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FORMATION OF MILITARY LEADERSHIP EXPERIENCE IN EDUCATION GETTING IN MILITARY EDUCATIONAL INSTITUTIONS OF NATO MEMBER COUNTRIES

Background. The article highlights the current aspects and methods of training future military leaders in the conditions of growing global and regional security challenges.

Results. The article presents an analysis of key aspects and methods of training military leaders in NATO educational institutions. The study emphasizes the need to integrate European and Euro-Atlantic educational standards in the training of military personnel in Ukraine, in accordance with NATO principles, given the political, economic and military aggression of Russia. The key aspects of the concept and definitions of military leadership are analyzed. The article examines the key components of effective military leadership, including transformational and situational leadership, which determine ways to stimulate and motivate subordinates to achieve higher results and adapt to changing conditions. Considerable attention is paid to the analysis of educational programs of NATO military academies and the training methods used to develop leadership skills, including the study of international humanitarian law and cyber security, which enables leaders to manage effectively in a variety of operational environments. The study also covers a broader range of challenges facing military leaders, including cyberwarfare and hybrid threats, and requires expertise not only in traditional military strategies but also in international humanitarian law and international relations. The importance of a multifaceted approach to military education is emphasized, which contributes to the formation of highly qualified, ethical and adaptive leaders who are able to manage effectively in difficult conditions.

Conclusions. The work highlights the prospects for further research, which may include analysis of the impact of the latest technologies, such as artificial intelligence and automation, on strategic military planning and leadership, as well as the need for further development of military training methods. The further development of military education must take into account changes in the global security environment, including the growth of information and cyber threats, the need for international cooperation and the ability to adapt to changing military doctrines.

Keywords: military education, NATO standards, national security, management, leadership.

Background

The Russian Federation continues its aggressive policy against Ukraine, implementing full-scale military operations. This includes the use of political, economic, information-psychological, cybernetic and military means in order to regain influence over Ukraine, which is a serious threat to its national security and national interests. The main priorities of Ukraine in ensuring national security are the protection of independence and state sovereignty, the restoration of territorial integrity within the framework of internationally recognized borders, as well as integration into European and Euro-Atlantic structures.

The national defense tasks assigned to the defense forces require the development and enhancement of capabilities in accordance with NATO norms, principles and standards, which is a key condition for the fulfillment of the mentioned priorities. According to the Law of Ukraine "On the National Security of Ukraine", the Ministry of Defense of Ukraine is tasked with organizing defense planning activities and forming the foundations of military personnel policy in the defense forces.

The Ministry of Defense of Ukraine acts as the main body in the defense system, which is responsible for the policy of training personnel to fulfill legislative tasks. The training of the personnel of the defense forces is carried out within the framework of military education, which is an integral part of the educational system of the state, forming new requirements and tasks for its development in modern conditions.

The relevance of the study stems from the ever-increasing requirements for leadership skills in modern military conditions. These environments are characterized by a wide range of challenges, including hybrid threats, cyber warfare, as well as traditional military operations. Thus, leaders must possess not only a high level of professionalism, but also the ability to quickly adapt to changing conditions and effectively manage their units.

The purpose of the article is to analyze the key aspects and methods of training military leaders in NATO educational institutions.

To achieve the goal, the following research tasks were defined: analysis of educational programs of NATO military academies; evaluation of training methods used for the development of leadership qualities; systematization of acquired experience and knowledge, which are fundamental for the formation of effective military leadership.

Results

Different dimensions of the evolution and reformatting of military education were studied by such scientists as S. Poltorak (2018), who analyzed the transformation of the Ukrainian military education system in accordance with NATO standards, and A. Vitchenko with V. Osyodlo (2019), who focused on the development of higher military education in Ukraine in the context of current transformational changes. D. Viter and O. Mityagin (2020) studied the development of military education in Ukraine, its key directions, the content and prospects of reforms, taking into account the experience of NATO member countries. Theoretical aspects of the management of the military education system were presented in the works of O. Salnikova and V. Artamoshchenko (2021), and the issues of achieving the compatibility of military education based on quality assurance in accordance with national requirements and NATO doctrines were considered in the publications of A. Syrotenko (2021) and V. Artamoshchenko (2019).

