

Selected personality traits of the physical education students in aspect of their self-esteem

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Abstract: The work presents results of research, which purpose was to know the prevalence of selected personality traits among the physical education students, different because of their gender and self-esteem. To achieve this goal used two questionnaires – scales: standardized questionnaire – Rosenberg Self-Esteem Scale (SES) in polish adaptation and descriptive scale of personality (DSP) developed for this study. The most common description of the personality made by the students, different because of their self-esteem, were considered those, which the highest ratings, equivalent to selecting the answer ‘often’, rated by more than 50% of the respondents. Research involved 96 first-year students, the second semester of Physical Education Faculty of University of physical education and sport in Gdansk. All respondents participated in the various forms of the physical activity and sport competition. Statistically significant differences in the mean score assigned by the students, different because of their gender, was observed in 6 out of 46 evaluated traits in DSP. The female students, statistically significant “more often” than the male students, perceive in themselves features such as “good”, “selflessly helpful”, “discreet”, “systematic”, “involved”. In contrast the male students, significantly “more often” than the female students, think that they are “more life experienced”. The variable sex did not, statistically significant, differentiate the respondents self-esteem. The respondents with “low” self-esteem, statistically significant “less often” than the students with high intensity of this attribute, state that they have 5 designation describing “character”, and 4 characteristics of the category “capabilities/intelligence”. Significantly lower, than those with “average” self-esteem, they rate their “relation to themselves” (3 features) and some of the wording of the category “capabilities/intelligence”(3 features). The respondents with “high” self-esteem, statistically significant more often than the students characterized by “average” level of its, think that they are in the “relation to other” “kind”, “consistent” and “systematic”.

Key words: Self-esteem, Rosenberg’s Self-Esteem Scale (SES), personality traits, physical education students

Introduction

A personality of the athletes, especially those outstanding, is a subject of interest of many psychologist. For decades they try to know outstanding and comparatively constant traits of their personality. Including acquired as a result of increased physical activity and a culture, which comprise for, for example, their character and those biologically conditioned, like temperament. A general consensus is that, that increased physical activity contributes to shape certain personality traits, especially those, which are prone to the influence of the external environment [1]. There is a lack of compliance, if it takes about the abilities to shape by the sport activity personality traits biologically conditioned [2,3]. In fact the athletes of the master class outstand for example the ability to control their emotions and effectiveness in spite of the emotional tension, stress resistance, centre on the task, adaptability of thinking focuses on the task, purpose [4,5], this intensification of those traits may be the result of the natural selection in sport the people who have the problems with participation in the sports rivalry. Through the participation in the sport competitions also occur amass of the experience and knowledge about self, which are the basis for the self-esteem.

Sankowski [1:165], based on the literature review, states that self-esteem is “a group of judgments and opinions that individual refers to itself”. According to the citing author the researches and observations show, that acquire new skills and improve the motor skills accompanied by increase in the level of the self-esteem. It happens because, taken by an individual physical activity (sport)... “develops the ability of objective perception of the oneself, especially the ability of realistic assessment of their effective action’s capabilities”,... “with increasing age the people practicing sport set themselves tougher goals to achieve and more accurately evaluate their psychophysical capabilities of their realization, adapting them to the objective conditions”. Furthermore,... “among the people practicing sport, in the comparison with these who are not in the contact with that form of activity, self-esteem is higher”. The concept of the personality, understood as the set of integrated, socially determined mental characteristics of the man [6: 205-208] distinguished by its four basic components: character, capabilities, intelligence, temperament. According to Szewczuk’s intention the “character” is defined as the set of the relatively stable properties of the psyche, which determinate the ways of the human behaviour, including: *attitude to value, other people and himself, and his own work and also setting and implementing goals*. Secondly, the citing author, mentions “capabilities”, which are the specific mental properties, allowing

