Revista Românească pentru Educație Multidimensională
ISSN: 2066-7329 | e-ISSN: 2067-9270
Covered in: Web of Science (WOS); EBSCO; ERIH+; Google Scholar; Index Copernicus; Ideas RePeC; Econpapers; Socionet; CEEOL; Ulrich ProQuest; Cabell, Journalseek; Scipio; Philpapers; SHERPA/RoMEO repositories; KVK; WorldCat; CrossRef; CrossCheck

2024, Volume 16, Issue 1, pages: 506-517 | https://doi.org/10.18662/rrem/16.1/835
Submitted: November 13th, 2023 | *Accepted for publication:* January 16th, 2024

Investigating Correlations between Subjective Satisfaction with Body Image and Selected Personality Characteristics in Gender Adolescents with Attractive Face

Dominika DOKTOROVÁ [1]
Jana HUBINSKÁ [2]

[1] University of Ss. Cyril and Methodus in Trnava dominika.doktorova@ucm.sk
[2] University of Ss. Cyril and Methodus in Trnava jana.hubinska@ucm.sk

Abstract: *Body image just during adolescence is influenced not only by the media, but also by family and friends, and related to this, the adolescent must learn to cope with society's demands on body image. This study examines the relationships between facially attractive adolescents' body image dissatisfaction and personality characteristics. The research population consisted of 185 face-attractive students from different types of high schools, including 89 girls and 96 boys with an average age of 18 years. We used the Eysenck Personality Questionnaire EPQ-R and Stunkard Silhouettes and questions designed by us regarding satisfaction/dissatisfaction with different body parts to collect data. We found that there was no significant relationship between body image dissatisfaction and neuroticism, psychoticism. A significant negative relationship was found between body image dissatisfaction and extroversion.*

Keywords: *adolescence, body image, body image dissatisfaction, neuroticism, psychoticism, extroversion, EPQ-R, Stunkard's silhouettes.*

How to cite: Doktorová, D., & Hubinská, J. (2024). Investigating correlations between subjective satisfaction with body image and selected personality characteristics in gender adolescents with attractive face. Revista *Românească pentru Educație Multidimensională, 16*(1), 506-517. https://doi.org/10.18662/rrem/16.1/835

©2024 Published by LUMEN Publishing. This is an open access article under the CC BY-NC-ND license http://creativecommons.org/licenses/by-nc-nd/4.0/

Introduction

Nowadays, the issue of attractiveness and physical appearance is a common topic among people, especially among adolescents. The interest in the face and its attractiveness comes from Greek. The name physiognomy can be translated as knowledge of nature. This doctrine is concerned with the appearance of the face as well as morphological features, personality and behavior (Little et al, 2008). Every day, adolescents are presented with role models on how they can improve their body image, how they should look in order to be popular, successful in the group of their peers. Social networks such as Instagram or Facebook have a significant impact on the younger population, offering adolescents an image of how they should look, eat, even though often this image does not correspond to reality. It is typical for the period of adolescence that individuals cope with significant changes in body image. These changes particularly affect body shape and weight. Girls cope less well with the increase in fat mass on the body, while boys accept this change positively (Ricciardeli & Yager, 2016). Vilhjalmsson et al. (In Ricciardelli & Yager, 2016) found that adolescents' height also contributes to their body image satisfaction. Mass media, which daily promote how a person should look and give instructions on how to live healthy, eat healthy, how to lose weight. Parents are very important for the development of satisfaction or dissatisfaction with body image. It is the attractiveness and topicality of this issue that prompted us to focus on adolescents in this work and find out how they experience this difficult stage of life. We will be interested in what relationships exist between adolescents' dissatisfaction with body image and personality characteristics. Interest in body image (henceforth body image) in psychology and sociology first emerged in the work of Schilder (In Grogan, 2016), who paid attention to the body in broader psychological and sociological contexts. He said that body image is not only a cognitive construct but also a reflection of attitudes and interactions with other people (Cash & Smolak, 2011). Body image according to Fialova (2001) and Grogan (2016) define body image as the formation of one's own image of and attitude towards one's body, which includes information about it from external and internal sources, the attitude of the environment as well as the individual's awareness of his or her body. Body image is simply put a mirror reflection of external reality (Phillips & De man, 2010). Boys look forward to adulthood and perceive the changes associated with it as positive (Doktorova & Demuthova, 2021). In particular, the change of childhood body shapes to more feminine ones makes girls feel that their body image is at odds with the cultural ideal of a slim body

