

## **Experimental Research of the Sense-Value Regulation of Future Teachers in Academic and Professional Activity**

Ihor HALIAN<sup>1</sup>, Ihor POPOVYCH<sup>2</sup>,  
Yurii NESIN<sup>3</sup>, Yurii ZAVATSKYI<sup>4</sup>,  
Iryna VASHCHENKO<sup>5</sup>, Oksana  
MULIAR<sup>6</sup>, Andrey MARCHENKO<sup>7</sup>

<sup>1</sup> Doctor of Psychological Sciences, Full Professor, Full Professor of the Department Practical Psychology, Drogobych Ivan Franko State Pedagogical University, Drogobych, Ukraine, e-mail: [halyan@ukr.net](mailto:halyan@ukr.net)

<sup>2</sup> Doctor of Psychological Sciences, Full Professor, Full Professor of the Department of Psychology, Kherson State University, Kherson, Ukraine, [ihorpopovych999@gmail.com](mailto:ihorpopovych999@gmail.com)

<sup>3</sup> Candidate of Pedagogical Sciences, Assistant Professor of the Chair of Hotel Catering and Tourist Business, Kherson State Agrarian and Economic University, Kherson, Ukraine, [unesco65@ukr.net](mailto:unesco65@ukr.net)

<sup>4</sup> Candidate of Psychological Sciences, Associate Professor, Head of the Department of Human Health and Physical Education, Volodymyr Dahl East Ukrainian National University, Ukraine, [n.e.zavadska@gmail.com](mailto:n.e.zavadska@gmail.com)

<sup>5</sup> Doctor of Psychological Sciences, Full Professor, Full Professor of the Department of General Psychology, Taras Shevchenko National University of Kyiv, Kyiv, Ukraine [jarinavv62@gmail.com](mailto:jarinavv62@gmail.com)

<sup>6</sup> Candidate of Pedagogical Sciences, Head of the Department of Theory and Methods of School Subjects Teaching, Volyn Institute of Postgraduate Pedagogical Education, Lutsk, Ukraine, [mulyarop@ukr.net](mailto:mulyarop@ukr.net)

<sup>7</sup> Post-graduate student of the Department of Practical Psychology and Social Work, Volodymyr Dahl East Ukrainian National University, Severodonetsk, Ukraine, [marchenkoandriy21@gmail.com](mailto:marchenkoandriy21@gmail.com)

**Abstract:** The research is psychological-pedagogical experiment with factor analysis of value-sense meaningful parameters, preferences, expectations of future teachers (N = 140). The aim is to study the psychological rich in content features of formation of the value-sense sphere of future teachers. Values, while forming in the life experience of the individual, determinate the purpose-oriented and motivational program of behavior and provide sensory regulation of life activity. Personal sense, as a subject determinant, defines the effectiveness of professional activity. The development of system of values and senses is determined by rich in content process, the involvement of students in various types of social activities and purposeful impact by training facilities. Research methods: psychological and pedagogical experiment, standardized tests, factor analysis. The structure of value and sense regulation is determined. The forming stage provided changes in the experimental group (N = 17) from values oriented on social perception to values of personal and professional development. In the control group (N = 19), the dominance of personal comfort values was recorded. Compared to the ascertaining stage, the values of personal-professional development has emerged. The results obtained can be useful to stakeholders, leaders of educational institutions, researchers of self-regulation, axiogenesis, life creation and personality expectations.

**Keywords:** *Self-regulation, axiogenesis, expectations, pedagogical work, values of personal- professional development.*

**How to cite:** Halian, I., Popovych, I., Negin, Y., Zavatskyi, Y., Vashchenko, I., Muliar, O., & Marchenko, A. (2021). Experimental Research of the Sense-Value Regulation of Future Teachers in Academic and Professional Activity. *Revista Romaneasca pentru Educatie Multidimensionala*, 13(4), 509-523. <https://doi.org/10.18662/rrem/13.4/495>

## 1. Introduction

Innovative processes of social life, in particular education, actualize the problem of personal and professional senses of young people who acquire the profession of teacher. This issue is becoming increasingly important in discussing the status of teaching as a profession in the USA (Tatto, 2020), studying the quality of teaching by Norwegian researchers (Smith, 2021), studying the interdependence between active coping strategies and burnout among Finnish student-teachers (Vaisanen et al., 2018). The components of communicative competence of philology teachers during obtaining a profession in a higher education institution have been studied (Halian et al., 2020b).

The activity of the teacher is conditioned by the peculiarity of the sense sphere: the content of sense structures (needs, motives, directives, personal and professional values, expectations). An important mover of the teacher's activity is the level of coordination / non-coordination of personal and social senses of pedagogical work. When studying in higher education institution, there is a need for future teachers to comprehend one's own value limits in the light of chosen profession. New leading activity is emerging – educational and professional, which determines the appearance of new motives and senses.