the extremely efficient and successful action. Majorly, they depend on the physiological, anatomical and functional makings (traits of the mind, the nervous system, the analysers, etc.). The ability to enable the unusually efficient action in the field are the aptitudes and the highest degree of them is a talent. The third separate component is the “intelligence”, understood as a general ability to adapt to the new and changing requirements, solving the new tasks, transforming of the living conditions, efficient processing and generating the new information. The intelligent operation is possible thanks to the efficiency of the abstract thinking, extracting the elements of content and symbolic and also recognizing their interactions. The intelligence affects the process of studying and gaining the experience [7:18]. The fourth component of the described structure of the personality is the “temperament” defined as the set of the biologically conditioned and relatively stable characteristics of the nervous system, which determine the behaviour [8], refers to the basic, the relatively temporarily stable personality traits, which manifest themselves in the formal characteristic of the behaviour: its energetic and time parameters [2].

Research objectives

It was interesting to know the frequency of the appearance of the selected personality traits among students of the physical education varied by gender and their self-esteem.

Methodology

The study involved 96 study of Physical Education Faculty of University of physical education and sport in Gdansk, including 43,75% female students and 56,25% male students. The age of respondents was between 19 and 28 ($M=22,635$, $SD=1,875$). All respondents actively participated in the various forms of the physical activity and sport rivalry. The biggest group represents students who played football (18,75%), secondly recorded 14,58% answers ‘different’. Subsequently, students trained: playing volleyball (9.37%), handball (8.33%), athletics (7.29%), basketball (6.25%), tennis (5.25%), long-distance running(4.16%). Individuals were trained: rugby, bodybuilding, judo, freestyle football, roller derby, skimboard, ultimate frisbee, dancing. The age distribution of respondents illustrated by Fig.1

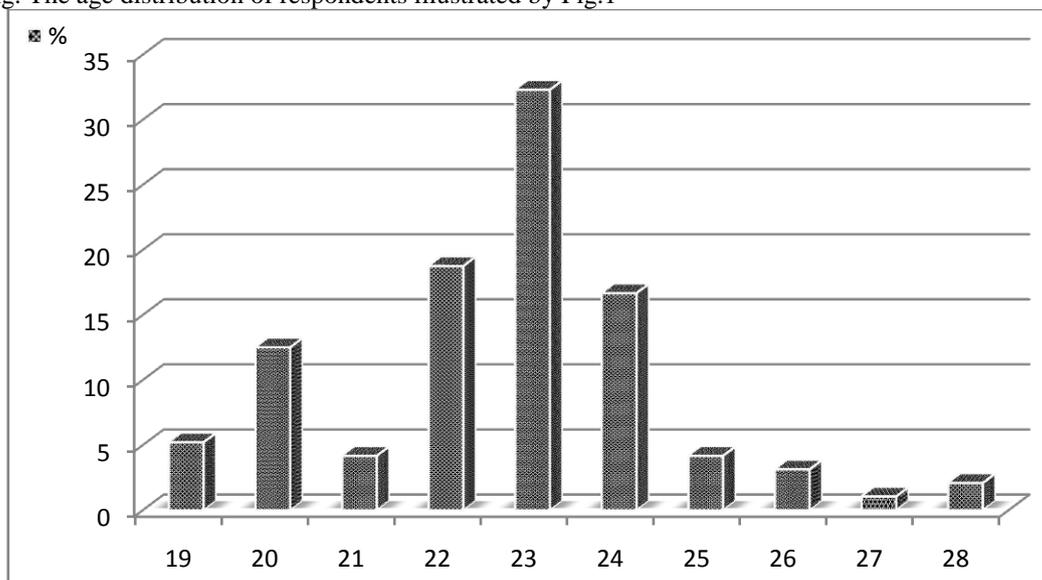


Fig. 1. Histogram age of the respondents (conform to normal distribution – variable: age, distribution: normal, chi squared=29,04, df=4, p=00001)

In these studies used two questionnaires – scales: standardized questionnaire – Rosenberg Self-Esteem Scale (SES) in polish adaptation [9] and descriptive scale of personality (DSP) developed for this study.

