

RESEARCH ARTICLE

Communication skills formation in cadets of investigative specialization in the process of their professional training

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ABSTRACT

Communication plays an important role in the work of investigators and determines their performance throughout their professional career. Investigators' communication skills ensure the establishment and development of business contacts with various categories of participants in professional relationships, and allow them to formulate profitable interaction strategies. Therefore, in the professional training of cadets i.e., future investigators, developing their communication skills is an important applied task. The research aims to investigate the communication skills of cadets of investigative specialization (future investigators) in the process of their professional training. The research was conducted using psychodiagnostic tools among cadets of the investigative specialization of Kharkiv National University of Internal Affairs ($n = 597$). It has been established that most of the subjects of interest have stable manifestations of the ability to form the skill to apply justified models of behavior during communication; they reveal a gradual development of the ability to navigate in situations of professional interaction and adapt to new living conditions. Two main variants of manifestation of the communication abilities of cadets i.e., future investigators with participants of interpersonal interaction have been identified: 1) with a predominant tendency to independence, leadership, and dominance; 2) with responsibility, focus on cooperation, and coherence with others. The results of the research confirm the influence of professional training on the process of communication skills formation in cadets i.e., future investigators.

Keywords: communicative abilities; communicative characteristics; cadets; future investigators; types of interpersonal interaction

1. Introduction

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Modern life requires an individual to possess a high level of professionalism, active life philosophy, competence and motivation for improvement and professional growth. Modern large-scale transformations within the law enforcement system require the training of a new generation of police officers, whose activity is aimed at comprehensive protection of the rights and freedoms of the population, effective performance of their professional duties and continuous self-improvement. This primarily applies to the employees of investigative units.

According to experts, the profession of an investigator among legal specialties requires not only the appropriate inclinations, vocation and education, but also sufficient life experience, array of professional knowledge, skills and abilities. This type of professional activity is associated with the process of investigating crimes. The purpose of the investigator's professional activity is the legal protection of the basic social values of society, establishing the truth during the investigation of crimes and bringing the perpetrators to justice^[1]. As rightly noted by Barko et al.^[2], this type of activity is characterized by knowledge of the classification of crimes; tactics and methods of detection and organization of work on the detection of specific crimes; tactical techniques of investigative (search) actions; establishing psychological contact with people; application of technical and forensic means, etc..

According to Shvets et al.^[3] and Rogers et al.^[4], one of the main results of psychological analysis of legal activity is its theoretical analysis, modelling and creating a professional and qualification reference model of a successful specialist (job description). The essence of legal activity is revealed through the accentuation of the following structural components: cognitive, constructive, communicative, certifying, organizational, preventive. Analysing the psychological structure of the investigator's activity, we emphasize that communication (professional intercourse) is its mandatory and dominant component, the result of which is to obtain the necessary information to investigate the crime^[5,6]. This process includes consideration of sources, the channel of information transmission, reception, and processing; particular qualities of control over its transmission; influence of participants of interaction on each other; exchange of experience, etc.

The success and effectiveness of the investigator's activity directly depends on his ability to organize work on the basis of professionally balanced communication with the subjects of a particular area of interaction, i.e., his communicative competence. Insufficiently developed communicative competence causes barriers, conflicts in communication, makes it impossible to obtain the necessary information for the investigation and reduces the effectiveness of the crime investigation. Therefore, the study of the peculiarities of the structure, development and formation of communicative competence of future investigators of prejudicial inquiry bodies is relevant and timely.

The comprehensive theoretical basis

Communicative activity is the ability to understand a person, to feel him, to control his emotional state. Among scientists who research the communicative component of professional activity of a specialist, "communicative competence" is considered primarily as:

- The ability to establish and maintain the necessary contacts with other people^[7,8];
- The ability of the individual to feel himself confident in communication situations, to have excellent skills in verbal and nonverbal means of communication, emphasizing that this ability involves socio-psychological learning, i.e., further opportunity to master communication^[9];
- Integral quality of the personality, which permeates all his professional and personal formations, as a set of knowledge in the field of interaction, behaviour, information exchange, people's perception of each other, as the statefulness of an individual program of behaviour within the system of social relations, as a motivational affiliation to a particular social environment, focus on the development of communicative

abilities^[10];

- The ability to establish and maintain the necessary contacts with other people, that includes the ability to model the circle of communication, to understand the communication partner^[11,12];
- As a hidden system of knowledge and skills necessary for communication^[13];
- The ability to master the technology of influencing others, which involves the use of cognitive potential of the employee's personality, generalized in specific abilities to adequately perceive and understand social objects^[14].
- Development of adequate human orientation in oneself, personal psychological potential, partner's potential, in the situation and the task^[15,16];
- As one of the most important qualitative characteristics of the individual, which allows to realize his needs for social recognition, respect, self-actualization and helps the successful process of socialization; as a system of internal resources needed to build effective communication^[17].

