

DOI: <https://doi.org/10.34069/AI/2022.53.05.28>

How to Cite:

Yaremko, R., Vavryniv, O., Tsiupryk, A., Perelygina, L., & Koval, I. (2022). Research of content parameters of the professional self-realization of future fire safety specialists. *Amazonia Investiga*, 11(53), 288-297. <https://doi.org/10.34069/AI/2022.53.05.28>

Research of content parameters of the professional self-realization of future fire safety specialists

Дослідження змістових параметрів професійної самореалізації майбутніх фахівців з пожежної безпеки

Received: April 28, 2022

Accepted: May 26, 2022

Written by:

Roman Yaremko¹¹⁸<https://orcid.org/0000-0002-2781-7788>**Olena Vavryniv**¹¹⁹<https://orcid.org/0000-0002-5166-6887>**Andrii Tsiupryk**¹²⁰<https://orcid.org/0000-0002-2921-7778>**Lina Perelygina**¹²¹<https://orcid.org/0000-0003-2594-6321>**Ihor Koval**¹²²<https://orcid.org/0000-0002-9204-9228>

Abstract

The research purpose is a theoretical analysis and empirical study of content parameters of professional self-realization of future fire safety specialists. The author implemented a retrospective analysis and identified key parameters of the professional self-realization of a future rescuer. A summative assessment with the construction of a correlation matrix of significant relationships between key parameters was applied, and graphical visualization of the obtained data was presented. The psychophysiological state was analyzed at the training facility "Psychological training ground". Significant relationships were established within the parameters: "Propensity for risk" and "Need for recognition" ($r_s = .291$; $p \leq .01$) and "Need to set complex goals and achieve them" ($r_s = .208$; $p \leq .01$); "Will, Openness and Democracy" with "Need for recognition" ($r_s = .219$; $p \leq .01$). It was found that the vital goal-value of "Will, Openness and Democracy" has a high operational capacity and is a key value orientation in respondents' professional self-realization. It is generalized that obtained scientific facts of the empirical research should be

Анотація

Метою статті є теоретичне аналізування і емпіричне дослідження змістових параметрів професійної самореалізації майбутніх фахівців з пожежної безпеки. Реалізовано ретроспективне аналізування і виокремлено ключові параметри професійної самореалізації майбутнього рятувника. Застосовано констатувальний експеримент з побудовою кореляційної матриці значущих взаємозв'язків між ключовими параметрами і подано графічну візуалізацію отриманих даних. Здійснено заміри психофізіологічного стану з застосуванням навчально-тренувального комплексу "Психолого-тренувальний полігон". Встановлено значущі зв'язки у параметрах: "Схильність до ризику" з "Потребою у визнанні з боку інших людей" ($r_s = .291$; $p \leq .01$) та "Потребою ставити складні цілі і досягати їх" ($r_s = .208$; $p \leq .01$); "Воля, Відкритість та Демократія" з "Потребою у визнанні з боку інших людей" ($r_s = .219$; $p \leq .01$). З'ясовано, що життєва ціль-цінність "Воля, Відкритість та Демократія" має високу операційну здатність і є ключовою ціннісною орієнтацією у професійній самореалізації

¹¹⁸ Lecturer at the Department of Practical Psychology and Pedagogy, Institute of Psychology and Social Protection, Lviv State University of Life Safety, Lviv, Ukraine.

¹¹⁹ Candidate of Psychological Sciences, Lecturer at the Department of Practical Psychology and Pedagogy, Institute of Psychology and Social Protection, Lviv State University of Life Safety, Lviv, Ukraine.

¹²⁰ Doctor of Pedagogical Sciences, associate professor, associate professor of the Department of Practical Psychology and Pedagogy, Institute of Psychology and Social Protection, Lviv State University of Life Safety, Lviv, Ukraine.

¹²¹ Head of the Department of Psychology of Activity in Special Conditions, National University of Civil Defence of Ukraine, Kharkov, Ukraine.

¹²² Deputy Head of the Department of Educational, Social and Humanitarian Work and Psychological Support, Lviv State University of Life Safety, Lviv, Ukraine.



operationalized in academic and professional training of fire safety specialists.

Key words: professionalization, cadets, fire safety specialists, risk propensity, neuropsychological resilience.

Introduction

Scientists from many countries and those involved in the relevant field constantly draw attention to the professional development of an individual, his/her professionalization and professional self-realization. A competent specialist with developed competencies that meet the current needs is the basis of strong public policy of any country. The issue of professional self-realization is organically related to personal development. The maturity of Self-concept, Self-image, reflection and the level of social expectations of a person influences his/her professional self-realization. Global instability and transience, permanent military conflicts, and turbulent socio-economic policy dictate terms and requirements for the training of a future specialist. These terms and requirements affect the qualitative and quantitative parameters of academic and professional training and determine the temporal and spatial components of the educational system. The processes of social democratization and humanization taking place in Ukraine directly affect the professional self-determination of the young personality and content parameters of self-realization of future specialists.

Hypothesis. It is assumed that the study of content parameters of the professional self-realization of future fire safety specialists will allow obtaining important scientific facts associated with respondents' motivational and affective-voluntary dimensions, which should be implemented in academic and professional training.

