



Balance of conscientiousness and openness to experience in the training of operational level officers: An empirical study

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◆ **Abstract.** The relevance of the study is conditioned by the need to clarify the role of personal characteristics of officers in ensuring effective military management in a complex, dynamic, and uncertain operational environment. The purpose of the study was to identify specific features of the relationship between conscientiousness and openness to experience in the personal profile of officers undergoing training for an operational level of military education, and to substantiate psychological and pedagogical approaches to the development of a balance between normative self-regulation and cognitive flexibility in the system of professional military education. The study used a psychometric approach based on the five-factor personality model (Big Five). Empirical data were obtained using the Big Five Inventory-2 questionnaire (BFI-2), implemented on the "I am a Psychologist" platform. The statistical analysis included 424 valid officer profiles. Descriptive statistics were used for data processing, in particular, the calculation of mean values and standard deviations. To check the statistical significance of differences between indicators of conscientiousness and openness to experience, the Student's t-test was applied. The results showed that in the study sample, the most pronounced trait was conscientiousness ($M = 3.92$; $SD = 0.417$), which was manifested primarily through organisation ($M = 4.07$), productivity and responsibility ($M = 3.84$). Openness to experience had a moderate level of expression ($M = 3.60$; $SD = 0.521$) and a predominantly cognitive character, which was confirmed by higher indicators of creative imagination ($M = 3.77$) and intellectual curiosity ($M = 3.74$) compared to aesthetic sensitivity ($M = 3.29$). Statistical analysis confirmed a significant difference between indicators of conscientiousness and openness to experience ($t = 9.88$; $p < 0.001$), and Cohen's d effect size of ≈ 0.68 indicated the practical significance of this difference. The data obtained give grounds to interpret the personal

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profile of officers as one in which the regulatory component prevails, while simultaneously the potential for developing adaptability, alternative analysis, and innovative thinking remains. The practical significance of the findings lies in demonstrating the value of strengthening problem-based learning, scenario-based simulation, and “red team” exercises within the system of professional military education

♦ **Keywords:** military leadership; cognitive flexibility; normative self-regulation; managerial behaviour; adaptability; professional military education

♦ Introduction

In the context of a full-scale war and a complex operational environment, the effectiveness of military management increasingly depends on the ability of officers to combine discipline, responsibility, and normative manageability with cognitive flexibility, readiness to rethink experience, and search for non-standard solutions. This issue takes on particular significance in the training of officers for operational-level military education, as this stage of professional development involves a growing need to integrate staff experience, analytical thinking, the ability to cope with uncertainty, and the capacity to make decisions in rapidly changing circumstances. In this context, conscientiousness can be seen as a trait that supports organisation, consistency, and responsible task execution, while openness to experience is associated with adaptability, intellectual curiosity, and the ability to alternative analysis. The scientific literature does not sufficiently empirically substantiate exactly how these traits relate in the personal profile of officers who are trained at the operational level, which is what makes this study particularly relevant. Thus, the relevance of the study lies in the need for scientific understanding of the importance of personal predictors in the training of operational-level officers. The results obtained will help not only to better understand the psychological mechanisms of managerial activity, but also to substantiate approaches to improving the system of professional military education based on the requirements of modern warfare.

In recent leadership research, personality traits are considered as important predictors of professional performance, adaptability, and effectiveness of managerial behaviour. A.A. Javalagi *et al.* (2024) showed that personality traits are systematically associated with both leader emergence and leadership effectiveness, and the behavioural mechanisms of this connection are structure initiation, supportive interaction, and the ability to influence group processes. In this context, conscientiousness is usually associated with organisation, responsibility, self-discipline, and consistency of action, while openness to experience is associated with cognitive flexibility, intellectual curiosity, receptivity to new information, and a willingness to review established ways of doing things. The importance of these traits is enhanced in a complex and changing professional environment. A. Bonini *et al.* (2024) in a systematic review and meta-analysis proved a positive association between leadership and adaptive performance, which is particularly important for working in conditions of uncertainty and rapid changes in requirements. For the analysis of officer training, these results are of methodological importance,

since they give grounds to consider openness to experience as a psychological prerequisite for adaptation to changes, and conscientiousness as a basis for responsible and consistent implementation of management decisions.

In military psychology and military education, the role of personality traits is also considered as a factor in the professional development of future officers and military leaders. S. Bekesiene (2023), studying cadets of the Lithuanian military academy, found that conscientiousness, openness to experience and extraversion are associated with academic and military performance, and part of this influence is mediated by self-efficacy. S. Bobdey *et al.* (2021), drawing on data from an Indian military academy, also found a positive correlation between conscientiousness and success in military training, and the development of leadership qualities. These results confirmed the importance of conscientiousness as a trait that supports discipline, reliability, and the ability to withstand the demands of an intense professional environment. However, the effectiveness of military leadership cannot be reduced only to discipline and normativity. N.M. Sekel *et al.* (2023) argued that adaptive decision-making under simulated operational stress depends on a complex of psychological, cognitive, and physical factors, among which personality characteristics are essential. J. Österberg *et al.* (2024) proved that cadets' perceptions of future officer careers, leadership challenges, and professionally important qualities were linked to their personal characteristics; openness was positively correlated with empathy and general knowledge, and conscientiousness was positively correlated with a focus on certainty. Therefore, in a military context, conscientiousness and openness to experience should be considered not as mutually exclusive, but as complementary characteristics. Another important block of research concerns military leadership in highly stressful and innovatively saturated environments. C. Panait (2025), analysing the profile of highly effective military leaders based on BFI-2, showed that emotional stability and conscientiousness dominated among the most pronounced characteristics, with high performance and responsibility directly linked to leadership performance under stressful conditions. The researcher also noted that a balanced level of openness to new experiences promotes strategic adaptability without undermining discipline and effectiveness.

