



RESULTS OF DIAGNOSING THE LEVEL OF DEVELOPMENT OF THE COGNITIVE COMPONENT OF THE PROFESSIONAL COMPETENCE OF CIVIL SECURITY SPECIALISTS

Viktor Mykhailov ¹

¹ Candidate of Science in Public Administration, Associate Professor, Deputy Head of Research, Institute of Public Administration and Research in Civil Protection, Ukraine, <https://orcid.org/0000-0002-5629-1500>, e-mail: mvn2006@ukr.net

Abstract.

Relevance: The need to develop the professional competence of specialists in civil security is determined by the tasks of increasing the capacity and strengthening the operational readiness of civil defense forces to ensure the stability of the state during crisis situations of various origins. The readiness of these specialists for professional activity is a personal basis of their professionalism, which must be developed in the context of postgraduate education.

Aim: to analyze the development of the cognitive component of the professional competence of specialists in civil security in the system of postgraduate education.

Methods: theoretical (systematization of scientific and pedagogical literature); complex (analysis and synthesis); empirical (study and analysis of pedagogical experience, questionnaires, expert evaluation); mathematical; statistical.

Results: the development of the cognitive component of the professional competence of specialists in civil security in the process of improving their professional skills is analyzed.

Conclusion: there is a need to create and implement the author's pedagogical system of professional development of specialists in civil security in order to increase the level of development of their professional competence.

Keywords: *advanced training of specialists; civil security, postgraduate education, professional competence*

Introduction. Due to the significant risk of emergencies, in particular the armed conflict in the east of our country, the problem of improving the professional competence of civil security professionals is acute. The readiness of specialists for professional activity is the personal basis of their professionalism, which must be developed in the context of postgraduate education. The practice of professional development of this category of specialists, as shown by the diagnostic study of its condition, is quite controversial and requires a thorough study of the features and experimental

confirmation of existing problems (Mykhailov, 2020).

Sources. Theoretical analysis of the researched problem was carried out on the basis of scientific works on professional training of specialists in the field of security (P. Volyansky, I. Kobylanska, M. Kozyar, M. Koval, O. Kosolapov, R. Kravchenko, E. Litvinovsky, Y. Nenko, O Povstin, O. Samoilenko, R. Sirko, Y. Taimasov, A. Terentyeva, V. Yurchenko and others). The results of scientific research (I. Anosov, L. Baiborodova, S. Honcharenko, L. Zhuk, A. Novikov, D. Novikov, I. Obratsov,

V. Tusheva, A. Chernyavska, F. Chmilenko and others) show a significant amount of scientific works on the organization, conduct and processing of experimental results and confirm the importance of organizing and conducting empirical research. However, the process of developing the professional competence of civil security specialists in the process of improving their professional skills requires further study.

The article aim to analyze the development of the cognitive component of professional competence of civil security specialists in the system of postgraduate education.

Methods: theoretical (systematization of scientific and pedagogical literature, analysis and synthesis); empirical (study and analysis of pedagogical experience, questionnaires, expert evaluation); mathematical; statistical.

Results and discussion. Professional competence of civil security specialists is an integrated characteristic of the individual, which reflects the level of professional knowledge, skills and abilities based on the components of civil protection, and affects the success of professional activity (Mykhailov, 2020). It was found that the components of professional competence of the studied category of specialists are cognitive (theoretical and technological knowledge), activity (analytical and synthetic skills, managerial and communicative knowledge and skills) and personal values (professionally important personality traits). In turn, it provides a variety of forms and methods of pedagogical influence on professionals in order to improve their skills (Mykhailov, 2021). Therefore, the complexity and multifaceted nature of the subject we studied determined the need for a comprehensive pedagogical experiment.

