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# Self-esteem and loneliness in Russian adolescents with body dissatisfaction

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#### **Abstract**

Adolescents satisfied and dissatisfied with their body were compared in body image, appearance perception, self-esteem and loneliness. The majority of adolescents made a clear distinction between the concepts of "body" and "appearance". Body image and body satisfaction were associated primarily with weight perception. Adolescents with body dissatisfaction viewed themselves as weak and inactive, had an intense conflict between the actual and desired self, and often experienced a feeling of loneliness. The most significant body areas were the abdomen, thighs and breasts for girls, and the shoulders, chest and muscle mass for boys.

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#### 1. Introduction

Adolescence is a time when the appearance and the body move from the periphery of children's attention to its center. Body image for contemporary teenagers is increasingly becoming a cause of disturbances, anxiety, depression and eating disorders [1], [2], [3], [4], [5]. So, the rise of scientific interest in the problem of body perception in adolescents is not surprising.

Researchers define body image as a multidimensional construct including at least perceptual, affective, cognitive, evaluative and behavioral dimensions [6], [7]. According to Muth and Cash [8, p.1438], it reflects how individuals "think, feel and behave with regard to their own physical attributes". These dimensions are often studied in adults, and rarely in adolescents and children, which makes it difficult to trace the development of body attitudes. Moreover, studies involving children adopt a broader understanding of body image, limited to the dissatisfaction criterion and a total disregard for the emotional and behavioral consequences of this dissatisfaction.

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Hardit and Hannum [9] proposed a tripartite influence model for analyzing the development of negative attitudes to appearance and body. The main predictors of body dissatisfaction were parental influence (family messages, parental concern and criticism about children's appearance and weight), peer influence (appearance-related teasing, social status in a peer group) and mass media (imposing the stereotypes of beauty). They claimed the last factor to be the most significant. Studies in Russia [10] indicated that for Russian adolescents, the most important factor was parental influence, which also included the modeling of behavioral patterns towards the body and looks, adherence to certain rules with respect to body care, eating behavior, sports, etc.

A certain level of body dissatisfaction in adolescence is, in fact, "normative" [11], but it is crucial to distinguish children who are at risk for eating disorders and depression. The lack of epidemiological data makes it difficult to estimate when body and appearance dissatisfaction becomes a problem and interferes with a child's well-being. It is believed that girls' concerns over their body are more likely to turn into destructive behavior than those of boys since appearance is an important indicator of self-worth with girls [12]. For boys, self-worth is based on abilities rather than on physical attractiveness. However, modern adolescent boys feel anxious about their appearance and body, and suffer from imperfection no less than girls [13].

The aim of this research was to study body and appearance perception, self-esteem and feelings of loneliness in adolescents with body dissatisfaction. The following issues were under scrutiny: how body and appearance dissatisfaction manifests emotionally and in behavioral strategies; how it is refracted in self-image, self-esteem and desired self; whether body and appearance dissatisfaction in combination with self-esteem may contribute to isolation and loneliness in adolescents, for whom communication is a leading activity at this stage of development. It was also questioned whether there are gender differences and what they are.

#### 2. Method

The participants were 66 Russian adolescents aged 13-15 years (34 boys and 32 girls). They completed the following measures: 1) "Attitudes towards body and appearance" questionnaire; 2) Human figure drawings [14]; 3) The Color-A-Person body dissatisfaction Test, CAPT [15], [16]; 4) Dembo-Rubinstein Self-Esteem Scale [17]; 5) a modified Russian version of the semantic differential to estimate the concept of "myself" [18], 6) UCLA Loneliness Scale [19]. Responses to the questionnaire allowed us to form two subsamples of subjects, satisfied with their body (Sample 1, N = 27), and dissatisfied (Sample 2, N = 39). Content analysis of the data and further statistical analysis using chi-square and Mann-Whitney test were carried out.