At the beginning of the 21st century, many armies of the world's leading states, including the USA, Germany, France and Great Britain, gained unique combat experience in military conflicts in Iraq, Afghanistan, Syria, as well as in African countries and other regions with high conflict. This experience has a significant impact on the development of combat training systems, which is constantly analyzed by military education specialists and the command of these countries, which have

made significant progress in implementing modern methods of conducting combat operations.

A unique context belongs to the Armed Forces of Ukraine, which since 2014 have experience of confronting the hybrid forces of the Russian Federation, in particular the 1st and 2nd Army Corps subordinated to the Southern Military District of the Russian Federation. These forces, from the time of the annexation of Crimea by Russia and the subsequent armed confrontation in the east of Ukraine, to the full-scale Russian invasion of Ukrainian territory, where the Armed Forces of Ukraine have been defending for the third year and have successfully returned the territories (53% since the beginning of the invasion), demonstrate the effectiveness of military leadership, especially on the tactical level levels.

This poses certain challenges and problems, the understanding and solution of which will allow the integration of the best world practices in the training of future officers of the Armed Forces of Ukraine, which is key for the further development and strengthening of the country's defense capabilities.

The military security strategy of Ukraine defines the main directions of the development of military education systems and personnel training for the defense forces, using the experience of combat operations, as well as the methodology and principles of NATO (President of Ukraine, 2021). According to the Annual National Program under the auspices of the Ukraine-NATO Commission for 2020, the strategic goals are the professionalization of the defense forces and the creation of the necessary military reserve, as well as the provision of centralized training of operational-level personnel by 2025 (President of Ukraine, 2020). The education system, which includes different levels and degrees of education, qualifications, educational programs, education standards, licensing conditions, educational institutions and other subjects of educational activity, is complex and requires a clear definition of the ways of development of each element of the system (Verkhovna Rada of Ukraine, 2017). In the armed forces of NATO member countries, capability assessment is carried out according to DOTMLPFI components (Doctrine, Organization, Training, Material Support, Leadership and Education, Personnel, Facilities, Interoperability) (NATO Standardization Office, 2019). Defense planning based on capability assessment is implemented in the activities of the national defense forces (Rusnak et al., 2017). The Ministry of Defense of Ukraine is implementing a number of projects for the development of individual capabilities of the military forces, including in the field of military education, using the methodology of program and project management (Artamoshchenko, 2019). The main task and element of the development of the capabilities of the military education system is to ensure compatibility with NATO principles and standards in the process of training military personnel (NATO Standardization Office, 2019).

Analysis of professional military education systems of NATO member countries reveals that despite external similarities, there are significant differences in aspects of combining professional training and educational processes, as well as in the duration of educational periods. For example, the duration of training in educational institutions of NATO countries is differentiated depending on the educational level (bachelor's degree, master's degree), ranging from 3 to 3.5 years at the tactical level, from 10 months to a year at the operational level, and from 5 months to two years at the strategic level (Viter, & Mityagin, 2020). The set terms and content of training are determined depending on the specifics of the programs, goals and

requirements for courses or electives. Although the majority of NATO member countries prefer professional military training, recently there has been a growing interest in the implementation of master's programs at the operational level, which reflects the growing need for deepening the knowledge and qualifications of officers, starting from the brigade level (Saganyuk, & Pavlikovsky, 2017).

Tasks of special training can change in accordance with social transformations, changes in the principles of modern warfare and defense policy. Therefore, it is important that the formation of the officer corps takes place taking into account the high general requirements for the qualification of officer personnel. Military education should ensure the development of such qualities as initiative, creative approach, flexibility, critical thinking, ability to analyze, collect and summarize information, effective exchange of knowledge, understanding of social processes, ability to withstand pressure in critical situations, responsibility for decisions made and openness to criticism. Educational programs should also prepare officers to combine various components: careful analysis of the situation, decision-making, training of military personnel, provision and organization of task performance, as well as evaluation of the results of actions (Boiko et al., 2020).

