# FACTORS DIFFERENTIATING BODY ESTEEM IN POLISH PHYSICAL ACTIVITY SAMPLE 

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- Body image
- Body Esteem Scale
- Athletes
- Sexuality
- Attractiveness


#### Abstract

: The aim of this study was to analyse factors differentiating general body esteem by using the Body Esteem Scale [BES] among athletes of various ages. Analysed factors included sport discipline, class of sport achievements, status of sport activity (professional vs nonprofessional), gender and age of responders. Participants were Polish citizens ( $\mathrm{N}=353$ ) who completed the BES. In general, men had a better perception of their body than women ( $p<0.01$ ). In both groups, the most important factor differentiating body esteem was age ( $p<0.01$ ). The largest effect in body perception occurred between the youngest group (the lowest body esteem) and the older group (20-29 for men and $30-39$ for women), who achieved the highest values of body esteem. The results indicate that a specific part of body esteem is influenced by age. For women, it is sexual attractiveness, and for men it is physical attractiveness - these factors seem to be influenced by age.


## INTRODUCTION

Body image [Cash 2012] may be analysed from the perspective of body schema (understood as knowledge about body) and as an attitude towards the body (represented by general body satisfaction, as well as cognitive, behavioural and emotional aspects of the body to general self-esteem). Attitudes towards the body refer to beliefs that reveal individual satisfaction or dissatisfaction with the body. Those attitudes are based on beliefs, values and opinions and may result in a comparison of one's body to respective norms (and then lead to a satisfaction or dissatisfaction with the body). One of the factors affecting the body image issue is gender. The significant role of gender was described by feminist theories, which claimed that culture influences one's body perception. Women perception of the body is based on the perspective of seeing it as an object, which is observed and judged. Such an attitude develops in women's objectified perspective of body and body awareness [McKinley 1998]. The objectification theory, originated by Fredrickson and Roberts [1988], provides the foundation of understanding differences among men and women. In light of this theory, girls and women are adapted to the perspective of external observer towards self-appearance. Such perspectives trigger in women specific behaviours, such as body monitoring, which may lead them to experience higher levels of shame and fear. Being absorbed with body-checking behaviours may lead to a higher intensification of neuroticism and conciliatoriness [MinerRubino 2002].

The differences in body image may already be visible among children aged between 8 to 10 years. Tatangello and Ricciardelli [2013] have reported that for boys, sport is an important activity, and sportsmen are figures to admire and follow. In contrast, for girls of the same age it is seen as important to imitate actresses and singers. For the latter figures,
appearance is the most important issue - rather than for sport players, who concentrate primarily on the functioning of the body. Body perception is more diversified among women than in men [Franzoi et al. 1984]. According to data on Polish populations, the main factor differentiating boys and girls is physical activity [Kołoło et al. 2012].

## MATERIAL AND METHODS

## Participants

The examined group consisted of women ( $\mathrm{n}=212 ; 60 \%$ ) and men ( $\mathrm{n}=141 ; 40 \%$ ). Applied age classification distinguished six clusters: < $19(\mathrm{n}=105 ; 30 \%) ; 19-29(\mathrm{n}=105$; $30 \%) ; 30-39(\mathrm{n}=57 ; 16 \%) ; 40-49(\mathrm{n}=35 ; 10 \%) ; 50-59(\mathrm{n}=35 ; 10 \%) ;>60(\mathrm{n}=16 ; 4 \%)$ (Lipowska \& Lipowski, 2013). The majority of the participants were under the age of 30 . Responders were at different levels of sport competitions. Professionals were classified according to one of five sport classes - the lowest was III class, then II class, I class, National Masterclass, and International Masterclass (country representation and international championship). The recreational athletes were not connected with the representation of the country or sport club in any contest. Professional athletes ( $\mathrm{n}=138 ; 39 \%$ ) were involved in the following disciplines: track \& field $(\mathrm{n}=93 ; 26 \%)$; swimming ( $\mathrm{n}=45 ; 13 \%$ ). According to the physical activity, the majority ( $n=117 ; 33 \%$ ) of participants reported sport activity in fitness clubs (activities such as fitness, indoor cycling, exercises with free weights). Sixty-nine of the responders ( $20 \%$ ) described their activity as yoga. A few responders did not take part in any physical activity ( $\mathrm{n}=29 ; 8 \%$ ). The study was approved by the local Bioethical Committee at the Jerzy Kukuczka Academy of Physical Education in Katowice.

