

Value-semantic predictors of professional orientations

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Abstract - In recent years, the pedagogical interpretation of education and its role in society has been complemented by the coverage of education problems from the perspective of the subject area of other sciences: sociology, psychology, and economics... The axiological (value-orientation) role of education in modern society is becoming more actualized. On the one hand, this phenomenon is conditioned by the dynamics of public consciousness and values, and on the other hand, it is conditioned by the dynamics of humanization of education, as a response to the changed external conditions [1, 2, 3]. The article presents the results of modeling structural equations, which allow to speak about the dependence of professional inclinations of the value-semantic person orientations.

Keywords - sociology of education, value orientations, professional self-determination, professional inclinations.

I. INTRODUCTION

Most often, education is treated as a process and a result of knowledge assimilation. V. Zykov tried to determine education through the content of this process and specificity of the result, and product. He considers education as a social institution, which has an impact on the entire life activity of the subjects using peculiar means. Education is interpreted as the replacement of objects with their images (signs of similarity, models, projections), the creation of figurative systems of the surrounding reality for the people's life orientation. It means that education is the instrumental environment of a person who has learned to create figurative models and to reproduce his orientation in reality. Such an art of an educated person generates information. An educated person can not only use it, but also can transform it and create a basis for the conceptual reproduction of information [4].

The sociology of education focuses on the place and role of education in society (i.e. its status and functions), on the social consequences of educational policy and the relationship of education with changes in society. G. Zborovsky also adheres to a sociological approach and considers it important to determine the effectiveness of education, its relationship with social structures, the impact of social conditions on education as a phenomenon, process,

institution, and system. The author writes about the connection of education with the lifestyle of people in society and about its influence on social well-being.

From the point of view of L. Shpak, education can be interpreted in sociology without traditional influence of pedagogy in two aspects:

a) education is the degree of acceptance of the socializing effects of the society institutions (culture, labor, politics, science, etc.), that is, some kind of interaction between the institution of education and other institutions of society;

b) education is a degree of mastering a system of scientific knowledge and sociocultural mechanisms of incorporation into social practice to form a developing personality capable of interacting with society [5].

L. Shpak emphasizes, that besides cultural, more precisely, sociocultural mechanism, there are mechanisms for the intellectualization of subjects, organizing processes of thinking, cognition, information interaction at the scientific level, acts of creativity. It allows subjects to present a system of knowledge, creatively accompany processes of knowledge assimilation.

However, in addition to the function of forming a knowledge system, the axiological orientation of education is expressed in the formation of professional ideas and attitudes towards the world of professions, which is very important for the future graduates of general education organizations. Accordingly, emphasizing the important role of the value-semantic component in vocational guidance, the term "professional self-determination" is used. The scope of this concept includes not only aspects of professional choice, but also all manifestations of personality formation in the context of the formation of ideas about the world of professions and about their place in it.

This problem only receives a new understanding in the conditions of the formation of educational clusters, which become "growth points" and sources of synergistic effect [6].

Self-determination encompasses the entire period of schooling and is associated with the phased internalization of social reality. V. Bobrikov indicates that professional self-determination will be most successful if the choice of profession is correlated with the available resources of the person (inclinations, estimations, values, meanings...) [7].

Thus, the purpose of our research is to determine the degree of dependence of professional inclinations on value-semantic orientations.

II. MATERIALS AND METHODS (MODEL)

The study involved 191 people. School students in Belovo and Kemerovo: 116 people and 75 people, respectively. There were 67 boys, 35.1%; 124 girls, 64.9%. 8th grade students - 2 people, 1.1%; 9th grade students - 127 people, 66.5%; 10th grade students - 42 people, 21.9%; 11th grade students - 20 people, 10.5%.

Research methods. Vocational orientations were assessed using a differential diagnostic questionnaire (A. Azbel's variant) and a Holland questionnaire. Value-semantic orientations were assessed using a life-sense orientation questionnaire (adaptation by D. Leontiev) and a modified form of the R. Inglehart questionnaire (modification by MS Yanitsky).