Purpose. To conduct theoretical analysis and empirical study of content parameters of the professional self-realization of future fire safety specialists.

Literature review

The phenomenon of professional self-realization was elucidated in psychological literature through foundational works by K. Horney (1993), A. Rean (2008), C. Rogers (1959). The issue of human self-realization and self-actualization was considered in terms of

respondents. In general, it is noted that scientific facts of empirical research are expedient to operationalize in the training-professional preparation of specialists in fire safety.

Ключові слова: професіоналізація, курсанти, фахівці служби пожежної безпеки, готовність до ризику, нервово-психічна стійкість.

humanistic psychology. At the same time, the phenomenon of self-realization needs to be studied in the context of psychological practice. The phenomenon of self-realization is characterized by both philosophical and psychological aspects. The concept of self-realization is partly identical to self-actualization. It was found that an essential component of self-realization is a person's demonstrative goal setting of his activity. Self-realization begins with social self-determination and continues until the end of a person's life (Rean, 2008).

Factors determining the process of self-realization are human needs, interests, goals, and ideals. The need for personal self-realization can be considered fundamental. Its main essential feature is polyvalence, namely, the possibility of satisfying it in almost all spheres of life. Other determinants of the self-realization phenomenon are internal aspirations, motives of an individual, his/her internal need, and external drivers that act breaking through internal causes. The individual can be forced into particular activity, but one cannot be forced to realize oneself. Thus, internal activity is an essential prerequisite for a future specialist's self-realization. The study of gender aspects of self-realization, motivational factors of self-realization, in particular, self-realization as a factor of mental health, sparks academic interest (Malimon, 2018).

A person can fully realize and implement all of his/her aspirations and opportunities only if one oversteps the aforementioned personal boundaries. However, ensuring conditions for going beyond one's "Self" can be challenging for some individuals. Sometimes a person should, on the contrary, become part of something major and global. An individual often has no resources to confront reality, hence merges into it. S. Rubynshtein (2003) justified that a person does not resist reality but is the center of his being, and his whole life flows in this reality. Complete detection (internalization) is a determinant of intrapersonal transformation, and this aspect describes human life as a unique and phenomenological event (Rubynshtein, 2003).

In addition to the above, A. Kovaleva (2005) believes that self-realization is the process of personality becoming, which results in the emergence of values – goals, directions, and ways of activity adequate for individual abilities, and the ability to independently and authentically realize own mission through goal setting (Kovaleva, 2005). Summing up, professional self-realization is a person's inner desire to exert the most influence on himself and keep as much reflected subjectivity in professional activity as possible.

Professional self-realization as a way of personal functioning and development is reduced to three main classes of mental phenomena, that is, it can act as a process, state (review at a certain stage), and property of the subject. This fact is highlighted and substantiated in the studies of psychological phenomena (Blynova et al., 2020b; Popovych et al., 2021b). Self-realization as a process is a predominant class of mental phenomena and allows a comprehensive and systemic study of human life. Therefore, the subject's self-realization combines the awareness, choice, and implementation of those aspects of individuality that contribute to his self-expression, the realization of potential, the formation of a personal system of narratives, values, motives, ideas about himself, setting goals, and determining ways to achieve them and creating himself (Maksymenko & Osyodlo, 2019). Researchers of professional self-realization attribute the following to the main formal dynamic characteristics: maturity degree, i.e., awareness, integrity, availability and development level of the life and professional program and self-determination; breadth, i.e., a variety of ways to achieve professional goals and decision-making; heterogeneity/homogeneity of the system of principles, values, ideals, goals, motives, expectations; situational variability/stability – susceptibility to random external influences, changes in the individual state, mood; intensity of the self-realization process, i.e., speed and productivity; the nature of dynamics, i.e., progressive, abrupt, cyclic; success, effectiveness, efficiency, adequacy of professional self-realization – direct indicators, in particular, the degree of satisfaction with various spheres of professional activity and life as a whole, subjective quality of life, well-being and happiness; indirect indicators, i.e., rate of job burnout (Maksymenko & Osymenko, 2019).

Content parameters of the professional self-realization of future fire safety specialists are considered components and mental formations that belong to the rescuer's motivational,

behavioral, regulatory, and operational spheres. The level and maturity of the mentioned parameters influence competence and the implementation of emergency rescue operations.

Materials and methods

Methodology. The methodological output data of the empirical study of content parameters of the professional self-realization of future fire safety specialists have rendered professional self-realization as an integrated complex of needs, interests, ideals, and purpose of professional activity. The listed complex of mental formations in the content dimension is a set of motivational, behavioral, regulatory, and operational components in the context of professional training (Blynova & Kruglov, 2019). Popovych et al., 2020b; Vavryniv, 2020). Fourth-year cadets are at the final stage of forming professional self-realization and have a high operational readiness to perform professional duties. In constructing a summative research strategy, the author has used the experience of experimental studies of the professional sphere of an individual (Halian, 2019), adaptation (Blynova et al., 2020a; Popovych et al., 2020a; 2021c) and self-regulation of specialists in the modified operational climate (Hudimova, 2021; Hudimova et al., 2021; Kharytonov et al., 2021; Kuzikova et al., 2020; Popovych et al., 2020c; Shevchenko et al., 2020), a predictive component of professional activity (Plokhikh, 2021; Plokhikh et al., 2021; Popovych et al., 2021a) in the influence of the corporate culture of the educational system on the formation of professional self-realization (Blynova et al., 2020c). Since rescue work is associated with extreme conditions of work performance, studies covering extreme conditions and excessive physical and psycho-emotional loads of respondents were taken into account (Nosov et al., 2020a; 2020b; Zinchenko et al., 2019; 2022). All the analyzed studies made it possible to formulate a summative strategy for clarifying content parameters of the professional self-realization of future fire safety specialists.