(Almeida, 2010). For boys, changes in body shape during puberty are more acceptable. Body size, weight and muscle mass increase, which contributes to a positive body image (Levine & Smolak, 2002; Ricciardeli & Yager, 2016; Ata et al., 2007). Traits that are often found in girls dissatisfied with their bodies are ambition, high ambition, focus on performance and achievement, conscientiousness, perfectionism, low self-esteem, insecurity, need for self-control, self-control, anxiousness, and neuroticism (Krch, 2005). Temperament characteristics are known to have an impact on self-esteem. Extroverts are more satisfied, have higher self-esteem than introverts (Blatný & Osecká,1998). Cash (2012) argues that one of the personality characteristics that can affect body satisfaction is neuroticism. It is generally believed that neuroticism reflects the sensitivity of the limbic system to thoughts and situations that induce stress. Concerns can be greatly exacerbated if an individual does not conform to an ideal standard of attractiveness or does not meet the ideal body size promoted daily by the media. In the current cultural context, such concerns may manifest as low satisfaction with one's appearance. We will also be interested in gender differences in body image satisfaction. We will also turn our attention to the relationship between body image satisfaction and personality characteristics.

After reviewing the literature and considering the stated objectives of the thesis, we asked the following research questions:

VO1 : Are there statistically significant differences between boys and girls in subjective satisfaction with body image and body care in adolescents?

VO2 : Are there statistically significant relationships between personality characteristics and subjective satisfaction with body image in adolescents?

Methods

Research sample

The research population of our study consists of 186 respondents aged between 17 and 19 years who were selected by purposive sampling. These were individuals who were rated as having an attractive face based on self-assessment as well as peer assessment. All respondents were high school students. The average age is 18.00 years. The research sample consists of 89 girls and 96 boys. The research population was selected based on previous research, we approached attractive individuals. All participants took part in the research voluntarily and were informed about its significance and procedure. The VEGA research was reviewed by an ethics committee.

An overview of the different types of schools, fields of study and numbers of boys and girls is given in Table 1.

Table 1: Frequency and percentage distribution of girls and boys in schools.

Year of study	Girls		Boys	
	N	[%]	N	[%]
3	13	7,0	14	7,6
3	15	8,1	9	4,9
2	9	4,9	10	5,4
3	26	14,1	0	0
3	0	0	18	9,7
2	11	5,9	13	7,0
3	0	0	24	13,0
2	15	8,1	8	4,3
Total	**89**	**48,1**	**96**	**51,9**

Operationalisation of variables

In research, the precise classification of variables is very important. The variable "gender" belongs to the category of nominal variables. The most important variable in our research, "body image", includes subjective satisfaction/dissatisfaction with body parts. Responses were coded using a Likert scale whereby 1 - completely dissatisfied, 2 - more than quite dissatisfied, 3 - partially dissatisfied, 4 - partially satisfied, 5 - quite satisfied, 6 - completely satisfied. The result was obtained by summing the scores with the questionnaire we created, from which we obtained a raw score. A given variable is marked as cardinal. The variable in our research "overall satisfaction with appearance" from which there were 6 options to choose from 1- completely dissatisfied/y, 2- more than quite dissatisfied/y, 3- partially dissatisfied/y, 4- partially satisfied/y, 5- quite satisfied/y, 6 - completely satisfied/y. A given variable is marked as cardinal. The EPQ-R was the first measurement instrument used in the questionnaire, focusing on the individual personality dimensions, which consisted of six subscales. We obtained an Extroversion score, an Emotional Stability score, a Psychoticism score, an Addictiveness score, a Criminality score, and a Lying score, which we classify as cardinal variables

