



Asesorías y Tutorías para la Investigación Científica en la Educación Puig-Salabarría S.C.
José María Pino Suárez 460-2 esq a Lerdo de Tejada. Toluca, Estado de México. 7223898473
 RFC: AT1120618V12

Revista Dilemas Contemporáneos: Educación, Política y Valores.

<http://www.dilemascontemporaneoseduccionpoliticayvalores.com/>

Año: VII Número: 2 Artículo no.:25 Período: 1ro de enero al 30 de abril del 2020.

TÍTULO: La falta de competencia metódica de los futuros oficiales en el entrenamiento físico como un problema pedagógico.

AUTORES:

1. Prof. Ivan Okhrimenko.
2. Prof. Oleksandr Kobernyk.
3. Ph.D. Oleksandr Husarevych.
4. Ph.D. Viktoriia Krykun.
5. Ph.D. Nataliia Kalashnik.
6. Assoc. Prof. Vita Pavlenko.
7. Assoc. Prof. Ivan Samokish.
8. Assistant. Nataliia Biruk.
9. Senior Teacher. Olena Butok.
10. Assoc. Prof. Valentin Bondarenko.
11. Prof. Grygoriy Griban.
12. Assoc. Prof. Kostiantyn Prontenko.

RESUMEN: El nivel de los cadetes de las instituciones de educación militar superior (IEMS), que son futuros oficiales, investiga la competencia metódica en el entrenamiento físico en el artículo. 609 cadetes participaron en el estudio. Se formaron dos grupos: EG (n = 38), que incluía a los cadetes que participaban en diversos deportes y CG (n = 65), que incluía a los cadetes que se

entrenaban según el programa tradicional de entrenamiento físico. La competencia metódica se evaluó por el nivel de dominio de las bases teóricas del entrenamiento físico y la calidad de la implementación de acciones prácticas de entrenamiento físico.

PALABRAS CLAVES: competencia metódica, entrenamiento físico, deporte, cadetes.

TITLE: The lack of future officers' methodical competence in physical training as a pedagogical problem.

AUTHORS:

1. 1. Prof. Ivan Okhrimenko.
2. Prof. Oleksandr Kobernyk.
3. Ph.D. Oleksandr Husarevych.
4. Ph.D. Viktoriia Krykun.
5. Ph.D. Nataliia Kalashnik.
6. Assoc. Prof. Vita Pavlenko.
7. Assoc. Prof. Ivan Samokish.
8. Assistant. Nataliia Biruk.
9. Senior Teacher. Olena Butok.
10. Assoc. Prof. Valentin Bondarenko.
11. Prof. Grygoriy Grihan.
12. Assoc. Prof. Kostiantyn Prontenko.

ABSTRACT: The level of the cadets' of higher military educational institutions (HMEI), who are future officers, methodical competence in physical training is investigated in the article. 609 cadets participated in the study. Two groups were formed: EG (n=38), which included the cadets who were

engaged in various sports and CG (n=65), which included the cadets who were training according to the traditional physical training program. The methodical competence was assessed by the level of mastering the theoretical bases of physical training and the quality of implementation of practical actions of physical training. It was determined that EG cadets had a higher level of methodical competence in physical training than CG cadets at the end of the study at HMEI.

KEY WORDS: methodical competence, physical training, sport, cadets.

INTRODUCTION.

Physical training is a pedagogical process of the physical improvement of general and special physical qualities, the formation of military-applied skills and abilities, the education of psychological qualities in order to ensure the physical and psychological readiness of military personnel for training and combat activities and the performance of functional duties (Griban, Romanchuk, & Romanchuk, 2014; Burley, Drain, Sampson, & Groeller, 2018).

Physical training is one of the main subjects of professional and combat training, an important and integral component of military training and education of military personnel of the Armed Forces of Ukraine (Sergienko, & Andreianov, 2013; Kamaiev, et al., 2018). The aim of physical training at HMEI is to provide the formation of the need of the cadets who are future commanders to master theoretical knowledge, physical exercises, techniques and actions, organizational and methodical skills and the abilities to manage physical development and the improvement of military personnel by certain means, as well as to train to apply the acquired values in the future daily work activity (Kamaiev, et al., 2018; Prontenko, et al., 2019).

