

## **PECULIARITIES OF COGNITIVE SPHERE OF OFFICERS OF THE OPERATIONAL AND INVESTIGATIVE UNITS OF THE STATE BORDER GUARD SERVICE OF UKRAINE**

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### **INTRODUCTION**

The tasks of the State Border Guard Service of Ukraine (SBGS) are to search and record factual data on illegal actions of individuals and groups at the state border, the responsibility for which is provided by the Criminal Code of Ukraine, intelligence and subversive activities of special services of foreign organizations with a view to ending offenses and in the interests of criminal justice, as well as obtaining information in the interests of the security of citizens, society and the state. Within the limits of their authority, officers of the SBGSoperational and investigative units (OIU) are obliged to take necessary operative-investigative measures to prevent, timely detect, stop and solve crimes and expose the causes and conditions that contribute to the crime, to prevent offenses.

In order to effectively combat illegal activities at the border, OIU officers must have a high intellectual capacity, be professional, be able to work ahead, be able to analyse trends in the crime situation and anticipate possible threats to the security of the country. Only those officers who have a highly developed cognitive realm can accomplish these tasks. The dialectic of countering cross-border crime requires that OIU officers be able to see not the shell of the phenomenon, but its essence, not frozen schemes, but development processes, their interconnections and contradictions, to be able to identify intricate mechanisms of illegal activity at the state border.

The profession of the officer of the police officer of the SBGS is associated with considerable risk not only for him personally, but also for the health and life of his relatives and relatives. This threat can be significant, as evidenced by the possibility to change the personal data, places of residence, work and training guaranteed by the law officer of the SBGS OIU. In addition, the activities of an OIU officer are public

and private. Therefore, it is charged with particular legal responsibility for the strict observance of the rights and freedoms of the individual and the citizen in carrying out the operational search activities. Due to the peculiarities of the work and the unspoken forms of prompt work, it is largely related to the need to comply with the requirements of the conspiracy, which imposes additional requirements on the subject of law enforcement activity<sup>1, 2, 3</sup>.

The profession of a police officer of the SBGS of Ukraine can be called multidimensional: it includes elements of other professions: detective (agent), lawyer, customs officer, Special Forces. In all its dimensions, it requires the OIU officer to persistently and creatively seek truth within the law, the ability to identify cause and affect relationships between people's facts, events and actions, and to make timely decisions in difficult, unanticipated situations, and so on. Therefore, the basis of the activity of a police officer of the traffic police of Ukraine is primarily search work: obtaining information about the operational situation, its analysis and evaluation, developing a system of operational and investigative measures to identify, prevent and stop cross-border crimes, search of persons who have committed these crimes, or suspected of their perpetration, obtaining information on events and actions that threaten the security of the state at the border.

The effectiveness of the professional work of OIU officers is ensured by their ability to make decisions in complex unforeseen, un-

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<sup>1</sup> Galimov Yu. A. (2004). *Psyhologhichne prohnozuvannia nadiinosti diialnosti oficeriv operatyvno-rozshukovykh pidrozdiliv Derzhavnoi prykordonnoi sluzhby Ukrainy* [Psychological Prediction of the Reliability of the Activity of Officers of the Operational-Search Units of the State Border Guard Service of Ukraine] (PhD Thesis), Khmelnytskyi: Nacionalna akademiia Derzhavnoi prykordonnoi sluzhby Ukrainy im. Bohdana Khmelnyckoho.

<sup>2</sup> Kelbia V. Gh. (2002) *Vykhovannia profesiinykh yakosti u mabutnikh oficeriv operatyvno-rozshukovykh orghaniv Prykordonnykh viisk Ukrainy* [Education of Professional Qualities of Future Officers of the Border Guards of Ukraine] (PhD Thesis), Khmelnytskyi: Nacionalna akademiia Derzhavnoi prykordonnoi sluzhby Ukrainy im. Bohdana Khmelnyckoho.

<sup>3</sup> Filipov S. O. (2004). *Psyhologhichni osoblyvosti profesiinoidiialnosti oficeriv-operatyvnykh Derzhavnoi prykordonnoi sluzhby Ukrainy* [Psychological Features of Professional Activity of Officers-Operatives of the State Border Guard Service of Ukraine] (PhD Thesis), Khmelnytskyi: Nacionalna akademiia Derzhavnoi prykordonnoi sluzhby Ukrainy im. Bohdana Khmelnyckoho.

programmed situations for which there are no ready decisions. As a rule, only a person capable of acting in the conditions of uncertainty, difficulties, risk, a person who can think and manoeuvre and retain self-control and confidence can effectively solve professional tasks in such a situation<sup>4, 5, 6, 7</sup>.

