations of the society also gain importance as factors affecting the body perception of individuals. Physical criteria imposed on individuals through social media and various channels can lead them to evaluate their bodies, and these evaluations may increase negative perceptions about the body (Kuzu, 2019). As the difference between the bodily appearance of individuals and social expectations becomes wider, the tendency to perceive the body more negatively than it is may increase. As a result, body perception cannot always be in harmony with reality, and it may change continuously depending on various factors that are affected throughout life (Nernekli, 2017; Tezcan, 2009).

Body perception includes self-evaluation of who the individual is, it forms a part of the individual's personality. Therefore, it is open to change in parallel with personality development. The complex and multifaceted nature of personality, which is defined as the personal characteristics that distinguish individuals from each other in its most general definition, and its reference to many dimensions of human behavior, enabled it to be defined in different ways. Common points of definitions in the literature; It can be expressed as a set of structured traits with many dimensions that allow personality to be organized holistically, express the consistent aspect of behaviors, represent the evolutionary process that includes biological and social conditions (Yazgan-İnanç and Yerlikaya, 2014 p.3).

As a result of studies examining the basic dimensions of personality, McCrea and Costa (2003) stated that personality has a two-pronged, continuous structure and can be explained based on five basic characteristics. These are openness to experience, adaptability, extraversion, neuroticism, and selfdiscipline. Openness to experience; It expresses the tendency of the individual to one of the two extremes, such as being open to innovations, having a sense of curiosity, or tending to preserve traditional habits. The general characteristics of individuals with a high level of openness to experience are being interested and curious, creativity and independence. These individuals are also adventurous and artistic individuals who like to produce and innovate. Individuals with a low level of openness to experience generally have the opposite of these characteristics. Although they are closed to innovation, they tend to maintain their ideas steadily (Benet-Martinez and John, 1998). Agreeableness; indicates that the individual is closer to one of the two extremes, such as docile, trustworthy, or skeptical, critic. Individuals with compatible personality traits can be characterized by traits such as outspoken, humble, and altruistic. Less adaptable individuals, on the other hand, may show a competitive attitude. They can be associated with traits such as hostility, stubbornness, and unreliable (Bono, Boles, Judge and Lauver, 2002; Graziano, Jensen-Campbell and Hair, 1996). Another dimension is extraversion; They vary between loving, social, or asocial, low-energy personality traits. According to Hurtz and Donovan (2000), extraverted individuals can show high performance in their work. However, excessive observation of extraversion in the individual may also be

associated with some exaggerated characteristics such as excessive ambition, passion, and dominance (Trouba, 2009). Individuals with low extraversion may prefer to be withdrawn, quiet, and alone. Neuroticism; is associated with anxiety, insecurity, or predisposition to one of the traits such as calm and relaxation. Individuals with high neurotic levels may be associated with negative features such as depression, introversion, and vulnerability. Contrary to these characteristics, it can be said that people who are calm, confident, and relaxed have a low neurotic level (McCrea and Costa, 2003). The self-discipline dimension is; it is evaluated according to being more prone to one of the personality traits such as hardworking, determined, or disorganized, careless. It is associated with traits such as having high conscientiousness, motivation, and hard work. It has been demonstrated that high conscientiousness is an important predictor of job performance (Barrick, Mount, and Judge, 2001). Individuals with low conscientiousness may display characteristics such as impulsive, disorganized, and difficulty in selfcontrol. In addition to these structures that make up the personality, the concept of self is among the determinants of personality and actions through individuals' attitudes and evaluations towards themselves. After it is stated that the place of body perception and personality in the life of the individual, adaptation of personality and the individual's self-evaluation may be related, it becomes important to examine the factors affecting both concepts. One of these factors can be considered the extent to which individuals engage in sports in their lives. Considering the positive effect of sports on physical health and appearance, it can also be associated with body perception. Also, studies are showing that sports are related to the development of individuals' character structures (Şahan, 2007). Salar, Hekim, and Tokgöz (2012) observed in their study with individuals aged 15-18 years that individuals engaged in individual or team sports developed positive psychological and social characteristics. Good communication, willpower, and self-confidence are among the characteristics of these individuals. Considering the supportive findings, this study aimed to examine the body perception and personality traits of individuals who do sports regularly and those who do not. Hypotheses created in line with the purpose of the research can be expressed as follows:

- 1. Body perception of individuals significantly differentiates according to their sporting status.
- 2. Individuals' extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience differ significantly according to their sports status.