The commander of the unit, his methodical competence and physical fitness are of great importance in achieving the aim of physical training by subordinate personnel and the unit. The investigations (Glazunov, 2014; Romanchuk, Loginov, & Anohin, 2010) established a consistent pattern which

implies that the level of physical fitness of personnel is always higher in those units where the commander has excellent physical fitness that is an example for others.

Scientists prove that the personnel of the units where commanders clearly organize and carry out all physical training activities, encourage independent exercises and sports during the scheduled time, have a high level of physical fitness, reaches quite high indicators of military and professional training, sports readiness, and work activities. Conversely, the lack of physical readiness and methodical competence of unit commanders leads to low levels of physical fitness of subordinate personnel.

The correct, confident performance of the exercise by a teacher (trainer, instructor) increases the psychological confidence of subordinates in their abilities to perform the exercise at a sufficiently high level, encourage them to achieve the same level of physical fitness from the very first minutes of the activity. Therefore, the commander and head of the class is obliged to constantly increase the level of physical fitness, theoretical knowledge, and methodical skills (Loginov, & Loyko, 2000).

According to scientists (Mulyar, Pichugin, & Romanchuk 2007; Petrovska, 2015), the commander and head of the class needs to have the theoretical knowledge of physical training to correctly understand the importance of physical training in the Armed Forces of Ukraine, its role in improving the units' combat readiness; to correctly use the appropriate means and methods; to realize the impact of physical activity on the organism; to know hygiene requirements, etc.

The scientists (Kyrolainen, Pihlainen, Ojanen, & Santtila, 2018; Griban, Romanchuk, & Romanchuk, 2014; Groeller, Burley, Orchard, Sampson, Billing, & Linnane, 2015; Bolotin, Bakayev, & Vazhenin, 2016) note that the quality of combat training is directly dependent on the quality of training. Therefore, the cadets of HMEI should develop methodical skills in conducting classes in different kinds of combat training, including physical training.

The annual reports of the state examination committee indicate a low level of methodical competence of graduates, namely weak theoretical knowledge of the basics of physical education; the lack of skills in organizing and conducting forms of physical training; the inability to use the physical training means to improve professional performance.

The mentioned negative aspects are confirmed by experimental studies (Petruk, 2016; Shlyamar, 2014; Loginov, & Loyko, 2000), which, on the basis of the analysis of the methodical training level of the commanders of cadets, found that it is low and it does not let to solve the physical training problem of the cadets of HMEI efficiently.

According to many experts, the process of the cadets' physical training should not only be reduced to the development of physical qualities but also it should include an appropriate set of theoretical knowledge and methodical skills.

The scientists (Silchuk, 2003; Zhukevych, et al., 2019; Bolotin, Bakayev, & Vazhenin, 2016; Krutsevych, 2008; Mulyar, Pichugin, & Romanchuk, 2007) believe that the theoretical and methodical training of cadets should solve the following tasks: the creation of a knowledge base in theory and methods of physical training; the formation of organizational and methodical skills according to their official appointment; mastering the skills of independent physical training; the development of physical and special qualities, the improvement of military-applied skills; the self-improvement of basic training to maintain the professional capacity of military personnel; the formation of resistance of an organism to the influence of unfavorable factors of military-professional activity.

According to scientists (Petruk, 2017; Silchuk, 2003; Prontenko, et al., 2019), the methodical competence of a future officer and the head of the class is provided in different ways: at training sessions, in the process of self-preparation, at competitions, in sports classes.

DEVELOPMENT.

Methodology.

The aim of the article is to carry out a comparative analysis of the level of methodical competence in physical training of the graduates who were engaged in sports during the study, and the cadets who were engaged in the traditional program of physical training.

The cadets of S. P. Koroliiv Zhytomyr Military Institute (ZMI) (n=609) participated in the research in 2014-2019. The summative and formative experiments were carried out. The summative experiment studied the level of methodical readiness of 23-unit commanders and 506 cadets who graduated from ZMI in 2014-2018 according to the result of state exams in physical training. The formative experiment implied a comparative analysis of the level of methodical competence of the cadets who were engaged in various sports teams of the institute and who participated in competitions during studying (EG, n=38), and the cadets who were engaged in the traditional program of physical training (CG, n=65) at the end of study at HMEI. The formative experiment was conducted in 2019.

The level of methodical competence of cadets was evaluated by:

- The level of knowledge of theoretical bases of physical training.
- The quality of the methodical task performance that includes practical actions for organizing and conducting physical training.