Thus, the professional mobility of SBGSofficers is provided primarily by the developed cognitive sphere. Our study was devoted to the study of its features.

## **1. Research on the development of cognitive processes of officers of the SBGSOIU officers**

The study of the cognitive sphere of the officers of the SBGSOIU was conducted in three stages. In the first stage, the scientific literature on the problem was analysed, the purpose, objectives and methodology of the research work were determined. In the second stage of the study, the development of cognitive processes in officers of the SBSS OIU officers was examined. The hypothesis was tested that the development of the cognitive sphere of the officers of the SBGSOIU can be ensured, if not the individual cognitive processes, but in the whole cognitive activity as a system of structural and functional components, is improved. The level of formation of the cognitive sphere of the officers of the SBGS OIU officers and individual cognitive processes was determined. In particular, some cognitive processes, interpersonal and interpersonal

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<sup>4</sup> Kitaev-Smyk L. A. (1983) *Psikhologiya stressa*. [Stress Psychology] Moskva: Nauka (in Russian).

<sup>5</sup> Kremen V. Gh., Oleksienko B. M., Safin O. D. ta in. (1999) *Psykholohiia profesiinoi diialnostiki oficera* [Psychology of Professional Activity of an Officer]. Khmelnyckyj: Vydavnytvo Akademiji PVU (in Ukrainian).

<sup>6</sup> Potapchuk Je. M. (2004) *Socialno-psykhologhichni osnovy zberezhenia psykhičnoho zdorovia viiskovosluzhbovciv* [Socio-Psychological Bases of Maintaining Mental Health of Servicemen] (PhD Thesis), Khmelnyckyi: Nacionalna akademiia Derzhavnoi prykordonnoi sluzhby Ukrainy im. Bohdana Khmelnyckoho.

<sup>7</sup> Timchenko O. V. (2003) *Profesiinyi strespracyvnyki vorghani v vnutrishnikh sprav Ukrainy (konceptualizaciia, prohnozuvannia, diaghnostyka ta korekciia)* [Occupational Stress of Internal Affairs Officers of Ukraine (Conceptualization, Forecasting, Diagnosis and Correction)] (PhD Thesis), Kharkiv: Kharkivskiy universytet vnutrishnikh sprav.

relationships were investigated, which revealed the peculiarities of the self-knowledge of officers of the SBGSOIU.

In order to diagnose the level of cognitive process formation of officers of the SBGS officers, it was taken into account that intelligence mediates the success of professional activity. Intelligence has the greatest influence on the behaviour and relationships with other people, as well as being the leading, pivotal quality of not only cognitive but also holistic personal development of a person<sup>8</sup>. The study identified the following groups of cognitive mental processes: feeling, perception, memory, attention, imagination, and thinking. It is also taken into account that it is impossible to isolate any of the cognitive processes in pure form, since they are all closely related to each other<sup>9, 10, 11</sup>.

Test methods were used to diagnose cognitive processes.

Intellectual Liability Test (IL) is a blank group test to study the speed and flexibility of intellectual processes<sup>12</sup>. This test is used to predict the success of vocational training, mastering new activities and assessing the quality of work practices. It has been taken into account that performing the test tasks requires the individual to have high concentration of attention and speed of action. It was suggested that test participants should perform simple intellectual tasks at a given pace, requiring both very rapid response (several seconds) and a sharp switching of activities from one type of intellectual work to another. It is this mode of cognitive activity that is quite common for officers of the SBGSOIU.

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<sup>8</sup> Brushlinski A. V. (1996). *Subekt: myshlenie, uchenie, voobrazhenie*. [Subject: thinking, scientists, imagination] Moskva: Institut prakticheskoy psikhologii (in Russian).

<sup>9</sup> Shestopalova O. P. (1997). *Struktura piznavalnykh zdibnostei motyvatsii ta mozhyvosti psikhodiahnostyky v osvitiomu orientuvanni* [The Structure of Cognitive Abilities and Motivation and the Ability to Diagnose Them in Educational Orientation] (PhD Thesis), Kharkiv: Kharkivskyi universytet vnutrishnikh sprav.