III. RESULTS AND DISCUSSION

According to the main purpose of the research we differentiated the subjects by types of value orientations. There are three main types of value orientations. The adaptive type is characterized by the predominance of defensive mechanisms in behavior aimed at eliminating feelings of anxiety and fear for the sake of maintaining the status quo and minimizing external social threats. The socialized type is characterized by a pronounced tendency to follow standard social norms; one might say that the main behavioral scenario of this type is conformal behavior, focus on traditional values. An individualizing type is characterized by a focus on the values of education, development, and self-realization, which are tools of prosocial behavior. In the absence of a pronounced tendency, an intermediate type is determined; it is characterized by a lack of formation of the value system, irrationality and rigidity of judgment. [8]. In order to check the probable differences in value-semantic characteristics between the students of the cities of Belovo and Kemerovo we used discriminant analysis (table 1).

As it follows from the table, the differences are revealed by the magnitude of the occurrence of subjects with an intermediate type of orientation. In the sample of the schoolchildren from the city of Belovo the proportion of subjects with intermediate type is 17.2%, and among schoolchildren from the city of Kemerovo the frequency of occurrence of the intermediate type is 25.3%.

TABLE I. THE RESULTS OF THE DISCRIMINANT ANALYSIS FOR THE FACTOR «CITY»

	Wilks criterion	F	p
Meaning of life	1.00	0.03	0.85
Purpose in life	1.00	0.46	0.50
Process of life	0.98	2.94	0.09

Result of life	1.00	0.78	0.38
Locus of control - Self	1.00	0.15	0.70
Locus of control - life	1.00	0.13	0.72
Adaptable	0.99	1.46	0.23
Socializing	1.00	0.71	0.40
Individualising	1.00	0.79	0.38
Intermediate	0.98	3.91	0.05

Similarly, we have evaluated the likely differences between students of different classes (table 2). Since the eighth-grade students are only two people, we have excluded them from the calculations.

TABLE II. THE RESULTS OF THE DISCRIMINANT ANALYSIS FOR THE FACTOR «CLASS»

	Wilks criterion	F	p
Meaning of life	1.00	0.03	0.97
Purpose in life	0.97	2.41	0.09
Process of life	0.99	0.50	0.61
Result of life	1.00	0.12	0.89
Locus of control - Self	1.00	0.11	0.90
Locus of control - life	1.00	0.21	0.81
Adaptable	0.93	6.27	0.00
Socializing	0.92	7.72	0.00
Individualising	0.93	6.72	0.00
Intermediate	0.96	3.83	0.02

As can be seen from the tables, the probable differences in the frequency of occurrence of value types in different samples are revealed, however with greater accuracy we can speak of differences in the distribution, based on estimates of differences in the distribution, which are shown in Table 3. From the data in the table it follows that there are no significant differences in the size distribution of value types between students in different cities and classes.

TABLE III. EVALUATION OF DIFFERENCES IN THE DISTRIBUTION OF VALUE TYPES IN THE STUDIED SAMPLES

	On a residence		Class	
	chi-square	p	chi-square	p
Adaptable	0.3	0.6	3.5	0.2
Socializing	1.9	0.2	6.3	0.0
Individualising	0.4	0.5	3.5	0.2
Intermediate	2.1	0.1	0.3	0.8

The next step in the analysis is the description of differences in the magnitude of the manifestations of life-meaning orientations and the severity of professional-personal inclinations among representatives of various value types.

The ratio of the severity of professional inclinations according to the method of differential diagnostic questionnaire is presented in Figure 1.

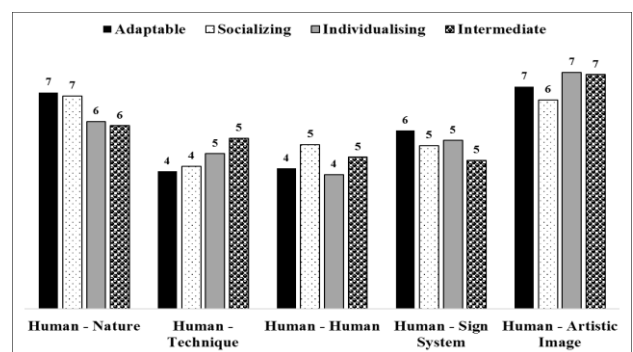


Fig. 1. The severity of professional inclinations in different value types

As can be seen from the figure, on average, inclinations toward the professions of the types person-technics, person-person, and person-sign system are not expressed. The inclinations towards the professions of the person-nature type at the middle level are expressed in representatives of the adapting and socializing value types, and at the middle level they also have inclinations towards the professions of the person-art type. Representatives of the individualizing and intermediate types also have inclinations towards professions of the creative type at the middle level.