The check of the level of knowledge of the theoretical bases of physical training was carried out by the method of testing. Each cadet answered one test task, which included 12 questions; the time required for the test was 8 minutes. The test tasks were developed by the Department of Physical Education, Special Physical Training and Sports of ZMI. The level of knowledge of the theoretical bases of physical training was assessed as "mastered" – if a cadet gave 6 or more correct answers; "not mastered" – if a cadet gave less than 6 correct answers.

The performance of the methodical task was evaluated as "completed" – if a cadet as the head of the class has a neat appearance, maintains a military bearing, names the exercises according to the established terminology, clearly shows the exercises, applies a rational teaching methodology, supervises those who are training (keeps discipline, prevents and corrects errors), organizes insurance and assistance, determines the state of students, and correctly determines physical activity, achieves the aim of the task; "not completed" – if a cadet does not clearly show physical exercises, does not master a definite terminology, rational methodology of training (violates the sequence of exercises, performs the tasks with significant stops, etc.), and if the aim of the task is not achieved.

The general assessment of the level of methodical competence of the cadets consisted of the grades they received for answering theoretical questions and performing the methodical task and it was defined as "methodically prepared" – if a cadet received two positive grades (if one "mastered" theoretical bases of physical training and the methodical task was "completed"); "methodically unprepared" – if a cadet received one negative grade, if he did "not mastered" theoretical bases of physical training or the methodical task was "not completed".

The general assessment of the physical training of cadets is determined by the results of their practical examination (physical fitness), provided that their methodical competence is "methodically prepared". In the case of receiving a grade "methodically unprepared" for methodical competence, the general grade in physical training was reduced: by one point – for the grade "not mastered" for the knowledge of theoretical bases of physical training or the grade "not completed" for methodical task; by two points – for the grades "not mastered" for the knowledge of theoretical bases and "not completed" for methodical task.

The research methods are theoretical analysis of literature, pedagogical observation, testing, pedagogical experiment, methods of mathematical statistics.

The researches related to the involvement of cadets were carried out in compliance with all relevant national regulations and institutional policies (Order of the Minister of Defense of Ukraine "On Approval of the Regulation on the Organization of Scientific, Research and Technology Activities in the Armed Forces of Ukraine" dated 27.07.16, No. 385). An informed agreement was received from all the people involved in this research.

Results and discussion.

Each unit commander is responsible for the physical condition of the subordinate staff and for:

- The efficient management and control over the process of physical training of military personnel.
- The proper planning, systematic physical training and rational distribution of physical activities throughout the day and week.
- The readiness of educational and material base of physical training and sports for classes (Griban, Romanchuk, Romanchuk, 2014; Loginov, & Loyko, 2000).

The analysis of the organization and conducting physical training in ZMI lets to identify a number of disadvantages that cause a decrease in the level of physical fitness of cadets:

- Low requirements of senior heads for the heads of courses for the organization, conducting and control of sports events.
- The irresponsibility of unit commanders for organizing and conducting morning physical exercises and sports-mass work.
- Personal indiscipline and irresponsibility of course officers who are assigned to directly organize and conduct physical training activities of cadets.
- Lax control by the commanders of the units over the subordinate personnel to follow the daily routine.

- Low level of personal methodical competence of commanders to organize and conduct physical training of cadets.

The analysis of the studies and the guidance documents on physical training showed that during the check of methodical competence the following issues are analyzed (Krutsevych, 2008; Glazunov, 2014; Shlyamar, 2014):

- The lesson plan: the correctness and specificity of the definition of the lesson tasks; the relevance of the content of the training material and methodical techniques to the aims and conditions of the training, and to the readiness of cadets; the connection of the content of the lesson with the previous and next lessons; following the scheme of conducting classes and correct distribution of time; the correct recording of exercises according to the program; the compliance of the exercises of the preparatory part with the tasks and conditions of the main part of the lesson; the specificity and completeness of organizational and methodical guidelines, their relevance to the content and objectives of the lesson; the dosage of physical activity; the reflection of the method of actions of the head of the activities and the actions of cadets in the lesson plan; security measures, assistance and insurance; the relevance of the training manuals and the means of material support used to prepare lesson plan; the design and completeness of the lesson plan.