<sup>10</sup> Davies D. R., Jones D. M., Taylor A. (1984). *Selective and sustained attention tasks: Individual and group differences*. Parasuman R. et al. (eds.) Varieties of attention. N.-Y.: Academic Press. 25–30.

<sup>11</sup> Hale J. A., Lewis M. (eds.) (1980). *Attention and cognitive development*. N.-Y.: Plenum Press.

<sup>12</sup> Druzhinin V. N., Galkina T. V. (1993). *Metody psikhologicheskoy diagnostiki* [Methods of Psychological Diagnosis]. Moskva: IPAN (in Russian).

Pictogram Test (P) is a form-based test for exploring the features of thinking, memory, and the affect-personal sphere<sup>13</sup>. G. Münsterberg's (MT) technique is a blank test for determining selectivity and concentration of attention<sup>14</sup>. The technique allowed studying the stability of attention during prolonged, monotonous work, the pace of mental processes, the degree of fatigue of attention during activity, the influence of obstacles, the predominant setting on speed or diligence in work. One-Redundancy Row Test (ORR)<sup>15</sup> is a blank test for assessing the ability to generalize and distinguish essential features, to evaluate verbal-logical thinking. J. Raven's Progressive Matrices (RPM)<sup>16</sup> is an intelligence test designed to measure the level of intellectual development, non-verbal intelligence, and logical thinking. Test "Creative abilities" (CA) – a technique for the study of creative imagination, speed of thought processes and latitude-activity of the vocabulary<sup>17</sup>.

The use of these tools made it possible to evaluate the development of the cognitive sphere of the officers of the SBGSOIU by the following components:

- the amount of attention (the number of objects that can be focused);
- attention flexibility as the ability to quickly switch from one setting to another under new conditions;
- flexibility of thinking as a feature of productive thinking, manifested in the restructuring of existing ways of solving the problem, in changing the inefficient way of solving the optimal;
- openness of intelligence, that is, the ability to accept and process new ideas in the mind, taking into account the identified problem; openness of intelligence is associated with the ability to find

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<sup>13</sup> Druzhinin V. N, Galkina T. V. (1993). *Metody psikhologicheskoy diagnostiki* [Methods of Psychological Diagnosis]. Moskva: IPAN (in Russian).

<sup>14</sup> Druzhinin V. N, Galkina T. V. (1993). *Metody psikhologicheskoy diagnostiki* [Methods of Psychological Diagnosis]. Moskva: IPAN (in Russian).

<sup>15</sup> Druzhinin V. N, Galkina T. V. (1993). *Metody psikhologicheskoy diagnostiki* [Methods of Psychological Diagnosis]. Moskva: IPAN (in Russian).

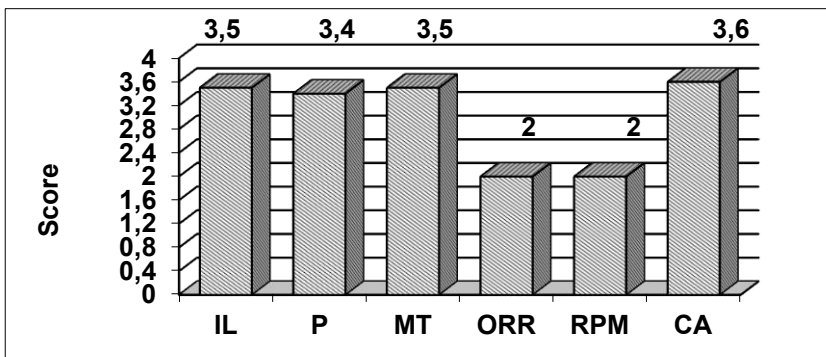
<sup>16</sup> Druzhinin V. N, Galkina T. V. (1993). *Metody psikhologicheskoy diagnostiki* [Methods of Psychological Diagnosis]. Moskva: IPAN (in Russian).

<sup>17</sup> Druzhinin V. N, Galkina T. V. (1993). *Metody psikhologicheskoy diagnostiki* [Methods of Psychological Diagnosis]. Moskva: IPAN (in Russian).

analogies, to establish associations, to think independently, to be able to look from the new side for known things;

– prediction of the means and the end result of the subject’s substantive activity, based on which programs of behaviour in a problem situation are determined.

