1.8. Peculiarities of the relationship of psychic working capacity with the success of teaching students at the lyceum of the police

The relevance of the study lies in the fact that one of the features of modern education in Ukraine is the creation of a system of educational institutions with elements of military education — high schools, which are associated with the activities of various security agencies and departments. The main goal of modern lyceums is not only teaching younger generation in the spirit of patriotism, but also the formation of an intelligent, efficient, successful specialist.

Education and upbringing in modern educational institutions contribute to the formation and development of older adolescents of clearer ideas about the world of military professions, which motivate them to choose career paths that are associated with the activities of security agencies. This is evidenced by the growing interest of adolescents in the desire to enter the police lyceum. In addition, the very influence of the organizational and methodological process affects the psychological development of adolescents, which is expressed in the qualitative characteristics of the individual and psychic working capacity of the individual.

Among the main reasons that determine these features are the presence in the teaching and educational process of elements of military education and focus on patriotic education. A special point can be identified strict regulation of the activities at the lyceum students, which involves strict compliance with the requirements in a certain time interval, according to the statute at the lyceum. Adolescents need to develop a certain level of self-organization, the ability to self-regulation in order to carry out the tasks in a quality and timely manner.

Considering that learning at the lyceum of the police includes elements of vocational training, one of the key professionally important abilities of future specialists is psychic working capacity as a complex systemic education, which is caused by motivation, functional state and individual personality characteristics of the subject and ensures the implementation of activities with a certain quality at a given time interval. Researches of the specific personal characteristics students at the lyceum, their motivation and conditions for the development of working capacity, especially psychic working capacity, are presented in the scientific literature in a less degree.

Analysis of recent researches and publications. The study of psychic working capacity, which in this work is interpreted including the subject's ability to productive intellectual activity, is particularly relevant at the present time.

Psychological studies of students of boarding schools with elements of military training were conducted by a number of authors, including P. A. Korchemny, A. D. Glotochkin, D. V. Gander, A. V. Ponomarenko, I. S. Petranyuk and others, but the number of generalizing works on this topic is very limited.

In these works adequately features of training and education of trainee are investigated, at the same time there are single researches of psychological features of increase of psychic working capacity of teenagers who study in specialized educational institutions.

Research of psychological features of psychic working capacity of teenagers who learn the basics of vocational training in the conditions at the lyceum is, urgent, for revealing specific psychological qualities which define success of their activity, is not enough developed by the scientists, and formed base for choice of the topic of this research.

The test subject is a psychic working capacity of teenagers.

The Subject of research is features of psychic working capacity of teenagers who study in the vocational lyceums (police lyceums).

The purpose of our research is investigation of dynamics of psychic working capacity its her interrelation with success of training of pupils at police lyceums. Creation of classification of the types psychic working capacity of pupils of the lyceum of the police will allow to optimize and

provide favourable conditions for success of their training and further professional self-determination.

The description of the main content material. Research of features of psychic working capacity of pupils at the lyceum of the police was carried out based on Kharkov specialized school-boarding school «Police lyceum» of Kharkov regional council. In total 92 lyceum pupils took part in the research.

To solve the problems of research the following methods were applied: theorist-methodological analysis of scientific literature on the problem of research, methods of the interrogation (questioning, conversation), mental diagnostic tests, qualitative and quantitative analysis of received data.

Method of the evaluation of cognitive domain of pupils at lyceum or «psychic working capacity» implied a complex research of specifications of attention, memory and logic thinking. For attention research technique «Continuous account in autorate» was used, for research of logic thinking or definition of specifications of complexity of activity technique «Ravena's progressive matrixes» was executed, for definition of specification of volume of short-term memory during performance of task technique «Storing of geometrical matrixes» was used.

The results were processed with the aid of methods of mathematical statistics: parametrized ratings of descriptive statistics; method of the evaluation of the reliability of distinctions on the Student's t-test; method of rank correlation of Spirmen.

The most common is definition of psychic working capacity in the scientific literature of our country is as ability of a person to perform certain of determined activity within given temporary limits and efficiency parameters.

On the basis of theoretical positions of system approach, psychic working capacity is a difficult system formation which is caused by motivation, functional condition and individually-personal features of the subject and which supplies performance of activity with determined quality in given time interval, as well as ability of the subject to intelligent productive activity. 101

The purpose of modern specialised educational institutions is development and maintenance of teenagers' interest to trades of military profile, implementation of preparation of teenagers which is required and sufficient to continue professional career.

The pupils of specialised educational institutions represent age groups of coevals who differ among themselves by diversity of individual personal development which is expressed in their behaviour and action. The reasons of these distinctions depend, on the one hand, on those conditions, in which a child lived joining the lyceum, and on the other hand, depends on the atmosphere in the lyceum.