The main task of the communicative side of the investigator's activity is to obtain reliable information about the crime during the investigation by means of communication with people. Thus, Basinska and Dåderman^[18] emphasizes that the communicative component of investigative activity is determined by a set of developed professionally important communicative qualities (sociability, accessibility, diplomacy, tactfulness and benevolence, confidence and ease of communication, lack of constraint, tolerance, empathy, linguistic quick-wittedness and attractiveness, etc.) and investigator's abilities (to establish psychological contact; to adjust and manage the process of interaction; to resist stereotypes of perception, barriers to communication; to establish feedback; to legally receive information necessary for investigative activities; to establish contacts with various participants in investigative actions; to prepare for different forms of communication depending on the individual and psychological characteristics of the objects of investigative activity; shortly, clearly and unambiguously)^[18].

Along with this, Fedorenko and colleagues^[12], Galanis et al.^[19], emphasize in their studies that the typical communicative tasks of police personnel, in which the employee's competence is manifested, are: obtaining reliable information in the process of communicating with people who are in a state of stress (victims, witnesses), knowingly or unknowingly distorting or hiding it (witnesses, suspects); adequate transfer of information to citizens, colleagues, senior executives; managing the behaviour of other participants in the interaction through the use of various methods of legitimate psychological influence.

The considered works are only a small part of scientific researches which analyse peculiarities of the communicative component of professional activity in general and employees of investigative units, in particular. Summarizing the existing preliminary studies, the communicative competence of investigators is considered by us as a complex, structural phenomenon that includes the following components: knowledge, skills and abilities as well as the possibility of their use in a professional environment; communication skills; the ability of the investigator to build and implement interaction psychologically competently and effectively in the line of his professional functions.

Developed communicative competence ensures the effectiveness of horizontal and vertical relationships of the socionomic specialist with other people within the framework of professional environment^[20-23]. That is why the development of communicative competence of a professional investigator is one of the main tasks of specialists' training in the higher educational institutions with specific learning environment^[24-27].

In view of the above, it can be noted that the research of the communicative abilities of future investigators contribute to the expansion of ideas about the peculiarities of its formation, development and construction of effective ways to improve the professional skills of this category of specialists.

The aim of the research is to investigate the communication skills of cadets of investigative specialization (future investigators) in the process of their professional training.

2. Materials and methods

2.1. Participants

The main diagnostic work was conducted in 2022. The empirical basis of the research was made up of the cadets of the faculty of specialists' training for prejudicial inquiry units of the Kharkiv National University of Internal Affairs with a total number of 597 people: group 1 consisted of the first-year cadets (200 people); group 2 was composed of the second-year cadets (100 people) and the third-year cadets (97 people); group 3 consisted of the fourth-year cadets (200 people). The grouping of respondents into the three specified groups was carried out after the initial processing of the obtained results of diagnostic methods. At the time of conducting the research, the results obtained by the selected methods between the cadets of the second and third year of training were similar, which gave us the opportunity to combine them into one group. The initial characteristics of the surveyed respondents were:

Group 1 (200 people): average age—17.2 years; male—141 (70.5%), female—59 (29.5%);

Group 2 (197 people): average age—18.8 years; male—125 (63.5%), female—72 (36.5%);

Group 3 (200 people): average age—20.4 years; male—136 (68.0%), female—64 (32.0%).

2.2. Procedure and methods

Research methods: theoretical analysis and generalization of scientific and methodological literature, observations, questionnaires, mathematical and statistical method. We carried out a comparative analysis between the groups of respondents, the main criterion of which was the year of study, which determined the formation of the cadets' communication skills. In addition, we used appropriate psychodiagnostic tools to achieve this purpose, which made it possible to distinguish communication skills, peculiarities of social contacts establishment, the type of interpersonal relationships, adaptive capabilities of future prejudicial inquiry bodies' investigators.

1) Methods of multifactorial study of personality called "R. Cattell's Sixteen Personality Factor Questionnaire" to determine the general structural and dynamic characteristics ("universal features") of personality and predict human behaviour in different situations (communicative block: A, F, E, H, N, L, Q2).

2) Methods of communicative and social competence (CSC) diagnostics for the study of communicative abilities and peculiarities of social contacts establishment^[28];

3) Diagnostic technique of interpersonal relations to study peculiarities of mutual relations in small groups and definition of the prevailing type of interpersonal relations;

4) "Adaptability" multilevel personality questionnaire (MLO-AM) to study the adaptive capabilities of the individual based on the assessment of some psychophysiological and socio-psychological characteristics that reflect the integral peculiarities of mental and social development^[2].

5) The author's questionnaire aimed at studying the peculiarities of interpersonal relations, the level of proneness to conflict and the role structure of the cadet team.

