

Study of the value orientations and soft skills in modern senior high school students (in the context of the doctrine of sustainable development)

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Abstract. The concept of sustainable development involves maintaining the stability of social systems through the development of human capital. The formation of values and universal skills of the youth population is an important component of human capital. The article studies the problem of the universal readiness of school leavers for academic activity and professional labor that is expressed by the degree of formation of value orientations, which are the basis for non-specialized soft skills. The level of development of soft skills of senior high school students in modern comprehensive schools, that ensures the behavioral characteristics of self-organization and work ethics, depends on the values they share, which were studied using the survey method. The randomized survey of senior high school students in Rostov region (N = 4037, 59.3% of girls), carried out in 2019, was aimed at identification of the elements of social collectivism - social egoism in the minds of young people and normative - deviant components of behavior motivation. The studied value orientations of young people were reduced to social-cognitive elements and attitudes. The authors proceeded from the fact that evident social collectivism - social egoism is directly associated with manifestations of normative / deviant behavior. As a result of processing of the data obtained, a quantitative analysis and explication of the development of value orientations and soft skills in the field of work and organizational ethics of the modern contingent of secondary school students was represented, what made it possible to formulate the preferential directions of pedagogic work.

1 Introduction

Modern educational practices form and - at the same time - rely on the availability of *value orientations* and *soft skills* in students that are non-specialized, but extremely important for learning activities and that largely determine the performance of school leavers of secondary schools. Among the characteristics formed in students we can note the following: the acknowledgement by young people of the absolute value of work (including educational work), positive educational / work motivation, taking into account the time factor, adaptability to the schedule and regulation, the sense of responsibility, etc., what constitutes the normative content of work ethics. The ability of young people to build egalitarian

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relations in a team, the absence of individualistic claims and rejection of the tactics of value domination, adherence to norms and rules adopted in the society, the inadmissibility of their violation, including in order to achieve egoistic benefit, are included in the content of organizational ethics. These values and norms provide the corresponding groups of soft skills and are prevailing, i.e., they are of importance for many subject areas. The level of formation of soft skills, including skills of work and organizational behavior, depends on the degree of adherence of young people to the corresponding values. In turn, value orientations and soft skills ensure the social adaptation of the youth population in the academic environment, the readiness of applicants to master university educational programmes and the content of their future profession.

Within the modern social and humanitarian knowledge, the topic of social adaptation of adolescents and youth, including through formation of value orientations and soft skills, attracts the attention of a significant number of researchers. Some general vectors of research interests can be singled out in this area. Soft skills are considered as cognitive, communicative, organizational and ethical characteristics formed in adolescents and young people, assisting in ensuring the performance in a wide range of educational and production tasks. Social and pedagogical factors in the formation of soft skills; the potential of youth organizations used in the formation of soft skills; the problem of "skills mismatch", considered as an evidence of disadvantages of education, are studied in the works of Andreoni et al [1], Adnan et al [2], Adely et al [3], Modestino et al [4], Bodolica et al [5], Jagannathan et al [6], Sek-yum Ngai et al [7], Zeira et al [8] and others. The studies in which the factors of the spread of deviations in adolescents and youth are identified and the prerequisites for the formation of asocial and antisocial values are determined, are carried out by Kuzmenkov [9], Berdibayeva et al [10], Casas et al [11], Cunha et al [12], Masengo et al [13] and others. The studies of the role of school discipline and disciplinary measures as a practice that disproportionately affects specific groups of children are carried out by Cho et al [14], Binning et al [15], Welsh et al [16], Pentek et al [17] and others. The authors noted the general ineffectiveness of disciplinary measures as the methods of external enforcement that do not form the responsibility and self-discipline of students, as well as the methods of opposition against the specified circumstances are proposed.

The following are among the authors studying the labor and work values of different generations; the nature of the influence of values on the choice of a profession and the type of career: Arieli et al [18], Choi [19], Espiritu-Olmos et al [20], King et al [21], Akosah-Twumasi et al [22]. In modern sociological and social and psychological studies, the relationship between values and professional / career behavior is considered in the form of the dominant motivational attitudes of young people (in the aggregate of their cognitive, affective, conative components). This is reflected in the approaches of such authors as Lizardo [23], Magun et al [24] and others.