Analysis of existing scientific works allowed to determine three groups of factors, by which the groups of teenagers-lyceum students with behaviour disorder and with normal behaviour differ. Those factors are level of health, a family and the relationships of the teenager. For the group of teenagers with normal behaviour features are as follows – normal health, absence of the hereditary load. Children are raised mainly in full families, at the same time separate cases of partial families were noted, where the child is raised only by the mother, but a favourable atmosphere of the teenager's education is typical. For the group of teenagers with behaviour disorder poor health, the hereditary load, upbringing in one-parent families, the occurrence in the criminal environment are characteristic features.

Among pupils at lyceums we can frequently see teenagers with various behaviour disorder. Principal causes of disorders are the complex of psychophysiological grounds, including,

¹⁰¹ RYIZHOV B. N. (2010). The systems psychology and sociology, 5-42.

¹⁰² BAYBURTYANTS, E. V. (2007). The psychological studying of infringements of behavior of pupils (teenagers) of military school, 24.

upbringing in one-parent families, stay in the criminal environment, pedagogical neglect. The main kinds of such behaviour are infringements undisciplined behaviour in the establishment; social pedagogical neglect; smoking, alcoholisation, drug addiction; vagrancy, suicidal behaviour. 103,104,105.

Among the most sharp social, social pedagogical and psychological problems which are typical of specialized educational establishments, there is lack of life experience and training in the conditions of five-day educational week with round-the-clock stay in the walls at the lyceum, and authoritarian education style.

As well here it is possible to add such factors as: living in the conditions of high concentration of people; collectivization of behaviour and consciousness; phenomenon «we»; a dependent position; difficulties in communication; problems in the domain of interpersonal relationships; unreadiness to interact with society; inability to anticipate one's act; absence of entirely generated strong-will domain, self-checking and discipline; low social activity; infringements in personal development, character and behaviour. The common is necessity of development of the reflection which could help to build an adequate representation of yourself, to predict and to generate life and style of dialogue with social environment.¹⁰⁶

Among lyceum students' dominating personal features are high discipline, self-checking increased level of sense of duty and responsibility, endurance and self-control, high psychological stability at the time an increased tension which causes a high inner mobilization, and a high level of working capacity pupils of the lyceum is emphasized. 107,108

However these works do not set the task to consider, development of psychological qualities, cognitive domain which should be possessed by modern lyceum students, psychic working capacity of pupils, and its communication with school progress is not considered.

The research conducted of structural elements of psychic working capacity pupils at the lyceum pupils revealed such features:

- 1. Students at the lyceum have a good developed attention. Pupils of the lyceum quickly and practically without mistakes solve problems presented to them being accurate and correct in answers. This fact is due to the conditions of education and training of lyceum students, when their all activity is specified rigidly so that success depends to a large extent not only on correct performance of tasks, but also on the rate of performance. As well the rate of activity is on high enough level.
- 2. Results of measurement of difficult logic activity received during experiment showed that for lyceum pupils it is important to find an effective way of the problem solving with minimum expenditure of the time to correct decision, therefore they use ready algorithms of the decision of similar tasks that it is an important condition for successful activity of specialists of many military and policing branch.
- 3. The lowest rating of psychic working capacity falls on the second year at the lyceum, and the highest psychic working capacity we can see for the third year of training. The pupils of the

¹⁰⁷ MONASTYRSKIY V. A., MILOVANOVA N. Yu. (2006). Adaptation of students of a cadet corps to life activity, c. 122-127.

¹⁰³ VASHUTIN O. (2008). Socialization of youth in a family and becoming of psychology of the individual, 15.

¹⁰⁴ VASHUTIN O. (2000). The political socialization of youth in a family and becoming of psychology of the individual, 67-71.

¹⁰⁵ KONDRATEV M. Yu. (1994). An adolescent in a system of interpersonal attitudes in a closed educational institution,

¹⁰⁶. VACHKOV I. V. (1999). The bases of the technology of group training. Psychotechnics, 460.

¹⁰⁸ ARBENINA V. L.; VOLIANSKA O. V.; ZINCHYNA O. B.; KURIACHA M. A.; NIKOLAIEVSKA A. M.; SOKURIANSKA L. H, SHMACHKO V. B. (2000). The teenager in a big city: factors and mechanisms of socialization, 206.

first grade level showed an average level of psychic working capacity regarding all samples of test subjects

- 4. Prevailing type of psychic working capacity is a versatile type, for which it is characteristic domination of ability to storing or volume of activity above complexity of activity. Such type of psychic working capacity was revealed almost at half of all students at the lyceum.
- 5. Students at the lyceum with versatile type psychic working capacity study better those subjects, for successful development of which as leading mental processes memory and attention are operational (a social humanitarian cycle).

Students of lyceum with ingenious type of psychic working capacity show a relative complexity of storing, therefore they manage worse to memorize and to reproduce plenty of the information subsequently – the base of social humanitarian disciplines, but this group of lyceum students learn better on the subjects which rely to greater extent on function of analysis and synthesis in logic thinking.