Participants. In 2021, from February to December, an empirical study was organized following the summative strategy. The study involved eight groups of fourth and fifth-year cadets (n=198) who were in training, specialty 261 "Fire Safety", at Lviv State University of Life Safety (Lviv, Ukraine). The predominant part of the respondents was male (n=183; 92.42%), and the rest was female (n=15; 7.58). The sample group's average age was 20.87 years (SD=1.75, range 20-23 years). The sample was

randomized and comprised all groups obtaining the relevant degree.

Organization of Research. Throughout the second term of 2020 – 2021 and the first term of the 2021 – 2022 academic years, a summative assessment of empirical data was carried out. The questionnaire collected respondents' biographical data. The following methods facilitated the assessment of content parameters of the study of the professional self-realization of future fire safety specialists: "Definition of life goals and values of the personality" ("LGVP") (Ivanov & Kolobova, 2002); "The study of the motivational profile of personality" ("MPP") (Richie & Martin, 2004) ("MPP") (Richie & Martin, 2004); methodology "Diagnostics of personal risk propensity" ("PSK") (Schubert, 2002); training facility "Psychological and training ground" (Lviv State University of Life Safety, 2022).

The methodology "Definition of life goals and values of the personality" ("LGVP") (Ivanov & Kolobova, 2002) was applied to establish the life values of the respondents. It is a kind of verbal projective test. The methodology relies on humanistic initial provisions, which state that personality is a product of socialization and develops through the assimilation of social norms approved in a particular society. The psychodiagnostic test defines fifteen life goals-values of the cadets: Will, Openness and Democracy ("WOD"); Safety and Security ("SS"); Health ("H"); Financial Security ("FS"); Power and Influence ("PI"); Personal Growth ("PG"); Service to People ("SL"); Popularity ("P"); Attachment and Love ("AL"); Attractiveness ("A"); Sense of Satisfaction ("SS"); Interpersonal Relationships ("IR"); Spiritual Culture ("SC"); Autonomy ("A"); Spiritual-Religious Life ("SRL"). The homogeneity of the responses was recorded: α -Cronbach=.854

"The study of the motivational profile of personality" ("MPP") (Richie & Martin, 2004) determines the needs, which are organically combined in the phenomenon of professional self-realization and make up its core. The MPP questionnaire consists of twelve scales: Need for high wages ("HW"); Need for good working conditions ("GWC"); Need for work structuring ("WS"); Need for social contacts ("SC"); Need for stable relationships ("SR"); Need for recognition ("R"); Need to set and achieve challenging goals ("CACG"); Need to manage others ("MO"); Need for the diversity of feelings ("DF"); Need to be creative ("C"); Need for self-

improvement ("SI"); Need to be in demand ("D"). The homogeneity of the empirical data was observed: α -Cronbach = .867

The next technique is "Diagnostics of personal risk propensity" ("PSK") (Schubert, 2002). "PSK" identifies the risk appetite of the respondents and establishes the extent to which risk is necessary and appropriate. The respondents answered twenty-five questions using a bipolar five-point Stapel scale. The respondents were grouped by levels: low risk propensity – too cautious; average risk propensity; risk appetite. The homogeneity coefficient was α -Cronbach = .912

Undergoing the training complex "Psychological training ground" was a critical stage of the psychodiagnostic test (Lviv State University of Life Safety, 2022). The complex is a time-tested training ground developed by the academic staff of Lviv State University of Life Safety (Lviv, Ukraine). "Psychological training ground" contributed to analyzing the respondents' psychophysiological state under realistic conditions. The respondents passed through the following elements of the training ground: a gym for additional physical activity; a training path that combined a thermal zone (checking a person's endurance under elevated temperature in the room. The maximum temperature is – +60°C), a maze (to improve orientation in different structures and narrow manholes of different configurations); an apartment layout and production area (to simulate actual fire conditions, non-standard situations, and effective search for victims).

Procedures. The study of content parameters of the professional self-realization of future fire safety specialists rested on a summative assessment with the establishment of reliable correlational relationships. All respondents filled in the questionnaires, "LGVP", "MPP", "PSK", and passed through the complex "Psychological training ground". The research adheres to the principles of awareness, voluntariness, and confidentiality. These principles have ensured the reliability of answers, discipline, and responsibility of the respondents during the study. A causal relationship was established between the goals-values which took three top positions and the scales of the motivational profile and the respondents' risk propensity.