Self-esteem Scale developed by Morris Rosenberg, is a tool to assess the overall level of self-esteem, which is relatively constant disposal, understood as a conscious attitude (positive or negative) to the ‘self’. The scale consists of 10 statements, for example: “I believe that I am valuable, at least to the same extent as others.” “Generally speaking, I am willing to think, that I don’t live very well.” The answers are ranked from 1 to 4, 1- definitely agree, 2- agree, 3- disagree, 4- definitely disagree. The respondents were asked to indicate to what extent they agree with each of them, by setting the wheel of one of the answers. Scale range is from 10 (lowest self-esteem) to 40 (highest self-esteem). In the accepted way of assessing response, these statements are

reversed, which are formulated positively, that the higher point was awarded for answers expressing a higher level of self-esteem. Used punctuation from 1 to 4, is the most common in researches [10]. The reliability factor on Cronbach scale is $\alpha=0,87$ [9: 61-62].

Used in these studies descriptive scale of personality (DSP) refers to the personality traits theory by Włodzimir Szewczuk [6: 205-208]. It assumes that the structure of the personality define the set components: goals based on the knowledge of reality, activity implementation, position to the world, other people and themselves and self-regulatory mechanisms depend on the characteristics of the temperament of the organism. Among the many components of such personality structure distinguished: character, capability/intelligence, temperament [7: 211-216]. The most characteristic terms describing as outlined structure of personality found in questionnaire/scale (DSP). The subjects were asked to indicate how much the selected terms describe their personality, by determining their adequate number from 1 to 5. 1- means not at all, 2- very seldom, 3- rather seldom, 4- quite often, 5- often. The most common description of the personality made by the students, different because of their self-esteem, were considered those, which the highest ratings, equivalent to selecting answer "often", rated by more than 50% of respondents [11: 661]. Subsequently, was made an analysis of the significance of differences of distributions of the data collected using the methods of statistical analysis, also in the groups differentiated due to their self-esteem. In this work, posits the following markings: M- arithmetic mean, SD- standard deviation, DF- number of degrees of freedom, p- level of difference's significance, t- stat. value of the test, T- students and n- the number of tests.

Findings

Analysis of the frequency of the average ratings assigned by the respondents to the traits of descriptive scale of personality (DSP) showed their diversity. In this case, the highest ratings received terms describing their "attitude towards values" (M=4,214). Ratings assigned to them from 6 to 8 contained in the range from 4.1 to 4.5 (the respondents perceived at themselves distinguished treats "quite often" and "often"). The students similarly rated their "attitude towards self" (M=4,093) and statements characterized as a "capabilities/ intelligence" (M=4,012). Significantly lower scores were given to terms from the category "attitude towards other people" (M=3,981) and formulation from the category "temperament" (M=3,697).

An illustration of the analysed data is Figure 2.