At the same time, the empirical aspects of the relationship between the labor and work values and the corresponding motivation of modern Russian youth and their behavior (including the patterns of the formation of social deviations) have not been sufficiently studied yet. Despite the plenty of the studies of soft skills of university graduates, there is a lack of studies of the level of formation of soft skills in senior high school students in secondary schools (potential university applicants). This makes it difficult to build the dynamics of value orientations and soft skills and develop the recommendations for the implementation of a set of preventive and optimizing educational activities on the basis of the aggregate picture. In this connection, the objective of the proposed study seems to be relevant - study of the level of development of value orientations and soft skills of the modern contingent of senior high school students in secondary schools.

2 Materials and methods

The level of development of soft skills of work and organizational ethics in the contingent of senior high school students in modern educational institutions was studied using the method of survey based on the parameters that are considered as the most significant ones. The questionnaire-based survey was aimed at identifying the elements of social egoism and the abnormal components of behavior motivation in minds of young people. Taking into account the fact that the pronounced social egoism has a direct relation to the formation and manifestation of various types of normative / deviant behavior, value orientations were reduced to the corresponding social and cognitive elements and motivational attitudes. The modified questionnaire “Asocial forms of behavior (social egoism, non-standard behavior)” by E.N. Pozharskaya [25] was used.

The study was carried out in 2019 in the institutions of general education (secondary schools) in Rostov region, Russia. The total sample of respondents was 4037 students in grades 7-10, of which 2007 students were boys. The procedures for survey and processing of the results were performed using the resources of the information system (IS) "Information Technology in Education". This system is a technological platform for sociological and social and pedagogical research and monitoring procedures and it is developed by the laboratory "Computer methods of psychological and pedagogical diagnostics" of the Don State Technical University (the head - E. N. Pozharskaya).

As a result of the survey that revealed the level of standard behavior and manifestations of social egoism (integral scale), the data obtained were divided using three scales: 1 "Attitude towards egoism", 2 "Attitude towards lies and deception", 3 "Criteria of fairness (attitude towards money and physical strength)". The survey data were presented in the form of statistical reports (by 3 levels of detailing of the data obtained, differing by the degree of summarization of the material). The 1st report represented the final level of statistical data on social and psychological monitoring. Report 2 represented the distribution of students by qualitative levels of analysis of the results of social and psychological monitoring. Report 3 reflected detailed analysis by questions of the results of social and psychological monitoring.

3 Results

The study of value orientations and motivational attitudes involved the formation of rank (ordinal) scales built based on the interpretation of the respondents' answers received regarding the degree of their agreement / disagreement with a number of the proposed statements. At the same time, the specified statements were divided into several interconnected conceptual blocks, presented in Table 1.

The first block concerned the respondents' opinions about *the degree of admissibility of imposing of their interests on others*, i.e., in fact, the attitude towards value-based domination. In the sample as a whole, the maximum agreement with the statement “*The winner will be that one who will be able to impose his or her interests on others, and naive simpletons are guilty themselves that they are deceived*” was expressed by about 4.4% of the respondents, and almost 28.4% called it as the upper limit of dishonesty. At the same time the gender difference was recorded in this item: the maximum agreement with this statement was expressed by 6% of boys versus 3% of girls.

The second conceptual block concerned the respondents' agreement with the thesis about the *need to follow the basic normative and value regulations*. Only about 5% of respondents fully agreed with the statement “*When you really want something, many rules and prohibitions can be discarded if they are on the way of the achievement of the desired goal*”. To the maximum extent, 32.5% of the respondents support the need to comply with

the rules and prohibitions as a necessary condition for ensuring social order. In this case, no significant differences were observed between the assessments of boys and girls. At the same time, attention is drawn to the fact that some of the respondents found difficulty in replying about the unambiguous acceptance / rejection of the proposed statement. Also, within this block, the statement was proposed to assess "I think that clever people use the following rule in their life: "Something is not allowed - one has a great wish - then it is allowed!"". The maximum degree of agreement with the thesis was shown by 4.4% of the respondents, the maximum degree of disagreement - 33%. As for the inevitability of social egoism and deviations, 5.3% of the respondents fully agreed with the thesis "Human nature is such that any of us is inclined to act only to our advantage." Here, gender differences were also observed within the sample: 28.5% of girls who agreed versus 34% of boys who agreed.