- The explanation and presentation of exercises: the knowledge of the special terminology, conciseness, clarity and persuasiveness of explanation; consistency and completeness of the analysis of the technique while explaining the exercise, the knowledge of the technique of performing the exercise according to certain methods of training; the use of tables and diagrams while explaining the exercise; the quality of the exercise presentation, its methodological sequence, the choice of the place to present; the purposefulness of the demonstration which emphasizes the peculiarities of this technique of performing the exercise, the demonstration of some important elements of the exercise; the use of methodical techniques during the demonstration (showing by

sections, slowly, generally, at the fastest pace, in different planes, the mirror display, the display of common mistakes, the repeated display); the emotionality of explanation and display; the combination of display and analysis of the exercise technique.

- The methods and methodical techniques during training: the variety, correctness of the choice and application during the organization and conduct of classes and individual exercises training; the relevance of the readiness of cadets to the conditions of training; the organization of independent training during classes; the correctness and timeliness of assistance and insurance; choosing the place for insurance; self-insurance training.

- The prevention, detection and correction of mistakes: correct identification of mistakes, their causes and methods of correction; the prevention of mistakes in the process of mastering and improving the technique of performing the exercise; the explanation of the mistakes causes, timeliness and sequence of mistakes detection and correction; the organization of training and dosing of activity; their relevance to the objectives of the class; the method of dosing of physical exercises and activity during training; the application of complex training at the end of the main part of the lesson and before the change of training places; the application of methodical techniques to increase the interest and activity of cadets.

- The actions and behavior of the head: practical readiness; appearance; the ability to behave with the ranks, gestures, correct clarity of commands and orders; the attitude to the cadets, the tone of treatment, contact with cadets and pedagogical tact; the confidence during classes, the ability to take into account a specific situation, distribute the attention, give instructions during the exercise performance; the insistence on high standards, the ability to maintain discipline; the ability to combine training with education, teaching personal hygiene skills.

The analysis of the results of testing the methodical competence of commanders of cadets' units in 2017-2018 confirms the conclusions of a number of scientists on the lack of methodical skills of the heads of physical training of subordinate personnel. 14 out of 26 commanders tested were "methodically unprepared" (53.8%). The analysis of the assessment of the physical fitness of cadets also confirmed the conclusions of scientists on the connection of the level of physical readiness and methodical competence of commanders with the level of physical fitness of subordinate personnel. Thus, according to the results of correlation analysis, it was established that the cadets, whose commanders had a high level of physical readiness and methodical competence, achieved high results in physical training ($r=0.82-0.89$).

The analysis of the results of the state exams in physical training in 2015-2018 showed that there was a stable tendency of a low level of methodical competence of the graduates during 5 years of the study (Table 1).

A detailed analysis of the results of methodical competence showed that the cadets who participated in sports, competitions and had sports grades (the 1st grade, Candidate Masters of Sports) or titles (Masters of Sports, Masters of Sports of International Class) during the study at HMEI, had a higher level of methodical competence than the cadets who were not engaged in sports. In order to prove these conclusions, we organized a formative pedagogical experiment. Two groups were formed: the EG which included the cadets who were engaged in various sports and took part in competitions while studying at HMEI, and the CG which included the cadets who were training according to the traditional physical training program.

Table 1. The dynamics of the methodical competence of the HMEI graduates
in 2014-2018 (n=506, %)

The assessment of methodical competence	The years of the study				
	2014 n=120	2015 n=112	2016 n=115	2017 n=80	2018 n=79
"methodically prepared"	36.7	33.9	30.4	33.8	32.1
"methodically unprepared"	63.3	66.1	69.6	66.2	67.9

The analysis of the methodical competence of the cadets showed that the majority of cadets of both groups (89.5% in the EG and 75.3% in the CG) were assessed by the level of mastering the theoretical bases of physical training as having "mastered" knowledge (Table 2). Concerning the quality of the methodical task, the highest percentage of cadets who "completed" the methodical task was found in the EG (92.1%). However, the largest percentage of cadets who did not "complete" the methodical task is recorded in the CG – 64.9% that confirms our results of examining the reports of exam committees which defined one of the main disadvantages of physical training to be a low level of methodical competence of graduates, low-performing skills in the organization and conducting of physical training; the inability to use the means of physical training for self-improvement and training of personnel for professional and combat activity.