Statistical Analysis. To conduct statistical and mathematical data processing, "SPSS" v. 23.0 was applied. The following operations were carried out: typical frequency descriptive characteristics were

determined; reliable relationships were identified using the Spearman coefficient (r_s); differences between the ranks of the studied parameters were established according to the Mann–Whitney U-test; differences in the levels of $p \leq 0.05$ and $p \leq 0.01$ were analyzed.

Results and discussion

Tabl. 1 provides empirical data according to the method “Definition of life goals and values of the personality” (“LGVP”) (Ivanov & Kolobova, 2002). Fifteen life goals-values were ranked, and frequency descriptive characteristics were presented: M – arithmetic mean; Sx – sample standard error; SD – standard deviation.

Table 1.

Ranking and frequency descriptive characteristics of respondents’ life goals-values according to “LGVP” (n=198)

Scale	R	M	Sx	SD
Will, Openness and Democracy (“WOD”)	I	21.12	.11	4.82
Safety and Security (“SS”)	II	19.20	.11	4.31
Health (“H”)	III	17.15	.11	3.96
Financial Security (“FS”)	IV	15.67	.11	3.32
Power and Influence (“PI”)	V	12.22	.10	3.01
Personal Growth (“PG”)	VI	11.56	.10	2.96
Service to People (“SP”)	VII	10.09	.10	2.32
Popularity (“P”)	VIII	9.45	.04	2.21
Attachment and Love (“AL”)	IX	7.34	.04	2.06
Attractiveness (“A”)	X	6.57	.03	1.92
Sense of Satisfaction (“SE”)	XI	5.98	.03	1.81
Interpersonal Relationships (“IR”)	XII	4.23	.02	1.36
Spiritual and Religious Life (“SRL”)	XIII	4.05	.02	1.02
Spiritual Culture (“SC”)	XIV	2.80	.01	.41
Autonomy (“A”)	XV	1.23	.01	.26

Source: Personal elaboration, 2022.

Note: R – rank; M – arithmetic mean; Sx – sample standard error; SD – standard deviation.

We state that vital goals-values have the highest rating: “WOD” – I rank; “SS” – II rank; “H” – III rank. According to the Mann–Whitney U-test, differences were found between the three ranks. In particular, the statistical validity of differences is observed between the first and second ranks ($U=14.81$; $p \leq 0.01$); second and third ranks

($U=18.22$; $p \leq 0.01$); first and third ranks ($U=78.81$; $p \leq 0.01$).

Tabl. 2 provides empirical results of frequency descriptive characteristics of other content parameters of cadets’ professional self-realization under “MPP” and “PSK”.

Table 2.

Frequency descriptive characteristics under “MPP” and “PSK” (n=198)

Scale	M	Sx	SD
“MPP”			
Need for high wages (“HW”)	51.31	.15	1.65
Need for good working conditions (“GWC”)	43.32	.14	1.55
Need for work structuring (“WS”)	61.23	.18	2.12
Need for social contacts (“SC”)	49.34	1.16	1.74
Need to form stable relationships (“SR”)	48.22	.16	1.69
Need for recognition (“R”)	62.41	.20	2.21
Need to set and achieve challenging goals (“SACG”)	56.22	17.	1.81
Need to manage others (“MO”)	40.41	.15	1.75
Need for the diversity of feelings (“DF”)	43.61	.15	1.79
Need to be creative (“C”)	47.62	.16	1.64
Need for self-improvement (“SI”)	55.61	.18	2.10
Need to be in demand (“D”)	50.81	19.	2.02
“PSK”			
Propensity for Risk (PR)	22.01		3.95%

Source: Personal elaboration, 2022.

Note: M – arithmetic mean; Sx – sample standard error; SD – standard deviation.

The obtained parameters of frequency descriptive characteristics under “MPP” and “PSK” are generally within the approbation norms, as proposed by the authors of the methods, and within the results received by the researchers using the relevant tools in similar studies (Bedan et al., 2021). It is established that the “PSK” method (Schubert, 2002) states that (n=136; 68.69%) of the subjects are ready for risk, (n=36; 18.18%) show average indicators, which means that such respondents will risk when the risk is paid, and (n=26; 13.13%) of future fire safety specialists are too cautious.

The study of changes in the psychophysiological state took place at the academic and training complex “Psychological training field”. As a result, 36.92% of the participants remained calm and focused, with a confident facial expression, even breathing, unchanged face color, and their movements were well-coordinated, accurate, and gentle. 22.34% had a slight excitement, a frowned forehead, clenched lips, and their breathing was somewhat hurried but rhythmic. In

20.55% there was a slight redness (pallor) of the skin, quite coordinated movements, but with some effort, and a small tremor of the fingers. 14.19% felt moderate excitement; they had stained jaws, hurried and irregular breathing, expressively red or pale faces, moderately strained movements, clumsiness, and tremor of the fingers. 3.00% of the respondents had intense excitement, gritted teeth, noticeable asymmetry of facial expressions, a sharp increase in breathing, the face covered with spots and significant sweating, pronounced stiffness, and movements not proportional to the effort. Note that the average score of respondents’ successes in passing through the training complex was: 5.0-4.1 – 29.44%; 4.0-3.1 – 38.32%; 3.0 and below – 32.24%.