## 2. Science list review

Psychological research has shown that comprehension by the subject of the profession and its place in the general system of life activity is determined by world-view beliefs and social expectations (Novozhilova, 2008; Popovych et al., 2020a; 2020b). The influence of the sense structure of the personality on the development of professionalism is stated (Mironova, 2002). Sense has been empirically studied as the basis of life self-organization and the subject's professional activity (Blynova et al., 2020a; 2020b; 2020c; Halian, 2017). Of scientific interest is the research typology of undergraduate students by academic performance and aspects of achievement motivation (Gurgová & Nábělková, 2017). The authors found that the principal factor in this structure is F1 “meaning-of-life moderation” (20.70%), which is interrelated with F2 “pragmatic regulation” ( $r_s=.404$ ;  $p\leq.01$ ) and F3 “subjective regulation” ( $r_s=.357$ ;  $p\leq.01$ ). Of scientific interest is a study in which it is proved that the field of education should develop the potential of teachers. It is necessary to implement the results in university curricula through research and cultural studies (Tatto, 2020).

Theoretical analysis of the science list has proved that the subject's sense sphere was not sufficiently studied in a situation of uncertainty (Leontyev, 2003; Rogers & Freiberg, 1994), as well as during his education (Miliaieva et al., 2013; Nosov et al., 2020; Zinchenko et al., 2019).

### ***Hypothesis***

1. We assume that the study of values and meanings from the position of subjectivity and systemacy will provide understanding of their content and structure. This will establish significant scientific facts.

2. We assume that the value preferences in the spheres of life and the motivational and value preferences of the respondents of experimental and control groups of the future teachers, which are established by factor analysis, will have significant differences.

3. We believe that the obtained empirical results of the study of the possibilities of forming semantic-value regulation should be introduced in the professional training of students for future pedagogical activities.

### ***Purpose***

The study the psychological rich in content features of the value-sense sphere formation of future teachers.

## **3. Methodology of research**

The methodology of the research was the concept of the value-sense self-regulation (Halian, 2017) and the socio-psychological concept of the personality social expectations. Khmil & Popovych (2019) provisions on the value-regulatory component in studies of personality adaptation (Blynova et al., 2020d; Halian et al., 2020b; 2021). Semantic and value regulation of the future teachers' activities is a set of value orientations, meanings, attitudes and social expectations that form the basis of its activities.

Psychological-pedagogical experiment is applied. Social conditions are approximated to the social reality and training of influence on the studied variable is applied. The features and conditions of development of the system of values and senses are distinguished. The complex of diagnostic methods was used, which corresponded to the purpose and research issue of the study. Techniques have provided indicators which proved the level of formation of meaningful parameters of the system of values and senses.

### ***Participants***

The sample was constructed randomly from students who studied at Drogobych Ivan Franko State Pedagogical University, Volodymyr Dahl East

Ukrainian National University and Taras Shevchenko National University of Kyiv and they took part in the research; their average age was 20.6 years. The sample consisted of 140 persons. 36 students participated in the forming experiment. It should also be noted that students voluntarily agreed to participate in our study. They were informed in advance about the conditions of participation and could leave at any time without negative consequences. We ensure the confidentiality of data collection. Awareness, confidentiality, voluntariness and system of organization ensured the reliability of the data obtained.

### ***Procedures and instruments***

The study provided several directions for experimental effects. After ascertaining stage, the students were randomly divided into two groups: control and experimental. The students of the experimental group studied according to the inclusive program. Practices and tasks are aimed at forming personal senses about future professional activity and sensory-life orientations.

Participants considered the value of the knowledge gained in the context of professional development. The experimental group participated in personal growth training, reflected “the self”, and worked on a system of values and senses. Comprehension of the values during the training has formed persistent sensory-life and professional orientation. The training included 11 sessions of 2 hours each once a week for three months throughout the academic semester. Training combined role-playing situations, discussion games, relaxation methods. Creative modeling of situations facilitated free and full realization of the participants’ capabilities.

The under study parameters of the experiment were obtained using psychodiagnostic techniques: “Value Questionnaire” (“SVS”) S. Schwartz (Karandashev, 2004): Achievement, Power, Hedonism, Self-direction, Stimulation, Universalism, Benevolence, Tradition, Conformity, Safety. Scales give estimates on two axes of two-dimensional plane: openness to change – conservation and self-enhancement – self-transcendence. The method uses a seven-point semantic, differential, unipolar scale with the limits of answer (1) to (6). The higher the score, the more important the corresponding value to the respondent. The reliability parameters of Cronbach- $\alpha$  by this method were:  $\alpha_{SVS} = .798$ .