For students of lyceum with counterbalanced type of psychic working capacity the common abilities are equally advanced. In under study group of students of lyceum prevalence of abilities is which require development of mnemonic activity, abilities to operate big volumes of information, rather than to establish difficult logic connections is discovered.

Conclusions. As conducted empirical research showed, at the lyceum of police pupils the following problems were revealed: quick fatigue and reduction of working capacity, to which, as to the problem which hinders to study, indicated a large part of students. The interrogation of students shows that along with the common problems concerning students at the lyceum of all rates, especially absence of generated self-control and self-organizing is noted, therefore working capacity loss is observed that in turn influences satisfaction with educational activity and reduction in progress.

Basic task of research is studying of psychic working capacity of pupils at the lyceum. As a result of work not only the level of psychic working capacity on all curriculums was determined, but also three her types on the way of inclusion by the subject of determined cognitive abilities are revealed during performance of productive intelligent activity, to which conventionally all students at the lyceum which are related on the grounds of common abilities distinctly expressed at them: to ingenious, versatile and counterbalanced. Pupils at the lyceum quickly and practically without mistakes solve problems presented to them being accurate and correct in answers. This fact is due to the conditions of education and training of students at the lyceum, when their all activity is specified rigidly so that success depends to a large extent not only on correct performance of tasks, but also on the rate of performance. As well the rate of activity is on high enough level.

Results of measurement of volume of short-term memory or simple logic activity students at the lyceum lie within the range of means on age sample. Lyceum students in their activity constantly come across tasks, to solve which to them strictly determined time is taken away, therefore, on the one hand, to foreground specifications of activity act which depend on rate. On the other hand, the solving of defined tasks, in view of the limit of the time, requires search of early reply from students at the lyceum. Necessity to correspond this condition results in a solely effective way: students at the lyceum begin to search for similar algorithm of the problem solving, well it known, that is, produces operation of extraction from the memory of plenty of the information anyhow connected with the conditions of the task. Thereby, in the memory search of ready outlines of the decision of similar tasks is implemented that considerably falls behind to the way decisions based on search of cause-effect attitudes incorporated in the conditions of the task. But for students at the lyceum it is important to find an effective way of the problem solving for within minimum length of time.

The types of psychic working capacity of pupils at the lyceum of the police revealed during experiment assist to define, at the expense of which cognitive abilities pupils carry out tasks delivered them and in what professional work they can reach the largest success.

We will note that division of pupils to groups pursuant to the types psychic working capacity (ingenious, versatile and counterbalanced) allowed to establish significant correlation communications between the type of psychic working capacity and the level of progress on the subjects of different cycles such as social humanitarian, natural and exact.

For successful professional work it is necessary to conduct a special social psychological training of increasing working capacity, taking into account at the same time, to what cognitive processes (attention, memory or thinking) the main load in particular professional work is necessary, that is, allocated types on specifications of cognitive abilities should be compared with trades pupils have chosen.

References:

- 1. ARBENINA V. L.; VOLIANSKA O. V.; ZINCHYNA O. B.; KURIACHA M. A.; NIKOLAIEVSKA A. M.; SOKURIANSKA L. H, SHMACHKO V. B. (2000). The teenager in a big city: factors and mechanisms of socialization. Kharkov.
- 2. BAYBURTYANTS, E. V. (2007). The psychological studying of infringements of behaviour of pupils (teenagers) of military school (Master's thesis). Sholokhov Moscow State University for Humanities, Nizhniy Novgorod.
- 3. VACHKOV I. V. (1999). The bases of the technology of group training. Psychotechnics. Moscow: Axis-89.
- 4. VASHUTIN O. (2008). Socialization of youth in a family and becoming of psychology of the individual. Person and politics, 4, 115.
- 5. VASHUTIN O. (2000). The political socialization of youth in a family and becoming of psychology of the individual. Person and politics, 5, 67-71.
- 6. KON I. S. Psychology of an upperclassman. (1982). Moscow: Enlightenment.
- 7. KONDRATEV M. Yu. (1994). An adolescent in a system of interpersonal attitudes in a closed educational institution. Moscow: The federal institute of psychology of education.
- 8. MKRTCHYAN D. M. (2008). The role of a family in the domain of protect the health and health promotion of the cadets' in the conditions of cadet boarding school. The problem of protect the health and health promotion of the younger generation: the psychological and pedagogical approach. Proceedings of International scientific and practical conference, Mockow 2008.
- 9. MONASTYRSKIY V. A., MILOVANOVA N. Yu. (2006). Adaptation of students of a cadet corps to life activity. The psychological and pedagogical journal Gaudeamus, 9 (1), 122-127.
- 10. RYIZHOV B. N.(2010). Systematic grounds of psychology. The systems psychology and sociology, 1, 5-42.