Correlations between self-attitude and body image in university students

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Abstract.

The article deals with establishing the correlations between a personal body image and other elements of self-attitude in university students. This age refers to the period of ontogenesis, which is characterized by a tendency to achieve the highest spiritual, intellectual and physical abilities. Changes in the physical status during this period are relatively slow, which makes it possible to conduct studies on the attitude to the body with a certain degree of isolation of the objective physical status, which at a later age can significantly deteriorate and greatly affect the attitude towards oneself and the world. It was established that a more pronounced subjective body image was usually combined with an emotional and axiological attitude of a person. A positive attitude towards the body, as a rule, is combined with a self-esteem focused on external, socially significant standards. Direct correlations between the subjective attitude to the body and such components of self-relation as “self-leadership”, “self-worth”, “self-acceptance” and “self-attachment” were found. Negative correlations were established with such indicators as “closeness” and “self-incrimination”. The results of this study can contribute to even more intensive development of self-reflection mechanisms and psychophysical regulation by specialists in physical education. Understanding the needs of the body enriches a personal resource, helps self-determination, physical, and psychological coherence.

Keywords: self-concept, elements of self-consciousness, body image, body positive, self-analysis mechanisms.

Introduction

Physical education, which consists of developing physical qualities and acquiring special physical education knowledge, including hygiene, physiology, psychology, and the theory and methods of physical education, is aimed at forming scientifically justified views about the social and biological nature of a person.

Physical (body) formation reflects the effect of the (mostly social) environment on a person aimed at changing the level of body organization and the correlations between the mental and physical components of the body (Vani, M.F., Pila, E., Willson, E., Sabiston, C.M., 2020, Revenko E.M., Salnikov V.A., 2018).

Despite a growing interest in the body in modern society, including healthy food, fitness, fashionable clothes, and sex, people usually ignore their true needs. Such an object-oriented position towards the body is mostly determined by ignoring sensory abilities and suppressing feelings (Dorris, D.C., 2009, Taigulova G.S., 2017). A reflection of the dominant subjective relation of a person is the orientation not to obey the biological laws, but to manage development using these laws.

The body image of a person is an integral part of his self-esteem. It plays an important role at different stages of a person's life and significantly determines the form and content of a person's activity while moving into adulthood (Vani, M.F., Pila, E., Willson, E., Sabiston, C.M., 2020). Therefore, this study aims to establish the correlations between a personal body image and other elements of self-attitude in university students.

Among the variety of approaches to the concepts of physical education, the priority is given to a comprehensive development of a person when mastering physical education values. Unconditional respect for the self-worth of a person is considered as one of the most important conditions for the humanization of the upbringing process and the inclusion into it the student's development potential (Brodani, J., Kovacova, N., 2019).

Materials and methods.

The experiment was conducted during the academic year at the beginning of the 1st (October) and at the end of the 2nd (May) semester of 2018 – 2019 at the Physical Education and Health Department (South Ural State University). Eighty-three persons (51 females and 32 males) aged from 21 to 25 years participated in the study, including first to fourth-year students, master's students, and postgraduate students in science and arts. As a result of a medical examination, all participants were considered as apparently healthy.

During the experiment, the following methods were used: the self-attitude questionnaire developed by S.R. Pantileev, the body image questionnaire developed by D. Jade, and the body attitude scale by T.S. Levy and N.I. Sargveladze.

The mathematical processing of the data obtained was performed with Microsoft Excel 2003 and STATISTICA v.6 using generally accepted methods of variance statistics and correlation analysis.

Results and discussion.

The structure of self-attitude was studied with the help of self-attitude questionnaire developed by S.R. Pantileev (Table 1).

Table 1

The distribution of students according to self-attitude data (%)

Self-attitude	Above average	Average	Below average
Openness	15.7	53.0	31.3
Self-confidence	30.1	66.3	3.6
Self-leadership	25.3	49.4	25.3
Mirror-I	30.1	48.2	21.7
Self-worth	42.2	50.6	7.2
Self-acceptance	28.9	60.2	10.8
Self-attachment	15.7	69.9	14.5
Self-conflict	3.6	67.5	28.9
Self-incrimination	6.0	45.8	48.2

As a result of the study, a paradoxical mismatch was revealed between the Self-worth and Self-acceptance categories at the above-average level. 42.2% of participants highly rate their spiritual potential. They tend to treat themselves as a unique person. However, only 28.9 % of students accept themselves as they are with all advantages and disadvantages. Even though they highly rate their uniqueness, their self-attitude is based on quite a selective approach. Almost half of the participants (48.2%) tend to deny their guilt in conflict situations. Such people prefer to protect themselves by accusing others or sharing responsibility with other people to reach their goals.

In most subjects, a predominance of average values for all components of self-attitude was revealed, which indicates selective emotional self-attitude as a common attitude; selective appraisal self-attitude - an assessment of one's own effectiveness in achieving goals, an assessment of one's "I" in relation to social and normative criteria (morality, success, will, aspiration, social approval, etc.). It should be noted that the vast majority of subjects have no underlying problems in relation to themselves. They do not feel an urgent need for any changes in themselves, which can be an indicator, including low reflection and an uncritical attitude to the body.

Based on the body image questionnaire attention should be paid to participants with low results (25.7%) in terms of the average value ($M = 27.6$) and the standard deviation ($\sigma = 8$). Since " σ " is very large, it should be noted that this sample is heterogeneous. These respondents have a negative body image and feel a lack of confidence in their own body, which can interfere in their social life, imposing internal restrictions on self-expression. They mostly consider their body as a tool which corresponds to their goals and social standards. They tend to ignore the characteristics of their body, its capabilities, and needs.