# 3. Results and discussion

# 3.1. Perception of body and appearance in adolescents with body dissatisfaction

Preliminary data analysis showed that the majority of adolescents (64%) differentiate between the concepts of body and appearance. The concepts have distinct semantic fields for them, whereby body satisfaction does not always imply appearance satisfaction and vice versa. Appearance satisfaction coupled with body dissatisfaction was a significantly more frequent combination. Appearance for adolescents is the face and its elements, including the hair, while the body is the rest of the corpus from the neck. Previous research has shown that for adult women, the body and appearance are related concepts, and the face is a part of the body [20]. At what age a "face" becomes incorporated into the general concept of "body" and whether there are gender differences, is the subject of further research.

A comparative analysis of the two samples revealed the following differences between adolescents satisfied and dissatisfied with their bodies. Adolescents with body dissatisfaction more often believed that they were overweight (p> 0,001, Pearson's  $\chi$ 2 test) and needed to lose weight (p> 0,001, Pearson's  $\chi$ 2 test). They were more worried about their bodies (p> 0,001, Pearson's  $\chi$ 2 test), indicating as a reason for concern their particular figures or weight characteristics: "fat is somewhere there", "I'm not skinny", "no muscles, just fat",

etc. They often felt uncomfortable and embarrassed of their bodies (p> 0,001, Pearson's  $\chi 2$  test). Adolescents with body dissatisfaction were often tempted to change their body and appearance and even wanted to have another body (p> 0,001, Pearson's  $\chi 2$  test). The most common answers to the question "What would you like to change in your body / physical appearance?", were the "weight", "figure", "muscles", "abs".

These data suggest that body perception and body satisfaction in contemporary adolescents is associated primarily with weight characteristics. The content analysis also showed that, in some cases, despite the fact that nobody (parents, classmates) pointed out excessive weight or, on the contrary, pointed out excessive thinness, the child still believed that "I'm overweight, and must get rid of it". It is these weight characteristics that cause emotional distress, and weight self-estimation is more important than weight itself.

As for behavioral strategies, adolescents with body dissatisfaction more often look in the mirror (p> 0,001, Pearson's  $\chi 2$  test), stay at home because of their body or appearance (P> 0,001, Pearson's  $\chi 2$  test), and more often make attempts to somehow influence the body (p> 0,001, Pearson's  $\chi 2$  test), noting at the same time, that "this is ineffectual".

The significance of different body areas was gender-specific. For girls, the most important parts were the abdomen, thighs and breasts, and for boys they were the shoulders, chest and muscle mass (p < 0.01, Mann-Whitney U test). These findings are consistent with the data obtained on the Western sample [21], indicating that girls focus on weight and body shape, and young men focus on muscularity and strength. The only difference is that in our sample both the girls and the boys were concerned about their weight.

# 3.2. Self-esteem in adolescents with body dissatisfaction

Adolescents with body dissatisfaction were more likely to rate themselves below others (Table 1) on bodily parameters (figure, appearance); attractiveness parameters (beauty, attractiveness); relationship parameters (communication, authority among peers); and overall satisfaction (self-satisfaction, integral self-esteem).

Self-esteem	Sample 1	Sample 2	Mann-Whitney U test
Figure	41.57	27.91	p<0,01
Authority among peers	41.54	27.94	p<0,01
Self-satisfaction	38.98	29.71	p<0,05
Appearance	42.04	27.59	p<0,01
Self-confidence	41.13	28.22	p<0,01
Communication	38.93	29.74	p<0,05
Attitude of others	37.61	30.65	-
Beauty	43.44	26.62	p<0,01
Intelligence	37.04	31.05	- -
Attractiveness	42.48	27.28	p<0,01
Integral self-esteem	41.85	27.72	n<0.01

Table 1. Self-esteem in adolescents satisfied (Sample 1) and dissatisfied (Sample 2) with their body.