The survey was attended by 26 officers of the SBGSOIU. The average age of the respondents is 24.8 years. Respondents’ experience in OIU averaged 3.2 years. The results were agreed on a 5-point scale, in which 5 points is a higher score, 0 points – a lower score. This data is clearly illustrated in Fig. 1.2. During the test, the respondents demonstrated a high level of intellectual lability, including ease of assimilation of material and new information, retraining ability, success in professional activity, development of performance skills and sufficient level of memory and attention development.



IL – “intellectual lability”; P – “pictogram” technique;  
MT – G. Münsterberg technique; ORR – “One-Redundancy Row Test”;  
RPM – progressive matrices by J. Raven; CA – creative ability test.

**Fig. 1. The level of development of cognitive processes in OIU officers**

The application of G. Munsterberg’s technique made it possible to detect high concentration and persistence of attention, ability to focus on the object for a long time. The accomplishment of this task did not cause difficulties for the respondents, since in their professional activity officers of the police department of the SBGS often work with

different documents, compare information, analyse it. These qualities of attention contribute to the successful work with documents.

As a result of the data processing of the “Pictogram” methodology, high rates of indirect memory were found. The accomplishment of the task did not cause difficulties for the respondents; they usually reproduce the entire list of suggested words and phrases. Image analysis allowed them to be divided into three groups: symbolic, symbolic, concrete and abstract images. Taking into account IP Pavlov’s typology, respondents who used abstract images were considered to be thinkers<sup>18</sup>. It can be assumed that in mental operations such officers of the OIU, as a rule, seek generalization, synthesis of information, and this quality meets the requirements of the profession.

When examining the creative abilities of the officers of SBGS OIU, it was found that the sentences made by them from the proposed words were not original, most often they were the same logical combinations. This test proved to be the most difficult to perform. Moreover, at this stage of the work of the officers of the police department of the SBGS there was a restructuring of the activity, which affected the dynamics of their task. A similar situation occurred when performing the task of writing a series of words with one extra.

Working with the progressive matrices of J. Raven did not cause the respondents difficulties, which indicates the high level of formation of non-verbal thinking in them.

When interpreting the results of the study of cognitive processes, a comparative analysis was conducted with the results of the study of extraversion-introversion and neuroticism by R. Eysenck. It has been suggested that respondents with different degrees of extraversion-introversion and neuroticism will differently use large volume and heterogeneous information when solving mental problems, will exhibit different degree of flexibility when choosing decision options, with different diligence, different efforts will be made to achieve the goal (the result of the decision).

The analysis of the obtained data showed that:

- better performance when using tests showed introverts;

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<sup>18</sup> Nikandrov V. V. (2007). *Psikhologiya* [Psychology]. Moskva : Prospekt (in Russian).

– introverts and extroverts revealed specific procedural peculiarities of activity in solving problems related to the ways of analysing and using information, as well as to the ways of organizing cognitive activity. These specific procedural features have been interpreted as manifestations of individual styles of activity that are characteristic of introverts and extroverts;

– individual style of introductory cognitive activity (characterized by systematic and in-depth analysis of information, sequence of decision making, gradual selection and careful examination of decision options, caution in choosing the final answer, desire to use records and other external supports), more adequate to ways logical tasks, tasks for attention and memory. Individual extrovert style (characterized by ease when using a large amount of heterogeneous information (both current and stored), flexibility of decision making), adequate when performing the “Pictogram” technique;

– “Unstable” on the scale of neuroticism, the respondents better solved the test tasks for creative ability.

The analysis of the results of the study of the cognitive processes of officers of the SBGSOIU allows to conclude that they have well-developed memory, attention and non-verbal thinking, but insufficiently developed imagination and creative abilities.

Considering the nature of the professional activity of the officers of the SBGSOIU officers, in particular the need to combine in it the skills of activity “type – person” and “person – sign”, confrontation with its objects by type of permanent conflict, it can be argued that it requires developed imagination and creative abilities. Developed by creative thinking and imagination also provide for the professional mobility of officers of the SBGSOIUs, which in turn have a decisive influence on the effectiveness of their professional activities. Only in the case of advanced creative thinking and imagination will the OIU officer be able in most cases to anticipate different options for solving professional problems, be able to give them critical, well-grounded assessment, critically reflect on problem situations, develop problems independently, and theoretically argue their options, anger.