Correlational relationships between content parameters of professional self-realization and motivational profile of the respondents were determined. Tabl. 3 presents the values of the relationships in the form of a correlation matrix.

Table 3.
Correlation matrix of the study of professional self-realization (n = 198)

Motivational profile parameters	Content parameters of professional self-realization			
	WOD	SS	H	PR
Need for high wages (“HW”)	.133*	.092*	.031	.086*
Need for good working conditions (“GWC”)	.038	.086*	.093*	.041
Need for work structuring (“WS”)	-.059	.014	.086*	.032
Need for social contacts (“SC”)	.102*	.063	.027	.052
Need for stable relationships (“SR”)	.101*	.083*	.032	.096*
Need for recognition (“R”)	.219**	.042	.083*	.291**
Need to set and achieve challenging goals (“SACG”)	.044	-.035	-.069	.208**
Need to manage others (“MO”)	-.089*	-.038	.049	-.086*
Need for the diversity of feelings (“DF”)	.028	-.025	.071	.084*
Need to be creative (“C”)	.097*	-.042	.031	.018
Need for self-improvement (“SI”)	.089*	.065	.049	.071
Need to be in demand (“D”)	.049	.085*	.089*	-.023

Source: Personal elaboration, 2022.

Note: WOD – Will, Openness and Democracy; SS – Safety and Security; H – Health; PR – Propensity for Risk; * – p<.05; ** – p<.01.

Correlation pleiades in the study of professional self-realization of future fire safety specialists were represented graphically. It allowed the author to visually outline reliable positive and

negative correlations of the dimensions concerned (Fig. I).

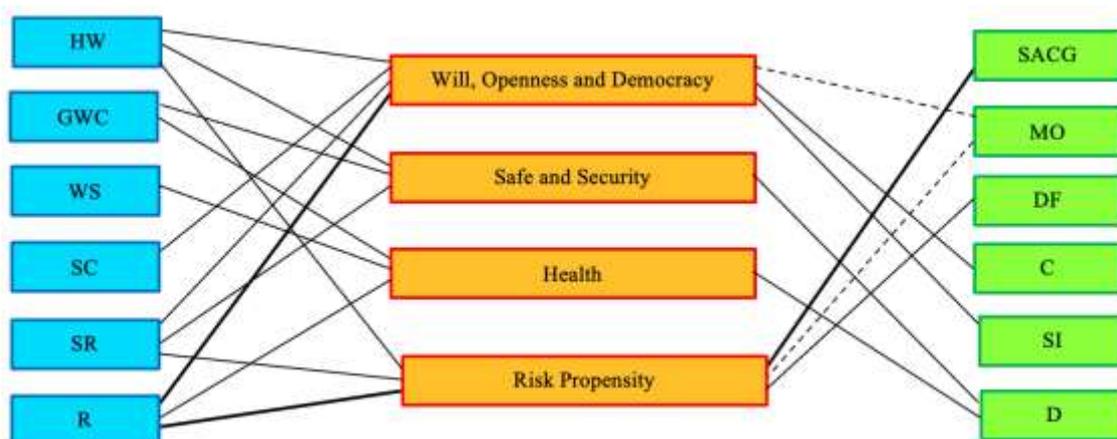


Figura 2. Correlation pleiades of parameters of the professional self-realization of future fire safety specialists (n=198)
Source: Personal elaboration, 2022.

Note: - - - - - negative correlations under $p \leq .01$; - - - - - negative correlations under $p \leq .05$; ——— positive correlations under $p \leq .05$; ——— positive correlations under $p \leq .01$; HW – Need for high wages; GWC – Need for good working conditions; WS – Need for work structuring; SC – Need for social contacts; SR – Need to form stable relationships; R – Need for recognition; SACG – Need to set and achieve challenging goals; MO – Need to manage others; DF – Need for the diversity of feelings; C – Need to be creative; SI – Need for self-improvement; PR – Propensity for Risk.

It was found that the following parameters have the most reliable correlations: “WOD” – seven; “PR” – six ($p \leq .05$; $p \leq .01$). Note that “Propensity for risk” has two strongest ties: “Need for recognition” ($r_s = .291$; $p \leq .01$) and “Need to set complex goals and achieve them” ($r_s = .208$; $p \leq .01$). Another tie of the same level was also fixed in a pair of parameters “Will, Openness and Democracy” and “Need for recognition” ($r_s = .219$; $p \leq .01$). Established relationships ($p \leq 0.05$) are explained by the fact that “Propensity for risk” and “Will, Openness and Democracy” are stimulated by a powerful social need for recognition. In addition, “PR” has another stimulus – “SACG”, which is the strongest one and indicates that the need to perform complex tasks and achieve the goal is participants’ life orientation. This plexus of ties shows that a formed need to set complex goals and achieve them, together with the social need for recognition, is a powerful incentive in developing professional self-realization of future fire safety specialists. Other reliable ties at $p \leq .05$ were established, among which fifteen were positive: WOD&HW ($r_s = .133$; $p \leq .05$); WOD&SC ($r_s = .102$; $p \leq .05$); WOD&SR ($r_s = .101$; $p \leq .05$); WOD&C ($r_s = .097$; $p \leq .05$); WOD&SI ($r_s = .089$; $p \leq .05$); SS&HW ($r_s = .092$; $p \leq .05$); SS&GWC ($r_s = .086$; $p \leq .05$); SS&SR ($r_s = .083$; $p \leq .05$); SS&D ($r_s = .085$; $p \leq .05$); H&GWC ($r_s = .093$; $p \leq .05$); H&WS ($r_s = .086$; $p \leq .05$); H&R ($r_s = .083$; $p \leq .05$); H&D ($r_s = .089$; $p \leq .05$); PR&HW ($r_s = .086$; $p \leq .05$); PR&SR ($r_s = .096$; $p \leq .05$); PR&DF ($r_s = .084$; $p \leq .05$), and two were negative: WOD&MO ($r_s = -.089$; $p \leq .05$);