#### **METHOD**

## DESIGN

This research, in which the body perception and personality traits of individuals who do sports and do not do sports will be examined, was carried out based on the descriptive survey model, one of the quantitative research approaches. The purpose of the descriptive survey model is to examine and reveal the characteristics of a particular group or groups (Büyüköztürk, 2015).

## **SAMPLE**

The sample group of the study consists of 222 people who were accessed by convenient sampling, which is one of the non-random sampling methods. Convenient sampling method; it is based on forming the sample, starting with the most accessible respondent until the agreed number of people is reached (Demir, 2017). The research group is distributed according to gender as 69 men (%31.1), 152 women (%68.5), and 1 other (%0.5). Participants' ages range from 17 to 43, with an average age of 23.89. More than half of the participants (%56.8) are undergraduate degrees, according to their education level. When the distribution according to professions is examined; 26 people reported not working (%11.7), 142 students (%64), 33 civil servants (%14.9), 13 workers (%5.9), and 8 self-employed (%3.6). The socioeconomic income level of the majority of the participants is at an average level (%64.9). Regarding smoking and alcohol use; %76.1 of the participants stated that they did not smoke and %79.7 did not use alcohol.

In addition to demographic characteristics, some data regarding sports were collected from the participants. The descriptive findings regarding regular exercise, the type of sports, the frequency of doing sports, and the reasons for doing sports are summarized in Table 1.

Table 1. Descriptive Findings of the Participants About Doing Sports

		f	%
Dogwien overeige	Yes	99	44.6
Regular exercise	No	123	55.4
Type of sport	Individual	75	33.8
	Team	26	11.7
Frequency of doing sports	Once a week	18	8.1
	2 days in a week	26	11.7
	3 days in a week	31	14
	More	26	11.7
The reason to do sports	Healtyh lifestyle	26	11.7
	Physical appearence	23	10.4
	Entertainment/Hobby	20	9
	Keep fit	15	6.8
	Other	17	7.7

#### DATA COLLECTION

Demographic information form, Body Perception Scale, and Adjectives Based Personality Test were combined and the measurement tool was finalized and presented to the participants electronically through Google Forms.

## PERSONAL INFORMATION FORM

The demographic information form created by the researcher was used to collect information about the participants' gender, age, educational status, profession, socioeconomic income level, smoking-alcohol use, regular sports-not doing sports, the type and frequency of sports, and the reasons for doing sports.

## **BODY PERCEPTION SCALE**

Body Perception Scale was used to measure the body perception of the participants in the study. The scale, originally named Bady Cathexis Scale (BCS), was developed by Secord and Jourard (1953). The reliability and validity studies of the scale in the Turkish version was carried out by Hovardaoğlu (1992). As a result of the validity and reliability studies, item test correlations were found between .45 and .89, and the Cronbach Alpha coefficient was calculated as .91. Body Perception Scale is a 5-point Likert-type scale consisting of 40 items (1- I like it very much, 2- I quite like it, 3- I am indecisive, 4- I don't like it very much, 5- I don't like it at all). The lowest score that can be obtained from the scale is 40 and the highest score is 200. Higher scores indicate that individuals are less satisfied with their body parts and their functions, and their body perception is low. The decrease in the score is interpreted as the individuals have a high body perception.

## ADJECTIVES-BASED PERSONALITY TEST

Adjective-Based Personality Test was used in the study to measure personality traits. Adjective-Based Personality Test is a measurement tool for measuring non-pathological personality traits developed by Bacanlı, İlhan, and Aslan (2009) based on the Big Five Personality Theory. It is a 40-item 7-point Likert-type scale that includes pairs of opposite adjectives. Between both pairs of adjectives, 1-Very suitable, 2-Quite suitable, 3-Somewhat appropriate, 4-Neither suitable nor not suitable, 5-Somewhat suitable, 6-Quite suitable, and 7-Very suitable options, and these are represents being closer. It has five sub-dimensions: neuroticism, extraversion, openness to experience, agreeableness, conscientiousness. The higher the scores obtained from the items indicate that the dimension is at the upper level and the lower the scores the lower level. As a result of the validity and reliability study of the scale, it was observed that the Cronbach Alpha internal consistency coefficients of each dimension ranged from .73 to .89. The item analysis performed to calculate the construct validity revealed that it explained %52.63 of the dimensions of personality. Also, Pearson Moments Multiplication Correlation results for concordance validity were found to be significant.