The experimental study involves: studying the current state of the problem of professional development of specialists in civil security in pedagogical theory and practice; development and substantiation of the author's model of advanced training of civil security specialists; development of conceptual bases of research; diagnostics of key issues in the context of advanced training of civil security specialists; conducting a formative experiment and clarifying the pedagogical feasibility and effectiveness of the concept, content, methods and technologies of training specialists in civil security; confirmation of the hypothesis by methods of mathematical statistics (Honcharenko, 2008).

At the ascertaining stage of the experiment, there was a questionnaire filled out by 42 respondents

who took part in advanced training in civil security educational institutions. The survey results were processed using the average value as a generalized characteristic of a qualitatively homogeneous population on a certain quantitative basis - the calculation of the average quantitative characteristics of correct and incorrect answers to questions about professional theoretical and technological knowledge, analytical, synthetic skills, management, communication and professional skills used by them in the process of professional activity.

The arithmetic mean of these parameters is an indicator of the level of cognitive and activity components of professional development and at the same time an indicator of the effectiveness of the author's methodology. This value is calculated by formula 1 (Obraztsov, 2004):

$$X = \frac{X_1 + X_2 + X_3 + X_4 + \dots + X_n}{N} = \frac{\sum_{i=1}^n X_i}{N} \quad (1)$$

where X – an arithmetic mean;

X₁, X₂, X₃, ... X_n – results of individual observations (sign values);

N – number of observations;

∑ – the sum of the results of all observations.

In the course of the study of the levels of development of the cognitive component of professional development of civil security specialists, the methods of the final generalization of data were used. To measure the level of development of the cognitive component of professional competence of specialists in civil security to pedagogical impact, the diagnosis is made on a relative scale of the results of mastering the relevant training courses: 0-33% – low level of professional knowledge; 34-66% – the average level of professional knowledge; 67-100% – high level of professional knowledge. Analytical grouping of data contributed to the establishment of relationships between professional theoretical and technological knowledge in the cognitive component of professional competence of civil security professionals, their interdependence in accurate calculation.

The obtained data on the development of the cognitive component are summarized in table 1.

The graph (Fig. 1) shows the synergy of components of theoretical and technological professional knowledge, which form a cognitive component of professional competence of specialists in civil security.

Results of the comparative analysis of development of a cognitive component of professional competence of experts on questions of civil safety at a statement stage of pedagogical experiment

Theoretical knowledge		
Low level	Average level	High level
11,9 %	69,06 %	19,04 %
Technological knowledge		
Low level	Average level	High level
19,04 %	50,01	30,95 %