Thus, the results obtained in the study of cognitive processes have confirmed the hypothesis that the development of officers of the SBGSOIU only individual cognitive processes or even their entire complex will not increase the overall intellectual level of their



professional activity. The professional effectiveness of officers of the SBGSOIU as subjects of activity of classes “person – person” and “person – sign”, which takes place in the conditions of permanent social and interpersonal conflict, is determined by the high level of development not only of cognitive processes, but of cognitive activity as a system of structural and functional components. It is these components that determine the success of an OIU officer in interacting with the outside world and mediate the performance of his or her professional activity as a whole. These findings will contribute to the development of adequate, psychologically sound technologies for the development of the cognitive sphere of officers of the police officers of the SBGS, taking into account the psychological features of their conflict interaction and behaviour in risky situations.

## **2. Peculiarities of cognitive activity of officers of SBGSOIU**

The study was attended by 51 officers of the SBGS OIU from the age of 23 to 45 years. In conducting the statistical analysis of the received data, their dependence on the age, the direct assignment of the unit in which the officer is serving was considered; the position he occupies; length of service (up to 1 year, up to 3 years, up to 5 years, over 5 years). The features of cognitive activity were revealed by the results of a comparative analysis of the results of officers of the SBGSOIU officers and their more experienced colleagues, recognized specialists in their field.

Respondents were asked to rank for the degree of significance and to assess the level of cognitive skills development: to determine the professional need for their cognitive activity; identify personal need for their cognitive activity; determine the motives of cognitive activity in a particular situation; identify possible outcomes of their cognitive activity in a particular situation; to analyse the internal connections of the system of needs, motives and goals of their cognitive activity; independently identify the cognitive contradictions that arise in practice; predict trends in cognitive development; design their cognitive activity; 9 – to play variants of decisions of cognitive tasks; clearly build a plan and program for solving the cognitive problem; adequately evaluate the effectiveness of their cognitive activity; carry out retrospective analysis of cognitive situations and solutions to

cognitive problems; correlate the motives and goals of cognitive activity and their implementation in a specific situation; be aware of the true motives of their cognitive activity in a particular situation; identify the causes of difficulty in solving cognitive tasks; accurately set cognitive tasks; identify cognitive problems; translate the strategy of knowledge into the level of tactics; when solving a cognitive task or problem, separate facts and estimates; to transform a “habitual view” of information to disrupt automaticity in solving cognitive problems or problems. In our opinion, the difference between the assessment of the importance and the formation of cognitive skills makes it possible to conclude what skills should be developed by officers of the SBGS.

Comparative analysis revealed that, on average, the self-esteem of cognitive skills was slightly lower (from 4.75 to 5.49 points) than the self-esteem of their significance (from 5.32 to 5.775). According to the results of self-assessment it was found that the following skills are most formed in the officers of the OIU:

- identify personal need for their cognitive activity (5.49);
- identify the professional need for their cognitive activity (5.45);
- determine the motives of cognitive activity in a particular situation (5.28);
- determine possible outcomes of their cognitive activity in a specific situation (5.27).

Thus, the respondents are confident that they are able to clearly understand the needs of their cognitive activity, identify the goals of the activity.

Further on the degree of formation are the ability to independently identify the cognitive contradictions that arise in practice (5,18), and the ability to accurately set cognitive tasks and identify cognitive problems (5.175 and 5.17 points, respectively). Awareness of motives allows you to start designing activities and then go directly to solving cognitive problems and tasks.

The ability to reflect, analyse the course of activity was evaluated somewhat lower: it is about the ability to relate motives, goals and their realization in a particular situation (5.08), to adequately assess the effectiveness of their cognitive activity and the ability to identify the causes of difficulties in solving cognitive problems (5.075 and 5.507 points respectively). At the same level, the ability to analyze the internal systems, needs, motives, and goals of cognitive activity was

evaluated and to design its course (5.063 and 5.06 points, respectively), as well as to plan and program for solving the cognitive problem (5.04) and to understand the true motives your cognitive activity in a specific situation (5.01).

The following cognitive skills are considered to be insufficiently formed by the officers of the SBGSOIU:

- play variants of decisions of a cognitive task (4.97);
- convert the usual view of information to disrupt automaticity in solving cognitive problems or problems (4.96);
- predict trends in cognitive development (4.86);
- translate the strategy of knowledge into the level of tactics (4.82);
- share facts and estimates when solving a cognitive task or problem (4.76);
- carry out retrospective analysis of cognitive situations and solutions to cognitive problems (4.75).

