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MOTIVATION AND RESPONSIBILITY OF BOYS AND GIRLS
HIGH SCHOOL AGE

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Abstract

The research focuses on the gender-determined correlation between motivation, self-attitude and locus of control as a measure of responsibility of male and female high school students. It is based on the study of 9th-11th-grade students (from 15 to 17 years old) in two Moscow schools with the traditional training paradigm (98 boys and 102 girls in total). The groups of the boys and girls are studied separately in order to find out: 1) the structure of the emotional attitude to the values of school life by means of factor analysis of estimates using the method of Semantic Differential; 2) the correlation of the identified factors with the locus of subjective control and the parameters of self-attitude.

The research has reveals that the nature of relationships between the locus of subjective control and various types of motivation is significantly gender-determined. The girls with cognitive motivation take responsibility for the majority of events in the spheres of life important to them, whereas for the boys with this type of motivation the sphere of responsibility is limited to certain significant situations. At the same time, the boys with motivation for affiliation have a high level of subjective control in most life spheres, whereas the girls with similar motivation have an internal locus of control in the fields of achievements and interpersonal relationships.

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1. Introduction

As is known, the system of motivation forms in upper secondary school when one of the types of motivation begins to dominate. During this period, the degree of awareness of one's own feelings and experiences increases, as well as the degree of distinctness of the "Self", people develop self-identity and become more clearly aware of their individuality, and this awareness becomes important for them. As a result, developing self-awareness becomes their priority (Kon, 1982). Comparison of real and ideal self-images becomes the core of the Self-concept, which incorporates two aspects: self-identity and self-attitude, i.e. the expression of the meaning of "Self".

During senior school years changes in the general structure and content of the motivational sphere of students also take place. The motives connected with the future, outlook and self-identity of the student become more important (Bozhovich, 2001).

Thus, both self-esteem of adolescents and their motivation related to the learning process are jointly formed in adolescence and obviously affect one another, remaining psychologically independent entities (Soldatova et al., 2017). At the same time, the gender of adolescents is another important factor, and the issues related to the impact of gender on psychological differences of people have recently been widely addressed by researches in psychology.

Gender roles and gender characteristics of self-attitude during the transition from early to middle adolescence should be taken into consideration at the stage of upper secondary school in the process of teaching responsible attitude to studying. Therefore, the need to take into account the gender specificity of pupils, especially in the upper grades is one of the important aspects of school education.

Recent research (Kaliteevskaya & Leontiev, 2006, Kudinov, 1998) has strongly indicated that the differences in psychological characteristics of adolescents are gender determined. It was demonstrated that gender differences affects both the cognitive sphere and the sphere of interests (Saulina, 2015).

During the transition from early to middle adolescence students develop social responsibility and self-attitude as well as attitude to other people, social norms and role responsibilities (Galperin, 2017). D.A. Leontiev and E.R. Kaliteevskaya in their study of adolescents consider the internal locus of control (internality) to be a measure of responsibility (Kaliteevskaya & Leontiev, 2006)

Any person is characterized by a certain position (locus of subjective control) on the continuum from the external type (when events are interpreted as a result of the action of external forces and circumstances which a person passively follows) to the internal one (when events are interpreted as the result of their own actions and activities). At the same time, naturally, for the same person this position will be different depending on the type of situation and how it is perceived. According to J. Rotter, the internality and externality of locus of control are permanent properties of personalities formed in the process of socialization. Thus, it is important how adolescents explain the causes of events that are significant for themselves - where they are localized (Rotter, 1975).

In this regard, locus of control can serve as an indicator of the processes of conscious self-regulation of personalities and an indicator of how the system of motivation is developing. It should also be connected with the motivation which already exists. Cognitive difficulties are defined by insufficient general learning skills and a poor capacity for reflection and self-esteem (Orlov et. al., 2018). For personality development it is necessary not only to decide on the direction of shaping motivation (which happens when the value

system is formed), but also to have the resources for self-control. The degree of their participation in certain situations can affect their interpretation, i.e. again in the corresponding profile of locus of control.