The increasing demands on officers relate to the ability to manage international tasks requiring knowledge of international relations and international humanitarian law. The main tasks of military training include effective deterrence of a potential enemy, ensuring high-quality training of military personnel, increasing the potential of combat capabilities, equipping with modern weapons and equipment, maintaining an optimal balance between various types of armed forces, as well as strengthening military and political positions through participation in international exercises and limited-force operations. scale with peacekeeping purposes.

The armed forces of the world's leading countries are actively adapting to the conditions of modern international relations, including participation in collective security operations and peacekeeping missions. Such adaptation includes the practice of international training of officers, in particular in the academies of NATO countries, which is based on the principles of integration (Pavlikovsky et al., 2020). Military education systems in these countries operate under centralized leadership, and the structure of the armed forces may include irregular formations, which ensures higher mobilization readiness and operational flexibility.

The essence of military leadership is the ability to influence personnel, which includes a clear formulation of goals, determination of methods of their achievement, use of effective communication techniques, motivation for active actions in the process of preparation and performance of tasks. It also involves the development of combat capabilities and the harmonious development of the team. The military leader is an authoritative figure to whom military personnel in any conditions are ready to delegate the right to make important decisions that correspond to national defense interests. Such a leader is able not only to achieve defined goals, but also to effectively rally the team to achieve high results, taking into account the individual needs of subordinates and directing them to professional improvement (Saganyuk, & Pavlikovsky, 2017).

According to the process of military leadership is a means of influencing personnel through moral authority, experience and competence, in order to successfully perform tasks and achieve set goals. Military leadership includes direct leadership through command, control, stimulation, and motivation, as well as indirect influence

through personal example, communication, and shaping organizational culture. Such leadership is key to Ukraine's national security and European integration processes. Leadership combines two integral elements: the leader and his team. Leaders must be able to apply their leadership qualities to lead effectively, taking into account the social and interpersonal aspects of their team.

The doctrine defines a military leader as a person with moral authority and competence, capable of critical and creative thinking and quick decision-making. A military leader influences personnel, motivates subordinates and other leaders to consciously perform tasks. The peculiarity of military leadership is the ability to effectively organize, inspire and direct subordinates in a military environment, which indicates his ability to possess moral virtues, practical experience, knowledge, skills and competences. Leaders must also adapt to different situations, consider the needs of subordinates, cooperate with other leaders, use the latest technologies and demonstrate social responsibility and gender equality.

The personnel's confidence in a military leader depends on his ability to meet their expectations. Combat experience clearly outlines the standards that servicemen expect from their leader: professional understanding and performance of their duties, in-depth knowledge of the duties of subordinates, informing the team about current events and the possible development of the situation, formation and maintenance of personnel cohesion, the ability to manage and ensure needs of subordinates, sharing difficulties and risks with them, recognition of merits and application of disciplinary measures, continuous improvement of own professional skills and promotion of personnel development (Salnikova, & Artamoshchenko, 2021).

Researchers A. Vitchenko and V. Osyodlo (2019) distinguish two key theoretical approaches to the formation of leadership in the armies of NATO member countries: transformational and situational, which emphasizes the need for systematic integration of leader training into military education.

Transformational leadership emphasizes changing the relationship between the leader and subordinates, aimed at stimulating interaction and improvement. Military leaders who employ this style motivate their soldiers to achieve higher results by setting a personal example and creating an inspiring atmosphere. As noted by Bernard M. Bass, one of the leading researchers in the field of leadership, transformational leaders make their subordinates want to exceed their own expectations and identify with shared higher-level goals (Poltorak, 2018).

Situational leadership involves adapting the leadership style depending on the specific situation and the needs of subordinates. NATO military training institutions emphasize the need for flexibility in leadership qualifications, as combat conditions often change. Paul Hersey and Kenneth Blanchard, developers of the theory of situational leadership, argue that a leader's effectiveness depends on his ability to adapt to changing circumstances, providing the appropriate level of guidance and support (Syrotenko, 2021).

Both transformational and situational leadership styles are important for military personnel in NATO training institutions because they provide not only tactical flexibility on the battlefield, but also a strategic perspective for long-term development and adaptation to new challenges and technologies.

Based on the analysis of modern empirical models and strategies of NATO countries integrated into military educational programs, several key approaches to military leadership training can be identified.