## Measures

Primary outcome was the result of the BES - Body Esteem Scale, devised by Franzoi \& Shields [1984] and adapted in Polish culture by Lipowski \& Lipowska [2013]. The internal consistency of the scale was very high for both women (Cronbach $\alpha=0.80-089$ ) and men [Cronbach $\alpha=0.85-085$ ]. The given coefficients covered the original division into subscales adopted by the authors of BES. Furthermore, it has been shown that BES is characterized by high level of test-retest reliability [Franzoi \& Shields 1984, 1994]. The scale was adapted and translated in various geographic regions and applied in diversified language versions [Franzoi \& Chang 2002; Jorquera, Baños, Perpiñá \& Botella 2005; Jung \& Forbes 2007; Kowner 2002; Lipowska \& Lipowski 2006a; Taleporos \& McCabe 2002]. It consists of 35 items grouped into three subscales dedicated to gender. Items included in the questionnaire were ranked by a 5-point Likert scale from 1 (strongly negative feelings) to 5 (strongly positive feelings).

Subscales dedicated for women concern three aspects of the body - sexual attractiveness, weight concern and physical condition. Sexual attractiveness concerns individual feelings towards body parts, which are not altered by physical activity. However, the attitude towards them, as a part of the appearance, concerns sexuality. Weight concern describes those body parts that are connected with 'fat' or 'weight' attitudes. Those items might be altered by activity or dietary restrictions. The last subscale describes items strictly connected to physical activity. Subscales dedicated for men are similar to those for women, but not exactly the same. Men perceive differently those body parts, which in women are connected with sexuality. For men, more adequate is physical attractiveness. It describes items that refer to being handsome (among men, sexuality of the image is not as important as it is in women) - both with reference to upper-body parts and functions that allow/enable
skilful actions. Another subscale - body strength - refers to physical activity, resistance, strength and nimbleness. The last subscale is 'physical condition', which concerns parameters that result from physical activity.
Demographic data
Demographic data included participants' age, gender, and participation in physical activity - whether professional (then sport class, which describes the level of sport performance) or amateur (its type: yoga, fitness and others, or none activity).

Procedure
The study was conducted in a few main Polish sports centres. Data were collected in Central Sport Center in Spała, Zakopane, Primary Schools in the Silesia province, and Silesian fitness clubs. Participants were informed that the survey investigates body image. Participants responded to all questions using the pen and paper method. The completed surveys were screened by the research coordinator.

## RESULTS

Statistical analyses were carried out using the STATISTICA data analysis software, version 10 [StatSoft Inc., Tulsa, OK, USA]. Firstly, the distribution of data was verified by the Shapiro-Wilk test. The values of skewness $(-0.77 ; 0.25)$ and kurtosis $(-0.61 ; 0.50)$ were in acceptable range, indicating normal distribution of data. Variance of the variable was homogeneous. Data were analysed by one-way analysis of variance ANOVA with 'age' as a between-subject factor ( $>19,20-29,30-39,40-49,50-59,>60$ ). Other factors were also analysed such us: sport discipline (track \& field, swimming, fitness club activities, yoga, no activity); level of performed sport activity (being professional athlete vs amateur). The $F$ tests were followed by post hoc Tukey comparison tests. Descriptive statistics showed that the average age for the examined group was $30.6 \pm 14.6$ years.

ANOVA revealed statistically significant main effects of 'age' for the variable sexual attractiveness in women $\left(F_{(5,206)}=5.82\right)$, and physical attractiveness in men $\left(F_{(5,134)}=2.71\right)$. The lowest body esteem concerning sexuality occurred among women <19 years old ( $M=$ 43.55), higher values were scored in women aged 20-29 years old ( $M=47.16$ ). The highest values were found in women aged $30-39$ years old ( $M=50.42$ ). Differences between those age groups were statistically significant ( $p<0.05$; Fig. 1). After reaching the age of 30-39 years, women tend to lose satisfaction in sexual attractiveness (Fig. 1). Women's body esteem was at the level of 48.52 in the age of 40-49 years, and at the level of 44.01 in the age of 5059 years.


