

The Relationship Between Body Composition and Self-Esteem and Body Image in Male Bodybuilding Athletes

Erkek Vücut Geliştirme Sporcularında Vücut Kompozisyonu ile Benlik Saygısı ve Beden İmgesi Arasındaki İlişki

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ABSTRACT: Being in optimal body composition is an important factor in athletes due to factors such as health, performance, and success of athletes. In general, lean body mass is considered an indicator of muscle fitness and is a performance-related factor. Bodybuilding is a branch of sports that aims to increase the strength and volume of the muscles and is mainly done by males. After a while, the training goals can move toward body images that cannot be achieved under normal conditions. This review aims to examine the relationship between body composition, self-esteem, and body image in male bodybuilders. Recent studies have shown an increased interest in the relationship between body dissatisfaction, self-esteem, and body image. It is seen that there is a negative relationship between self-esteem and body image in individuals with body dissatisfaction. Approaches that change one's self-esteem and body image can provide positive results in a treatment that will provide an approach to body dissatisfaction. More work is needed on this subject.

Keywords: bodybuilder, body composition, self-esteem, body image.

ÖZ: Sporcuların sağlığı, performansı, başarısı gibi faktörlerden dolayı optimal vücut kompozisyonunda olmaları sporcular için önemli bir etkidir. Genel olarak yağsız vücut kütlesi, kas kondisyonunun bir göstergesi olarak kabul edilir ve performansla ilişkili bir faktördür. Vücut geliştirme, kasların gücünü ve hacmini artırmayı amaçlayan ve ağırlıklı olarak erkekler tarafından yapılan bir spor dalıdır. Bir süre sonra antrenman hedefleri normal şartlarda elde edilemeyen vücut imajına doğru kayabilir. Bu derleme, erkek vücut geliştiricilerde vücut kompozisyonu, benlik saygısı ve beden imajı arasındaki ilişkiyi incelemeyi amaçlamaktadır. Son araştırmalar, beden memnuniyetsizliği, benlik saygısı ve beden imajı arasındaki ilişkiye artan bir ilgi göstermiştir. Beden memnuniyetsizliği olan bireylerde benlik saygısı ile beden imajı arasında negatif bir ilişki olduğu görülmektedir. Kişinin benlik saygısını ve beden imajını değiştiren yaklaşımlar, beden memnuniyetsizliğine yaklaşım sağlayacak bir tedavide olumlu sonuçlar verebilir. Bu konuda daha fazla çalışmaya ihtiyaç vardır.

Anahtar Kelimeler: vücut geliştirme, vücut kompozisyonu, benlik saygısı, beden imajı.

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1. INTRODUCTION

Analysis and follow-up of body composition in athletes are important for athletes' the health, performance, and success. Variations of body composition may attract the attention of athletes due to different exercise types, image, and composition requirements. In general, lean body mass is accepted as an indicator of muscle fitness (Marini et al., 2020).

Recently, it has been observed that significant body image disorders have emerged in males (Babusa et al., 2015). There is an increase in the importance of body image depicting the 'ideal' male body with strong bodies in the media (Greenway & Price, 2020). In athletes competing in weight categories, their body composition should match the optimal fat-to-muscle ratio. Optimal body composition provides the strength required for optimal performance throughout the season (Canda, 2021).

Bodybuilding is a sport that requires long-term and intense resistance training to have a high muscle mass and a symmetrical body (Chappell et al., 2018). Success in professional bodybuilding is evaluated according to posing performance on stage and muscle mass. At the same time, they must be at the minimum body fat that is marginal for survival (Alves et al., 2020). There are evidence-based guidelines for a balanced diet and training to achieve ideal body composition. However, professional bodybuilders generally choose restrictive eating to achieve the desired body composition (Helms et al., 2014; Mitchell et al., 2017). In bodybuilders, an obsession with a muscular body image precedes maintaining health (Efthymiou et al., 2021).

Bodybuilding aims to increase energy intake, and muscle strength, and volume through weight training. It is a sport branch performed mainly by males (Kouri et al., 1995). The main purpose of training programs is to reach ideal body images, usually associated with muscularity. In order to reach the target, special nutrition programs are applied to increase lean body mass and muscular body structure. After a while, the goals of these trainings move towards more muscular body images, which are impossible to achieve under normal conditions (Ricciardelli & McCabe, 2003). Various studies describe gender-neutral professional bodybuilders as dissatisfied with their muscularity, low self-esteem, and high levels of disordered eating behavior. Professional bodybuilders take their symmetrical body appearance and obsessive performance level to measure their success. Irregular

eating patterns common among bodybuilders are seen as anxiety, anorexia nervosa, binge eating disorder, and body dysmorphia. The motivations of recreational bodybuilders are different from professional bodybuilders. They generally aim to increase self-acceptance and self-satisfaction (Efthymiou et al., 2021). This study aims to examine the relationship between body composition, self-esteem, and body image of male bodybuilder athletes.

1.1. Self-Esteem

Self is the state of being aware of who one is and being aware of its potential (Neff, 2011).