Materials and methods

Questionnaires used, administered to respondents:

1. Eysenck Personality Questionnaire (EPQ-R: short version, H.J. Eysenck, S.G.B. Eysenck, 1992).

2. A questionnaire to measure satisfaction with one's own body using Stunkard's silhouettes (Wadden & Stunkard, 2004)

As we have chosen to conduct a quantitative type of research, we will use multiple methods for the research to make the results as detailed as possible. I have chosen to use standardized questionnaires. We will use Stunkard's silhouettes to determine satisfaction with one's own body. To find out personality characteristics we will use Eysenck's personality questionnaire EPQ-R. Opting for quantitative research, we constructed a larger test battery, which we presented to respondents in print. In consultation with the management of each school, we were allowed to attend classes, inform students of the purpose of our work, and then present the test battery to them. By having personal contact with respondents during the administration, we were able to provide individual instruction when needed. The test administration process took place in November-January 2023 in 8 high schools. All data were subsequently processed using statistical description and inference in IBM SPSS Statistics 24 statistical software.

A questionnaire to determine the level of satisfaction with one's own body using Stunkard silhouettes

We will use Stunkard's silhouettes (Wadden & Stunkard, 2004) to subjectively assess respondents' current and ideal body shape. Respondents will be tasked to indicate on a scale of nine silhouettes the silhouette that describes their silhouette, the silhouette that they think others will assign to them, finally, the silhouette assigned to them by their classmates. The silhouettes are divided into male and female from the skinniest to the most robust figure. We also compare the respondents' opinion with their current BMI to assess the objectivity of their opinion of the figure.

Eysenck Personality Questionnaire EPQ-R

We will use the Eysenck Personality Questionnaire EPQ - R to measure personality characteristics. This version contains 106 items that assess psychoticism scale, neuroticism scale, extroversion - introversion and lie - scores, addictiveness scale, criminality scale. The respondent can score a maximum of 12 points on each scale. If the respondent's lie-score reaches a high value, it will be necessary to discard the test battery from the research pool.

Results

VO1: Are there statistically significant gender differences among individuals with attractiveness in subjective satisfaction with body image and body care in adolescents?

Table 2: Gender comparison of subjective satisfaction with body image and body care in adolescents.

	Gender	N	MR	U	P
Care for the figure	girls	89	91,99	4182,000	**,783**
	boys	96	93,94		
Body image	girls	89	88,61	3881,500	**,283**
	boys	96	97,07		

In Table 2 we present the results of the Mann-Whitney U-test where we investigated whether there are statistically significant differences in subjective satisfaction with body image between girls and boys. As a measure of subjective satisfaction, we chose the average score in the questionnaire we created. There was no statistically significant difference between girls and boys in body care, which assessed the extent to which adolescents care for their appearance, $p<0.05$ ($U= 4182.000$; $p = .783$). In the subjective body part satisfaction, which assessed subjective satisfaction or dissatisfaction with specific body parts, there was no statistically significant difference between boys and girls $p<0.05$ ($U= 3881.500$; $p= ,283$). Thus, we can assess overall that girls do not achieve significantly higher mean values than boys in caring for their body shape, but the opposite is true. In subjective satisfaction with their body parts, girls achieve significantly lower mean values than boys.

VO2: Are there statistically significant relationships between personality characteristics and subjective satisfaction with body image in adolescents?

Table 3: Significance of the relationship between personality characteristics and subjective satisfaction with body image.