The analysis of the general assessment of the methodical competence of graduates showed that 86.8% EG cadets and only 30.8% CG cadets were defined to be "methodically prepared" that indicates the advantage of sports in the sections of the institute over the current system of physical training of HMEI to improve the level of the methodical competence of cadets who are future officers, the heads of the classes in physical training.

Table 2. The level of the methodical competence of the EG and CG cadets at the end of the pedagogical experiment, %

The indicators studied		EG (n=38)	CG (n=65)
The knowledge of theoretical bases of physical training	"mastered"	89.5	75.3
	"not mastered"	10.5	24.7
The quality of the methodical task	"completed"	92.1	35.4
	"not completed"	7.9	64.6
The assessment of methodical competence	"methodically prepared"	86.8	30.8
	"methodically unprepared"	13.2	69.2

According to the studies of a number of scientists (Silchuk, 2003; Shlyamar, 2014; Petrovska, 2015; Petruk, 2017) which indicated a close connection of the level of methodical competence of the commander, officer, specialist and high level of physical readiness, success of training and combat activity of subordinate personnel and units, it can be concluded that mastering the knowledge and methodical skills in the organization of physical training will contribute to the success in the future activity of the HMEI graduates as the heads of physical training classes, officers-leaders, demanding to themselves and subordinate commanders.

CONCLUSIONS.

The EG cadets were established to have a significantly better level of methodical competence at the end of the pedagogical experiment, in comparison to the CG cadets – 86.8% of methodically prepared cadets were determined in the EG and 30.8% in the CG that indicates the advantage of being engaged in sports during study to improve the level of the methodical competence of cadets who are future officers, commanders, and leaders of physical training classes.

BIBLIOGRAPHIC REFERENCES.

1. Burley, S. D., Drain, J. R., Sampson, J. A., & Groeller, H. (2018). Positive, limited and negative responders: the variability in physical fitness adaptation to basic military training. *Journal of Science and Medicine in Sport*, 21(1)1, 1168-1172. doi:10.1016/j.jsams.2018.06.018.
2. Bolotin, A., Bakayev, V., & Vazhenin, S. (2016). Pedagogical model for developing skills required by cadets of higher education institutions of the Aerospace Forces to organize their kettlebell self-training. *Journal of Physical Education and Sport*, 16(1), 177-186. doi:10.7752/jpes.2016.01028.
3. Glazunov, S. I. (2014). Deyaki aspekty metodichnoyi pidgotovki vkladacha fizichnogo vihovannya, spetsialnoyi fizichnoyi pidgotovki i sportu do zanyat z "prikladnih" rozdiliv fizichnoyi pidgotovki [Some aspects of the methodical preparation of the teacher of physical education, special physical training and sports for classes in the "applied" sections of physical training]. *Materiali nauk.-metod. konf. "Fizichna pidgotovka osobovogo skladu Zbroynih Sil, inshih viyskovih formuvan ta pravoohoronnih organiv Ukrayini: dosvid, suchasnist, problemi ta perspektivi rozvitku"*, 244-251. [in Ukrainian].
4. Grihan, G. P., Romanchuk, S. V., & Romanchuk, V. M. (2014). *Fizychne vykhovannja u vijsjkovykh pidrozdilakh* [Physical education in military subunits]. Lviv: ASV. [in Ukrainian].
5. Groeller, H., Burley, S., Orchard, P., Sampson, J. A., Billing, D. C., & Linnane, D. (2015). How effective is initial military-specific training in the development of physical performance of soldiers? *Journal of Strength and Conditioning Research*, 29(Suppl.11), 158-162.
6. Kamaiev, O. I., Hunchenko, V. A., Mulyk, K. V., Hradusov, V. A., Homanyuk, S. V., Mishyn, M. V. et al. (2018). Optimization of special physical training of cadets in the specialty "Arms and Military Equipment" on performing professional military-technical standards. *Journal of Physical Education and Sport*, 8(Suppl.4), 1808-1810. doi:10.7752/jpes.2018.s4264.