E. B. Fantalova’s method “The level of correlation of “value” and “accessibility” in different spheres of life” (“LCVA”) determined the type of sensory system, the basis for which is the difference between the importance of value and its accessibility (Fantalova, 2001): active life (*AL*), health (*H*),

interesting job (*I*), beauty of nature and art (*BN*), affection (*A*), material well-being (*MW*), having good friends (*HGF*), self-confidence (*SC*), cognition (*C*), freedom (*F*), happy family life (*HFL*), creativity (*CR*), index of dispersion (*R*) between importance of value “*IV*” and its availability of value “*AV*” “*D*” ( $R = IV - AV$ ) (difference greater than 4 points (when value is higher than accessibility) indicates internal conflict, (when availability is higher than value) – internal vacuum. The reliability parameters of Cronbach- $\alpha$  by this method were:  $\alpha_{LCVA} = .836$ . The obtained Cronbach- $\alpha$  data are in the range from good (.8) to high levels (.9). The methods used are valid and reliable. Twenty-nine scales relevantly represented the subject of the study.

### ***Data analysis***

Statistical analysis was performed using the statistical programs “SPSS” v. 21.0. Factor analysis used the principal components method. Rotation method: Varimax with Kaiser normalization. Differences between the variables at the  $p \leq .05$  level are considered statistically significant.

## **4. Results of research**

### ***The ascertaining stage of the study***

The “LCVA” technique involved the comparison of a pair of values and the choice of one of the two depending on the significance. This procedure was conducted twice: the first time regarding the importance of values and the second regarding their availability. The obtained dispersion index (*R*) indicated disintegration in the motivational and personal sphere. This testified to the level of dissatisfaction with the current life situation in relation to the realization of needs, as well as the level of self-realization, self-identity. Arithmetic mean (*M*) and mean square deviation (*SD*) were determined. The results showed the integrity of the students’ value sphere. The beginnings of internal vacuum are observed in the sphere of active life (-2.79), partially interesting job (-1.23) and sphere of aesthetics (-1.44). These are the areas that are not interesting to students at the beginning of their educational and professional activities. The sphere of family (2.69) and material (1.44) well-being is somewhat conflicting.

The “SVS” results were defined using *M* and *SD*.

According to the “SVS” technique, the values of “benevolence” (11.73) and “universalism” (15.31), “safety” (9.29) and “independence” (10.73) are conflicting. These indicators demonstrate problems with

students' self-determination associated with deficient self-direction and sense of insecurity.

The following is a factor analysis of 22 variables that reflect students' value inclinations and motivational-value preferences. This approach is methodologically grounded by the subject of study. The correlation matrix is determined by the principal component's method with Varimax rotation. Eight factors have their own values larger than one and explain 94.41% of the dispersion of variables (Tabl. 1).

**Table 1.** *Factor loads matrix*

Scale	F1	F2	F3	F4	F5	F6	F7	F8
Universalism	<b>.939</b>							
Self-direction	<b>.758</b>							
Safety	<b>.679</b>			.365				.353
Stimulation	<b>.638</b>	.394						
Achievement		<b>.864</b>						
Hedonism		<b>.750</b>						
Tradition	.427	.449	.410				.357	
Interesting job			<b>-.815</b>					
Material well-being		0.352	<b>-.720</b>					
Health				<b>.828</b>				
Freedom				<b>-.741</b>				
Affection					<b>-.825</b>			
Cognition			.361		<b>.703</b>			
Happy family life				<b>.506</b>	<b>-.583</b>			
Having good friends						<b>.857</b>		
Power		.361					<b>-.714</b>	
Benevolence	.427	.433			.379	.449		
Creativity							<b>-.868</b>	
Active life		<b>-.307</b>					<b>.648</b>	
Conformity	.395						<b>.530</b>	
The beauty of nature and art								<b>-.744</b>
Self-confidence			.371					<b>.731</b>
Dispersion, %	22.48	10.49	10.47	8.71	7.74	6.31	5.36	5.12
∑ dispersion, %	22.48	32.97	43.44	52.15	59.89	66.21	71.55	76.67
Value	4.946	2.308	2.304	1.916	1.703	1.937	1.178	1.126

Note: the loads of the significant variables are given in bold type.

Source: authors' own contribution, 2021.

F1 “Self-determination” indicates the importance of being open to change in the quest to find oneself. Conflict of values “safety” and “self-direction” only intensifies the desire for self-determination.

F2 “Social Approval” combines the “achievement” and “hedonism” values with the highest factor loadings, which is a desire for self-direction.