The cadets were interviewed in the morning hours in specially equipped classrooms for such sociological research, which reduced the risk of outside influences. Conditions were also provided for the voluntary participation of cadets, according to which the respondents had the possibility to elect not to participate in the survey and diagnostic work in general. The survey was anonymous, which increased the reliability of the results.

2.3. Statistical analysis

The mathematical and statistical method was used to process the experimental data obtained.

Mathematical and statistical data processing was carried out with the help of “SPSS 17.0”, “SPSS 22.0” and “Microsoft Office Excel 2003” application programs, which ensured the calculation of statistical variation indicators:

ϕ -criterion of Fisher’s angular transformation—to identify statistically significant differences between the percentages of the compared indicators in groups of respondents;

Student’s *t*-test for independent samples—to identify statistically significant differences between the average values of the compared indicators in the groups of subjects. The reliability of the difference was set at $p < 0.05$.

2.4. Ethics

The research was carried out according to the requirements of the Code of Ethics of Kharkiv National University of Internal Affairs, which was developed on the basis of Ukrainian and world practices in ethical rulemaking, the recommendations of experts, taking into account the proposals of the structural units of the University. This document was approved by the Academic Council of Kharkiv National University of Internal Affairs (protocol No. 13 of 24 December 2019) and implemented by the order of the Rector of the University (order No. 875 of 27 December 2019). The principles of upholding honesty, fairness, respect, responsibility, following ethical principles and rules of creative activity are taken into account in order to establish confidence in the results of scientific achievements. Informed consent was received from all individuals who took part in this research and people under test who could refuse participation at any time.

3. Results

3.1. The peculiarities of characteristics of the communicative abilities of the cadets’ personality

According to the professional profile of the investigator, the communicative block in his professional activity is dominant, because the communication process is constant, carried out with a significant number of people, with different categories of citizens and is one of the main ways to obtain information. This particular feature stipulated the determination of the peculiarities of characteristics of the communicative abilities of the cadets’ personality.

First, we determined the level of development of communicative characteristics of the cadets by interpreting the indicators of the communicative block factors (A, E, F, H, L, N, Q2) according to R. Cattell’s Sixteen Personality Factor Questionnaire. It was established that the first-year cadets’ indicators of the communicative block factors have average (A, E, F, H, N factors) and low (L, Q2 factors) levels of development (**Table 1**). Such data testify that the first-year cadets (future investigators) have a sufficient level of skills and abilities to get into touch with wider public and establish a dialogue. The first-year cadets tend to show flexibility and openness, they are straightforward and trustful in the process of communication. There is a conformity of their behaviour, social dependence and subordination to the authorities, which is quite characteristic of the personality of their age and social status.

The second-year and the third-year cadets were diagnosed with a high level of development of the indicators of A and H factors. That is, they are open, courageous and socially active in communication. The indicators of E, F, L, N factors have an average level of development, which points out the possibility of manifestation of two poles of quality, depending on the situation. In addition, softness, flexibility towards

people (E, F, L factors) can be compensated by courage and risk appetite (H factor); and restraint (F factor) can be supported by diplomacy (N factor). The indicator of Q₂ factor has a low level of development, which characterizes the social behaviour of the second-year and the third-year cadets with conformal reactions: dependence on the opinion and requirements of the group, lack of independence in decision-making (**Table 2**).

Table 1. Psychography of communicative characteristics of the first-year cadets' personality, (stens).

Low values	Stens										High values	
	1	2	3	4	5	6	7	8	9	10		
A—unsociability												A + sociability
E—subordination												E + dominance
F—restraint												F + disinhibition
H—bashfulness												H + courage
L—trustfulness												L + suspicion
N—straightforwardness												N + diplomacy
Q ₂ —conformism												Q ₂ + independence

Table 2. Psychography of communicative characteristics of the second-year and the third-year cadets' personality, (stens).

Low values	Stens										High values	
	1	2	3	4	5	6	7	8	9	10		
A—unsociability												A + sociability
E—subordination												E + dominance
F—restraint												F + disinhibition
H—bashfulness												H + courage
L—trustfulness												L + suspicion
N—straightforwardness												N + diplomacy
Q ₂ —conformism												Q ₂ + independence

The profile of communicative characteristics of the third group is similar to the psychography of the second group cadets. Thus, the indicators of A and H factors have a high level of development; the indicators of E, F, L, N factors have an average level of development and the indicators of Q₂ factor have a low level of development (**Table 3**). In other words, the fourth-year cadets are quite easily involved in active actions, are friendly to the environment, active in social contacts. They can be both talkative and impulsive, and cautious and silent. In their social behaviour, they are notable for conformism, the adoption of generally accepted moral rules and norms, uncertainty in decision-making.