Rosenberg examines the theoretical structure of the self-concept in three basic parts:

- 1) Existing self (social identity, characteristic personality, and physical traits),
- 2) Desired self (image of the direction that the individual wishes to be, the image that activates in this direction, and the moral image),
- 3) Presented self (presenting the desired image by socially and culturally accepted rules of action and behavior) (Rosenberg, 1979).

The existing self consists of parts that make up the whole of the self, relations between departments, dimensions that make up the self, and the development of ego boundaries. It includes the individual's social identity elements, characteristic features, and physical characteristics. Also, the existing self; also consists of the attitudes, abilities, and habits of the individual (Tatli, 2012). The first aspect of the desired self is the idealized self-image. Horney states that neurotics create their idealized images using fantasy and imagination. He states they gradually move away from their authentic selves with a foreign sense of self by not assimilating their real feelings, desires, and thoughts (Horney, 2008). The self-presented includes conforming to social roles and norms. The most important phenomenon is the satisfaction of self-esteem and self-consistency. The individual uses this self as a tool to reach his goals. This self includes social validation (Tatli, 2012).

Self-esteem develops after the second and third months of infancy when he can distinguish the relationship between himself and the outside world. According to Ericson, adolescence is when a person begins to know himself with all his features and form an identity. A healthy recovery during this period shows that self-esteem will develop positively (Kiran, 2021). Rosenberg (1965) stated that self-esteem has two factors as high and low. It is stated that if the person's

attitude in the development process is positive, he has high self-esteem, and if he has a negative attitude, he has low self-esteem.

Education received from infancy, communication, body image, gender, psychological health, social values, hobby, traumas experienced, self-evaluation, and many factors such as affect the development of self-esteem. They state that sports activities affect psychological well-being, reduce depression and anxiety, and improve self-esteem and body image (Kiran, 2021).

Athletes who practice rapid and unhealthy weight loss and chemical and biological functions can cause them to feel mentally unwell in parallel with physiological symptoms such as dehydration or hypoglycemia (Seyhan, 2018). These athletes have been reported to have decreased self-esteem, increased loneliness, and depression. Low self-esteem may result in thinking about the possibility of winning a match, especially against high-level opponents (Franchini et al., 2012).

Males body image disorders are associated with low self-esteem and depression. A study stated that muscle mass and body dissatisfaction might coexist in a significant proportion of 328 young French males. This relationship may lead to a greater risk for depression and eating disorders (Valls et al., 2013). Body dissatisfaction in some athletes has created low self-esteem, which leads to excessive training frequency and causes body image problems in some athletes (Greenway & Price, 2018).

1.1.1 The relationship between body composition and self-esteem in male bodybuilder athletes

It is stated that when males feel physically inadequate, this affects their self-esteem and causes body anxiety. Self-esteem requires individuals to self-evaluate based on external factors such as social comparisons and valued norms (Greenway & Price, 2018). Significant relationships were found between muscular drive, sociocultural pressure, narcissism, negative affect, and muscle-building behaviors. It has been noted that males with a higher drive for narcissism, vulnerability, and muscularity tend to report more negative effects. It has been stated that higher levels of narcissistic vulnerability, criticism, personal failures, and inability to meet one's ideal self-image in males create a stronger sense of shame (Besser & Priel, 2010).

Bodybuilding, a sport related to body image, also strongly affects the eating attitudes of athletes (Efthymiou et al., 2021). Stapleton et al. (2016) state that some male gym members experience clinical eating and

body image concerns, and body dissatisfaction, while others experience clinically significant symptoms that may be a precursor to the development of eating disorders. Given the sensitivity to self-image, physical appearance may represent a more important part of these males' self-representations and can be overestimated when it comes to assessing one's own personal worth (Begin et al., 2019). Another study that included 74 participants aimed to reveal the relationship between body satisfaction and self-esteem found that those who scored high on self-objectification measures showed more muscularity than those who scored low on self-objectification measures (Grieve & Helmick, 2008).

1.2. Body Image

Body image is a multifaceted construct encompassing thoughts, feelings, behaviors, and beliefs about the body. Positive body image refers to loving and respectful attitudes toward the unity and functionality of the body. Positive body image; body acceptance is the tendency to focus on feelings of comfort, happiness, and security related to the body and to emphasize the existing rather than the body's flaws. It expresses the capacity and desire to be protected from messages that are unrealistic and potentially harmful (Aime et al., 2020).

Body image includes perceptions, feelings, and attitudes about one's body. Poor body image has been associated with a number of negative outcomes, including but not limited to low self-esteem, poorer psychological functioning, and poorer interpersonal functioning. According to social comparison, individuals compare themselves with the physical appearance standards of the media to improve their self-understanding (for example, to evaluate their appearance to place themselves in a beauty hierarchy) (Goldsmith & Byers, 2016). Not being able to accept the changes in people's physical appearance (such as disability or disease affecting their appearance) or the inconsistency of their body appearance with the ideal body appearance in their dreams can cause negative body image (Tan & Karabulut, 2004). Talks about forms of body stigma (perceptions of not being accepted by others, body weight bias, etc.) are associated with low body appreciation. Individuals with low body appreciation may be more likely to focus more on body flaws, overestimate beauty ideals, and compare their appearance with others. The preservation and development of positive body image of these individuals can be prevented (Aime et al., 2020).