But in this complex of conditions it is also necessary to take into account the gender of children – it determines not only the specific nature of social roles and their effect on personal plans and values of their future performance, but also the psychological age (there is considerable heterochronicity in the physical and psychological development of boys and girls), and, consequently, the maturity of a person's system of motivation and values.

2. Problem Statement

The nature of academic motivation, acceptance of responsibility in various life spheres (locus of control) and self-attitude are often treated as independent constructs, but can influence each other. However, the nature of these relationships is not sufficiently understood at present. In addition, it is not known how the gender of students influences the specifics of these relationships.

3. Research Questions

- 3.1. How does the gender factor affect motivation in the learning process?
- 3.2. What relationship exists between motivation and locus of control as a measure of responsibility?
- 3.3. What is the relationship between motivation and self-attitude?

4. Purpose of the Study

The objective of this study is to reveal the gender specificity of the relationship between motivation, locus of control as a measure of responsibility and self-attitude of upper secondary school students.

5. Research Methods

In order to identify the motivational profile emotional assessments of the values of school life were analyzed according to the scale system defined by pairs of adjectives (25 pairs of adjectives were used), in accordance with the method of the Semantic differential by Ch. Osgood, adapted by V.F. Petrenko (Petrenko, 1983). Each student was asked to estimate from -3 (the degree of correspondence to the left adjective in the pair) to +3 (the degree of correspondence to the right adjective in the pair) each of the following ten values of school life: self-improvement in studying, school connections, acceptance in the class, profound knowledge, my authority and Self, academic achievements, faithful and good friends, approval of surrounding people, being better than others, meeting challenges. The data were processed by means of factor analysis which was described in previous studies (Vartanova, 2012; Vartanova, 2014a; Vartanova, 2014b).

To determine locus of control a questionnaire was used to measure the level of subjective control. The questionnaire designed by Bazhin, Golyunkina, and Etkind (Practicum ..., 2008) allows to assess overall internality and internality in six areas related to accomplishments, failures, family relationships, interpersonal relationships, health and illness.

Self-attitude was measured by the method of "Investigation of self-attitude" designed by S.R. Pantileev (1993), which allows to identify nine types of self-attitude: M1 secretiveness- openness, M2 self-confidence, M3 self-guidance, M4 reflected self-attitude, M5 self-worth, M6 self-acceptance, M7 self-attachment, M8 internal conflict, M9 self-blame.

Sampling: The schoolchildren of 9-11 grades of two schools with the traditional learning paradigm in Moscow took part in the poll voluntarily (with the consent of their parents). The number of full protocols for methods 1 and 2 is 98 for boys and 102 for girls, and for methods 1 and 3 - 86 for boys and 95 for girls.

6. Findings

As a result of factor analysis of the scores obtained separately on the samples of the boys and girls for scaling ten objects of school life based on the semantic differential method, four most important factors were singled out which were interpreted in accordance with the emotional evaluation characteristics of the scaled objects.

Factor 1 - Motivation for self-assertion. The boys demonstrated the highest scores in such constructs as "acceptance in the class" (characterized by adjectives: easy-going, joyful, strong), "my authority and Self" (joyful, strong, good, friendly, kind), "school connections" (joyful, bright, good, active). In girls, this factor is also characterized by the constructs "recognition in the team" (large, pleasant, fast) and "my authority and Self" (cheerful, pleasant, loved), but also "be better than others" (strong, good, pleasant).

Factor 2 - Motivation for avoidance, when studying was perceived as hard work. In the boys the highest scores are found in the following constructs (taking into account the corresponding assessments): "self-improvement in studying" (difficult, intense, slow), "profound knowledge" (complicated, difficult, stressful), "academic achievements" (complicated, difficult, stressful), "meeting challenges" (difficult, complicated, stressful, hard), "being better than others" (tense, hard, unpleasant). In girls this factor is characterized by the constructs "acceptance in the group" (complicated), "profound knowledge" (complicated, difficult, stressful), "academic achievements" (complicated, difficult, stressful), "meeting challenges" (complicated, difficult, slow), "be better than others" (complex, stressful), "approval of the surrounding people" (complicated).