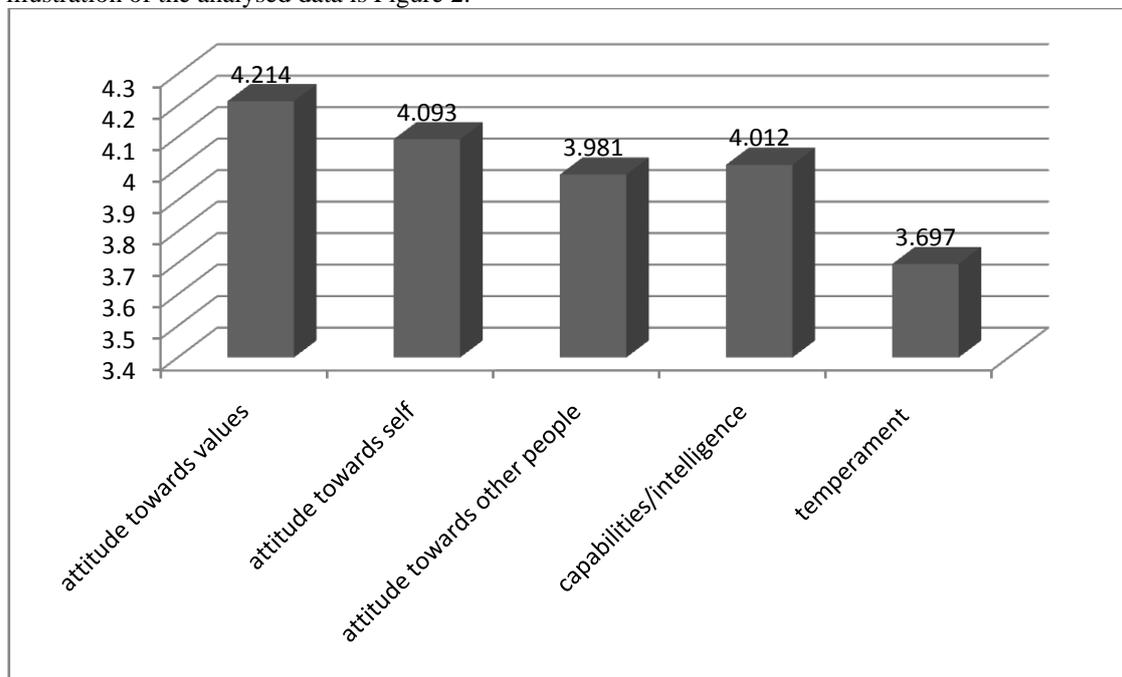


Fig. 2. Arithmetic ratings for terms that describe the structure of the personality of the respondents.

Analysis of the arithmetic average of the self-esteem of respondents indicated that their average (M=30,875) and standard deviation (SD=4,585) are comparable to the results of standardization groups of the polish version of SES [12]. The variable sex did not differentiate significantly self-esteem of the respondents. However, it should be note that the female students evinced a slightly higher self-esteem than the male students. Percentage distribution of self-esteem of the respondents on a standard sten scale illustrated Fig 3.

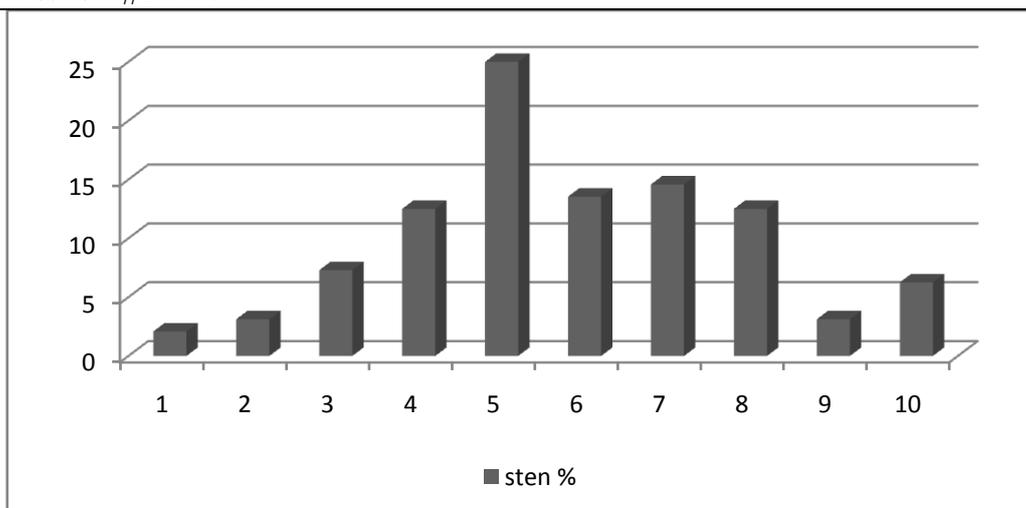


Fig. 3 Percentage histogram of self-esteem of respondents (test of normality: SES Sten, n=96, max. D=0,147; K-S $p < 0,05$; Lillief. $p < 0,01$)

According to the assumption of the research the incidence of selected personality traits among the physical education students turned out to be differentiated according to their self-esteem.