F3 “Social Role” outlines the importance of the “cognition” and “confidence” motives regardless income and lack of interesting work.

F4 “Personal well-being” brings together non-controversial values: “health”, “happy family life”. This factor is not related to “freedom”.

F5 “Curiosity” is somewhat controversial. They oppose the deep personal experiences expressed in feelings of love and family well-being to striving for new knowledge, impressions.

F6 “Friendliness” emphasizes the need for students to have positive, of equal worth relationship. They reject status and haughtiness and seek affiliation.

F7 “Social activism” combines “active life” and “conformity” with involvement in life of society, but without initiative and creativity.

### ***The control stage of the study***

The results of the control stage of the study, obtained by the method of “LCVA”, are presented using arithmetic mean (*M*) and mean square deviation (*SD*) in Tabl. 2.

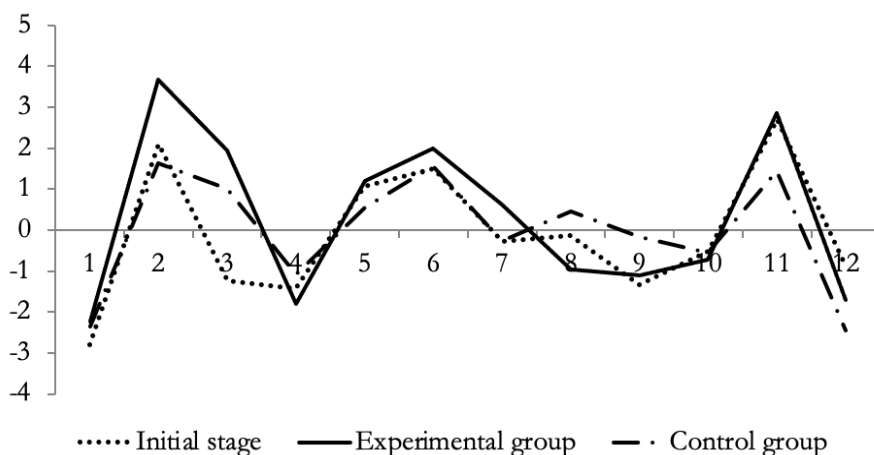
**Table 2.** Results according to “LCVA” at the control phase of the study

Scale	Experimental group, (N=17)					Control group, (N=19)				
	“IV”		“AV”		“D”	“IV”		“AV”		“D”
	M	SD	M	SD	M	M	SD	M	SD	M
AL	2.95	1.43	5.19	1.80	-2.24	2.09	1.38	4.45	3.05	-2.36
H	8.48	2.73	4.81	2.68	3.68	8.18	1.66	6.55	3.56	1.64
IJ	3.33	1.39	4.76	1.55	1.94	4.73	1.74	3.73	1.85	1.00
BNA	3.05	2.40	4.86	2.39	-1.81	2.73	1.90	3.82	3.31	-1.09
A	8.10	2.19	6.90	2.86	1.19	8.27	1.79	7.73	1.56	0.55
MW	5.67	1.59	3.67	2.54	2.00	4.82	2.32	3.27	2.33	1.55
HGF	5.95	2.31	5.33	2.52	0.62	6.09	2.02	6.36	2.77	-0.27
SC	5.90	1.87	6.86	2.24	-0.95	7.00	2.49	6.55	2.11	0.45
C	4.48	2.52	5.57	2.91	-1.10	4.55	1.92	4.73	2.72	-0.18
F	5.67	2.52	6.38	3.26	-0.71	5.45	1.69	6.00	2.32	-0.55
HFL	9.24	2.28	6.38	3.87	2.86	10.00	1.10	8.55	2.91	1.45
CR	2.57	2.69	4.29	3.39	-1.71	0.91	0.94	3.66	3.59	-2.45

Note: “IV” – importance of value; “AV” – availability of value; “D” – dispersion indicator; M – arithmetic mean; SD – mean square deviation.

Source: authors’ own contribution, 2021.

At the control stage, it was reported that the respondents of the experimental group were concerned about the health sector (3.68), which was a consequence of the awareness of climate problems both in their own country and on the planet as a whole. As students graduate, one of the needs is starting a family. Uncertainty about the life companion creates (in many of them) internal conflict (2.86). They are concerned about material well-being (2.00) considering the low pay they will receive after graduating. All other areas are not important for future teachers. No significant changes were found out in the control group (Fig. 1).



Source: authors’ own contribution, 2021.