Factor 3 – Cognitive motivation. The boys demonstrated the highest scores in such constructs as: "profound knowledge" (characterized by adjectives: clever, orderly, light); "academic achievements" (smart, good, bright), as well as "self-improvement in learning" (characterized by adjectives: smart, favourite). For the girls this factor included such objects as "self-improvement in learning" (good, bright, active), "profound knowledge" (joyful, bright, pleasant), "academic achievements" (joyful, pleasant, cheerful), "approval of the surrounding people" (characterized by an adjective: pleasant).

Factor 4 - Motivation for affiliation. The boys had one object in it: "the approval of the surrounding people" (characterized by adjectives: joyful, beloved, pleasant). For the girls this motivation was characterized by such constructs as "school contacts" (joyful, bright, beloved) and "faithful and good friends" (joyful, active, pleasant).

The obtained interpretation of the factors was confirmed by the results of the method of unfinished sentences. Thus, the analysis made it possible to determine not only the main trends (variants or types) in the individual emotional attitude to spheres of school life of the surveyed group of high school students,

but also to reveal the specific nature of their learning motivation, and to create individual motivational profiles of each student. This allowed further comparison of relevant motivation measurements in individual profiles (by calculating the correlations) with the indicators of other methods - levels of subjective control in the relevant areas and self-attitude. Correlations were calculated separately for groups of boys and girls, further only significant ($p < 0.05$) interrelations are described.

It was found that for the boys the motivation for self-assertion, which primarily implies authority related to communication and being popular with friends, correlates with the overall internality ($r = 0.23$), with internality in the field of achievement ($r = 0.25$), failures ($r = 0.25$), family ($r = 0.23$) and interpersonal relationships ($r = 0.33$). For the girls the motivation for self-assertion, which implied that authority was based on recognition in the group and on the desire to be better than others, correlates only with internality in the field of achievement ($r = 0.22$) and interpersonal relations ($r = 0.21$), but in self-attitude with internal conflict M8 ($r = 0.24$).

The degree of avoidance motivation in the group of boys is related to the externality in the field of achievement ($r = -0.26$), i.e. boys have an external locus of control in the area of achievement with a negative emotional attitude (learning as hard work). For the girls in general, the avoidance motivation is related to the general externality (external locus of control) ($r = -0.24$), as well as to the externality in the learning sphere ($r = -0.24$).

The degree of cognitive motivation for the boys positively correlates only with the general internality ($r = 0.24$), and also negatively with self-guidance (M3, $r = -0.23$) and self-attachment (rigidity of the Self-concept, M7, $r = -0.26$) in self-attitude. This means that they are less concerned with their self-image, less conservative in terms of their attitude to their self-image - they want changes, strive to conform to the ideal. At the same time, they believe that their self-image is affected by external circumstances, have imperfect self-regulation, a diffuse locus of "the Self" (M3). For the girls, this motivation positively correlates with overall internality ($r = 0.37$), with internality in the field of achievement ($r = 0.22$) and working (studying) relationships ($r = 0.30$), in the field of failures ($r = 0.38$) and negatively in self-attachment (M7, $r = -0.23$).

Thus, both the boys and the girls with a positive emotional attitude toward cognition and self-improvement are characterized with the feeling of being unsatisfied with themselves, a desire for a change and a lack of rigidity in self-attitude.

Motivation for affiliation (implying concerns with the approval of others) in the group of the boys is mainly related only to the internal locus of control in the field of interpersonal relations ($r = 0.26$). For the girls focused on communication and loyal friends, this motivation positively correlates with self-confidence (M2, $r = 0.29$). This means that the girls with this motivation are characterized by a sense of power of their Self, they see themselves as confident, independent strong-willed and reliable people. The relationship between the motivation for affiliation and locus of control in this sample of girls was not found.

7. Conclusion

The present research has revealed significant gender-determined peculiarities in the nature of relationships between self-attitude, locus of control, and the degree of importance in the profile of motivation. Getting older and more mature, girls with cognitive motivation feel their own responsibility for the events which are most significant for them in most spheres of life (including educational). One can

assume that for girls taking responsibility for events in almost all life spheres, including educational ones, can be considered as a reason for increasing cognitive motivation. Whereas for the boys with the same emotional attitude, the sphere of responsibility is limited to certain significant situations. This is confirmed in the field of self-attitude: they believe their Self is affected by external circumstances, which shows they are not likely to look for the causes of their actions and trait of their personalities in themselves. At the same time the boys as well as the girls with cognitive motivation are characterized by the lack of rigidity of “Self” concept, which is connected with a strong desire for change and self-dissatisfaction.