7. Krutsevych, T. Yu. (2008). Teoriia i metodyka fizychnoho vykhovannia [Theory and methods of physical education]. Kyiv: Olimpijsjka lij'eratura. [in Ukrainian].
8. Kyrolainen, H., Pihlainen, K., Vaara, J. P., Ojanen, T., & Santtila, M. (2018). Optimizing training adaptations and performance in military environment. *Journal of Science and Medicine in Sport*.
9. Loginov, D. O., & Loyko, O. M. (2000). Metodichna pidgotovka [Methodical training]. Lviv: Viyskoviy Institut pri Derzhavnomu universiteti "Lvivska politehnika". [in Ukrainian].
10. Mulyar, M. I., Pichugin, M. F., & Romanchuk, V. M. (2007). Metodichna pidgotovka z navchalnoyi distsiplini "Fizichne vihovannya, pidgotovka i sport" [in Ukrainian].
11. Petrovska, T. V. (2015). Maysternist sportivnogo pedagoga [The skill of a sports teacher]. Kyiv: Olimpijska literatura. [in Ukrainian].
12. Petruk, A. P. (2016). Metodichna funktsiya fizichnoyi pidgotovki viyskovosluzhbovtziv [Methodical function of physical training of servicemen]. *Molodizhniy naukoviy visnik Shidnoevropeyskogo natsionalnogo universitetu imeni Lesi Ukrayinki. Fizichne vihovannya i sport*, 24, 42-45. [in Ukrainian].
13. Petruk, A. P. (2017). Riven metodichnoyi pidgotovlenosti ofitseriv, yak skladovoyi fizichnoyi pidgotovki pidrozdilu [The level of methodical preparedness of officers as a component of physical training of the unit]. [in Ukrainian].
14. Prontenko, K., Bloschynskyi, I., Griban, G., Prontenko, V., Loiko, O., Andreychuk, V. et al. (2019). Current state of cadets' physical training system at the technical higher military educational institutions. *Revista Dilemas Contemporáneos: Educación, Política y Valores*. Año: VII, Número: 1, Artículo no.:11, Período: 1 de Septiembre al 31 de Diciembre, 2019.
https://dilemascontemporaneoseduacionpoliticayvalores.com/_files/200005687-2bc982bc9a/19.09.11%20Estado%20actual%20del%20sistema%20de%20entrenamiento%20f%C3%ADsico%20de....pdf

15. Prontenko, K., Griban, G., Bloshchynskiy, I., Boyko, D., Loiko, O., Andreychuk, V., et al. (2019). Development of power qualities of cadets of Ukrainian higher military educational institutions during kettlebell lifting training. *Baltic Journal of Health and Physical Activity*, 11 (3), 27-38. doi: 10.29359/BJHPA.11.3.04.
16. Prontenko, K., Griban, G., Okhrimenko, I., Bondarenko, V., Bezpaliy, S., Dikhtiarenko, Z. et al. (2019). Academic performance and mental capacity of cadets engaged in sports during studies. *Revista Dilemas Contemporáneos: Educación, Política y Valores*. Año: VII, Número: Edición Especial, Artículo no.:23, Período: Octubre, 2019.
https://dilemascontemporaneoseduccionpoliticayvalores.com/_files/200006065-431a4431a6/19.10.23%20Rendimiento%20acad%C3%A9mico%20y%20capacidad%20mental%20de%20los.....pdf.
17. Prontenko, K., Griban, G., Tymoshenko, O., Bezpaliy, S., Kalynovskyi, B., Kulyk, T. et al. (2019). Methodical system of kettlebell lifting training of cadets during their physical education. *International Journal of Applied Exercise Physiology*, 8(3.1), 240-248.
<https://doi.org/10.30472/ijaep.v8i3.1.656>.
18. Romanchuk, S. V., Loginov, D. O., & Anohin, E. D. (2010). Metodichniy praktikum z navchalnoyi distsiplini "Fizichne vihovannya, spetsialna fizichna pidgotovka i sport" [Methodical workshop on physical education, special physical training and sport]. Lviv: ASV. [in Ukrainian].
19. Sergienko, Y. P., & Andreianov, A. M. (2013). Models of professional readiness of students of higher military schools of the Armed Forces of Ukraine. *Physical Education of Students*, 6, 66-72. doi:10.6084/m9.figshare.840507.