It was found that adolescents with body dissatisfaction had a greater discrepancy between the level of aspirations and self-esteem, compared to those satisfied with their body (p < 0.01, Mann-Whitney U test). This indicates an intense internal conflict between the real self and desired self. Interestingly, the level of aspirations to beauty and appearance was higher in adolescents satisfied with their body (p < 0.01, Mann-Whitney U test). Perhaps this is due to the fact that young people with body dissatisfaction were largely concentrated on the "body" shortcomings (weight). This, again, raises the issue of distinguishing between "body" and "appearance" in adolescents and requires further research.

There were also differences in the evaluation of real self on the parameters of strength (p <0.01 Mann-Whitney U test) and activity (p <0.05 Mann-Whitney U test). Adolescents with body dissatisfaction considered themselves as more dependent, weak, indecisive, low in self-control, passive and closed. Many recent studies have pointed to the link between low self-esteem and negative body image [22], however, it is not always clear

where the cause is and where the effect is. We believe that the negative body image leads to a decrease in overall self-esteem. In addition, it is important that low self-esteem in bodily parameters is adjacent to low self-esteem in the quality of interpersonal relations (communication and authority among peers).

As for gender differences in self-esteem, it was found that girls were more likely to rate their self-confidence lower (p <0.05 Mann-Whitney U test), and had a higher level of aspirations to body and appearance (p <0.01 Mann-Whitney U test).

# 3.3. Loneliness in adolescents with body dissatisfaction

Considering loneliness as a two-dimensional construct, including emotional distress and behavioral strategies, it could be seen that young people with body dissatisfaction tend to narrow social contacts or even isolate themselves. This is evidenced by their inclination to avoid interaction in situations when experiencing discontent with their body and appearance, by low self-esteem ratings in communication and authority among peers, and by low scores in activity, in contrast with adolescents satisfied with their body. Comparison of the emotional aspects of loneliness, measured by UCLA Loneliness Scale, showed that adolescents with body dissatisfaction were more likely to experience a subjective feeling of loneliness (p<0,01 Mann-Whitney U test), and this was more typical for girls than for boys (p<0,01 Mann-Whitney U test).

# 4. Conclusion

This study analyzed how body dissatisfaction is manifested emotionally and behaviorally and reflected in self-esteem and loneliness. And in some sense it confirmed the hypothesis that body dissatisfaction contributes to the subjective feeling of loneliness, avoidance of social contacts, and underestimation of self-significance among peers. It is possible that loneliness can trigger eating disorders, and can be one of the depression predictors. It was found that concern with one's own weight is becoming more common among adolescents (in our sample, more than 50%) and gender-neutral, and we tend to agree with Tiggemann [23] who argues that the weight self-esteem is more crucial than the real weight.

Further research is required to study body-appearance semantic discrepancy in adolescents, and a specific resource for creating positive body image programs may be found here. Since body rejection in adolescents may be accompanied by appearance approval, inclusion of appearance in body image can help to correct body attitudes.

#### References

- [1] McCabe, M.P., Ricciardelli, L.A. A longitudinal study of pubertal timing and extreme body change behaviors among adolescent boys and girls. *Adolescence*, 39, 2004: 145–166.
- [2] Holmqvist, K., Lunde, C., Frisen, A. Dieting behaviors, body shape perceptions, and body satisfaction: Cross-cultural differences in Argentinean and Swedish 13-year-olds. *Body Image*, 4, 2007: 191–200.
- [3] Jones, D.C., Smolak, L. Body Image during Adolescence: A Developmental Perspective. *Encyclopedia of Adolescence*, 2011: 77–86.
- [4] Smolak, L. Body image in childhood. In *T.F. Cash, L. Smolak (Eds.). Body Image, Second Edition: A Handbook of Science, Practice, and Prevention*, 2011: 67–75. New York: Guilford Press.
- [5] McPhie, S., Skouteris, H., Fuller-Tyszkiewicz, M., McCabe, M., Ricciardelli, L.A., Milgrom, J., Baur, L.A. Dell'Aquila, D. Maternal predictors of preschool child-eating behaviors, food intake and body mass index: a prospective study. *Early child development and care*, 182(8), 2012: 999–1014.
- [6] Smolak, L. Body image in children and adolescents: Where do we go from here? *Body Image*, 1, 2004: 15–28.
- [7] Cash, T.F. Body image: past, present, and future. *Body Image*, 1, 2004: 1–5.
- [8] Muth, J.L., Cash, T.F. Body-Image Attitudes: What Difference Does Gender Make? *Journal of Applied Social Psychology*, 27(16), 1997: 1438–1452.