		Časti tela (Body Image)
Psychoticism	P	,013
	P	,860
	N	185
Neuroticism	P	,086
	P	,246
	N	185
Extroversion	P	**-,232****
	P	,002
	N	185

** correlation is significant at the level of .01 (**p<0.01)
*correlation is significant at the level of .05 (*p<0.05)

The significance of the relationships between personality characteristics and subjective satisfaction with body parts in adolescents was investigated using Spearman's correlation coefficient (ϱ) and the results are presented in Table 3. The measure for each personality characteristic of the respondents is the raw score from the EPQ - R. We report the subjective satisfaction with body parts using the raw score from the questionnaire we developed. We can see that there is no statistically significant positive relationship between the measure of psychoticism and the raw score in subjective satisfaction with body parts ϱ = .013; p< .01 (p = .860) for adolescents. There was also no statistically significant positive relationship between neuroticism and subjective satisfaction with body parts ϱ = 0.086; p< ,01 (p = ,246).

A statistically significant weak negative relationship ϱ = -.232; p< ,01 (p = ,002) was demonstrated between extroversion and subjective satisfaction with individual body parts.

Discussion

Body image has two important properties namely elasticity and subjectivity. The subjective experience of the body may not coincide with its objective parameters or with the perception of an external observer. Subjective perception is also elastic, which means that it changes under the influence of social experience (Grogan, 2000). Cash & Pruzinsky (In

Hargreaves and Tiggeman, 2006). identified two basic dimensions of self-perception, namely body image investment (external appearance) and body image evaluation (body image evaluation). Body image investment reflects the degree of cognitive as well as behavioural importance that people attach to their body and appearance. Body image evaluation reflects the degree of satisfaction or dissatisfaction with one's own body and appearance.

In research question 1, we investigated whether boys and girls differ in their satisfaction with their body image. Using the Mann-Whitney U-test, we compared boys' and girls' results regarding their body care and satisfaction with specific parts of their body. We found no statistically significant difference between genders in body care, which captured whether adolescents paid any attention to their body image ($p = .783$). Thus, in our case, we cannot claim that girls score significantly higher than boys in taking care of their body image. We did not observe a higher level of satisfaction among boys in subjective satisfaction with body parts, where we did not find a statistically significant difference ($p = .283$). Thus, in our case, we cannot claim that overall, boys achieve a higher level of body image satisfaction than girls. Thus, we could not confirm that girls' higher levels of dissatisfaction with their body image during adolescence may be associated, according to Ricciardelli and Yager (2016), with physical changes specific to this developmental period. We believe that attractive girls undergo more pronounced physical changes in adolescence than boys, which may account for their higher body image dissatisfaction. Men care more about body performance, strength and speed. While a woman is primarily represented by her body, heart and expressiveness, a man is more likely to be represented by his reason and rationality (Doktorova & Demuthova, 2021), therefore it can be assumed that there are no differences between attractive boys and girls. Another explanation for the higher body image dissatisfaction in girls is related to the influence of mass media. Our findings are not supported by the research of Hargreaves and Tiggeman (2004), who found that viewing idealized advertisements leads to higher body dissatisfaction in girls but not in boys. Fialova (2006), discusses that women overestimate both their body dimensions and individual body parts. According to them, the ideal figure is a figure that is slimmer and more attractive to men. Cash (2012), many teenage boys are dissatisfied with the size of their muscles, with height, strength, size of shoulders, biceps. Based on these findings, a detailed examination of individual body parts would be appropriate. For women, in addition to those mentioned above, characteristics related to appearance (dress, long hair, attractiveness, make-up, manicure), traditional values and pleasant demeanor (good manners, family orientation, friendly, traditional,

smiles), interest in culture (likes music, books), and general positive qualities (confident, intelligent) were also reported (Helgeson, 1994, 2011). Little is also known about the influence of fathers on body image, but it is confirmed that fathers influence their daughters' body image but not their eating habits.

The influence of siblings on body image and eating habits is also less well described. The sister is known to have the same influence on body image as the mother (Ricciardelli et al., 2000; Gupta, 2011).