It has been observed that students with “low” self-esteem, describing their “character”, most appreciated values such as “beauty”, “freedom”, “justice” and “fairness” (thought like that from 50% to 60% of the respondents). Their “attitude towards other people” they evaluate as “selfless help”, “direct” and “count the opinion of others” (50%-58%). While “attitude towards self”, defined as “committed”, “persistent” and “determined” (50%-67%).

Students with “low” level of self-esteem “often” also perceived at themselves traits describing their “capabilities/intelligence”. They believed that they are “competent”, “professional”, “percipient”, “intelligent”, “know how to listen” and “are a good observers”, “are persuasive” and they are “proficient in action”. From 50% to 71% think like that.

In the category of “temperament” 50% of students with “low” self-esteem set apart only the phrase “sustainable”.

Students with an “average” level of self-esteem felt that they “respect the traditions and ethics” (67,57%) and are “responsible/cautious in the judgements” (56,76). They also appreciated values such as “beauty”, “usefulness”, “freedom”, “justice” and “fairness”. The selection of these terms made from 54% to 65% of the respondents. Their “attitude towards other people” they evaluate as “selflessly helpful”, “kind”, “cordial”, “understanding”, “mild”, “gentle”, “sincere”, “direct”, “objective”, “polite” and “respectful of the opinions of others” (56%-78%). Declared “attitude toward self” they defined as “consistent” (about 60%), “involved” (67%) and “tenacious” (56%).

Students evincing “average” level of self-esteem also willing to reveal their traits evidence of their “capabilities/intelligence”. From 12 terms presented to them for evaluation they have chosen 9. They believed that they are “experienced in life”, “competent”, “professional”, “rational”, “intelligent”, “have the gift of persuasion”, “proficient in action” and “are good organizers”. The selection of these terms made from 51 % to 72 % of the respondents. Additionally, respondents with an “average” self-esteem distinguished 4 terms to determine their “temperament”, such as “cheerful”, “patient”, “calm” and “sustainable”. On those traits indicated 51 % to 67 % of the students in this group of the respondents.

In contrast, students with “high” self-esteem distinguished different personality traits than already presented. Their “attitude towards values” manifested by the fact that they valued: “good”, “justice” and “fairness”. So said about three-quarters of the respondents in this group of students. Their “attitude towards other people” defined as “nice”, “understanding”, “sincere”, “objective” and “polite” (51%-57%). And “attitude towards themselves”, described as “engaged” (51%), “tenacious” (51%) and “having self-esteem” (57 %). Besides, the respondents characterized by a “high” level of self-esteem proved to be reticent in describing their “capabilities/intelligence” and traits of “temperament”. Among 12 of the terms characterized “capabilities/intelligence” identified four, namely: “intelligent”, “have a gift of persuasion”, “proficient in action” and “good organizer” (57%-68%). In the category of “temperament” more than 50 % of this group of students paid attention only to the term “cheerful” (approx. 63% of the respondents).

A specific list of the presented data contains table 1.

Table 1. Percentage of respondents varied due to self-esteem, who “often” perceived at themselves the personality traits contained in the questionnaire DSP