- [9] Hardit, S.K., Hannum, J.W. Attachment, the tripartite influence model, and the development of body dissatisfaction. *Body Image*, 9(4), 2012: 469-475.
- [10] Zinovieva E.V., Keisevitch T.V., Nikonova A.N. Svyaz roditelskih poslanij o tele s koncepciej telesnogo ya devushek podrostkovogo vozrasta [Relationship between parental messages about the body and young women's corporeal Self conception]. *Aktualnye problemi psihologicheskogo znaniya [Actual problems of psychological knowledge]*, 1(34), 2015: 131–141.
- [11] Rodin, J., Silberstein, L., & Striegel-Moore, R. Women and weight: A normative discontent. *In T. Sonderegger (Ed.), Nebraska Symposium on Motivation: Vol. 32. Psychology and gender*, 1985: 267–308. Lincoln, NB: University of Nebraska Press.
- [12] Croll, J. Body image and adolescents. In Stang J, Story M (Eds.) Guidelines for Adolescent Nutrition Services Minneapolis, MN, 2005: 155–166.
- [13] Ricciardelli, L.A. Body Image Development Adolescent Boys. *Encyclopedia of Body Image and Human Appearance*, Vol. 1, 2012: 180–186.
- [14] Machover, K. Personality projections in the drawing of the human figure. 1949. Springfield, IL: Thomas.
- [15] Wooley O. W., Roll S. The Color-A-Person body dissatisfaction test: stability, internal consistency, validity, and factor structure. *Journal of Personality Assessment*, Volume 56, Issue 3, 1991: 395-413.
- [16] Sakharova, V.G. Psihologiya tela: diagnostika otnosheniya k telu [Psychology of the body: Body attitude diagnostics]. 2011.Saint-Petersburg: Rech.
- [17] Bakholdina, V., Bakholdina, D., Movsesian, A., Stupina, K. On certain aspects of Dembo-Rubinstein method of self-esteem measurement. *Procedia Social and Behavioral Sciences*, 140, 2014: 547 552.
- [18] Fetiskin, N.P., Kozlov, V.V., Manuilov, G.M. Socialno-psihologicheskaya diagnostika razvitiya lichnosti I malyh grupp [Social psychological diagnostics of personality and small groups development]. 2002. Moscow: Institute of Psychotherapy.
- [19] Russell D., Peplau L.A., Ferguson M.L. Developing a measure of loneliness. *Journal of personality assessment*, 42 (3), 1978: 290-294.
- [20] Zinovieva, E.V., Nikonova, A.N. Osobennosti obraza tela I povedencheskih strategij v otnoshenii sobstvennogo tela u zhenshchin raznyh vozrastov [Body image and coping with body-image threats of women of different age]. *Proceedings of the IV International Scientific Conference "The Current Issues in Theoretical and Applied Psychology"*. Yerevan, Armenia. October 25-27, 2013: 269–271.
- [21] Wertheim, E.H., Paxton, S.J. Body image development in adolescent girls. *Encyclopedia of Body Image and Human appearance*, 2012: 187–193.
- [22] Ricciardelli, L.A., McCabe, M. Children's body image concerns and eating disturbance: A review of literature. *Clinical Psychology Review*, 21, 2001: 325–344.
- [23] Tiggemann, M. Body dissatisfaction and adolescent self-esteem: Prospective findings. *Body Image*, 2, 2005:129-135.