**Fig. 1.** Dynamics of value preferences by spheres of life

**Table 3.** Value and accessibility correlation in different motivational and value blocks of students at the control stage of the study

Values	Experimental group, (N=17)					Control group, (N=19)				
	“IV”		“AV”		“D”	“IV”		“AV”		“D”
	M	SD	M	SD	M	M	SD	M	SD	M
Conformity	15.76	3.95	13.76	2.43	1.52	14.55	4.13	14.09	3.83	.45
Tradition	20.05	2.89	12.52	3.83	-.94	17.45	3.21	14.36	4.90	3.09
Benevolence	23.33	3.67	11.43	2.98	.69	20.27	3.85	11.55	3.80	8.83
Universalism	31.29	6.60	19.67	3.79	2.81	29.64	5.46	20.27	5.42	9.36

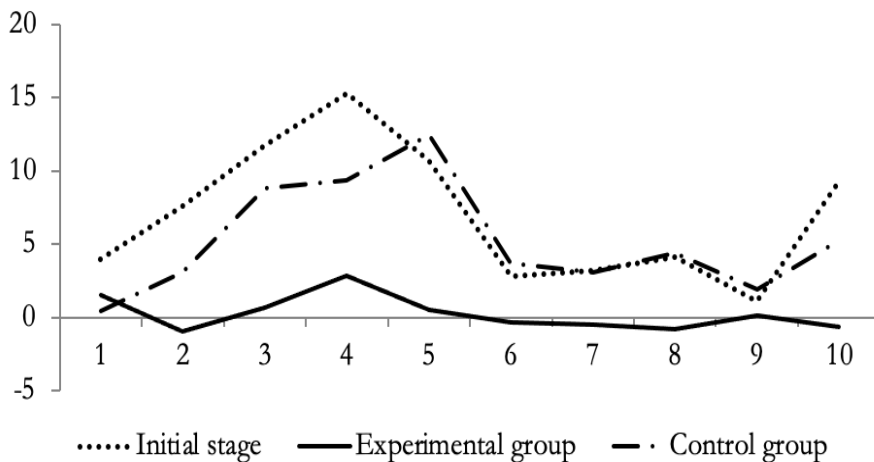


Self-direction	21.90	3.48	11.71	2.97	0.51	22.18	2.56	9.73	2.94	12.45
Stimulation	11.90	2.19	10.05	2.54	-.35	13.18	1.78	9.46	2.34	3.73
Hedonism	12.52	2.48	10.14	3.00	-.52	12.73	3.80	9.64	3.20	3.09
Achievement	18.10	2.74	12.76	3.55	-.81	16.55	2.84	12.18	4.17	4.36
Power	15.05	3.67	11.43	3.54	.12	13.64	2.98	11.73	2.87	1.91
Safety	23.24	2.36	16.19	2.99	-.63	21.91	3.18	16.64	2.16	5.27

Note: “IV” – importance of value; “AV” – availability of value; “D” – dispersion indicator; M – arithmetic mean; SD – mean square deviation.

Source: authors’ own contribution, 2021.

After the forming stage, no significant differences were found in the control group. However, according to the “SVS” technique, the conflict in the value of “universalism” (2.81) significantly decreased in the experimental group compared to the initial stage of the study (15.31). All other results indicated no conflict, or changed the conflict zone to the vacuum zone where value is not considered inaccessible (Fig. 2).



Source: authors’ own contribution, 2021.

**Fig. 2.** Dynamics of students’ value preferences according to motivational and value blocks at the control stage of the study

Factor analysis was conducted on parameters which reflect the value inclinations in the life spheres and the motivational-value preferences of the experimental and control group respondents. Seven factors have their own

values larger than one and explain 81.08% of the dispersion of variables in the experimental group, and 92.12% – in the control group (see Tabl. 4).

**Table 4.** *Factor analysis of the dispersion of the structure of values of future teachers at the control stage of the study*

Experimental group, (N=17)				Control group, (N=19)			
Factors identified	V	d	∑d	Factors identified	V	d	∑d
Personal development (F1)	5.334	24.25	24.25	Independence (F1)	4.852	22.05	22.05
Personal-professional balance (F2)	3.456	15.71	39.96	Conservatism (F2)	4.284	19.47	41.52
Aspiration for novelty (F3)	2.544	11.56	51.52	Professional skill (F3)	2.977	13.53	55.06
Intra-personal integrity (F4)	2.213	10.06	61.58	Life creative work (F4)	2.892	13.14	68.20
Effusiveness (F5)	1.792	8.14	69.73	Political self-determination (F5)	2.398	10.89	79.10
Security (F6)	1.297	5.89	75.62	Personal well-being (F6)	1.583	7.19	86.29
Carelessness (F7)	1.204	5.47	81.10	Life enjoyment (F7)	1.288	5.85	92.15

Note: V – value; d – dispersion; ∑d – sum dispersion.  
Source: authors' own contribution, 2021.