PR&MO ($r_s = -.086$; $p \leq .05$). Obtained correlations result from the fact that professional self-realization depends on the maturity of many content parameters that shape an integrated set of values, needs, motives, and competencies of future fire safety specialists. It was found that the vital purpose-value “Will, Openness and Democracy” has a high operational capacity and is a key value orientation in respondents’ professional self-realization. It is essential to pay attention to significant negative correlations ($p \leq .05$), which in both cases are related to the “Need to manage others”. The beforementioned indicates that graduate cadets predominantly orient towards mastering professional content components rather than formal subordination and desire to manage.

However, despite best practices in studying professional self-realization, scientists of various branches of science have poorly covered the issue of professional self-realization of future fire safety specialists. We consider the analysis of content parameters of the professional self-realization of future fire safety specialists timely and promising since the competence of rescuers and, accordingly, the quality of emergency rescue operations will partly depend on professional success.

The attempt of V. Bedan et al., (2021) to establish motivational factors of the professional self-realization of the individual is relevant to this paper. It was found that two groups, one with a high and the other with a low level of

professional self-realization, showed radically different motivational profiles. Persons with a high level of professional self-realization have a dominant motive for constant self-improvement and recognition, and persons with a low level – for good working conditions and high wages. The indicators of the former group confirm the fact that a “need for recognition” ($r_s=.291$; $p\leq.01$) is a content parameter of professional self-realization with the maximum value. The modern study of gender characteristics of professional self-realization of the individual singled out four factors represented by dichotomous pairs: adaptation – rejection, self-reflection – dissatisfaction, personal maturity – immaturity, volitional regulation – emotional weakness (Tsekhmister et al., 2021). These factors empirically confirm theoretical constructs of professional self-realization, which have been analyzed and summarized at the initial stage of the present research. We recognize that this research, to a large extent, also refers to gender one with a pronounced male differentiation.

Studies of professional self-realization in other areas of human activity, in particular pedagogical, established that a relationship between social status, recognition, and individual motivation is fundamental (Yağan et al., 2022). Such scientific facts are considered consistent with those ascertained in the present contribution towards the dominant need for recognition.

Obtained scientific facts of the study of content parameters of the professional self-realization should be operationalized in academic and professional training of fire safety specialists.

Conclusions

1. The article analyzed and justified that the factors determining the process of self-realization are human needs, interests, goals, and ideals. The author states that the need for personal self-realization is fundamental. It was found that content parameters of the professional self-realization of future fire safety specialists comprise such components and mental formations that belong to the motivational, behavioral, regulatory, and operational spheres of the rescuer.
2. It was noted that according to the ranking of life goals-values, the following have the highest rating: “Will, Openness and Democracy” – I rank; “Safety and Security” – II rank; “Health” – III rank.
3. It was established that the strongest ties are found in “Risk propensity”, “Need for recognition” ($r_s=.291$; $p\leq.01$) and “Need to

set complex goals and achieve them” ($r_s=.208$; $p\leq.01$). Such a tie was also fixed in the vital goal-value “Will, Openness and Democracy” and “Need for recognition” ($r_s=.219$; $p\leq.01$). The study explains that a strong social need for recognition stimulates “Risk propensity” and “Will, Openness and Democracy”. This plexus of ties shows that a formed need to set complex goals and achieve them, together with the social need for recognition, is a powerful incentive in shaping the professional self-realization of future fire safety specialists.

It was found that the vital goal-value “Will, Openness and Democracy” has a high operational capacity and is a key value orientation in respondents’ professional self-realization.

The author proved the hypothesis, achieved the goal; obtained scientific facts should be implemented in academic and professional training of fire safety specialists.