# DATA ANALYSIS

After the data were collected, the suitability of the distribution to the parameter was evaluated to decide on the statistical techniques to be used. According to Bachman (2004), the kurtosis and skewness coefficients between -2 and +2 are sufficient for the normality of the distribution. When the kurtosis and skewness coefficients of the data obtained in this study were examined, it was seen that it was suitable for normal

distribution (See Table 2.). Based on this, parametric analysis techniques were used in the analysis of the data. Analyzes were carried out in SPSS 22.0 package program.

	N	$\bar{X}$	sd	Skewness	Kurtosis
Body perception	222	146.50	24.05	16	32
Extraversion	222	46.21	10.08	67	.55
Agreeableness	222	48.05	9.44	92	1.69
Conscientiousness	222	38.45	8.00	-1.02	1.55
Neuroticism	222	26.32	6.20	.19	.28
Openness to experience	222	43.70	7.51	-1.17	.32

#### FINDINGS/RESULTS

To examine whether body perception, extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience differ according to regular exercise and not doing sports, an independent t-test was applied, and the results are shown in Table 3.

Table 3. Findings Regarding Body Perception and Personality Traits According to Regular Sports

Regular exercise		N	$\overline{X}$	sd	t	p	d
Body perception	Yes	99	152.00	24.19	3.11	.002*	41
	No	123	142.08	23.10			.41
Extraversion	Yes	99	49.21	9.18	4.11	.01*	.55
	No	123	43.80	10.17			.55
Agreeableness	Yes	99	48.92	9.67	1.24	.21	
	No	123	47.34	9.23			
Conscientiousness	Yes	99	39.95	7.84	2.53	.01*	.34
	No	123	37.25	7.95			
Neuroticism	Yes	99	25.68	6.48	-1.38	.16	
	No	123	26.84	5.93			
Openness to experience	Yes	99	45.08	7.54	2.47	.01*	.33
	No	123	42.60	7.34			.33

<sup>\*</sup>p<.05

When the table is examined, it can be seen that body perception, extraversion, conscientiousness, and openness to experience differ statistically significantly according to the status of regular sports and not doing sports. Body perception scale mean scores of individuals who do regular sports ( $\bar{X}$ =152.00±24.19) were found higher than those who do not exercise regularly ( $\bar{X}$ =142.08±23.10). The effect size of the difference (Cohen d=.41) was calculated as a medium level (Cohen, 1988). This shows that individuals who do sports regularly feel less satisfied with their bodies than those who do not. When we look at the extraversion dimension from personality traits, it is found that individuals who do regular sports ( $\bar{X}$ =49.21±9.18) are more extraverted than those who do not ( $\bar{X}$ =43.80±10.17). Considering the dimension of conscientiousness, those who do regular sports ( $\bar{X}$ =39.95±7.84) have higher averages than those who do not ( $\bar{X}$ =37.25±7.95), and similarly, those who do regular sports ( $\bar{X}$ =45.08±7.54) and those who do not do sports ( $\bar{X}$ =42.60±7.34), it is seen to have higher mean scores. The effect sizes calculated for the dimensions of extraversion (d=.55), conscientiousness (d=.34), and openness to experience (d=.33) are medium. Other dimensions of personality, agreeableness, and neuroticism, do not differ significantly in terms of doing regular exercise.

# DISCUSSION AND CONCLUSION

In this study, it was aimed to examine the relationships between body perception and personality traits of individuals who regularly do sports and those who do not, consisting of extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience. The findings of the study illustrate that body perception differs significantly according to individuals who do sports regularly and those who do not. This difference is in favor of those who do not practice sports. Considering the literature, it was seen that doing

sportive exercises gives the individual a sense of self-confidence (Kasatura, 1998), positively affects having positive feelings about physical appearance, and provides less anxiety about physical appearance (Mülazımoğlu, Kirazcı, and Aşçı, 2006). For this reason, it is expected that there is a difference in body perception in favor of individuals who do sports regularly. Findings in this direction have largely been reached in previous studies (Baştuğ and Kuru, 2009; Deryahanoğlu et al., 2016; Phillips and Drummond, 2001; Robinson and Ferraro, 2004; Vedul-Kjelsas and Augestad, 2004). However, some studies have found that doing sports or various exercise programs do not make a significant difference on body perception (Çiçek, İmamoğlu, Yamaner and Türk, 2017; Pickett, Lewis and Cash, 2005; Yegül, 1999). The findings obtained in this study are similar to the studies that found that exercising does not make a significant difference in body perception. This can be explained by the fact that the research group has different life experiences due to being heterogeneous in terms of age, education level, and profession and that there may be different factors affecting their perceptions of their bodies.