After forming effect, the structure of values and senses of future teachers of the experimental group determines “Personal development” (F1). F1 factor correlates positively with the values of “achievement”, “freedom” (.716) and “benevolence” (.641) and negatively – with “material well-being” (-.791) and “hedonism” (-.641). F2 “Personal-professional balance” combined tradition-bound values: “happy family life” (.749) and “interesting job” (.872). Personal and professional development is realized by means of “Aspiration for novelty” (F3). The values of “cognition” (.823),

“stimulation” (.819) and “universalism” (.814) positively correlate with this factor. Factor F4 affirms intra-personal value. F5 “Effusiveness” demonstrates a proactive stand.

The key values of this factor, “active life” (.843) and “self-confidence” (.791), formed a clear line of conduct. The last two factors reflect their need for security (F6) with the dominant value of “safety” (.829). “Carelessness” (F7) – with values of “creativity” (-.848) and “affection” (.536).

Identified factors of the control group respondents confirm their desire for independence and stability: F1 – independence: “self-direction” (.928), “universalism” (.899), “safety” (.710). The structure of values of the control group is less professionally oriented. Professional skill factor (F3) occupies the third place in the hierarchy of value preferences, and life creative work (F4) – the fourth.

## 5. Discussion

The sensitive period of professional, personal development and self-determination is adolescence. At this age, the system of value orientations becomes conscious and sustainable. There is little research into the value and sense sphere of future educators (Halian et al., 2020a; Ivanchuk et al., 2020; Kalenchuk, 2019; Matvieieva et al., 2019; Miliaieva, 2013). The values of young people (in general) were studied (Leontyev, 2003).

The system of values and senses is the main regulator of development in the period of professional self-determination. The process of sense creation is presented as a result of agreeing on the parameters of value importance and its accessibility. Reducing contradictions in the value system of dominant life spheres contribute to self-actualization of the personality. It is difficult to change the system of values of the individual, but it is possible to regulate some of its links, thereby affecting the quality of its structure, reducing its contradictions, strengthening the integrity, linking into a single whole personality and environment. The results obtained are partly in agreement with empirical studies of the regulatory role of mental states in the structure of the motivational and cognitive resources of the individual (Shevchenko et al., 2020), of the value-sense self-regulation of the subject's life activity (Salihova, 2011).

The results of the control stage showed the stability and structuredness of the value system of the experimental group. Differences between the importance of value and the ability to achieve it have become less pronounced ( $r_s = .77$ ;  $p < .05$ ). Content of values is focused on self-expression and self-realization. In the value field, senses of personal maturity appear, as affirmed by the names of the factors in the control stage of the

study. Compared to the ascertaining stage, the values of personal-professional development has emerged. We have reasons to claim that our hypotheses have been confirmed.

## 6. Conclusions

1. Values, while forming in the life experience of the individual, determinate the purpose-oriented and motivational program of behavior and provide sensory regulation of life activity. Personal sense, as a subject determinant, defines the effectiveness of professional activity. The development of system of values and senses is determined by rich in content process, the involvement of students in various types of social activities and purposeful impact by training facilities.

2. The experimental group (N = 17) recorded changes in the structure of values and senses: from values oriented on social perception to values of personal and professional development. In the control group (N = 19), the values of personal comfort remained dominant. Thus, the value preferences in the spheres of life and the motivational and value preferences of the respondents of the experimental and control groups of the future teachers, which are established by factor analysis, have significant differences.

3. Empirical results of research of possibilities of forming semantic-value regulation should be introduced in professional training of students for future pedagogical activity.

The results obtained can be useful to stakeholders, leaders of educational institutions, researchers of self-regulation, axiogenesis, life creation and personality expectations.

4. Hypotheses of experimental research of semantic-value regulation of future teachers in educational and professional activity are confirmed.

---

## References

---

- Blynova, O., Kisil, Z., Tkach, T., Semenova, N., Semenov, O., Kamisnka, S., & Popovych, I. (2020a). Psychological manifestations of professional marginality of future social welfare professionals. *Revista Inclusiones*, 7(Especial), 218–233.  
<http://www.revistainclusiones.org/index.php/inclu/article/view/1229>
- Blynova, O., Lappo, V., Kalenchuk, V., Agarkov, O., Shramko, I., Lymarenko, L., & Popovych, I. (2020b). Corporate Culture of a Higher Education Institution as a Factor in Forming Students' Professional Identity. *Revista Inclusiones*, 7(Especial), 481–496.  
<http://www.revistainclusiones.org/index.php/inclu/article/view/1305>