The following characteristics of the cadets' (future investigators') communicative abilities were determined using the methodology of diagnostics of communicative and social competence (**Table 4**). It was diagnosed that the indicators of A factor have an average level of development in all three research groups: the first (10.57 ± 4.07), the second (12.15 ± 3.87) and the third (13.88 ± 3.70). Such data suggest that the cadets,

depending on the communication situation, can show both openness and sociability, and unsociability and reticence. It was determined that the fourth-year cadets (13.88 ± 3.70) were statistically ($p \leq 0.001$) more sociable and communicative compared to the first-year cadets (10.57 ± 4.07). The indicators of D factor have a low level of development in the first-year cadets (7.68 ± 2.63) and an average level in the second-year and the third-year cadets (8.69 ± 3.87) and in the fourth-year cadets (11.81 ± 4.07). That is, the first-year cadets are silent and serious, and they are cheerful and joyful during the second, the third and the fourth years of their training. At the same time, the fourth-year cadets (11.81 ± 4.07) are statistically ($p \leq 0.001$) more prone to optimism and fun compared to the first-year cadets (7.68 ± 2.63).

Table 3. Psychography of communicative characteristics of the fourth-year cadets' personality, (stens).

Low values	Stens										High values	
	1	2	3	4	5	6	7	8	9	10		
A—unsociability												A + sociability
E—subordination												E + dominance
F—restraint												F + disinhibition
H—bashfulness												H + courage
L—trustfulness												L + suspicion
N—straightforwardness												N + diplomacy
Q ₂ —conformism												Q ₂ + independence

Table 4. Communicative abilities of the cadets (future investigators), (xavg ± σ).

Factors	Group 1	Group 2	Group 3	1-2 <i>t, p</i>	1-3 <i>t, p</i>	2-3 <i>t, p</i>
A (friendly-avoidant)	10.57 ± 4.07	12.15 ± 3.87	13.88 ± 3.70	1.46	2.67*	1.42
D (cheerful-serious)	7.68 ± 2.63	8.69 ± 3.87	11.81 ± 4.07	1.13	4.10**	2.49
K (sensitive-rational)	7.04 ± 3.73	9.54 ± 5.29	13.06 ± 3.96	2.02	5.05**	2.30
M (independent-dependent on the group)	7.21 ± 3.46	8.38 ± 3.57	9.88 ± 3.86	1.22	2.35	1.27
H (self-controlling-impulsive)	9.43 ± 4.03	10.77 ± 3.83	11.19 ± 3.29	1.25	1.48	0.36
C (emotionally stable-emotionally unstable)	8.43 ± 3.94	11.85 ± 2.75	13.00 ± 4.63	3.67**	3.47**	1.02
B (logical thinking)	12.71 ± 3.70	12.77 ± 3.15	14.44 ± 2.94	0.06	1.59	1.71
P (tendency to antisocial behaviour)	5.54 ± 2.28	6.77 ± 2.45	7.56 ± 2.99	1.17	1.89	1.43

Note: * $p \leq 0.05$; ** $p \leq 0.001$.

Let us note that the first-year (K factor: 7.04 ± 3.73) cadets (future investigators) are statistically ($p \leq 0.001$) more rational than the fourth-year (K factor: 13.06 ± 3.96) cadets (future investigators). The second-year and the third-year (11.85 ± 2.75) and the fourth-year cadets (13.00 ± 4.63) were statistically ($p \leq 0,001$) more emotionally balanced compared to the first-year cadets (8.43 ± 3.94).

It is stated that the level of development of logical thinking (B factor) corresponds to the average in the first (12.71 ± 3.70), the second (12.77 ± 3.15) and the third (14.44 ± 2.94) research groups. That is, the cadets (future investigators) at the stage of their higher education are able to logically form and express opinions through communication, but need to expand the means of language structures using. Predisposition to antisocial behaviour (P factor) has a low level of development in the first (5.54 ± 2.28), the second ($6.77 \pm$

2.45) and the third (7.56 ± 2.99) groups.

Thus, the first-year cadets' communicative abilities are at a stage of development, when it is not the subject of activity that influences the situation, but the situation, which determines the manner of communication and harmonizing relations. The first-year cadets are silent, restrained, seek to work collectively and make decisions with the group, which causes their dissatisfaction with working alone in the process of communication. They are characterized by tranquillity, understanding of their own feelings and adequate ways to express themselves in the process of communicating with others.

The communicative abilities of the cadets of the second and third groups have an average level of development on all scales, which indicates a sufficient level of their rapport and desire for communication and cooperation. They are characterized by sociability, cheerfulness, proactive attitude, self-control of behaviour and tranquillity. However, the average level of development of the indicators of all scales of the methodology indicates the process of formation and development of the ability to apply different models and styles of behaviour in communication in regard to the cadets of the second and the third research groups.