Comparison of self-esteem data by officers of the SBGSOIU officers of their cognitive skills with the normative model allows to note that the subjective assessment of phases of cognitive task determination and decision modelling is not balanced, and the formation of phases of analysis of possible decisions and de-automation of cognitivism.

A comparative analysis of the self-esteem of the level and significance of the cognitive skills of officers of the SBGSOIU, as well as the level of significance of these skills in the group of experts allowed revealing differences in estimates. Comparing the ranking results of formed and significant cognitive skills gives approximately the same composition of skills. The only difference is that officers have the ability to identify the motives of cognitive activity in a particular situation, while the more significant one is not. The first five significant skills include the ability to identify the causes of difficulty in solving cognitive problems. Obviously, it is very important for OIU officers to be aware of the driving force behind their cognitive activity. The desire to understand both professional and personal need for cognitive activity is clearly expressed.

The most significant officers of the SBGSOIU officers recognize the ability to identify a professional need for their cognitive activity (average score 5.775), while in terms of their level of competence, this

ability takes second place (average score 5.45). In the group of experts, this ability is also among the leading, but occupies the third position.

High importance in the self-esteem of officers of the SBS SBGSU is the ability to independently identify the cognitive contradictions that arise in practice (average score 5.77). It was rated slightly lower by employees' self-esteem (average score 5.18) and was not even included in the top five by experts.

It is very important for officers of the SBGSOIU to be able to identify their personal need for their cognitive activity. At the same time, in terms of self-esteem, this skill occupies the first place (average score 5.49), and for experts this skill was insignificant.

The fourth place of importance for the officers of the SBGSOIU officers is the ability to identify the causes of difficulties in solving cognitive tasks (average score 5.75), and fifth place – the ability to determine the possible results of their cognitive activity in a specific situation (average score 5.723).

The analysis of the most formed and the most significant skills in the group of officers of the OIU revealed differences in the subjective perceptions of the officers of the OIUSBGSU about the formation and significance of one or another skill. It is obvious that first and foremost, OIU officers are aware of the need to improve specific cognitive skills. At the same time, the comparison of the top five rankings by form and by significance shows that OIU officers consider the phases of the decision modeling, cognitive task clarification and cognitive planning phases to be the most important for effective cognitive activity. In the Expert Group, the emphasis in the structure of cognitive activity is shifted to the sequential implementation of phases of actualization, clarification of the cognitive task, planning of cognitive activity and modeling of the decision.

Comparative analysis of the least significant cognitive skills showed that, as in the expert group, OIU officers in the last five rank included the ability to adequately assess the effectiveness of their cognitive activity (5.51), the ability to share facts when solving a cognitive task and assessment (5.41), ability to analyse the internal connections of the system of needs, motives and goals of their cognitive activity (5.395), ability to predict trends in the development of cognitive situation (5.39) and to carry out retrospective analysis (5.32).

Such an assessment can be explained by the fact that in the professional activities of OIU officers perform separate tasks, which does not give the full picture of what is happening. In this regard, it is delegated responsibility for the development of the situation and the modelling of the future to the immediate superior, and therefore there is no need for these skills.

Next, we analyse the dependence of the structure of cognitive skills on age, position, service experience, and the specifics of the officers of OIU.

Four age groups were identified to study the dependence of subjective perceptions on the structure of cognitive skills by the officers of the SBGS OIU officers: Group 1 – from 23 to 27 years old; Group 2 – from 27 to 32 years old; Group 3 – from 32 to 40 years old; Group 4 – over 40 years old.

When analysing the self-esteem of skills in different age groups, one can see a certain coincidence. However, fourth-grade OIU officers are much better able than others to identify possible outcomes of their cognitive activity and clearly build a plan and program for solving a cognitive task. It is also possible to distinguish the level of formation of the ability to be aware of the true motives of their cognitive activity in the officers of second and fourth group OIU and the ability to detect cognitive problems in officers of the first and fourth age groups.

When analysing the first five ranked places in self-esteem, only the second group differed. Only SBGS OIU officers in this age group included in the list of the most urgent skills to accurately set cognitive tasks.

When comparing the self-esteem of the significance of cognitive skills in age groups, we can conclude that the assessments of the importance of one or another skill in all groups are almost the same. The lowest value in all age groups of OIU officers was given the ability to make a retrospective analysis of cognitive situations and decisions of cognitive tasks.