1.2.1 The relationship between body composition and body image in male bodybuilder athletes

Body image dissatisfaction is when one's body weight and shape are perceived negatively (Soohinda et al., 2020). Body image disorders arise due to western socio-cultural pressures (strong and muscular masculine figure, slim feminine figure). For decades, the focus of body image disorders has been on the female gender, whose ideal is reflected in the weak appearance in the West, and recently there has been increasing interest in their research, as body dissatisfaction rates are equal in both males and females (Behar & Arancibia, 2015). This fact is based on specific reports stating that males will not be satisfied with their appearance (Soohinda et al., 2020; Modica, 2020).

It is more commonly cited in weightlifting athletes than medical students who want to maintain or reduce their silhouettes to achieve a prototype of the imagined physical appearance. In addition, it has been found that weightlifters spend most of their daily time observing in mirrors (Danilova et al., 2013; Parker & Scott, 2018; Walker et al., 2009).

It is seen that males who experience muscle dissatisfaction and are seen as a high-risk population for body image disorders typically participate in physical activities that increase muscle size and strength, such as football, rowing, weightlifting or competitive bodybuilding (Behar & Arancibia, 2015; Babusa et al., 2015). In the study of 328 French males of normal weight (mean age 21.9 ± 2.4 years); It has been stated that body and muscle mass dissatisfaction may be in a significant minority of young males and may also lead to a greater risk for depression and eating disorders (Valls et al., 2013). It is an important risk factor for conditions such as eating disorders, body dysmorphic disorder, depression, anxiety and substance use disorders. Body image disorders develop from a complex interaction between psychological (personality, self-esteem), physical (body mass index), and cultural factors (social expectations and media messages) (Soohinda et al., 2020).

In the literature, limited studies evaluate body image and self-esteem in individuals who do bodybuilding exercises (Erdoğanoglu & Tunç, 2020). In a study by Pickett et al., muscle and body images were examined in males. As a result, it was stated that amateur and elite bodybuilders had higher appearance evaluation scores than other active people (Pickett et al., 2005). Frederick et al. (2007) stated that 51 to 71% of the males who participated in their study were unsatisfied with their body fat percentage, and 90%

stated that they wanted to be more muscular. Individuals with higher self-concept, a strong association exists between lower body image concerns and a lower incidence of eating pathology. In one study, it is stated that self-understanding interventions for body image and eating pathology are effective. These findings support that self-compassion appears to be an adaptive emotion regulation strategy in eating disorders and body image (Turk & Waller, 2020). Self-compassion can protect against dysfunctional attempts to regulate emotions in eating disorders and body image concerns (Klimecki et al., 2014; Braun et al., 2016). Instead of escaping negative emotions with self-compassion, these emotions are recognized as valid and important. Self-compassion training can activate brain areas associated with positive emotions (Klimecki et al., 2014). The results of 21 studies show that higher levels of body image concerns are associated with lower levels of self-compassion. Self-compassion interventions resulted in a more positive body image with moderate effect sizes. This result shows that the relationship between self-compassion and body image variables is causal rather than merely correlational. Therefore, it is stated that self-compassion interventions are effective in developing a healthy body image (Turk & Waller, 2020).

The unrealistic body ideal desires that males try to achieve may cause more negative effects among males with low self-esteem (Begin et al., 2019). In a study with 294 participants, coping with body image; showed a positive correlation with bodybuilding addiction and a negative correlation with muscle satisfaction. It has been stated that some males who do weight training may be selective about whom they show their bodies to because they fear negative labels or are accused of using steroids when they do not consume steroids and similar substances. It is possible that these individuals, who may be satisfied with their physique, may exhibit avoidance behavior in certain situations in order to avoid negative labels and perceive that the corrections they have contribute to their quality (Tod & Edwards, 2015).

The currently widely accepted triple-effect model of body dissatisfaction assumes that social pressures from the media, peers, and family lead to body dissatisfaction through internalizing social body ideals and social comparison (Klimek et al., 2018).

2. CONCLUSION AND SUGGESTIONS

In most societies, it is seen that people's physical appearance is of great importance in their social lives. It is seen that there are relationships between the body

compositions of the athletes, their self-esteem, and body images.

It is seen that there are negative relationships between self-esteem and body image in individuals with muscle dissatisfaction. Approaches that change the person's attitude towards self-esteem and body image may have positive results in the direction of treatment. It is thought that more work is needed on this subject. It is stated in studies that self-concept and body image are closely related to each other. For this reason, it is thought that knowing what coping strategies people use with negative body image will be beneficial in improving the psychiatric disorders associated with body image and protecting the mental health of people with physical defects. The limitations of this study may be the lack of a systematic review and adequate studies in the field.

3. AUTHOR CONTRIBUTIONS

GŞ and PG designed the research. GŞ did a literature review. GŞ wrote the article. PG critically reviewed and audited.

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