The third conceptual block was devoted to the *attitude to deception as a method to achieve practical benefits in specific social situations*. Only 4.2% of the respondents considered this to be absolutely normal, while 39.5% students considered it absolutely unacceptable, first of all, from the point of view of compliance with social expectations as a motivational basis for social activities. It should be noted that one of the highest negative values of the parameter under consideration was observed here: with the statement "I think that most people use lies to promote their ideas and get an opportunity for personal development," 6% were in absolute agreement (and here the boys also "leaved behind" the girls - 7.6% versus 4.5%). Even more alarming is the fact that almost 7% of respondents are absolutely certain that people will more willingly believe in the fact that seems to be the truth, but is not it, than in the truth itself, if the latter is not beneficial for them. Only 27% indicated the striving for the truth as the most characteristic for the human nature, interpreted as fairness.

The highest negative value was obtained for the parameter "the external nature of the regulation of young people's behavior" - 10% of respondents who believe that fear of sanctions is the leading motive for compliance with social norms. At the same time, about 5% of respondents indicated strength and wealth as exceptional criteria of social prestige and a compelling reason for social domination (as opposed to intelligence, honesty, diligence, etc.); the latter was revealed against the background of the fact that less than a third of the entire group of young people surveyed do not fundamentally agree with such a view.

About 7% of the surveyed students fully agreed with the statement "It is widely known that celebrities can have the most disgusting vices, but their money and influence make people to shut eyes to everything." Only 285 respondents (less than 8%) fully agreed with the same fact that among celebrities there are much more people who have attained a high place thanks to their talent and hard work. Only 4.5% of respondents fully agree with the statement "In detective stories, I often want a criminal to escape punishment, because he or she seems to be smarter and more cunning than everyone else," while 37% absolutely disagree with this, but agree with the thesis: "In detective stories, I am always on the side of justice, and crimes must be punished."

Tables 1-4 given below illustrate the results of the study in terms of averaged indicators within the gender and combined samples. The results are shown in the form of indicators: "Average absolute score for the sample" (raw scores), "Average relative score for the sample" (% of the indicator from the maximum possible score on the scale) and "The level of occurrence of the diagnosed parameter", that characterizes the quality of the shown sign.

Table 1. Quantitative values of the occurrence of the diagnosed parameters in the gender groups of the respondents (parameters of work and organizational ethics).

Summarized data	the 1st sample -all tested boys	the 2nd sample - all tested girls	Total (aggregate) sample of students
Number of the students in the sample	2007	2030	4037
Mean absolute score for the sample	109.856	115.137	112.512
Mean relative score for the sample (% of the indicator of the max. possible score on the scale)	73.237	76.758	75.008
The satisfaction level of the diagnosed parameter	Moderate level of the positive pole of the diagnosed parameter	Moderate level of the positive pole of the diagnosed parameter	Moderate level of the positive pole of the diagnosed parameter

Table 2. Quantitative values of the occurrence of the diagnosed parameter "attitude to social egoism" in the gender groups of the respondents.

Scale 1 Attitude towards egoism	the 1st sample - all tested boys	the 2nd sample - all tested girls	Total (aggregate) sample of students
Number of the students in the sample	2007	2030	4037
Mean absolute score for the sample	36.617	38.145	37.385
Mean relative score for the sample (% of the indicator of the max. possible score on the scale)	73.235	76.290	74.771
The satisfaction level of the diagnosed parameter	Moderate level of the positive pole of the diagnosed parameter	Moderate level of the positive pole of the diagnosed parameter	Moderate level of the positive pole of the diagnosed parameter

Table 3. Quantitative values of the occurrence of the diagnosed parameter "attitude to lies and deception" in the gender groups of the respondents.