- Blynova, O., Moiseienko, V., Los, O., Burlakova, I., Yevdokimova, O., Toba, M., & Popovych, I. (2020c). Assertiveness as a Factor of Students' Choice of Behavior Strategies in Social Interaction. *Revista Inclusiones*, 7(4), 259–272.  
<http://www.revistainclusiones.org/index.php/inclu/article/view/1551>
- Blynova, O., Popovych, I., Semenova, N., Kashyrina, Ye., Ursulenko, O., & Kononenko, O. (2020d). Personality Factors of Choosing Adaptation Strategies in a Different Cultural Environment by Labor Migrants from Ukraine. *Revista Amazonia Investiga*, 9(32), 45–54.  
<http://dx.doi.org/10.34069/AI/2020.32.08.5>
- Fantalova, E. B. (2011). Uroven' sootnosheniya "tsennosti" i "dostupnosti" v razlichnykh sferakh zhizni: psikhometricheskoye issledovaniye pokazateley. Metodologiya [The level of correlation of "value" and "accessibility" in various areas of life: a psychometric study of indicators. Methodology]. *Mir Psikhologii* [World of Psychology], 2(66), 228–243.  
[http://psychlib.ru/mgppu/periodica/JPP172010/FPi-175.htm#\\$p175](http://psychlib.ru/mgppu/periodica/JPP172010/FPi-175.htm#$p175)
- Gurgová, B. Z., & Nábělková, E. (2017). Typology of undergraduate students by Academic Performance and Aspects of Achievement Motivation. *The New Educational Review*, 47(1), 17–28.  
<https://doi.org/10.15804/ner.2017.47.1.01>
- Halian, A., Halian, I., Popovych, I., Zavatskyi, Y., Semenov, O., & Semenova, N. (2021). Stress Resistance in the Situation of Uncertainty as a Factor of Development of Adaptive Ability of Medical Personnel. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12(1), 251–264.  
<https://doi.org/10.18662/brain/12.1/181>
- Halian, I., Machynska, N., Lozynska, S., Nos, L., Derkach, Yu., Prots, M., & Popovych, I. (2020a). Tolerance of uncertainty as a component of the process of life-creation of future educators. *Revista Inclusiones*, 7(Especial), 512–528.  
<http://www.revistainclusiones.org/index.php/inclu/article/view/1307>
- Halian, I. M., Halian, O. I., Gusak, L. Ye., Bokshan, H. I., & Popovych, I. S. (2020b). Communicative Competence in Training Future Language and Literature Teachers. *Revista Amazonia Investiga*, 9(29), 530–541.  
<https://amazoniainvestiga.info/index.php/amazonia/article/view/1417>
- Halian, I. M. (2017). Metodolohichni osnovy rozrizznennya typiv samorehulyatsiyi sensu tsinnosti u maybutnikh uchyteliv [Methodological Bases of Distinguishing Types of Value-Sense Self-Regulation in Future Teachers]. *Nauka i osvita* [Science and education], 9, 36–41.  
<https://doi.org/10.24195/2414-4665-2017-9-6>
- Ivanchuk, M., Kostashchuk, O., Machynska, N., & Oliynyk, M. (2020). Professional Honor in the Pedagogical Activity of the Future Teacher. *Revista Romaneasca pentru Educatie Multidimensionala*, 12(1), 291–310.  
<https://doi.org/10.18662/rrem/214>