| Personality – traits/Self-esteem | | low | average | high |
|---|--|------------|----------------|-------------|
| Character – attitude towards values | respect the traditions and ethics | | 67,57 | |
| | responsible/cautious in the judgements | | 56,76 | |
| | Appreciating values such as: | | | |
| | good | | | 65,71 |
| | beauty | 50,00 | 54,05 | |
| | usefulness | | 62,16 | |
| | freedom | 54,17 | 62,16 | |
| | justice | 54,17 | 59,46 | 74,29 |
| Character – attitude towards other people | honesty | 58,33 | 64,86 | 74,29 |
| | selflessly helpful | 54,17 | 56,76 | |
| | kind | | 64,86 | 57,14 |
| | hearty | | 64,86 | |
| | understanding | | 78,38 | 51,43 |
| | mild | | 62,16 | |
| | gentle | | 64,86 | |
| | sincere | | 56,76 | 54,29 |
| | direct | 50,00 | 67,57 | |
| | objective | | 59,46 | 51,43 |
| | discreet | | | |
| | polite | | 64,86 | 54,29 |
| Character – attitude toward self | respectful of the opinions of others | 58,33 | 62,16 | |
| | consistent | | 59,46 | |
| | systematic | | | |
| | involved | 50,00 | 67,57 | 51,43 |
| | persistent | 66,67 | 56,76 | 51,43 |
| | determined | 50,00 | | |
| Capabilities/ Intelligence | having self-esteem | | 54,05 | 57,14 |
| | experienced in life | | 51,35 | |
| | competent | 58,33 | 72,97 | |
| | professional | 50,00 | 62,16 | |
| | sedate | | 64,86 | |
| | astute | 70,83 | | |
| | intelligent | 50,00 | 64,86 | 57,14 |
| | sociable | | | |
| | knowhow to listen | 58,33 | | 68,57 |
| | good observer | 50,00 | | 62,86 |
| | have a gift of persuasion | 66,67 | 54,05 | |
| | proficient in action | 54,17 | 59,46 | 60,00 |
| Temperament | good organizer | | 62,16 | |
| | spontaneous | | | |
| | cheerful | | 67,57 | 62,86 |
| | calm | | | |
| | patient | | 51,35 | |
| | controlled | | 54,05 | |
| | balanced | 50,00 | 56,76 | |
| | active | | | |
| slow | | | | |

Comparison of the significance of the differences of average ratings distributions assigned by the students, varied by gender, to the designations contained in the DSP revealed significant differences ($p < 0,5$) at 6 of 46 evaluated traits. Therein 5 referred to the traits of “character” and one for “intelligence”. It turned out that the female students significantly more often than the male students see at themselves the values and traits such as “good” ($p = 0,020$), selflessly helpful ($p = 0,001$), discreet ($p = 0,008$), systematic ($p = 0,004$), involved ($p = 0,030$).

In contrast, the male students significantly more often than the female students believed that they are more experienced in life (p=0,46).

Detailed sheet of the results of discussed analysis contains the tab. 2.

Table 2. Comparison of the significance of the differences of the distributions occurrence of the personality traits of the respondents varied by gender*

T-tests; Grouping: Gender, G1- female students, n=42, G2- male students, n=54

| Variables | M G1 | M G2 | SD G1 | SD G2 | t | df | p |
|---------------------|-------|-------|-------|-------|--------|----|-------|
| good | 4,595 | 4,222 | 0,798 | 0,744 | 2,361 | 94 | 0,020 |
| selflesslyhelpful | 4,452 | 3,907 | 0,803 | 0,784 | 3,345 | 94 | 0,001 |
| discreet | 4,214 | 3,722 | 0,871 | 0,899 | 2,697 | 94 | 0,008 |
| systematic | 4,238 | 3,685 | 0,821 | 0,987 | 2,927 | 94 | 0,004 |
| involved | 4,405 | 4,074 | 0,798 | 0,669 | 2,208 | 94 | 0,030 |
| experienced in life | 3,405 | 3,778 | 0,989 | 0,816 | -2,024 | 94 | 0,046 |

* table ignored differences statistically insignificant

Another analysis of the data related to the significance of the differences of the distributions of the respondents ratings, differentiated due to their self-esteem, assigned by them to particular characteristics of descriptive scale of personality (DSP). This analysis showed some significant differences between students characterized by “low”, “average” and “high” self-esteem in the evaluation of the incidence of the traits contained in DSP. It turned out that the respondents exhibiting “low” level of self-esteem, statistically significant (p<0,05) less than the students with a “high” severity of this feature, affirmed the existence of 5 phrases describing their “character” (“understanding”, “sincere”, “systematic”, “determined”, “having self-esteem”) and 4 traits from category “capabilities/intelligence”, such as: “competent”, “professional”, “sedate” and “proficient in action”. In addition, students characterized by “low” self-esteem assessed, significantly lower than their colleagues from the “average” of its intensity, their “attitude towards self” described as: “determined” (p=010, “having self-esteem” (p=0,002), also some traits from the category “capabilities/intelligence”, such as: “professional”(0,007), “sedate” (0,007) and “good organizer” (0,035). While respondents with “high” self-esteem often than those featuring the “average” level of its thought that they are in “relation to other people” “polite” (p = 042), more “consistent” (p = 0,027) and “systematically” (p = 0,045).