Analysing the five most significant skills, you can also see a coincidence in the assessment of the first four positions in the second and fourth age groups and the discrepancy between the officers of the second and fourth age group SBGS, who put only the fifth position on the ability to determine the personal need for cognitive activity and ability to identify cognitive problems accordingly.

Also, subjective perceptions of officers of different structural units (anti-smuggling – ASU, anti-trafficking – ATU, information and analytical work – IAWU and regime-secret work –RSWU) were analysed. Analysis of the results of the study revealed a significant difference in the levels of skill formation in officers of different structural units. In particular, unlike other groups, the officers of the classified units are much higher in assessing the ability to project the course of their cognitive activity and to adequately assess its effectiveness. In this group, in comparison with others, the level of forming the ability to analyse the internal connections of the system of needs, motives and goals of their cognitive activity, to predict trends of cognitive development, to understand the true motives of cognitive activity and to share facts and assessments in solving cognitive problems. Officers of other structural units in the assessment of the formation of cognitive skills are almost unanimous.

Only Fifth Officers in the Fifth Counterfeit Officers set the ability to pinpoint cognitive tasks, while officers in other structural units did not include it at all in the top five. Most likely this is due to the specific differences between the professional activities of the officers of the anti-smuggling units and the officers of other units. Yes, to prevent the offense of smuggling, you need to know not only the number of people who can commit it. You need to know what goods will be shipped overseas, where they will be stored, when, how (legally or illegally) and where the shipment will take place.

The analysis of the self-esteem of the level of significance of cognitive skills also revealed a significant discrepancy between the assessments of officers of the regime-secret units with the assessments of officers of other structural units.

Comparing the cognitive skills most relevant to officers in the various divisions of the intelligence agencies, we can see the coincidence of the estimates given by the officers of the anti-smuggling, trafficking, and intelligence officers. The views of the officers of the secrecy divisions are completely different from them, as is the nature of their professional activity.

The logic of the study also required us to analyse the dependence of the subjective perceptions of the officers of the SBGSOIU on the structure of cognitive skills from the position they occupy. We divided the study participants into four conditional groups. The first was

enlisted by the heads of the Operations and Investigation Units (OIU), the second – the officers of the Regional Directorates Operations and Investigation Units (RDOIU), and the third – the officers of the Operations and Investigation Units of the Border Guard Detachments (GDOIU), and the fourth group included officers of Operations and Investigation Units (OOIU).

In the leadership group, the self-esteem of skills such as the ability to project their cognitive activity, to understand the true motives of their cognitive activity in a particular situation, to share facts and assessments when solving cognitive tasks was lower than in other groups. It can be assumed that this group of skills is the least up-to-date in OIU managers. In the other groups, the self-esteem of the skills is mostly the same.

The first four ranked places in self-assessment of the level of cognitive skills in all groups occupy the same skills: to determine their need for cognitive activity; identify the professional need for cognitive activity; identify possible outcomes of their cognitive activity in a particular situation; determine the motives of cognitive activity in a particular situation. Fifth-ranked executives take the ability to identify the causes of difficulty in solving cognitive tasks; OIU officers of regional offices – ability to detect cognitive problems, and officers of OIU border units – the ability to independently identify the cognitive contradictions that arise in practice.

An analysis of the self-esteem of the significance of cognitive skills showed that the level of assessments in the group of officers of the RDOIU is slightly higher than in the other categories of officers. Managers generally rate the importance of cognitive skills much lower than other categories of OIU officers. This can be attributed to the fact that senior positions are usually occupied by experienced officers who have a thorough knowledge of the tactics and specifics of offenders at the state border and are able to solve high-complexity professional tasks independently and effectively. For them, the discipline of subordinates is more important. Subjective perceptions of the importance of certain cognitive skills in RDOIU officers are in some way the same as those of OIU heads and BDOIU officers, the difference is only in the fifth rank.

Differences of subjective perceptions about the structure of cognitive skills in the officers of the SBGSOIU with different work

experience were also analysed. Analysis of the dependence of self-esteem on the formation of cognitive skills on the length of service in law enforcement agencies suggests that the experience has little effect on the self-esteem of their formation. When comparing the first five ranked places on the basis of self-assessment of cognitive skills, it can be noticed that the self-esteem of officers who have served up to 3 and more than 5 years are quite close. These categories of officers chose the same skills: to identify a professional's need for cognitive activity; identify personal need for cognitive activity; determine the motives of cognitive activity in a particular situation; separate facts and estimates when solving a cognitive problem or problem; accurately set cognitive tasks. But they were placed in different order of importance. At the same time, officers with up to 1 year and up to 5 years of age have the ability to assess their cognitive performance adequately and accurately set cognitive tasks when solving a cognitive task or problem and to share facts and assessments accordingly. When interpreting the result, one should also take into account the fact that, as a rule, officers of this category are young people from the age of 22 to 27 years, who are characterized by high emotionality and categorical character. It is these qualities that sometimes interfere with a proper understanding of the operational situation; tasks assigned by the manager and adequately evaluate the results of their work.