Scale 2 Attitude to lies and deception	the 1st sample - all tested boys	the 2nd sample - all tested girls	Total (aggregate) sample of students
Number of the students in the sample	2007	2030	4037
Mean absolute score for the sample	35.572	37.318	36.450
Mean relative score for the sample (% of the indicator of the max. possible score on the scale)	71.145	74.636	72.901
The satisfaction level of the diagnosed parameter	Moderate level of the positive pole of the diagnosed parameter	Moderate level of the positive pole of the diagnosed parameter	Moderate level of the positive pole of the diagnosed parameter

Table 4. Quantitative values of the occurrence of the diagnosed parameter "adherence to the principle of justice" in the gender groups of the respondents.

Scale 3 Criteria of fairness and justice (attitude towards money and physical strength)	the 1st sample - all tested boys	the 2nd sample - all tested girls	Total (aggregate) sample of students
Number of the students in the sample	2007	2030	4037
Mean absolute score for the sample	37.666	39.674	38.676
Mean relative score for the sample (% of the indicator of the max. possible score on the scale)	75.332	79.349	77.352
The satisfaction level of the diagnosed parameter	Moderate level of the positive pole of the diagnosed parameter	Moderate level of the positive pole of the diagnosed parameter	Moderate level of the positive pole of the diagnosed parameter

The summary of the survey data is presented in table 5, showing the above described data in the form of a grouping of samples based on the qualitative assessment of the diagnosed indicators. The data illustrate the percentage distribution within each of the gender and combined groups of the samples for the qualitative assessment of the diagnosed indicators with their distribution using a binary scale from the position "High level of the negative pole of the diagnosed parameter" to the position "High level of the positive pole of the diagnosed parameter". The results are given in Tables 5-8.

Table 5. Occurrence of the diagnosed parameters in the gender groups of the respondents (parameters of work and organizational ethics).

Summarized data	the 1st sample -all tested boys	the 2nd sample -all tested girls	Total (aggregate)sample of students
Number of students in sample	2007	2030	4037
Level of occurrence of the diagnosed parameter			
High level of the negativepole of the diagnosedparameter	0.448 %	0.591 %	0.520 %
Moderate level of the negative pole of thediagnosedparameter	5.580 %	2.167 %	3.864 %
Neutral level of the indicator (absence of theevident polarity of the diagnosed parameter)	16.343 %	10.936 %	13.624 %
Moderate level of the positive pole of the diagnosedparameter	36.074 %	38.325 %	37.206 %
High level of the positivepole of the diagnosed parameter	38.017 %	44.680 %	41.367 %

Table 6. Occurrence of the parameter "attitude towards egoism" in the gender groups of the respondents (parameters of work and organizational ethics).

Scale 1 Attitude towardsegoism	the 1st sample -all tested boys	the 2nd sample -all tested girls	Total (aggregate)sample of students
Number of students in sample	2007	2030	4037
Level of occurrence of the diagnosed parameter			
High level of the negativepole of the diagnosed parameter	0.847 %	0.788 %	0.817 %
Moderate level of the negative pole of thediagnosedparameter	5.879 %	3.005 %	4.434 %
Neutral level of the indicator (absence of theevident polarity of the diagnosed parameter)	17.539 %	13.892 %	15.705 %
Moderate level of thepositive pole of the diagnosed parameter	30.493 %	30.049 %	30.270 %
High level of the positivepole of the diagnosed parameter	37.668 %	45.123 %	41.417 %

Table 7. Occurrence of the parameter "attitude towards lies and deception" in the gender groups of the respondents (parameters of work and organizational ethics).

Scale 2 Attitude to lies anddeception	the 1st sample -all tested boys	the 2nd sample -all tested girls	Total (aggregate)sample of students
Number of students in sample	2007	2030	4037
Level of occurrence of the diagnosed parameter			
High level of the negativepole of the diagnosed parameter	1.196 %	1.084 %	1.139 %
Moderate level of the negative pole of thediagnosedparameter	8.022 %	3.744 %	5.871 %
Neutral level of the indicator (absence of theevident polarity of the diagnosed parameter)	18.137 %	14.286 %	16.200 %
Moderate level of thepositive pole of the diagnosed parameter	29.547 %	33.448 %	31.509 %
High level of the positivepole of the diagnosed parameter	34.728 %	39.507 %	37.132 %

Table 8. Occurrence of the parameter "attitude towards lies and deception" in the gender groups of the respondents (parameters of work and organizational ethics).