Analyzing the data of the body attitude scale by T. Levy and N. Sargveladze, 22.6% of students showed high values compared to the average value ($M = 15$) and standard deviation ($\sigma = 6.2$) of the sample. These students have a clear understanding of the needs of their body, accepting it as it is, with all advantages and disadvantages. The body for these students is an absolute value.

At the same time, subjects with low values (25.2%) show a poorly developed sense of spiritual-bodily unity and inability to reflect on bodily potential. For them, the body, as a rule, is valuable, since it corresponds to the goal and is the object of manipulation. The body signals are not necessary to understand, it is not necessary to take into account its features, capabilities and needs.

As a result of correlation analysis in the total sample of participants, six positive and two negative correlations were revealed in terms of self-attitude and body image (Table 2, Figure 1).

The subjective attitude to the body is mostly connected with self-attitude components (6 correlations) than with a positive body image (4 correlations).

The subjective attitude itself possesses only two positive correlations (Self-worth and Self-acceptance), which proves that the stronger the connection with the body and its acceptance, the more complete the personality is and the more valuable is the person for others.

Table 2

Correlations between self-attitude, body image, and attitude to the body

Self-attitude components	Body image	Attitude to the body
F 1 Openness	0.200	-0.397**
F 2 Self-confidence	0.339*	0.254
F 3 Self-leadership	0.290*	0.297*
F 4 Mirror-I	0.406**	-0.280
F 5 Self-worth	0.039	0.411**
F 6 Self-acceptance	0.150	0.628***
F 7 Self-attachment	0.515**	0.340*
F 8 Self-conflict	-0.103	0.127
F 9 Self-incrimination	-0.089	-0.386*

Note: * - $p < 0,05$; ** - $p < 0,01$; *** - $p < 0,001$

Figure 1 – Correlations between self-attitude, body image, and attitude to the body

Negative correlations between the Openness and Self-incrimination categories have many ambiguous determinations. The main of them is connected with the requirement of society to meet certain standards which can differ with reality or can be a manifestation of rigidity, unwillingness to change something or desire to preserve everything as it is without efforts. This can provoke a feeling of guilt, a tendency to perceive reality as a threat to one's positive self-attitude, etc.

The positive body image has direct positive correlations with the self-confidence and Mirror-I categories. Moreover, Table 1 shows a pronounced manifestation of these components in the participants, and therefore, we could assume that these factors should be more related to the attitude to the body. However, positive correlations were revealed in body image. Interpreting this correlation with body image, we can conclude that a positive body image consists of self-respect, self-confidence, independence, and strong-willingness. At the same time, it reflects the person's idea of the ability to evoke respect and sympathy in other people, which may not reflect true communication, but only a person's perception of the existing relationship.

Both attitude to the body and a positive body image revealed two correlations with the components of self-attitude: "self-attachment" and "self-leadership", reflecting the personality as the main source of activity, which emphasizes the dominance of either person or external circumstances and reveals the desire to change something or to leave everything as it is.

Our methodology also offers generalized self-attitude indicators: self-esteem, self-sympathy and internal imbalance. We examined the correlations between the indicators of attitude to the body with the above-mentioned generalized factors (Table 3).

Table 3

Correlations between generalized factors with indicators of the body image and subjective / objective attitude to the body

Self-attitude	Body image	Attitude to the body
F 1 self-esteem	0.339*	0.056***
F 2 self-sympathy	0.188***	0.052**
F 3 internal imbalance	-0.097***	-0.197***

Note: * - $p < 0,05$; ** - $p < 0,01$; ***

A positive correlation between the indicator of body image and the "Self-esteem" factor was revealed. That is, the more positive the image of the body, the higher the self-esteem of the subject's "I" in relation to social and normative criteria: success, will, determination, social approval. This correlation can be explained by the fact that the image of the body is formed on the basis of comparison with an external standard, some social attitude regarding what the body should be, and compliance with this attitude is achieved, as a rule, by working on the body by means of volitional qualities and self-control.

A positive correlation between the indicator of subjective/objective attitude with the "Self-sympathy" factor was revealed. The stronger the connection with the body, the understanding of its needs, the acceptance of it as it is, the more the emotional-value attitude of the subject to his/her "I" is reflected, which is not so much an assessment as a style of attitude towards oneself, a general attitude. Emotional-value self-relation has no external evaluative foundations in relation to the individual and depends little on real successes and failures. Since the indicator of subjectivity largely reflects a general personal emotional assessment, it can be assumed that it is part of the structure of self-relationship.

There is no significant correlation between the indicator of the body image and the indicator of subjectivity/objectivity. The lack of connection between the image of the body and the unity of body and personality can be explained by the fact that these are two independent phenomena. The "body image" describes the correlation of one's body with an external reference (the situation of analysis from the perspective of an external observer), in turn, the assessment of subjectivity implies a feeling of one's physicality as an internal entity (the situation of analysis from the perspective of an internal observer).

Conclusion.

As a result of empirical research, the following conclusions can be made:

- A subjective attitude to the body is one of the reserves of personality integration;
- Understanding the needs of the body enriches a personal resource, helps self-determination, physical and psychological coherence;
- A more pronounced subjective body image is usually combined with an emotional and axiological attitude of a person towards himself.
- Direct correlations between the indicator of subjective attitude to the body with such components as "self-leadership", "self-worth", "self-acceptance" and "self-attachment" were found. Negative correlations were established with such indicators as "closeness" and "self-incrimination".
- Positive correlations between the subjective / objective attitude with the "Self-esteem" and "Self-sympathy" factors were revealed.

The results of this study can contribute to even more intensive development of self-reflection mechanisms and psychophysical regulation by specialists physical education.

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