In assessing the significance of cognitive skills, we found significant differences for all categories of OIU officers. Officers of the SBGS OIU who have up to 1 year of experience place first the ability to determine the possible outcomes of their cognitive activity in a particular situation, that is, the skill that is in the phase of analyzing possible solutions to a cognitive task. Officers with up to 3 years of experience consider the ability to determine the professional need for cognitive activity the most important, that is, the ability to enter the decision modelling phase. Officers with up to 5 years of age put first the ability to clearly build a plan and program for solving a cognitive task, that is, a skill that is in the planning phase of cognitive activity, and officers with experience of more than 5 years highlight the ability to identify the causes of difficulties in solving cognitive tasks that are also in the modelling phase.

Thus, the study of the self-esteem of the level of development and the level of significance of competences for different categories of



officers of SBGS OIU revealed some differences between experts and officers of SBGS, as well as between officers of different ages, from different units, different positions, and service experience. In particular, it was found that, according to experts, the emphasis in the structure of cognitive activity should be given to ensure the consistency of phases of updating the cognitive problem, clarifying the cognitive task, planning cognitive activity and modelling the solution of the cognitive task. At the same time, officers of the SBGS OIUs of the other categories consider the phases of clarifying the cognitive task, modelling the solution of the cognitive task and analysing the possible solutions to the cognitive task.

## **CONCLUSIONS**

The value of the cognitive sphere for the effective professional activity of the officer of the operative and investigative units of the SBGS is determined by the specific conditions of operational and search activities at the state border: high degree of organization of cross-border criminal groups, branching of criminal relations, high level of latency and transpersonal complexity. others and the requirements for its organization: the need for a thorough analysis of trends in the development of criminogenic situation, successful forecasting of possible threats and risks, planning activities aimed at preventing the offenders, identify not only the perpetrators, but also the organizers of the offense, disclosure and legal proof of violations of law border, and illegal ways of hiding them, etc. The cognitive sphere of an OIU officer has a specific professional focus on the predominant development of appropriate skills.

Diagnosis of the development of cognitive processes in the officers of the SBGS OIU confirmed the hypothesis that even the complex development of cognitive processes does not ensure an increase in the overall intellectual level of their professional activity. Therefore, it is necessary to develop not just cognitive processes, but the level of cognitive activity as a system of structural and functional components.

Some differences in the indicators of self-esteem of the formation and importance of the cognitive sphere for different categories of officers of the operational-search units were revealed. In particular, it was found that, according to the heads of the operational and

investigative bodies of the SBGS of Ukraine, the emphasis in the structure of cognitive activity should be placed on ensuring the consistency of phases of updating the cognitive problem, clarifying the cognitive task, planning cognitive activity and modelling the cognitive task solution. At the same time, their subordinates consider the phases of elucidating the cognitive task, modelling the solution to the cognitive task and analysing possible solutions to the cognitive task. Differences in self-esteem of development and significance of cognitive skills-competences also depend on peculiarities of age, character of professional activity, position, length of service.

### **SUMMARY**

The article deals with the importance of the cognitive sphere for the professional activity of officers of the operational-search units of the State Border Guard Service of Ukraine, presents the results of the study of the level of development of their cognitive processes and features of self-assessment of the formation and importance of components of the cognitive sphere for different categories of officers of the operational division. It is stated that the requirements for the cognitive sphere of the officer of the operational-search unit are determined by the specific conditions of the operational-search activity at the state border. It is noted that the cognitive sphere of the officer has a kind of professional focus on the predominant development of professionally important cognitive skills. It is concluded that the complex development of cognitive processes does not provide an increase in the overall intellectual level of their professional activity, which requires an increase in the overall level of cognitive activity of the officer as a system of structural and functional components. Differences in cognitive field formation in different categories of officers by age, nature of professional activity, position, length of service have been identified and analysed.

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