Scale 3 Criteria of fairness and justice (attitude towards money and physical strength)	the 1st sample -all tested boys	the 2nd sample -all tested girls	Total (aggregate) sample of students
Number of students in sample	2007	2030	4037
Level of occurrence of the diagnosed parameter			
High level of the negative pole of the diagnosed parameter	1.046 %	0.739 %	0.892 %
Moderate level of the negative pole of the diagnosed parameter	5.730 %	2.266 %	3.988 %
Neutral level of the indicator (absence of the evident polarity of the diagnosed parameter)	12.955 %	9.261 %	11.097 %
Moderate level of the positive pole of the diagnosed parameter	28.749 %	29.754 %	29.254 %
High level of the positive pole of the diagnosed parameter	42.900 %	47.685 %	45.306 %

According to the results of the survey, among the diagnosed students in grades 7-10, an unquestionably positive attitude towards egoism among boys and girls is approximately equal - about 1%. 41.417% of girls versus 37.668% of boys have a more negative attitude to the manifestation of egoism. The negative attitude towards lies and deception is higher in girls (34.728%) than in boys (39.507%). The analysis of the assessment of the criteria of fairness and justice showed that girls believe that money and physical strength are the criteria of fairness and justice to a lesser extent.

According to the results of the analysis with use of three scales, the responses of girls (44.680%) are more shifted towards a positive assessment of standard behavior if to compare with the boys (44.680%), what can be an evidence that boys tend more towards violation of the norms than girls.

4 Discussion

The analysis of the results on the study of social egoism and non-standard behavior as the value-based and motivational fundamentals of social behavior of young people showed that, in general, pro-social, positive value orientations prevail in the minds of the respondents. Thus, the mean relative score for the sample was about 75, what indicates a sufficiently high level of the positive pole of the diagnosed parameter. At the same time, statistically significant differences in the sample between boys and girls were almost not observed within the scope of the carried out study.

The philosophical and anthropological substantiation of the admissibility of social egoism (in the spirit of social Darwinism) demonstrated a small number of the respondents (5.3%), among which boys constituted the majority. The gender differences, in our opinion, are explained in this case not by differences in real beliefs, but by the choices made under the pressure of anticipated social expectations - due to the less favorable attitude of the society towards female domination and rationality.

At the same time, the results obtained show that a part of today's Russian youth does not have a number of value orientations that ensure positive motivational attitudes of social behavior. The assimilated beliefs and skills indicate the personal deformations that form non-standard motivation and deviant forms of behavior in the youth environment. This applies, first of all, to the attitude towards honest work and labour as towards a morally significant condition for achievement of success in his or her life. The predominantly

external nature of the regulation of the behavior of a part of young people attracts attention, what can be explained by its desire to avoid censure, but no more than that.

The new value-based maintenance of labor activity that meets the challenges of the present time is at the stage of formation. The registered mismatch between the abstract and declarative values adopted by young people and their real value orientations, the embodiment of which are specific motives of behavior can be considered as manifestation of this. The gap between the declared and the real things indicate the conflicting and indefinite nature of the information content of the socialization environment, through which social experience is translated.

5 Conclusions

It is advisable to recommend to the professional pedagogical community to perform preventive and corrective work with boys and girls aimed at reducing the level of social egoism and forming a critical attitude towards non-standard and socially deviant behavior. The preventive work should include the following: formation of inclination in students to correlate their desires with socially important norms, awareness in relation to consequences of their actions, respect for an individual and the needs of other people. In preventive and corrective work, it is necessary to focus on reflection, self-determination and self-realization, achieving clarity in understanding of one's goals, desires and needs; searching for a sphere of socially important activity and determining socially acceptable methods for realization of personal goals. The methods for performance of preventive work can be social and psychological trainings, role-playing games, case-work, the method of dialogue.

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