The ability to adapt to the conditions of professional activity depends on the set of personal characteristics of the individual, including the ability to establish contacts, communicate and interact with others. Therefore, the next stage of our research was to determine the degree of development of the cadets' adaptive potential at the stage of their higher education using the "Adaptability" multilevel personality questionnaire^[2].

As can be seen from **Table 5**, the indicators of the scale of "neuro-psyche stability" have an average level of development in the first (6.21 ± 1.73), the second (6.45 ± 1.65) and the third (5.13 ± 1.51) research groups. This means that the combination of innate psychophysiological capabilities of the body and acquired personal qualities and mobilization resources by the cadets of all four training courses during their life are able to ensure optimal functioning in adverse conditions of the professional environment.

The indicators of the level of development of communicative abilities are at the average level in the first (5.55 ± 1.11), the second (5.55 ± 1.18) and the third (4.92 ± 1.35) research groups, which indicates the ability to establish contacts and cooperate with others, but there exists possible manifestation of proneness to conflict in the cadets of all four training courses (**Table 5**).

The average indicator of the scale of "moral normalization" is at the average level of development in the first (5.17 ± 0.93), the second (5.36 ± 1.22) and the third (4.92 ± 1.14) research groups. Such data indicate the presence of a sufficient level of orientation to the existing norms and rules of conduct in the cadets (future investigators) of all groups.

Table 5. Adaptive abilities of the cadets (future investigators), ($\bar{x} \pm \sigma$).

Scales	Group 1	Group 2	Group 3	1-2 <i>t, p</i>	1-3 <i>t, p</i>	2-3 <i>t, p</i>
Neuro-psyche stability	5.13 ± 1.51	6.45 ± 1.65	6.21 ± 1.73	0.53	2.57	2.67
Communicative peculiarities	5.55 ± 1.11	5.55 ± 1.18	4.92 ± 1.35	0.01	2.05	1.67
Moral normalization	5.17 ± 0.93	5.36 ± 1.22	4.92 ± 1.14	0.72	0.96	1.29
Adaptive abilities	17.45 ± 1.23	17.55 ± 1.22	28.67 ± 7.98	0.29	4.66**	4.49**

Note: * $p \leq 0.05$; ** $p \leq 0.001$.

It was determined that the indicators of the general level of adaptive abilities of the cadets at the stage of their higher education are at the average level of development in all three research groups (**Table 5**). At the same time, the indicator of adaptive abilities of the fourth-year (28.67 ± 7.98) cadets (future investigators) is statistically ($p \leq 0.001$) higher than that of the first-year (17.45 ± 1.23) cadets and the second-year as well as

the third-year (17.55 ± 1.22) cadets. In other words, the process of adaptation in the fourth-year cadets, as an active adaptation of a human being to the ever-changing conditions of the social environment and professional activities, is much easier and faster compared to the first-year, the second-year and the third-year cadets.

In general, the cadets of all four courses are able to adapt to new conditions, join a new team and feel themselves adequately confident in the situation. The level of development of their adaptive abilities is average. That is, usually the cadets are not conflictual and are able to objectively perceive themselves and others. However, there exists a possibility of maladaptation, which may be accompanied by proneness to conflict, disruption of relationships, reduced efficiency in case of an underdeveloped self-image or unrealistic comparison of one's own needs with the available opportunities.

The personality is manifested during the process of interaction with the environment in a certain style of interpersonal behaviour, which was investigated using the test of interpersonal interaction of T. Leary. The average profile of the first-year cadets is dominated by the following types of interaction: authoritarian (8.03 ± 2.98), altruistic (7.91 ± 3.51), benevolent (7.39 ± 2.81); and low values were recorded for suspicious (5.27 ± 2.28) and dependent (5.97 ± 2.77) types. The data obtained indicate that the first-year cadets are characterised by self-confidence, perseverance and the qualities of the organizer. The first-year cadets are responsible towards people, seek to help, show compassion and care in the process of interaction. They tend to cooperate, show friendliness and flexibility in relationships. They resort to compromise, try to agree with the opinion of others, follow the established rules in relations with people in the process of solving problems in conflict situations. The average profile of the second-year and the third-year cadets is dominated by the following styles of interpersonal relations: authoritarian (10.61 ± 3.10), altruistic (7.95 ± 2.38), aggressive (7.68 ± 2.02); subordinate (6.37 ± 3.01) and dependent (6.73 ± 2.67) types are characterised by low indicators.

We diagnose that the cadets of the second group tend to dominate, show themselves as energetic, successful in business, with a strong motivation to achieve, persistent and determined people in achieving the goal in the process of interaction with others. They may be intolerant of criticism, as they are characterized by a reassessment of their own capabilities and some constriction of attitudes. They easily develop a sense of hostility in the face of dissent. An interesting fact is the combination of altruistic and aggressive types of interaction. That is, they combine sociability, benevolence, the need to comply with social norms of interaction, the desire for useful activities for people with high spontaneity, perseverance, self-righteousness, straightforwardness in speech, increased vulnerability, which can easily turn into aggression.