Bibliographic references

- Bedan, V., Brynza, I., Budiianskyi, M., Vasylenko, I., Vodolazska, O., & Ulianova, T. (2021). Motivative Factors of Professional Self-Realization of the Person. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12(2), 18-37. <https://doi.org/10.18662/brain/12.2/189>
- Blynova, O., Chervinska, I., Kazibekova, V., Bokshan, H., Yakovleva, S., Zaverukha, O., & Popovych, I. (2020a). Social and Psychological Manifestations of Professional Identity Crisis of Labor Migrants. *Revista Inclusiones*, 7(3), 93-105. <http://www.revistainclusiones.org/index.php/inclu/article/view/1318>
- Blynova, O., Kisil, Z., Tkach, T., Semenova, N., Semenov, O., Kamisnka, S., & Popovych, I. (2020b). Psychological manifestations of professional marginality of future social welfare professionals. *Revista Inclusiones*, 7(SI), 218–233. <http://www.revistainclusiones.org/index.php/inclu/article/view/1229>
- Blynova, O., & Kruglov, K. (2019). The value of social capital for the psychological well-being of employees. *Insight: the psychological dimensions of society*, 1, 72–78. <https://doi.org/10.32999/2663-970X/2019-1-11>
- Blynova, O., Lappo, V., Kalenchuk, V., Agarkov, O., Shramko, I., Lymarenko, L., & Popovych, I. (2020c). Corporate Culture of a Higher Education Institution as a Factor in Forming Students’ Professional Identity.

- Revista Inclusiones, 7(SI), 481-496.
<http://www.revistainclusiones.org/index.php/inclu/article/view/1305>
- Halian, I. M. (2019). Personal determinants of responsibility of future educators. *Insight: the psychological dimensions of society*, 1, 15–21. <https://doi.org/10.32999/2663-970X/2019-1-2>
- Horney, K. (1993). *The neurotic personality of our time*. Moscow: Progress-Univers. <http://psylib.org.ua/books/hornk02/index.htm>
- Hudimova, A. Kh. (2021). Psychological well-being and social media users' behavioral online patterns in everyday life and during COVID-19 pandemic. *Insight: the psychological dimensions of society*, 5, 133–147. <https://doi.org/10.32999/2663-970X/2021-5-9>
- Hudimova, A., Popovych, I., Baidyk, V., Buriak, O., & Kechyk, O. (2021). The impact of social media on young web users' psychological well-being during the COVID-19 pandemic progression. *Revista Amazonia Investiga*, 10(39), 50–61. <https://doi.org/10.34069/AI/2021.39.03.5>
- Ivanov, P., & Kolobova, E. (2002). Definition of life goals and values of the personality. In N. P. Fetiskin (Ed.). *Socio-psychological diagnostics of personality development and small groups*. Moscow: Institute of Psychotherapy. http://www.miu.by/kaf_new/mpp/105.pdf
- Kharytonov, E., Kharytonova, O., Kolodin, D., Tkalych, M., Larkin, M., Tolmachevska, Y., Rojas-Bahamon, M.J., Arbeláez-Campillo, D.F., & Panchenko, O.I. (2021). Distance learning in the conditions of Covid-19: problems and prospects of their solution. *Amazonia Investiga*, 10(48), 157-169. <https://doi.org/10.34069/AI/2021.48.12.17>
- Kovaleva, A. V. (2005). Pedagogical conditions of self-realization of high school students in the educational process of secondary school. (Extended abstract of candidate's thesis). Volodymyr Dahl East-Ukrainian National University. Luhansk. http://catalog.library.tnpu.edu.ua:8080/library/DocDescription?doc_id=157955
- Kuzikova, S., Kuzikov, B., Shcherbak, T., Blynova, O., Vavryniv, O., Khmiliar, O., & Popovych, I. (2020). Research of predisposition to risk of participants of extreme sports. *Revista Inclusiones*, 7(SI), 43–58. <http://www.revistainclusiones.org/index.php/inclu/article/view/1740>
- Lviv State University of Life Safety (2022). Psychological training ground. Lviv: LSULS. <https://ldubgd.edu.ua/content/psihologo-trenuvalniy-poligon>
- Malimon, L. (2018). Professional Self-Realization as Mentalhealth Factor of Public Service Personell. *Psychological Prospects Journal*, 31, 195–206. <https://doi.org/10.29038/2227-1376-2018-31-195-206>
- Maksymenko, S., & Osyodlo, V. (2019). Structure and personal determinants of professional self-realization of the subject. *Problems of modern psychology*, 8, 3–19. <http://journals.uran.ua/index.php/2227-6246/article/view/162000>
- Nosov, P. S., Popovych, I. S., Cherniavskiy, V. V., Zinchenko, S. M., Prokopchuk, Y. A., & Makarchuk, D. V. (2020a). Automated identification of an operator anticipation on marine transport. *Radio Electronics, Computer Science, Control*, 3, 158–172. <https://doi.org/10.15588/1607-3274-2020-3-15>
- Nosov, P. S., Zinchenko, S. M., Popovych, I. S., Ben, A. P., Nahrybelnyi, Y. A., & Mateichuk, V. M. (2020b). Diagnostic system of perception of navigation danger when implementation complicated maneuvers. *Electronics, Computer Science, Control*, 1, 146-161. <https://doi.org/10.15588/1607-3274-2020-1-15>
- Plokhikh, V. V. (2021). Assessment of subject's readiness for urgent actions using the variations of sensorimotor response tasks. *Insight: the psychological dimensions of society*, 5, 46–65. <http://doi.org/10.32999/2663-970X/2021-5-4>
- Plokhikh, V., Popovych, I., Zavatska, N., Losiyevska, O., Zinchenko, S., Nosov, P., & Aleksieieva, M. (2021). Time Synthesis in Organization of Sensorimotor Action. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12(4), 164–188. <https://doi.org/10.18662/brain/12.4/243>
- Popovych, I., Arbeláez-Campillo, D. F., Rojas-Bahamón, M. J., Burlakova, I., Kobets, V., & Bokshan, H. (2021a). Time perspective in the professional activity of specialists of economic sphere. *Cuestiones Políticas*, 39(69), 424–445. <https://doi.org/10.46398/cuestpol.3969.27>
- Popovych, I., Blynova, O., Zhuravlova, A., Toba, M., Tkach, T., & Zavatska, N. (2020a). Optimization of development and psycho-correction of social expectations of students of foreign philology. *Revista Inclusiones*, 7(SI), 82-94.