In the next question 2, we examined the relationship between adolescents' personality characteristics and their level of body image dissatisfaction. The statistical processing of the data was based on the results of the EPQ-R questionnaire and the results in the questionnaire we developed. Through Spearman's correlation, we found that there is no statistically significant relationship between psychoticism and the results of the questionnaire we created. We did not find a statistically significant relationship between neuroticism subjective satisfaction with body parts ($p<.01$). Thus, it cannot be concluded from the results that higher levels of neuroticism are associated with higher concern for body appearance and higher dissatisfaction with certain body parts. The reason for this correlation between neuroticism and body part satisfaction may be due to adolescents' increased concern about their appearance. The personality trait neuroticism is considered by Davis and Dione (2012) to be the most important personality characteristic in body image dissatisfaction because its cognitive manifestation is anxiety and worry. Research (Jackson at al, 2013; Nouri et al., 2014) confirms that body dissatisfaction is positively correlated with levels of neuroticism. The final personality trait we examined is extroversion. We found a statistically significant weak negative relationship between extroversion and subjective satisfaction with body parts ($p< .01$). Based on these results, we can argue that higher levels of extroversion in adolescents are associated with higher satisfaction with body parts. We think that the reason for the higher satisfaction with their body image in extroverts is their cheerful, carefree, active personality, as suggested by Eysenck & Eysenck (1992). Extroverts do not seem to show concern about their body, or their concern is lower. Extraversion is associated with a tendency to assert only positive evaluations and statements about one's self. While neuroticism, for example, is associated with the willingness to agree with just negative statements (Blatný & Osecká,1998). Davis and Dione (2012) argue that one of the personality characteristics that can affect body satisfaction is neuroticism. It is generally believed that neuroticism reflects the sensitivity of the limbic system to thoughts and situations that induce stress. High levels of neuroticism manifest as emotional lability or anxiety, which may be

most important in body image studies because its cognitive manifestation is worry. Concerns can be greatly exacerbated if the individual does not conform to an ideal standard of attractiveness or does not meet the ideal body size promoted daily by the media. In the current cultural context, such concerns may manifest as low satisfaction with one's appearance. Several studies show that body dissatisfaction is positively correlated with high levels of neuroticism (Jackson, et al, 2013; Nouri et al., 2014). Also, high levels of neuroticism are associated with eating disorders, which are related to body image dissatisfaction.

Acknowledgements: This study was supported by VEGA 1/0251/21 - Human Facial Attractiveness - Key Characteristics and Psychological Mechanisms of Its Assessment

References

Almeida, S. M. R. (2010). Body image and depressive symptoms in 13-year-old adolescents. *Jounal of Paediatrics and Child Health, 48*(10), 165 -171: DOI: 10.1111/j.14401754.2012.02576.x

Ata, R. N., Ludden, A. B., & Lally, M. M. (2007). The effects of gender and family, friend, and media influences on eating behaviors and body image during adolescence. *Journal of Youth and Adolescence*, *36*, 1024-1037

Austin, S.B., Haines, J., & Veulgelers, P. (2009). Body satisfaction and body weight: gender differences and sociodemographic determinants. *BMC Public Health*, *9*(1), 1- 7 DOI : 10.1186/1471-2458-9-313

Blatný, M., and Osecká,L. (1998). Zdroje sebehodnocení a životní spokojenosti:

Cash, T. F. (2012). *Encyclopedia of body image and human appearance*. London: Academic Press

Cash, T. F., & Smolak, L. (2011). *Body image. A handbook of science, practice, and prevention*. 2.vyd. New York: Guilford Press

Cash, T.F., & Pruzinsky, T. (2002). *Body image. A handbook of theory, research, and clinical practice*. New York: Guilford Press

Davis, D., & Dionne, M. M. (2012). *Body image and personality*. In*: Encyclopedia of Body Image and Human Appearance*. London: Academic Press

Doktorova, D., & Demuthova, S. (2021). Symptoms of eating disorders in young women with and without selfharming behaviour. *Ad Alta: Journal of Interdisciplinary Research*.