According to another finding obtained in the study, the sub-dimensions of personality, extraversion, conscientiousness, and openness to experience differ according to the state of doing sports and not doing sports. It has been found that individuals who do regular sports have more extraverted personality traits than those who do not. Similar to the result of this study, İkizler (1994) stated in his book that the feature of extraversion is observed in individuals who do sports. The study of Bayar-Koruç (2003) also revealed that extraversion significantly differentiated between women who do sports and those who do not. Extraversion; covers features such as sociability, assertiveness, friendliness, talkativeness, adaptability, leadership, and activeness. Optimism, strong humor, and flexibility are among the characteristics of extraverts (Yazgan-İnanç and Yerlikaya, 2014). These features are similar to the benefits of doing sports to the personality development of the individual. Studies have shown that individuals who take part in sports in their lives receive significant positive feedback from their environment and this situation is effective in showing their extraverted characteristics (Eppright et al., 1997).

Openness to experience was observed as another variable that showed a significant difference according to regular exercise or not. It was found that individuals who do regular sports have personality traits that are more open to the experience. Bayar-Koruç's (2003) study, in line with the findings obtained in this study, revealed that the adventurous personality trait, which is a feature of openness to experience, is higher in individuals who do sports. Openness to experience implies that individuals have a higher innovative tendency from both ends, traditional and innovative. These individuals are sensitive to innovations, far from rigidity, concerned, and have a rich imagination. Their level of intellectual development and openness to diversity and new experiences are high. The opposite is that individuals tend to be conservative and conservative (Çivitçi and Arıcıoğlu, 2012). It can be said that the personality and character development provided by sports is effective in making individuals open to new experiences.

According to the results of the research, conscientiousness, which is one of the sub-dimensions of personality, shows a significant difference according to the status of doing regular sports and not doing it. In the study of Saygılı et al. (2015), in line with the results of this study, the conscientiousness personality traits of individuals who regularly do sports were found to be at a better level than those who do not exercise regularly. Conscientiousness is also expressed as self-control in the literature and indicates the degree of the individual's characteristics such as planned and concentrated, self-control. It is seen that individuals with self-control are hardworking, systematic, and determined people. Individuals with low self-control may be more impulsive and prone to procrastination (Costa and McCrea, 1995). It can be said that the understanding of a discipline that sports will bring will positively affect self-regulation, that is, the personality trait of conscientiousness.

In this study, it was found that neuroticism and agreeableness did not differ significantly according to the status of regular sports. There are studies in which there is a relationship between neuroticism and doing sports. These studies reveal that neuroticism may develop differently depending on the type of sport. It is stated that high emotional balance will provide some advantages especially in individuals who do team sports (Courneya and Hellsten, 1998; Egloff and Gruhn, 1996; Piedmont, Hill and Blanco, 1999). Agreeableness, on the other hand, includes traits that can establish good relationships with others and are open to cooperation, social, sincere, and reliable. In this respect, it can be said that doing sports is one of the personality traits that can have a positive effect. According to the literature, it was expected that doing sports regularly would make a significant difference in agreeableness. When the expected difference cannot

be observed in terms of those who do not do sports, it can be said that it may be an advantage for these individuals. The results showed that neuroticism did not show a significant difference compared to regular sports, that is, individuals who do not exercise regularly may show low neurotic characteristics as those who do. Individuals who do not exercise regularly may also have emotional balance, which is an indicator of low neuroticism. Although there were no findings compatible with the literature in terms of neuroticism and agreeableness, compared to doing sports, it was observed that extraversion, openness to experience, and conscientiousness were significantly different in sports practitioners. Based on this result, it can be said that regular sports are important for individuals to develop positive personality traits and individuals should give more place to sports in their lives. The development of these traits may allow individuals to show more social, productive, and motivated traits.

The fact that some findings yielded different results than expected according to the literature may be related to the limitations of the study. It is a limitation of the study that the data were collected according to the statements of individuals who stated that they do sports regularly, rather than directly from environments that are interested in sports. The findings can be re-examined by using purposeful sampling methods and by making new studies with larger samples. Besides, it may be suggested to be cautious in generalizations to be made to other sample groups according to the results of this study. Another suggestion may be to examine the effect of regular sports on body perception and personality traits with longitudinal studies.

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