The profile of interpersonal interaction of the fourth-year cadets reflects the dominance of the following types: benevolent (6.67 ± 3.42), altruistic (6.42 ± 3.54), authoritarian (6.08 ± 3.46); low indicators were recorded for aggressive (4.25 ± 2.25), subordinate (3.63 ± 2.83) and dependent (4.50 ± 2.32) types. Such data show that the fourth-year cadets tend to cooperate, show flexibility and compromise in resolving conflict situations, care and benevolence in relationships. They easily get into various social roles, are communicative, benevolent and responsible towards people, can show compassion, are able to encourage and reassure others. Their behaviour is confident, they are persistent in achieving the goals of the group, can be good mentors and organizers, possess the ability to lead.

3.2. Profiles of interpersonal interaction in the activities of the cadets at the stage of their higher education

In general, the obtained data indicate the existence of two variants of profiles of interpersonal interaction in the activities of the cadets at the stage of their higher education: 1) with a predominance of independence, leadership and dominance (octant 1) and 2) responsibility, focus on cooperation and coherence with others (octants 7, 8) (**Table 6**). The results of the survey showed that most cadets are satisfied with their relationships

in the team (Table 7).

Table 6. Peculiarities of interpersonal interaction of the cadets (future investigators), ($x_{avg} \pm \sigma$).

Types of interaction	Group 1	Group 2	Group 3	1-2 <i>t, p</i>	1-3 <i>t, p</i>	2-3 <i>t, p</i>
Authoritarian	8.03 ± 2.98	10.61 ± 3.10	6.08 ± 3.46	3.62**	2.27	5.44**
Selfish	6.52 ± 2.76	7.49 ± 2.41	5.25 ± 2.59	1.62	1.75	3.51**
Aggressive	6.39 ± 2.82	7.68 ± 2.02	4.25 ± 2.25	2.29	3.08**	6.34**
Suspicious	5.27 ± 2.28	6.83 ± 3.60	3.08 ± 1.25	2.16	4.25**	4.91**
Subordinate	6.61 ± 2.95	6.37 ± 3.01	3.63 ± 2.83	0.34	3.84**	3.63**
Dependent	5.97 ± 2.77	6.73 ± 2.67	4.50 ± 2.32	1.20	2.12	3.40**
Benevolent	7.39 ± 2.81	7.59 ± 2.75	6.67 ± 3.42	0.30	0.88	1.19
Altruistic	7.91 ± 3.51	7.95 ± 2.38	6.42 ± 3.54	0.06	1.58	2.09

Note: * $p \leq 0.05$; ** $p \leq 0.001$.

Table 7. Relationships within the cadets' (future investigators') team, (%).

Questions/answer options	Group 1	Group 2	Group 3	Φ_{emp} <i>p</i> ₁₋₂	Φ_{emp} <i>p</i> ₁₋₃	Φ_{emp} <i>p</i> ₂₋₃
Are you satisfied with the relationship with your course mates?						
Yes	86.0	73.1	72.0	3.22**	3.48**	0.24
Partially	11.0	24.9	28.0	3.66**	4.39**	0.70
No	3.0	2.0	-	0.61	3.48**	2.84**
Are you satisfied with the relationship with your parents?						
Yes	96.0	86.3	84.0	3.54**	4.20**	0.64
Partially	-	13.7	16.0	7.55**	8.23**	0.64
No	4.0	-	-	4.01**	4.02**	-
Are you satisfied with the relationship with your instructors?						
Yes	74.0	76.6	72.0	0.61	0.45	1.06
Partially	22.0	23.4	28.0	0.32	1.38	1.06
No	4.0	-	-	4.01**	4.02**	-
Are you satisfied with the relationship with the course officers?						
Yes	88.5	58.9	45.0	6.97**	9.79**	2.77**
Partially	11.5	33.0	45.0	5.29**	7.78**	2.45**
No	-	8.1	10.0	5.75**	6.43**	0.65
How do you assess the level of proneness to conflict within your team as a percentage from 0% to 100%?						
Below 5%	55.0	3.6	28.0	12.88**	5.55**	7.33**
10%–20%	25.5	13.7	24.0	2.99**	0.34	2.64**
30%–50%	-	23.9	32.0	10.11**	12.02**	1.81*
60%–80%	14.5	45.2	12.0	6.90**	0.73	7.63**
90%–100%	3.5	13.7	4.0	3.80**	0.26	3.54**
What is your role within the team?						
Action coordinator	7.5	15.7	24.0	2.60**	4.69**	2.07*
Idea generator	22.0	47.2	32.0	5.36**	2.26**	3.11**
Expert	22.0	17.8	16.0	1.05	1.53	0.46

Table 7. (Continued).