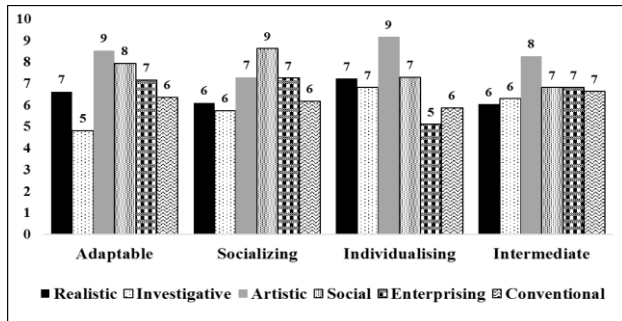


Fig. 2. The severity of professional personality types of different value types

Figure 2 presents the results of a comparison of the severity of professional personality types depending on their belonging to the value type. Representatives of the socializing type have a stronger focus on social interaction, which is quite logical. All the other value types have the most artistic type and this is consistent with the results of the differential diagnostic questionnaire, where the propensity for creative activity is also quite pronounced.

Below, in Figure 3, the comparison results of the indicators' severity of the life-meaningful orientations are presented. Indicators of the overall comprehension of life, goals in life, the process of life, the result of life and *Locus of control - Self* among the subjects with a predominance of values of individualization are in the range below the average. The representatives of other value types have the meanings of this scale at an average level. On the scale of *Locus of control - life* – all subjects had average points. Thus, we see that students who share the values of individualization are in a state characterized by a decrease in the vision of perspectives, an experience of dissatisfaction with life in the present and the past, a decrease in belief in their own strength. Of course, it should be borne in mind that this condition should not be considered as permanent and stable, because the semantic states are dynamic and can characterize the current moment of the subject's life [9].

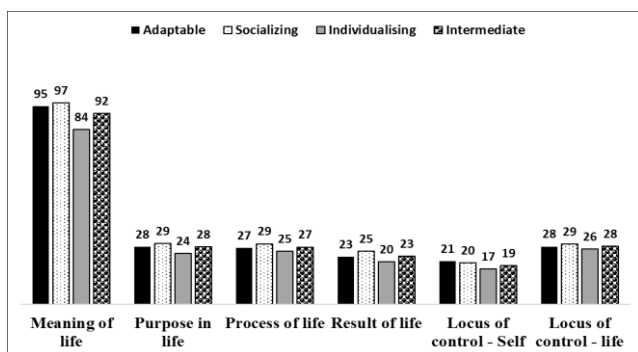


Fig. 3. The severity of meaningful life orientations of different value types

The above results allow us to speak about some distinctions in the manifestations of professional choice and comprehension of life in different value types. To verify the reliability of the differences, we used the Student's criterion (table 4).

TABLE IV. EVALUATION OF DIFFERENCES IN INDICATORS OF VALUE TYPES

Differences of adaptable type Group 1 - adaptable type; Group 0 - all other subjects					
	Mean (I)	Mean (0)	t	n	p
Investigative	4.82	6.11	-2.50	189	0.01
Differences of socialized type Group 1 is a socializing type; Group 0 - all other subjects					
	Mean (0)	Mean (I)	t	n	p
Artistic	8.30	7.31	2.50	189	0.01
Social	7.46	8.63	-2.61	189	0.01
Result of life	21.90	25.48	-2.77	189	0.01
Differences of individualizing type Group 1 - individualized type; Group 0 - all other subjects					
	Mean (0)	Mean (I)	t	n	p
Realistic	6.10	7.24	-2.19	189	0.03
Artistic	7.84	9.18	-2.00	189	0.05
Enterprising	7.03	5.12	3.21	189	0.00
Differences of Intermediate type Group 1 - intermediate type; Group 0 - all other subjects					
	Mean (0)	Mean (I)	t	n	p
Social	8.13	6.82	2.47	189	0.01

The table shows that the main differences can be traced by the indicators of the Holland questionnaire and of the scale of the life-meaningful orientations questionnaire individually. The adaptive type of the value orientations is significantly lower than the indicators of the manifestation of the research type of personality, which reflects less interest in the professions of the intellectual type. Subjects with socialization values are less inclined to professions of creative character (artistic type), and more oriented to professions of social type, implying relationships and interaction with people. They also have higher rates of comprehension of the past and, accordingly, a level of satisfaction with the lived part of life.