Figure 1 - Sexual attractiveness in women grouped by age. Statistically significant differences were observed only between three age groups. The highest sexual esteem was found in women in the aged 30-39 group, while the lowest values were observed among women in the age $<19$ and 50-59 groups.

In the groups of men, age was the only significant factor differentiating the esteem of physical attractiveness. The lowest values of physical attractiveness occurred among the youngest men ( $M=39.21$ ). After this age, satisfaction with physical attractiveness increased ( $M=43.76$ ). For the age group 30-39 years old it started to decrease ( $M=41.54$ ); 40-49 ( $M=$ 39.44); 50-59 ( $M=42.33$ ); 60 years and more $(~ M=38.88)$. The highest values of physical attractiveness appeared in the group of men in the age group 20-29 years old ( $M=43.00$ ). The difference between the youngest men and those in the age group 20-29 years old was statistically significant ( $p<0.02$ ).


Figure 2 - Physical attractiveness in men's groups reported by age. Statistically significant differences were observed only between men in the youngest group and the group aged 20-29 years.

## DISCUSSION

The results of the current study showed that age significantly affects the esteem of body image. This finding occurred in both genders, indicating that men and women perceive their body differently in different periods of their life. In both women and men, the lowest body esteem values were observed among responders under the age of 19. Body esteem between adolescence and subsequent years increased, but the highest values are noticed between the age of 20 and 29 in men and 30 and 39 in women. Physical activity did not differentiate body esteem in either women or men.

For women, before they reach the age of 19 , the low values of sexual esteem may be connected to the fact that they are just entering the adulthood and beginning to explore their own sexuality. In the groups of men, physical attractiveness is the equivalent of sexual attractiveness, however in body esteem sexuality for men is not as important as it is for women, rather it is more to perceive one's self as an attractive and handsome man. The most noticeable differentiation with respect to age appears in both genders: when boys and girls are crossing from adolescence into early adulthood there is the most significant difference in body esteem and such a trend is growing.

So far, Polish researchers have evaluated different variables by using the BES. Optimism was described as a factor positively related to general body satisfaction. The authors also pointed out that age might affect body esteem, especially during adolescence (Lipowska \& Lipowski, 2006). Age varied the body expectations. Among males, the differentiating point for the desire to lose weight transferred to increasing muscle size, depending on the age of the examined group [McCabe \& Ricciardelli 2004].

A more broadened perspective for body esteem and sport activity occurs when age is in the context of physical activity, then it becomes a predictor of body image and eating disorders [Monsma \& Malina 2004]. According to Festinger's theory of social comparison, people need a reference group by which to evaluate themselves and their own body. Sports activity may be one of the reference groups, in which professional athletes are those with whom the body is compared [Franzoi \& Klaiber 2007]. The images of the athletic image, which are common in physically active people, influences body esteem in various ways [Benton \& Karazsia 2015]. The results of the current study did not confirm a significant difference in perceived body esteem based on physical activity [Swami et al. 2009]. Different results may be explained by the types of sport included. The current study concerned mainly individual sports, which may not differ as much in body image as team sports or for example martial arts. The selection of the examined group may also be a limitation - if the group had contained more diversified sport disciplines, maybe the expected differences between body esteem and sport activity would occur.

Interestingly, the same variable, age, appeared as the most significant factor in men with regard to physical attractiveness - and in women, in terms of sexual attractiveness. Attractiveness of the body according to the conducted study is the factor that undergoes most changes as a person ages.

## CONCLUSIONS

The most important factor significantly differentiating body esteem for both, men and women was the age variable. The differentiation concerns a specific factor of body image body attractiveness -in women associated with sexuality and in men with general attractiveness. Women perceive their body as being most attractive (sexually) between 20 and 39 years old, while men perceive theirs as being most attractive (physically) between the ages of 20 and 29. During other periods of life body esteem such as sexual and physical attractiveness drops.

## HIGHLIGHTS

- Age was the only variable, which significantly differentiated body esteem for both gender.
- Women perceive their body as being most attractive (sexually) between 20 and 39 years old, while men perceive theirs as being most attractive (physically) between the ages of 20 and 29
- Physical activity did not differ the body esteem in the researched sample.
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