Questions/answer options	Group 1	Group 2	Group 3	Φ_{emp} p_{1-2}	Φ_{emp} p_{1-3}	Φ_{emp} p_{2-3}
Diplomat	11.0	17.8	32.0	1.93*	5.26**	3.31**
Researcher	29.0	-	8.0	11.33**	5.63**	5.71**
Executant of ideas	15.0	23.4	24.0	2.12**	2.28**	0.15
Critic	25.5	25.4	16.0	0.02	2.35**	2.32**
Assistant	29.0	47.2	12.0	3.76**	4.29**	8.04**

Thus, the positive answer concerning the relationship with course mates is given by 86.0% of the first-year cadets, 73.1% of the second-year and the third-year cadets, 72.0% of the fourth-year cadets; with parents—96.0% of the first group cadets, 86.3% of the second group, 84.0% of the third group; with instructors—74.0% of the first-year cadets, 76.6% of the second-year and the third-year cadets, 72.0% of the fourth-year cadets; with course officers—88.5% of the first-year cadets, 58.9% of the second-year and the third-year cadets. The first-year cadets (3.0%) and the second-year and the third-year cadets (2.0%) are statistically ($p \leq 0.01$) more often than the fourth-year cadets dissatisfied with relationships with the course mates. The fourth-year cadets are completely satisfied (45.0%) and partially satisfied (45.0%) with their relationships with course officers, which is statistically more significant ($p \leq 0.01$) than the first-year cadets (11.5%) and the second-year and third-year cadets (33.0%).

The level of proneness to conflict within the team is assessed as low by the first-year 55.0% cadets, which is statistically ($p \leq 0.01$) more significant compared to the second-year and the third-year (3.6%) cadets and the fourth-year (28.0%) cadets. Proneness to conflict within the team is assessed as high at the level of 90%–100%, by the first-year (3.5%) cadets, the second-year and the third-year (13.7%) and the fourth-year (4.0%) cadets.

The opinion of future investigators on their roles within the team was determined. The first-year cadets statistically ($p \leq 0.01$) more often than the second-year and the fourth-year cadets choose the roles of researcher (29.0%) and assistant (29.0%). The second-year and the third-year cadets statistically ($p \leq 0.01$) more often, compared to the first-year and the fourth-year cadets, choose the roles of assistant (47.2%) and generator of ideas (47.2%). The fourth-year cadets statistically ($p \leq 0.01$) more often than the first-year and the second-third-year cadets choose the roles of generator of ideas (32.0%) and diplomat (32.0%).

4. Discussion

The communicative block in the professional activity of investigators is dominant, since the process of communication is permanent, is carried out with a significant number of people, with different categories of citizens and is one of the main ways of obtaining professionally important information^[28,29].

The research revealed that the communicative abilities of the first-year cadets (group 1) are at the stage of development, when the situation sets the manner of communication and establishing relationships in the process of communication, the respondents of the first group tend to show compliance and openness, they are straightforward and trusting, they demonstrate conformity of behavior, a certain lack of independence and uncertainty in decision-making, they are subject to the influence of others, which is characteristic both for their age and for the period of adaptation to new conditions of the professional and educational environment. Therefore, it is precisely in the first year of study, when the communicative abilities of cadets are still at the stage of development and transformation due to the influence of the new situation on the conditions and form of communication, it is necessary to work on creating optimal conditions for adaptation to the new educational

and professional environment in order to reduce the adaptation load. The vector of attention is directed to awareness of the available personal communicative potential and its compliance with the requirements of the chosen institution of higher education; features of inclusion in the primary (small) group of cadets and building vertical and horizontal interpersonal relationships.

The communicative abilities of the second-year, the third-year and the fourth-year cadets (future investigators) (groups 2 and 3) are characterised by an average level of development, which indicates a sufficient level of their proactive attitude, rapport and desire for communication and cooperation. An increase in the indicators of the scales to average values may indicate the presence of a process of awareness and application of various models and styles of communication behavior in both professional and personal life. Passing the adaptation period, increasing the practical component of training, establishing interpersonal relationships of a vertical and horizontal nature, the opportunity to test and consolidate the acquired theoretical knowledge during the internship contribute to the development of communication skills and increase the level of adaptability of cadets. These are significant components of the growing potential of their professional readiness for official activities.

The abilities to adapt to the conditions of professional activity (adaptive abilities), join a new team and feel confident in various situations are developed at an average level in the cadets of all three research groups, but the processes of adaptation to the professional environment in the third group are much easier and faster compared with the representatives of the first and the second groups of interest. The gradual growth of adaptability indicators diagnosed in the respondents of the third group can indicate both the balance of the theoretical and practical components of education within the higher education institution with specific conditions, and the presence of a sufficiently harmonious educational and social environment that contributes to the formation of effective horizontal and vertical relationships in cadet team. This is the basis for the development of a high level of cadets' readiness for future service activities and the ability to quickly and effectively join the technological process with the performance of more complex functional tasks.