The intensity of the motivation for self-assertion (the need for recognition, as well as the desire to be better than others) among girls motivates them to take responsibility not only in the sphere of interpersonal relations, but also in the field of achievements. They are confident that success is the result of hard work and little depends on the circumstances or luck. Concerning this type of motivation only the girls besides having a motive of respect and recognition demonstrate a need to be better than others. As revealed in another study, women have the ability for emotional attracting the attention of others’ expressive self-presentation (Vizgin & Pantileev, 2001). In the opinion of E.D. Bozhovich, the need for recognition and the need for self-assertion are two forms of the same sociogenic need which, however, have certain substantial (personality-semantic) differences (Bozhovich, 2000). One may assume that this is why most of the girls, for whom recognition and approval, as well as self-assertion (to be better than others) are equally important, there is often a sense of self-conflict (internal conflict in self-attitude).

Further in the study it is shown that boys with motivation for self-assertion (recognition, authority, communication) take responsibility for events in most important life spheres. We can assume that this fact is associated with stereotypes of “a real man”. If a young man wants to prove himself in this capacity, then he has to take responsibility for the events happening in the spheres of his life which are important for him (the exception is the academic sphere). In the study by (Sobkin & Kalashnikova, 2015) it is noted that among boys the proportion of those who are not motivated to study is higher. One notes by researches that the attitude of teenage boys to learning is determined by external motivation to achieve certain position, to earn approval and respect (Sobkin & Kalashnikova, 2015). This can be explained by different social requirements (attitudes and stereotypes) to boys and girls, the specific nature of the feedback they receive from adults. (Karabanova, 2007). Foreign studies of gender-role stereotypes also show that different expectations of teachers and parents influence the child's self-perception (Bern, 1996; Dweck & Bush, 1978; Lazarides et al., 2016). The intensity of the motivation for avoidance in the student’s profile, implying for boys an ambivalent emotional attitude toward learning as a heavy but necessary duty, leads to a decrease in one's own responsibility for their actions in the field of achievements. Girls with negative motivation to study (avoidance) tend to attribute the responsibility to external factors, to other people or to the circumstances in most significant situations (general externalities), including the academic sphere. Apparently, the external locus of control for girls with motivation for avoidance in a stressful challenging learning environment is a protective reaction.

Girls with motivation for affiliation, focused on communication and friends see themselves as confident, independent and reliable individuals who deserve self-respect. Thus, girls focused on communication and friends have a more positive self-attitude compared to girls with a motivation for self-affirmation. The intensity of the motivation for affiliation in the motivational profile of boys implies

concerns with being approved by significant people (including parents), which leads to increased self-responsibility primarily for events that occur in interpersonal relationships.

Thus, the revealed patterns may be useful for rendering more differentiated and effective psychological support in secondary school, which will enhance the quality of the educational process.

The study has revealed significant gender differences in the nature of relationships between the locus of subjective control as a measure of responsibility and the intensity of a certain motivation in the profile. So, the girls with cognitive motivation take responsibility for the majority of events in life spheres important for them (including academic ones), whereas for the boys with such motivation the sphere of responsibility is limited to separate significant situations (general internality). At the same time, boys with motivation for self-affirmation have a high level of subjective control in most life spheres, whereas girls with similar motivation have an internal locus of control in the field of achievements and interpersonal relationships.

A number of interrelations between the nature of the motivation for learning activity and the parameters of the self-relationship have been found: the boys with cognitive motivation have weak self-control and personal control and often doubt the ability to control their own Self. At the same time, like the girls with cognitive motivation they are characterized by the absence of rigid concept of Self, which is connected with a strong desire for change and self-dissatisfaction.

The girls focused on communication and friends prove to be more confident in comparison with the girls with a motivation for self-assertion characterized by doubts and self-dissatisfaction.

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