One important practice is to include leadership modules in military strategy and tactics courses. This allows cadets

not only to acquire theoretical knowledge, but also to learn to apply this knowledge in practice, in particular, in the conditions of combat operations. This approach contributes to a deeper understanding of how strategic decisions affect real military scenarios and how to effectively manage military units in different combat environments.

Another important element of military education is the use of the case method, which includes the analysis of real military situations. This method allows cadets to improve their critical thinking and decision-making skills while facing complex situations that require quick response and adaptability. Analyzing specific cases from combat experience, cadets learn to understand the nuances of military tactics and strategy, which is key to the formation of effective leadership (Prykhodko, 2020).

These training methods and strategies play an important role in the formation of future military leaders, who must be able not only to perform direct combat tasks, but also to effectively manage units and ensure their moral and professional development.

Discussion and conclusions

On the basis of what has been done, several important conclusions can be drawn regarding the training of military leaders in the context of modern requirements and changes in the military education of NATO member countries and Ukraine.

The wars at the beginning of the 21st century, which include the wars in Iraq and Afghanistan, as well as the full-scale invasion of Ukraine, emphasize the need for constant updating of military doctrines and approaches to the training of military leadership. An important aspect is adaptation to changes in the conduct of hostilities and the use of the latest technologies.

Leadership is a key component of military education, as today's military leaders must be able not only to direct operations, but also to inspire and motivate their personnel. Integrating leadership skills into military strategy and tactics courses allows future officers to better understand how theoretical knowledge can be applied in practical scenarios. Military education should include a comprehensive approach to leadership, integrating leadership modules into military strategy courses. This allows cadets not only to develop theoretical knowledge, but also teaches them to apply this knowledge in practical, combat conditions, increasing their effectiveness as future commanders.

The case method is an effective tool for developing critical thinking and decision-making skills among cadets. Analysis of real military scenarios and situational tasks helps military personnel prepare for unexpected circumstances and provides a deeper understanding of military tactics and strategy. Trust is a fundamental aspect of military leadership. It is based on professionalism, ethical standards, and the leader's ability to demonstrate loyalty to military ideals. Effective leadership requires not only strategic vision, but also the ability to rally a team by creating strong interpersonal connections.

Prospects for further research in the field of military education and leadership may focus on analyzing the impact of emerging technologies, such as artificial intelligence and automation, on military strategies and decision-making. An important direction is also the study of intercultural interaction and its impact on international peacekeeping operations, in particular, how these aspects affect the formation of leadership qualities in conditions of global uncertainty. In addition, the development of military training methods that would maximize the potential of virtual and augmented reality for teaching tactical and strategic skills without risking the lives of cadets needs further consideration.