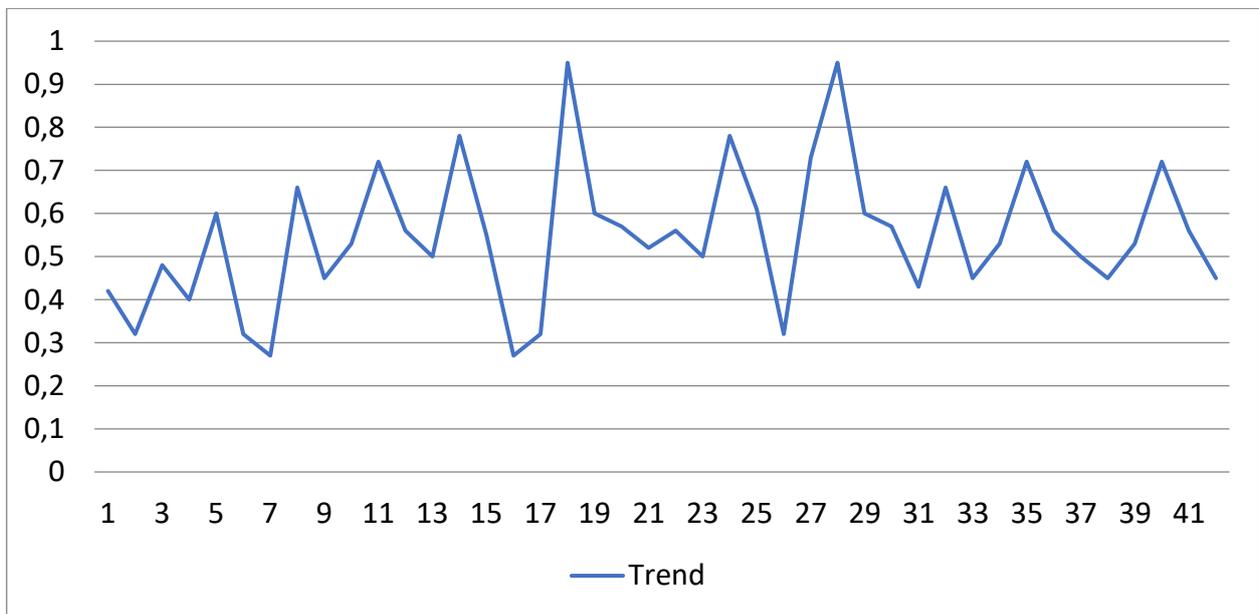


Fig. 1. Graph of indicators of levels of development of the cognitive component of professional competencies of specialists in civil security.

Diagnosing the levels of development of the cognitive component of professional competence of civil security professionals shows that 16.8% of respondents had a low level of development ($0 < \text{Effective Development} \leq 0.33$), 66.6% of respondents had a medium level of development ($0.34 \leq \text{Effective Development} \leq 0.66$), high - 16.6% of respondents ($0.67 \leq \text{Effective Development} < 1.0$).

Conclusions. The results of the observational

experiment indicate an insufficient level of development of the cognitive component of professional competence of civil security specialists. This suggests that most professionals who implement civil security tasks in government (enterprises, institutions, organizations) need to improve professional knowledge, skills and personal qualities, which is possible through the creation and implementation of author's pedagogical system of training specialists in civil security field.

List of references

Михайлов, В. М., 2020. Підвищення кваліфікації керівників структурних підрозділів органів влади з питань цивільної безпеки у вітчизняній педагогічній літературі. *Вісник післядипломної освіти*. 11(40), с. 119-135. DOI [https://doi.org/10.32405/2218-7650-2020-11\(40\)-119-135](https://doi.org/10.32405/2218-7650-2020-11(40)-119-135).

Аносов, І. П., Елькін, М. В., Головкова, М. М., Коробченко, А. А., 2015. *Основи науково-педагогічних досліджень*. Мелітополь : ТОВ «Видавничий будинок ММД».

Гончаренко, С. У., 2008. *Педагогічні дослідження: Методологічні поради молодим науковцям*. Київ-Вінниця: ДОВ «Вінниця».

Михайлов, В. М., 2021. Зміст та структура професійної компетентності фахівців з питань цивільної безпеки. О. Є. Карпенко, ред. *Педагогіка XXI століття: сучасний стан та тенденції розвитку*. Львів-Корсунь : Ліга-Прес. с. 285-308. DOI <https://doi.org/10.36059/978-966-397-241-1-11>

Образцов, П. И., 2004. *Методы и методология психолого-педагогического исследования*. СПб.: Питер.

Кулалаєва, Н. В., 2019. Формування культури безпеки професійної діяльності майбутніх будівельників: підсумки педагогічного експерименту. *Professional Pedagogics*, 2(19), с 101-107. DOI <https://doi.org/10.32835/2223-5752.2019.19.101-107>.

Translated & Transliterated

Mykhailov, V. M., 2020. Pidvyshchennia kvalifikatsii kerivnykiv strukturnykh pidrozdiliv orhaniv vlady z pytan tsyvilnoi bezpeky u vitchyzniani pedahohichnii literaturi [National pedagogic publications as regards advanced vocational training in the issues of civil security for the heads of authorities' structural divisions]. *Visnyk pislidyplomnoi osvity [Bulletin of Postgraduate education]*, 11(40), s. 119-135. DOI [https://doi.org/10.32405/2218-7650-2020-11\(40\)-119-135](https://doi.org/10.32405/2218-7650-2020-11(40)-119-135), [in Ukrainian].