20. Shlyamar, I. L. (2014). Metodichna pidgotovlenist komandira – osnova fizichnoyi pidgotovki pidrozdilu [Methodical preparedness of the commander is the basis of physical training of the unit]. [in Ukrainian].
21. Silchuk, A. M. (2003). Osobennosti metodicheskoy podgotovki kursantov voenno-morskih institutov s primeneniem programmirovannogo obucheniya [Features of the methodical training of cadets of naval institutes with the use of programmed training]. [in Russian].
22. Zhukevych, I., Okhrimenko, I., Okhrimenko, S., Kazymir, V., Lisnichenko, Yu., Ollo V., et al. (2019). Experimental verification of the effectiveness of the pedagogical conditions for the training of self-education of cadets. Revista Dilemas Contemporáneos: Educación, Política y Valores. Año: VII, Número: Edición Especial, Artículo no.:82, Período: Noviembre, 2019.
[https://dilemascontemporaneoseducacionpoliticayvalores.com/files/200006258-6ef056ef08/EE%2019.11.82%20Verificaci%C3%B3n%20experimental%20de%20la%20efectividad%20de%20las%20condiciones....%20\(4\).pdf](https://dilemascontemporaneoseducacionpoliticayvalores.com/files/200006258-6ef056ef08/EE%2019.11.82%20Verificaci%C3%B3n%20experimental%20de%20la%20efectividad%20de%20las%20condiciones....%20(4).pdf)

DATA OF THE AUTHORS.

- 1. Ivan Okhrimenko.** Doctor of Law, Professor, Professor of the Department of Legal Psychology, National Academy of Internal Affairs (Kyiv, Ukraine). E-mail: ivango-07@ukr.net.
- 2. Oleksandr Kobernyk.** Doctor of Pedagogical Sciences, Professor, Professor of the Department of Pedagogy and Education Management, Pavlo Tychyna Uman State Pedagogical University (Uman, Ukraine). E-mail: kobernikan@meta.ua.
- 3. Oleksandr Husarevych.** Ph.D. in Physical Education and Sport, Associate Professor of the Department of Social Rehabilitation Technologies, Zhytomyr Institute for Economics and Humanities of Higher Educational Establishment "Open International University of Human Development "Ukraine" (Zhytomyr, Ukraine). E-mail: s.p.q.r.alexandr@gmail.com.

- 4. Viktoriia Krykun.** Ph.D. in Pedagogics, Senior Research Associate at the Scientific Language Testing Centre of the Foreign Languages Educational and Research Centre, National Defence University of Ukraine named after Ivan Cherniakhovskyi (Kyiv, Ukraine). E-mail: v.krykun@ukr.net
- 5. Nataliia Kalashnik.** Ph.D. in Pedagogics, Associate Professor of the Department of Ukrainian Art, National Pirogov Memorial Medical University (Vinnytsya, Ukraine). E-mail: kalashnuknatalia@gmail.com
- 6. Vita Pavlenko.** Assistant Professor of the Department of Pedagogy, Professional Training and Management of Educational Institutions, Zhytomyr Ivan Franko State University (Zhytomyr, Ukraine). E-mail: pavlenko-vita@meta.ua
- 7. Ivan Samokish.** Doctor of Pedagogical Sciences, Associate Professor, Professor of the Department of Physical Education, Odessa National O. S. Popov Academy of Telecommunications (Odessa, Ukraine). E-mail: samokih@i.ua
- 8. Nataliia Biruk.** Assistant of the Department of Pedagogy, Professional Training and Management of Educational Institutions, Zhytomyr Ivan Franko State University (Zhytomyr, Ukraine). E-mail: shcherbakova_n@ukr.net
- 9. Olena Butok.** Senior Teacher of the Department of Special Disciplines and Organization of Vocational Training, University of the State Fiscal Service of Ukraine (Irpin, Ukraine). E-mail: butok.elena.v@gmail.com
- 10. Valentin Bondarenko.** Doctor of Pedagogical Sciences, Associate Professor, Head of the Department of Special Physical Training, National Academy of Internal Affairs (Kyiv, Ukraine). E-mail: guryavvb@ukr.net

11. Grygoriy Griban. Doctor of Pedagogical Sciences, Professor, Professor of the Department of Physical Education and Sport Improvement, Zhytomyr Ivan Franko State University (Zhytomyr, Ukraine). E-mail: gribang@ukr.net

12. Kostiantyn Prontenko. Doctor of Pedagogical Sciences, Associate Professor, Associate Professor of the Department of Physical Education, Special Physical Training and Sport, S. P. Koroliov Zhytomyr Military Institute (Zhytomyr, Ukraine). E-mail: prontenko-kostya@ukr.net

RECIBIDO: 6 de diciembre del 2019.

APROBADO: 19 de diciembre del 2019.