References

- Artamoshenko, V. S. (2019). Management of changes regarding the development of the military education system on the basis of program-project management. *Science and Defense*, 3, 40–44 [in Ukrainian]. [Артамощенко, В. С. (2019). Управління змінами щодо розвитку системи військової освіти на засадах програмно-проектного менеджменту. *Наука і оборона*, 3, 40–44].
- Boyko, R. V., Leontovych, S. P., Marko, Y. I., & Butenko, M. P. (2020). Formation of approaches to defense planning based on capabilities considering resource provision. *Collection of Scientific Works of the Center for Military-Strategic Studies of the National Defense University of Ukraine named after Ivan Chernyakhovsky*, 3, 62–69 [in Ukrainian]. [Бойко, Р. В., Леонтович, С. П., Марко, Є. І., & Бутенко, М. П. (2020). Формування підходів до оборонного планування на основі спроможностей з урахуванням ресурсного забезпечення. *Збірник наукових праць центру воєнно-стратегічних досліджень Національного університету оборони України імені Івана Черняхівського*, 3, 62–69]. <https://doi.org/10.33099/2304-2745/2020-3-70/62-69>
- NATO Standardization Office. (2019). NATO Glossary of Abbreviations used in NATO Documents and Publications (AAP-15). [https://nso.nato.int/nso/zPublic/ap/PROM/AAP-15%20\(2019\)%20EF.pdf](https://nso.nato.int/nso/zPublic/ap/PROM/AAP-15%20(2019)%20EF.pdf)
- Pavlikovsky, A., Frolov, V., Saganyuk, F., Pavlenko, V., Lobko, M., Nalyvaiko, A., Pushnyakov, A., Vorovich, B., Polyayev, A., Fuchko A., & Ustyenko, O.; Syrotenko, A. (Ed.). (2020). Defense reform: A systematic approach to defense management. Kyiv: National University of Defense of Ukraine [in Ukrainian]. [Павликовський, А., Фролов, В., Саганюк, Ф., Павленко, В., Лобко, М., Наливайко, А., Пушняков, А., Ворович, Б., Поляев, А., Фучко, А., & Устименко, О.; Сиротенко, А. (Ред.). (2020). Оборонна реформа: системний підхід до оборонного менеджменту. Київ: НУОУ]. <https://nuou.org.ua/assets/documents/mono-obo-ref-2020.pdf>
- Poltorak, S. T. (2018). Transformation of the military education system of Ukraine on the way to achieving NATO standards. *Science and Defense*, 2, 3–10 [in Ukrainian]. [Полторак, С. Т. (2018). Трансформація системи військової освіти України на шляху до досягнення стандартів НАТО. *Наука і оборона*, 2, 3–10].
- President of Ukraine. (2020). *About the Annual National Program under the auspices of the Ukraine-NATO Commission for 2020*. (decree dated 26.05.2020 No. 203/2020) [in Ukrainian]. [Президент України. (2020). *Про Річну національну програму під егідою Комісії Україна – НАТО на 2020 рік*. (Указ від 26.05.2020 № 203/2020)]. <https://www.president.gov.ua/documents/2032020-33861>
- President of Ukraine. (2021). *About the decision of the National Security and Defense Council of Ukraine dated March 25, 2021 "On the Military Security Strategy of Ukraine"* (Decree dated March 25, 2021 No. 121/2021) [in Ukrainian]. [Президент України. (2021). *Про рішення Ради національної безпеки і оборони України від 25 березня 2021 року "Про Стратегію воєнної безпеки України"* (Указ від 25.03.2021 № 121/2021)]. <https://www.president.gov.ua/documents/1212021-37661>
- Prykhodko, Yu. I. (2020). Didactic foundations for the training of military specialists with higher education in the context of military educational systems of leading NATO countries; historical retrospect, modernity, prospects. *Science and Defense*, 1, 43–5 [in Ukrainian]. [Приходько, Ю. І. (2020). Дидактичні основи підготовки військових фахівців з вищою освітою в контексті військових освітніх систем провідних країн НАТО; історична ретроспектива, сучасність, перспективи. *Наука і оборона*, 1, 43–5].
- Rusnak, I. S., Petrenko, A. G., Yakovenko, A. V., Romaniuk, I. M., & Kohno, V. D. (2017). Defense planning based on capabilities: Features and prospects of implementation. *Science and Defense*, 2, 3–10 [in Ukrainian]. [Руснак, І. С., Петренко, А. Г., Яковенко, А. В., Романюк, І. М., & Кохно, В. Д. (2017). Оборонне планування на основі спроможностей: особливості та перспективи впровадження. *Наука і оборона*, 2, 3–10]. <https://doi.org/10.33099/2618-1614-2017-0-2-3-10>
- Saganyuk, F. V., & Pavlikovsky, A. K. (2017). Approaches to strategic planning for the development of forces capabilities in the security and defense sector of Ukraine. *Collection of Scientific Works of the Center for Military-Strategic Studies of the National Defense University of Ukraine named after Ivan Chernyakhovsky*, 2, 24–29 [in Ukrainian]. [Саганюк, Ф. В., & Павликовський, А. К. (2017). Підходи щодо стратегічного планування розвитку спроможностей військ (сил) в секторі безпеки і оборони України. *Збірник наукових праць центру воєнно-стратегічних досліджень Національного університету оборони України імені Івана Черняхівського*, 2, 24–29]. <https://doi.org/10.33099/2304-2745/2017-2-60/24-29>
- Salnykova, O., & Artamoshenko, V. (2021). Theoretical aspects of state management of the military education system. *Investments: Practice and Experience* [in Ukrainian]. [Сальнікова, О., & Артамощенко, В. (2021). Теоретичні аспекти державного управління системою військової освіти. *Інвестиції: практика та досвід*]. http://www.investplan.com.ua/pdf/12_2021/13.pdf
- Syrotenko, A. M. (2021). Achieving compatibility of military education and training of defense forces personnel on the basis of quality. National requirements and NATO standards. *Science and Defense*, 1, 48–53 [in Ukrainian]. [Сиротенко, А. М. (2021). Набуття сумісності військової освіти і підготовки кадрів сил оборони на засадах якості. Національні вимоги і стандарти НАТО. *Наука і оборона*, 1, 48–53].
- Verkhovna Rada of Ukraine. (2017). *On education* (Law of Ukraine dated September 5, 2017 No. 2145-VIII) [in Ukrainian]. [Верховна Рада України. (2017). *Про освіту* (Закон України від 05.09.2017 № 2145-VIII)]. <https://zakon.rada.gov.ua/laws/show/2145-19>
- Viter, D., & Mityagin, O. (2020). Professionalization of military education in Ukraine: Main directions, content, and perspectives. *Military Education*, 1, 81–90 [in Ukrainian]. [Вітер, Д., & Мітягін, О. (2020). Професіоналізація військової освіти в Україні: головні напрямки, зміст та перспективи. *Військова освіта. Збірник наукових праць НУОУ*, 1, 81–90].
- Vitchenko, A. O., & Osiodlo, V. I. (2019). Development of the system of higher military education in Ukraine in the context of modern transformational changes. *Science and Defense*, 2, 44–50 [in Ukrainian]. [Вітченко, А. О., & Осюдло, В. І. (2019). Розвиток системи вищої військової освіти України в контексті сучасних трансформаційних змін. *Наука і оборона*, 2, 44–50].