- Kalenchuk, V. O. (2019). Sotsial'nyy status studenta yak chynnyk otsinky orhanizatsiynoyi kul'tury universytetu [Student's Social Status as a Factor of Assessment of the University's Organizational Culture"]. *Insayt: psykholohichni vymiry suspil'stva* [Insight: the psychological dimensions of society], 2, 72–77. <https://doi.org/10.32999/2663-970X/2019-2-10>
- Karandashev, V. N. (2004). *Metodologiya Shvartsa dlya issledovaniya tsennostey lichnosti: ponyatiye i metodicheskoye rukovodstvo* [Schwartz methodology for the study of personality values: concept and methodological guidance]. Rech.
- Khmil, V. V., & Popovych, I. S. (2019). Philosophical and Psychological Dimensions of Social Expectations of Personality. *Anthropological Measurements of Philosophical Research*, 16, 55–65. <https://doi.org/10.15802/ampr.v0i16.187540>
- Leontyev, D. A. (2003). *Psikhologiya znacheniya: priroda, struktura i dinamika smyslovy real'nosti* [Psychology of meaning: nature, structure and dynamics of semantic reality]. Smysl.
- Matvieieva, O., Ovcharenko, N., Korchagina, A., Kuznetsova, O., & Grineva, V. (2019). Study of Aspects Facilitating “Lifelong Learning” Competence Development in High School Students. *Revista Romaneasca pentru Educatie Multidimensionala*, 11(2), 180–197. <https://doi.org/10.18662/rrem/124>
- Miliaieva, V., Lebid, N. & Breus, Yu. (2013). *Rozrytok osobystisnobo potentsialu v umovakh suchasnoho osvith'oho seredovyshcha* [Development of personality potential in the conditions of modern educational environment]. *Visnyk Odes'kobo natsional'noho universytetu. Psykholohiya* [Bulletin of the Odessa National University. Psychology], 18(23), 53–59. [https://www.researchgate.net/publication/340488215\\_Rozvitok\\_potencial\\_u\\_osobistosti\\_v\\_umovah\\_suchasnogo\\_osvithnogo\\_seredovisa](https://www.researchgate.net/publication/340488215_Rozvitok_potencial_u_osobistosti_v_umovah_suchasnogo_osvithnogo_seredovisa)
- Mironova, M. N. (2002). *Osobystisno-semantychni determinanty rozvytku profesionalizmu vchyteha* [Personal and semantic determinants of the development of teacher professionalism] [Unpublished doctoral thesis]. Institute of Psychology named after L. S. Vygotsky. Moscow. <https://www.dissercat.com/content/lichnostno-smyslovye-determinanty-razvitiya-professionalizma-pedagoga>
- Nosov, P., Palamarchuk, I., Zinchenko, S., Popovych, I., Nahrybelnyi, Y., & Nosova, H. (2020). Development of means for experimental identification of navigator attention in ergatic systems of maritime transport. *Bulletin of the University of Karaganda – Physics*, 1(97), 58–69. <https://doi.org/10.31489/2020Ph1/58-69>
- Novozhilova, V. Ju. (2008). *Dynamika semantychnoyi sfery vykladachiv vyshchyykh navchal'nykh zakladiv z riznoyu profesiynoyu oriyentatsiyeyu* [The dynamics of the semantic sphere of higher education teachers with different professional

- orientations] [Unpublished doctoral dissertation]. Far Eastern State Transport University Khabarovsk.
- Popovych, I., Lymarenko, L., Tereshenko, N., Kornisheva, T., Yevdokimova, O., Koverznieva, A., & Aleksieieva, M. (2020a). Research on the Effectiveness of Training Technologies' Implementation in Student Theater". *Revista Inclusiones*, 7(2), 104–121.  
<http://www.revistainclusiones.org/index.php/inclu/article/view/261>
- Popovych, I., Zhigarenko, I., Losiyevska, O., Dovbenko, S., Kashyryna, Ye., Shevchenko, R., & Piletska, L. (2020b). Research of Achievement Motivation's Impact on the Career Orientations of Future Managers of Organization. *Revista Inclusiones*, 7(Especial), 247–263.  
<http://www.revistainclusiones.org/index.php/inclu/article/view/1231>
- Rogers, C. R., & Freiberg, H. J. (1994). *Freedom to Learn* (3rd edition). Pearson.
- Salihova, N. R. (2011). *Tsinnisno-semantychna rebulyatsiya zhyttya sub'yekta* [Value-semantic regulation of the life of the subject] [Unpublished doctoral dissertation]. Kazan Federal University. Kazan.
- Shevchenko, R., Popovych, I., Spytyska, L., Nosov, P., Zinchenko, S., Mateichuk, V., & Blynova, O. (2020). Comparative analysis of emotional personality traits of the students of maritime science majors caused by long-term staying at sea. *Revista Inclusiones*, 7(Especial), 538–554.  
<http://www.revistainclusiones.org/index.php/inclu/article/view/1309>
- Smith, K. (2021). Educating teachers for the future school – the challenge of bridging between perceptions of quality teaching and policy decisions: reflections from Norway. *European Journal of Teacher Education*.  
<https://doi.org/10.1080/02619768.2021.1901077>
- Tatto, M. A. (2020). Professionalism in teaching and the role of teacher education. *European Journal of Teacher Education*, 44(1), 20–44.  
<https://doi.org/10.1080/02619768.2020.1849130>
- Vaisanen, S., Pietarinen, J., Pyhalto, K., Toom, A., & Soini, T. (2018). Student teachers' proactive strategies for avoiding study-related burnout during teacher education. *European Journal of Teacher Education*, 41(3), 301–317.  
<https://doi.org/10.1080/02619768.2018.1448777>
- Zinchenko, S., Nosov, P., Mateichuk, V., Mamenko, P., Popovych, I., & Grosheva, O. (2019). Automatic collision avoidance system with many targets, including maneuvering ones. *Bulletin of the University of Karaganda – Physics*, 4(96), 69–79. <https://doi.org/10.31489/2019Ph4/69-79>