Anosov, I. P., Elkin, M. V., Holovkova, M. M., Korobchenko, A. A., 2015. *Osnovy naukovopedahohichnykh doslidzhen: navchalnyi posibnyk [Fundamentals of scientific and pedagogical research: a textbook]*. Melitopol : TOV «Vydavnychiy budynok MMD», [in Ukrainian].

Honcharenko, S. U., 2008. *Pedahohichni doslidzhennia: Metodolohichni porady molodym naukovtsiam [Pedagogic research: Methodological for the sake of young scientists]*. Kyiv-Vinnytsia: DOV «Vinnytsia», [in Ukrainian].

Mykhailov, V. M., 2021. Zmist ta struktura profesiinoi kompetentnosti fakhivtsiv z pytan tsyvilnoi bezpeky [Content and structure of professional competence of civil security specialists]. О. Ye. Karpenko, ed. *Pedahohika XXI stolittia: suchasnyi stan ta tendentsii rozvytku [Pedagogy of the XXI century: current status and development trends]*. Lviv-Korsun : Liha-Pres, s. 285-308 DOI <https://doi.org/10.36059/978-966-397-241-1-11>, [in Ukrainian].

Obraztsov, P. I., 2004. *Metody i metodologiya psihologo-pedagogicheskogo issledovaniya. [Methods and methodology of psychological and pedagogical research]* SPb.: Piter., [in Russian].

Kulalaieva, N. V., 2019. Formuvannia kultury bezpeky profesiinoi diialnosti maibutnykh budivelnykiv: pidsumky pedahohichnoho eksperymentu [Formation of safety culture of professional activities in future builders: the results of the pedagogical experiment]. *Professional Pedagogics*, 2(19), s 101-107. DOI <https://doi.org/10.32835/2223-5752.2019.19.101-107>, [in Ukrainian].

РЕЗУЛЬТАТИ ДІАГНОСТУВАННЯ РІВНЯ РОЗВИТКУ КОГНІТИВНОГО КОМПОНЕНТА ПРОФЕСІЙНОЇ КОМПЕТЕНТ- НОСТІ ФАХІВЦІВ З ПИТАНЬ ЦИВІЛЬНОЇ БЕЗПЕКИ

Віктор Михайлов¹

¹ кандидат наук з державного управління, доцент, заступник начальника Інституту з державного управління та наукових досліджень з цивільного захисту, Україна, <https://orcid.org/0000-0002-5629-1500>, e-mail: mvn2006@ukr.net

Реферат.

Актуальність: потреба розвитку професійної компетентності фахівців з питань цивільної безпеки визначається завданнями підвищення спроможності та посилення оперативної готовності сил цивільного захисту щодо забезпечення стійкості держави під час кризових ситуацій різного походження. Готовність цих фахівців до професійної діяльності є особистісною основою їх професіоналізму, яку необхідно розвивати в умовах післядипломної освіти.

Мета: проаналізувати розвиток когнітивного компонента професійної компетентності фахівців з питань цивільної безпеки в системі післядипломної освіти.

Методи: теоретичні (систематизація науково-педагогічної літератури); комплексні (аналіз і синтез); емпіричні (вивчення та аналіз педагогічного досвіду, анкетування, експертне оцінювання); математичні; статистичні.

Результати: проаналізовано розвиток когнітивного компонента професійної компетентності фахівців з питань цивільної безпеки у процесі підвищення ними своєї професійної кваліфікації.

Висновки: виявлено необхідність створення та впровадження авторської педагогічної системи підвищення кваліфікації фахівців з питань цивільної безпеки з метою підвищення рівня розвитку їхньої професійної компетентності.

Ключові слова: *підвищення кваліфікації фахівців; цивільна безпека, післядипломна освіта, професійна компетентність.*

Received: 10 December 2021

Accept: 20 December 2021