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ФОРМУВАННЯ ДОСВІДУ ВІЙСЬКОВОГО ЛІДЕРСТВА У ЗДОБУВАЧІВ ОСВІТИ У ВІЙСЬКОВИХ НАВЧАЛЬНИХ ЗАКЛАДАХ КРАЇН – ЧЛЕНІВ НАТО

Вступ. Висвітлено актуальні аспекти та методи підготовки майбутніх військових лідерів в умовах зростаючих глобальних і регіональних безпекових викликів.

Результати. Представлено аналіз ключових аспектів і методів підготовки військових лідерів у навчальних закладах НАТО. Увагу дослідження акцентовано на необхідності інтеграції європейських та євроатлантичних освітніх стандартів у підготовці військових кадрів в Україні, відповідно до принципів НАТО, з огляду на політичну, економічну та військову агресію росії. Проаналізовано ключові аспекти щодо поняття та дефініції військового лідерства. Розглянуто ключові компоненти ефективного військового лідерства, зокрема і трансформаційне та ситуативне лідерство, які визначають способи стимулювання і мотивації підлеглих до досягнення вищих результатів та адаптації до змінних умов. Значну увагу приділено аналізу освітніх програм військових академії НАТО та методам навчання, що застосовуються для розвитку лідерських навичок, включаючи вивчення міжнародного гуманітарного права та кібербезпеки, що дозволяє лідерам ефективно керувати у різноманітних оперативних середовищах. Дослідження також охоплює ширший спектр викликів, з якими стикаються військові лідери, зокрема і кібервійни, й гібридні загрози, та вимагає знань не тільки в традиційних військових стратегіях, але й в міжнародному гуманітарному праві та міжнародних відносинах. Підкреслено значення багатоаспектного підходу до військової освіти, який сприяє формуванню висококваліфікованих, етичних та адаптивних лідерів, здатних ефективно керувати у складних умовах.

Висновки. Висвітлено перспективи подальших досліджень, які можуть містити аналіз впливу новітніх технологій, таких як штучний інтелект і автоматизація, на стратегічне військово-планування та лідерство, а також необхідність подальшого розвитку методів військової підготовки. Подальший розвиток військової освіти має враховувати зміни у глобальному безпековому середовищі, зокрема і зростання інформаційних і кібернетичних загроз, потребу в міжнародній взаємодії та здатність адаптуватися до мінливих військових доктрин.

Ключові слова: військова освіта, стандарти НАТО, національна безпека, управління, лідерство.

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