Schoolchildren with a focus on developmental values are more inclined towards realistic type of professions, which imply a focus on achieving a specific result, as well as artistic professions that imply creative development and self-realization. And there is a significantly lower inclination to entrepreneurial-type professions that imply an orientation toward power, leadership, and work under uncertainty. Schoolchildren with an intermediate type of value orientations have a significantly lower propensity to professions of social type.

In the process of analyzing the above data we could see some combinations of different parameters among themselves. In addition, during the exploratory correlation-regression analysis (we do not give the data of this analysis due to the large amount of data), interrelations of different groups of parameters were noted. All this made it possible

to formulate the following private hypotheses about the construction of the structural model, in the context of the general hypothesis of the study: the value and life-meaningful orientation are exogenous variables (predictors); professional inclinations and professional personality types are endogenous variables; value-semantic orientations determine the professional personality manifestations. These assumptions were verified using structural equation modeling (table 5, significant indicators in bold).

TABLE V. STRUCTURAL EQUATION MODELING RESULTS

discrepancy function 2.828 ; Chi square 537.324 ; degrees of freedom 183 ; p 0.000 ; RMS 0.103				
	<i>Parameter estimate</i>	<i>Standard error</i>	<i>T</i>	<i>p</i>
(VO)-->(DDQ)	-103.01	44.25	-2.33	0,02
(VO)-->(PPT)	0.00	0.05	0.05	0.96
(MLO)-->(DDQ)	82.95	44.16	1.88	0.06
(MLO)-->(PPT)	0.11	0.08	1.43	0.15
(DDQ)-->(PPT)	-0.27	0.14	-1.97	0.05
(PPT)-->(DDQ)	1992.18	963.74	2.07	0.04

As it follows from the results of the calculations, the constructed model is not very exact, but in the first approximation it allows to partially confirm the suggested assumptions. Belonging to different value types affects the severity of professional inclinations in the differential diagnostic questionnaire. The influence of life-meaningful orientations on professional inclinations in our model is not reliable, but in magnitude of significance, it is close to the level of trends, which allows to hypothetically consider this influence. Professional inclinations have reliable mutual relations with the manifestations of professional type of personality. Thus, this model allows us to assert about the dependence of professional and personal characteristics on the value-semantic features of a person.

IV. CONCLUSION

For all value types the expressed inclination to professional activity of creative type is peculiar, which can be considered as probable tendency of compensation of tension connected with preparation for final examinations. Earlier, in the work of D. Dolganov similar effect of the positive influence of creative activity on the success of educational activity was described [10]. This trend is also confirmed by the results of the Holland questionnaire, where the manifestations of the artistic personality type are again expressed. However, these manifestations can be interpreted as the expressed desire for creative development and self-realization, which is an essential characteristic of the representatives of the Generation Z [11]. At the moment, we cannot reliably confirm one of the above assumptions, due to the limited amount of data.

In manifestations of life-meaningful orientations, we see a noticeable decrease in almost all indicators among schoolchildren with pronounced values of individualization (development). As it was already assumed, this decrease is reasonably considered as a temporary manifestation, as a reaction to the collision of the aspirations of personal

development with the requirements in educational activities and involving mainly algorithmic, routine actions.

The analysis of the differences between life-meaningful and professional orientations revealed the following. Representatives of the adapting type of value orientations are less inclined to professions of research (intellectual) type. Representatives of the socializing type are less inclined to creative activity, and more oriented towards professions of a social type. The representatives of the individualized type are more disposed to the professions of realistic and artistic types and they are less disposed to the entrepreneurial type professions. Representatives of intermediate type are not oriented to professions of social type.

The results of structural equation modeling allow us to speak about dependence of professional inclinations on the value-semantic orientations of the person.

The results of this study can be used in the process of professional orientation of schoolchildren, which will contribute to improving the quality of decision making about professional choice, taking into account value-semantic determinants. However, there are still unrevealed aspects of the problem, that would be the subject of further study of this problem.

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