A detailed summary of the results of these analysis are shown in Table 3.

Table 3. Comparison of the significance of the differences of the distributions occurrence of the personality traits of the respondents varied by their self-esteem*

| SES/SO/ Variables | M G1 | M G2 | SD G1 | SD G2 | t | df | p |
|--|-------|-------|-------|-------|--------|----|-------|
| G1 (SES – low), N=24; G2 (SES – high), N=35 | | | | | | | |
| understanding | 3,833 | 4,343 | 0,917 | 0,802 | -2,261 | 57 | 0,028 |
| sincere | 3,917 | 4,400 | 0,929 | 0,775 | -2,171 | 57 | 0,034 |
| systematic | 3,500 | 4,286 | 1,022 | 0,926 | -3,070 | 57 | 0,003 |
| determined | 3,500 | 4,200 | 0,885 | 0,901 | -2,953 | 57 | 0,005 |
| having self-esteem | 3,500 | 4,429 | 1,142 | 0,850 | -3,581 | 57 | 0,001 |
| competent | 3,542 | 4,086 | 1,021 | 0,951 | -2,096 | 57 | 0,041 |
| professional | 3,500 | 4,143 | 0,933 | 0,772 | -2,885 | 57 | 0,006 |
| sedate | 3,333 | 4,029 | 0,917 | 0,891 | -2,911 | 57 | 0,005 |
| proficient in action | 3,833 | 4,457 | 0,963 | 0,852 | -2,620 | 57 | 0,011 |
| G1 (SES – low), N=24; G2 (SES – average), N=37 | | | | | | | |
| determined | 3,500 | 4,081 | 0,885 | 0,795 | -2,668 | 59 | 0,010 |
| having self-esteem | 3,500 | 4,243 | 1,142 | 0,641 | -3,254 | 59 | 0,002 |
| professional | 3,500 | 4,054 | 0,933 | 0,621 | -2,789 | 59 | 0,007 |
| sedate | 3,333 | 3,892 | 0,917 | 0,658 | -2,771 | 59 | 0,007 |
| goodorganizer | 3,708 | 4,162 | 1,042 | 0,602 | -2,158 | 59 | 0,035 |
| G1 (SES – high), N=35; G2 (SES – average) N=37 | | | | | | | |
| polite | 4,429 | 4,081 | 0,815 | 0,595 | 2,074 | 70 | 0,042 |
| consistent | 4,371 | 4,000 | 0,690 | 0,707 | 2,255 | 70 | 0,027 |
| systematic | 4,286 | 3,865 | 0,926 | 0,822 | 2,042 | 70 | 0,045 |

* table ignored differences statistically insignificant

Discussion

Despite of the numerous studies on the correlates of the personality traits and physical activity it is still a lack of sufficient evidence of the relatively invariable connections of these factors. As a result of the meta-analytic procedures were identified only a relatively low correlates of the selected personality traits such as: extraversion, neuroticism and conscientiousness with the various forms of the physical activity. In contrast, other traits such as openness to experience/intellect and willingness to compromise, and also a trait psychoticism Eysenck's, were not associated with the physical activity [13,14]. Only some domains and aspects of the extraversion, such as openness to the others, positive emotions suggest, that these associations may partly explain the level of the physical activity, including with the reference to the component strength [15]. Other studies were aimed at determine the balance between the physical activity and frame of mind [16], dealing with stress [17,18] or eliminating the anxiety in the situation of the sport rivalry including: paralyzing fear, inability to concentrate, excessive sweating, trembling, breathlessness, dizziness and increased heart rate [19]. Under way are search of the compounds of the temperamental traits with the various aspects of the physical activity. For example, it was observed that all dimensions of the temperament of the investigated women, related with the energy aspects of the behaviour, were correlated with the simple response time, negative - with their emotional reactivity and agility, and did not correlate with the aerobic efficiency [20].