Eysenck, H. J., & Eysenck, S. G. B. (1992). *Eysenckove osobnostné dotazníky pre dospelých*. Bratislava: Psychodiagnostika.

FIALOVÁ, L. 2001. Body image ako součást sebepojetí človeka./Body image such as comonet od selfesteem Praha: Karolinum, 269 s. ISBN 80-246-0173-7.

Grogan, S. (2000). *Body image. Psychologie nespokojesnosti s vlastným telem*. Praha: Grada

Grogan, S. (2016). *Body image. Understanding body dissatisfaction in men, women and children*. 3rd ed. New York: Routledge

Gupta, C. H. (2011). *The relation between body image satisfaction and self- esteem to academic behavior in adolescents and pre adolescents*. University of Manitoba.

Hargreaves, D. A., & Tiggemann, M. (2006). 'Body image is for girls' A qualitative study of boys' Body Image. *Journal of health psychology*, *11*(4), 567-576.

Hargreaves, D. A., & Tiggemann, M. (2004). Idealized media images and adolescent body image:"Comparing" boys and girls. *Body image*, *1*(4), 351-361.

Helgeson, V. S. (1994). Relation of agency and communion to well-being: Evidence and potential explanations. *Psychological bulletin*, *116*(3), 412.

Helgeson, V. S. (2011). Gender, stress, and coping. *The Oxford handbook of stress, health, and coping*, 63-85.

Jackson AM, Cox AE, Sano Y, Parker L, Lanigan J. Body image and eating behaviors: A latent profile analysis. Body Image. 2022 Jun;41:396-405. doi: 10.1016/j.bodyim.2022.04.013. Epub 2022 May 6. PMID: 35533520.

Kocsis, R. N. (2013). Book review: diagnostic and statistical manual of mental disorders: (DSM-5).

Krch, F. D. (2005). Poruchy příjmu potravy.

Levine, M. P., & Smolak, L. (2006). *The prevention of eating problems and eating disorders: Theory, research, and practice*. psychology press.

Little A. C., Burriss R. P., Jones B. C., DeBruine L. M., Caldwell C. A. 2008. Social influence in human face preference: men and women are influenced more for long-term than short-term attractiveness decisions. Evol. Hum. Behav. 29, 140–146 10.1016/j.evolhumbehav.2007.11.007 (doi:10.1016/j.evolhumbehav.2007.11.007)

Nouri, M., Dolatshahi, B., Dadkhah, A., & Falahatdoost, M. (2014). The role of personality factors and sexual self-schema in body image dissatisfaction. *Practice in Clinical Psychology*, *2*(2), 127-134

Phillips, N., & De man., A. (2010). Weight status and body image satisfastion in adult men and woman. *North American Journal of Psychology*, *12*(1), 171-184.

Ricciardelli, L.A., & Yager, Z. (2016). *Adolescence and body image: From development to preventing dissatisfaction*. New York: Routledge

Ricciardelli, L. A., McCabe, M. P., & Banfield, S. (2000). Body image and body change methods in adolescent boys: Role of parents, friends and the media. *Journal of psychosomatic research*, *49*(3), 189-197.

Wadden, T. A., Brown, G., Foster, G.D., & Linowitz J. R. (1991). Salience of weight- related worried in adolescent males and females. *International Journal of Eating Disorders, 10*(4)

Wadden, T.A., & Stunkard, A.J. (2004). *Handbook of obesity treatment*. 2nd ed. New York: Guilford Press

Yates, A., Edman, J., & Aruguete, M. (2004). Ethnic differences in BMI and body/self-dissatisfaction among Whites, Asian subgroups, Pacific Islanders, and African-Americans. *Journal of adolescent Health*, *34*(4), 300-307