In addition, adaptability of the individual is a system-forming component that permeates all components of both the structure of the individual and the leading areas of future investigative activity, which depends on the level of its formation and development^[30,31]. In addition, we should talk about the specifics of coping strategies to overcome stress and the interaction of future investigators with different categories of citizens as objects of professional activity^[32-34].

Also, the existence of two variants of profiles of interpersonal interaction within the activities of future investigators in the process of their training in a higher educational institution was diagnosed: 1) with a predominance of the tendency to independence, leadership and dominance; 2) responsibility, focus on cooperation and coherence with others. The outlined positions are explained by the conscious desire of future legists to show individual and professional potential, combined with the possibility of exercising competent procedural powers within the framework of future investigative activities, as well as the desire for self-affirmation not only as young professionals but also promising law enforcement officials^[35-40].

Most of the participants of interest revealed both an increase in the development of communicative characteristics (communicative and adaptive abilities, understanding and building interpersonal relationships, disposition to cooperation, collaboration, compromise in resolving conflict situations, etc.) and an understanding of the nature and peculiarities of professional interaction and role expansion in interpersonal communication in vertical and horizontal direction. Generalized characteristics of the components of communicative competence of future investigators are presented in **Table 8**.

A review of the generalized characteristics of the communicative competence of future investigators at

the stage of professional training indicates their gradual awareness of the importance of the communicative component of their official activity, as well as directions for applying the acquired knowledge and skills in practical activities.

Table 8. Generalized communicative characteristics of cadets (future investigators).

Group 1	Group 2	Group 3
Types of interpersonal interaction		
1) Authoritarian 2) Altruistic 3) Friendly	1) Authoritarian 2) Altruistic 3) Aggressive	1) Friendly 2) Altruistic 3) Authoritarian
Communicative abilities		
Open, attentive, prone to cooperation and trust-based. Equilibrium between the poles of unsociability-communicativeness	Open, attentive, prone to cooperation and trust-based. Equilibrium between the poles of unsociability-communicativeness	Communication skills are above average. Open to the environment, quite easily involved in active actions.
Adaptive abilities		
Average level of development: -neuro-psychic stability; -moral normalization; -adaptive abilities	Average level of development: -neuro-psychic stability; -moral normalization; -adaptive abilities	Average level of development: -neuro-psychic stability; -moral normalization; -adaptive abilities

5. Conclusion

In the course of the study, it was noted that for the respondents of the first group, considering the background of the adaptation processes to the new conditions of the educational and professional environment, the internalization and revision of the existing communicative potential of the cadets is significant. The second group is characterized by assimilation and accumulation of professional knowledge and skills in the field of communication and attempts to implement this knowledge in practical activities and interpersonal communication with fellow students. Respondents of the third group demonstrate consolidation of communicative knowledge and skills in the field of personal and professional interaction with the social environment, which is a component of their professional readiness for further activities in the investigation of crimes.

The research found that the communicative abilities of the second and the third groups are characterised by an average level of development, which is a) a positive basis for the establishment of communication and the formation of communicative potential of the investigator; b) communicative abilities of the cadets are underdeveloped at the initial stages of mastering the profession of an investigator, which reduces the effectiveness of interpersonal relationships in general and requires more careful professional and psychological support; c) two variants of profiles of interpersonal interaction (with a predominance of the tendency to independence, leadership and dominance; with a focus on cooperation and responsibility) were diagnosed.

The obtained indicators confirm the presence of a tendency to the development of communicative abilities of cadets (future investigators) during their professional training within a higher educational institution with specific learning environment. This emphasizes the need for appropriate professional and psychological support for the formation and development of communicative abilities of future investigators both during the first stage, to learn the conditions and peculiarities of the educational and professional environment, and subsequently—to strengthen and maintain communication relations and improve communicative competence.

The development of the communicative potential of cadets during professional training in institutions of higher education is a necessary condition for the formation of indicators of a highly effective employee, namely:

skills of social interaction; abilities to perform social roles and overcome communication barriers; horizontal and vertical levels of development of interpersonal contacts; adaptability, etc., which essentially forms the basis of the communicative component of the official activity of the investigator.

Author contributions

Conceptualization, IO and IB; methodology, IB and OP; formal analysis, NB; investigation, NM; resources, NM and NP; writing—original draft preparation, VB; writing—review and editing, NM; visualization, NM; supervision, IO. All authors have read and agreed to the published version of the manuscript.

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Conflict of interest

The authors declare no conflict of interest.

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