The physical activity affects the self-esteem of the people involved in it. The self-esteem is most often understood as a set of the judgments and opinions relating to self. The positive self-esteem affects the sense of self-worth. [1]. The studies have shown that the physical activity of the youth mediate in building their self-esteem as well as the socio-economic status [21]. On the other hand, the self-esteem (positive self-esteem) is a possible mediator in increasing the physical activity of the youth [22]. In turn, the physical self-concept and self-esteem can affect the perception of their social acceptance [23].

The aim of the study was to investigate the prevalence of selected personality traits among the physically active people different because of their gender and self-esteem.

Analysis of the incidence of selected personality traits among the students of the physical education varied due to their self-esteem, among which more than 50% issued highest rating, equivalent to selecting answer 'often', showed significant differences of them. It turned out, that the students exhibiting an "average" level of self-esteem were the most likely to describe the components of their personality. Students from this group of respondents among 46 evaluated personality traits, perceived 35 of them at themselves "often". Among respondents with "low" self-esteem was observed 19 distinguished traits of the descriptive scale of personality. The least likely to describe their personality traits turned out to be students who have a "high" self-esteem. In this case, more than 50 % of them "often" noticed at themselves 16 to 46 personality traits contained in DSP.

Comparison of the significance of the differences of the distributions average ratings assigned by the students, differentiated by gender, to particular expressions contained in the descriptive scale of personality, revealed significant differences ($p < 0,05$) only on 6 of 46 evaluated characteristics. 5 referred to features of the "character" and one to the "capabilities/intelligence".

Stated also some significant differences in the evaluation of the respondents varied due to their self-esteem ("low", "average" and "high") assigned to some personality traits. It turned out that the respondents exhibiting "low" level of self-esteem statistically significant ($p < 0,05$) "less often" than students with a "high" severity of this feature, affirmed at themselves the existence of 5 terms describing the "character" and 4 features from the category "capabilities/intelligence". In addition, the students in this group significantly "lower", than their colleagues with "average" self-esteem, rated their "attitude towards self" referring to terms "determined" and "having self-esteem" and also to some terms from the category "capabilities/intelligence", such as: "professional", "sedate", "good organizer". While respondents with "high" level of self-esteem more often than those with "average" level of its think that they are, in the "relation to other people" "polite", "consistent" and "systematic".

If you read literally assertions of Sankowski [1: 165-166], saying that self-esteem is a "team of judgments and opinions, which the individual refers to self" and ... "understood as a relatively constant self-esteem which have repercussion on self-presentation" it can be concluded, that the students with an "average" self-esteem are more likely to present possessed personality traits than their colleagues with "high and low" severity of this feature.

From the above description, with some caution, due to the relatively low cardinality of the study group of the students, makes some suppositions. Probably people with "low" self-esteem can manifest fears and anxieties in a situation to disclose their own personality traits. On the other hand, students with the "average" self-esteem willingly present characteristics of their personality, taking the line "I have nothing to hide". As for the people manifested the "high" self-esteem, they may not be interested in self-presentation ("I know what I know and do not need to prove anything to anyone"). Of course, confirmation of this line of thinking requires in-depth research.

Conclusions

The results led to the following conclusions:

1. The variable sex does not differentiate significantly self-esteem of the physical education students.
2. Respondents highest ratings attributed to the traits of the “character”, secondly capabilities/intelligence”, and the lowest to expressions of “temperament”.
3. Students with “average” self-esteem more often than exhibiting a “low” and “high” levels of its presented selected personality traits.

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