- <https://revistainclusiones.org/index.php/inclu/article/view/1657>
- Popovych, I., Chervinskyi, A., Kazibekova, V., Chervinska, I., & Machynska, N. (2021b). Empirical research of the typology of social expectations of the personality. *Amazonia Investiga*, 10(43), 112–122. <https://doi.org/10.34069/AI/2021.43.07.11>
- Popovych, I., Shevchenko, A., Galvez, L. M., & Klenina, K. (2021c). Research of the relationship between social desirability and value orientations of adolescents. *Revista Notas Históricas y Geográficas*, 26(1), 241–268. <https://www.revistanotashistoricasygeograficas.cl/index.php/nhyg/article/view/339>
- Popovych, I., Tkach, T., Sirko, R., Rudenko, L., Sokolova, H., Slobodianyk, V., & Blynova, O. (2020b). Research on Mental States of Anxiety of First-Year Cadets of the University of Life Safety. *Revista Inclusiones*, 7(SI), 264-278. <http://www.revistainclusiones.org/index.php/inclu/article/view/1233>
- Popovych, I., Zhigarenko, I., Losiyevska, O., Dovbenko, S., Kashyryna, Ye., Shevchenko, R., & Piletska, L. (2020c). Research of Achievement Motivation's Impaction the Career Orientations of Future Managers of Organization. *Revista Inclusiones*, 7(SI), 247-263. <http://www.revistainclusiones.org/index.php/inclu/article/view/1231>
- Rean, A. A. (2008). Psychology of personality adaptation. St. Petersburg: Prime-EUROSNAK. <http://portal.iapm.edu.ua/portal/media/books/1fd5366754d940159f1525e47aaaa992.pdf>
- Richie, S., & Martin, P. (2004). Motivation management. Moscow: UNITY-DANA. http://www.colloquium.ru/test/motivation/di_scr.html
- Rogers, C. R. (1959). A Theory of Therapy, Personality, and Interpersonal Relationships: As Developed in the Client-Centered Framework. In S. Koch (Ed.), *Psychology: A Study of a Science. Formulations of the Person and the Social Context* (Vol. 3, pp. 184-256). New York: McGraw Hill. [https://www.scirp.org/\(S\(351jmbntvnsjt1aadkposzje\)\)/reference/ReferencesPapers.aspx?ReferenceID=1569786](https://www.scirp.org/(S(351jmbntvnsjt1aadkposzje))/reference/ReferencesPapers.aspx?ReferenceID=1569786)
- Rubynshtein, S. L. (2003). *Fundamentals of General Psychology*. St. Petersburg: Piter.
- Schubert, G. (2002). Diagnosis of the level of personal readiness for risk. In N. P. Fetiskin (Ed.), *Socio-psychological diagnostics of personality development and small groups*. Moscow: Institute of Psychotherapy. <https://studfile.net/preview/5287941/page:4/>
- Shevchenko, R., Cherniavskiy, V., Zinchenko, S., Palchynska, M., Bondarevich, S., Nosov, P., & Popovych, I. (2020). Research of psychophysiological features of response to stress situations by future sailors. *Revista Inclusiones*, 7(SI), 566–579. <http://www.revistainclusiones.org/index.php/inclu/article/view/1780>
- Tsekhmister, Y. V., Shestopal, I., & Papusha, V. (2021). Características de gênero da auto-realização profissional da personalidade de uma mulher. *Laplace Em Revista*, 7(3A), p.452-462. <https://doi.org/10.24115/S2446-6220202173A1437p.452-462>
- Vavryniv, O. S. (2020). Empirical study of the professional empathy of future rescuers. *Insight: the psychological dimensions of society*, 4, 57–72. <https://doi.org/10.32999/2663-970X/2020-4-4>
- Yağan, E., Özgenel, M., & Baydar, F. (2022). Professional self-understanding of teachers in different career stages: a phenomenological analysis. *BMC Psychol*, 10, 57. <https://doi.org/10.1186/s40359-022-00769-w>
- 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 university of Karaganda*, 96(4), 69-79. <https://physics-vestnik.ksu.kz/apart/2019-96-4/8.pdf>
- Zinchenko, S., Tovstokoryi, O., Nosov, P., Popovych, I., & Kyrychenko, K. (2022). Pivot Point position determination and its use for manoeuvring a vessel. *Ships and Offshore Structures*, <https://doi.org/10.1080/17445302.2022.2052480>