The question of combining discipline and adaptability was particularly pronounced in the research of military leadership. J. Teixeira *et al.* (2024) substantiated the need for forms of leadership that can maintain initiative,

autonomy, and adaptability without destroying hierarchy and discipline. V. Šimanauskienė *et al.* (2021), using the example of the Lithuanian Armed Forces, showed that support for innovation, delegation, intellectual stimulation, and remuneration were associated with innovative behaviour of military officers. These findings are consistent with a broader body of research that sees conscientiousness as a sustainable predictor of academic and professional performance (Mammadov, 2022), and openness to experience as one of the leading personal factors in innovative behaviour (Zhu *et al.*, 2025).

Thus, the available research confirmed the importance of conscientiousness and openness to experience for leadership, training, adaptation, and professional performance. Simultaneously, most empirical research focused on cadets, initial military training, or a broader organisational context. The correlation of these traits in the personal profile of officers undergoing training for obtaining an operational level of military education remains insufficiently investigated. It is this gap that determines the research focus of this paper. The hypothesis of the study is that the personal profile of officers who are trained to receive an operational level of military education, there is a statistically significant difference between the level of expression of conscientiousness and openness to experience. It is assumed that conscientiousness will have higher average indicators compared to openness to experience, which may reflect the predominance of the regulatory component in the personal profile of this professional group. The purpose of the study was to identify specific features of the relationship between conscientiousness and openness to experience in the personality profiles of officers undergoing training for an operational level of military education, and to substantiate psychological and pedagogical approaches to striking a balance between normative self-regulation, and cognitive flexibility within the system of professional military education.

◆ Materials and Methods

The methodological basis of the study was the five-factor personality model Big Five, which allowed describing relatively stable individual psychological differences in five basic domains: extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience (McCrae & Costa, 2008). This research focused on two areas – conscientiousness and openness to experience, as they are conceptually related to normative self-regulation, responsibility, cognitive flexibility, and the ability to adapt in a challenging professional environment. To empirically measure these characteristics, the Big Five Inventory-2 (BFI-2) questionnaire was used in an adapted Ukrainian-language version implemented on the psychodiagnostic platform “I am a Psychologist”. The BFI-2 questionnaire contained 60 items and allowed evaluating five basic personal domains and 15 facets, with three facets for each domain. As part of this study, the tool was used to diagnose the personal characteristics of officers who are being trained to receive an operational level of military education. Respondents’ answers

were recorded on a five-point Likert scale, where lower values reflected a lower degree of the trait in question, and higher scores indicated a greater degree. The questionnaire format included assessing the respondent’s degree of agreement with brief statements describing typical behavioural, cognitive, and emotional manifestations of the individual. Examples of the content type of such statements are judgments related to organisation, perseverance, responsibility, intellectual curiosity, interest in new ideas, and the ability to mentally model situations.

The choice of BFI-2 was conditioned by its high psychometric characteristics. The tool provides “greater throughput, accuracy, and predictive power” (Soto & John, 2017). The authors also emphasised that BFI-2 had a clear hierarchical structure that enabled simultaneous analysis of both common domains and their facets. The hierarchical structure of the tool involved evaluating not only five basic factors, but also 15 facets, which provided a deeper understanding of the behavioural manifestations of the individual. In particular, conscientiousness included organisation, productivity, and responsibility, while openness to experience included aesthetic sensitivity, intellectual curiosity, and creative imagination (DeYoung, 2015; Denissen *et al.*, 2020). This approach was consistent with current understanding of the multi-level structure of the personality.

The empirical sample of the study consisted of 427 officers who were trained in the system of professional military education for obtaining an operational level of military education. The sample was targeted in nature and was formed according to the principle of accessibility of respondents who, at the time of the study, were enrolled in operational-level training programmes. The study involved officers who had military service experience, were enrolled in the Joint Staff Officer Training Programme (L-3) and had consented to take part in the online survey. This type of sample was not random in a strict statistical sense, but it was relevant for an empirical description of the personal profile of a particular professional group. The study was conducted at the National Defence University of Ukraine among officers enrolled in the operational-level professional military education programme. All respondents belonged to the same target category – officers trained to perform military management tasks at the operational level, but could have different previous service experience, military specialties, and experience participating in assigned tasks. This helped to maintain the focus of the study on a certain professional and educational group and simultaneously consider its internal heterogeneity. Empirical data was collected through an electronic questionnaire on the “I am a Psychologist” platform. The survey was conducted remotely, in a standardised form, without researchers interfering in the process of filling out responses. The subsequent statistical analysis included only valid profiles of respondents who had complete data on the studied scales; the final volume of the analytical sample was $N = 424$ (Table 1).

Table 1. Characteristics of the empirical sample of the study

Category	Value
Total number of participants	427
Average age	40.2 years
Age range	21-57 years old
Core sample by age	30-50 years old
Men	369 (86.4%)
Women	58 (13.6%)

Source: compiled by the authors based on generalised data from an empirical study of the sample profile

The data in Table 1 indicate that the sample covered a professionally mature group of officers with sufficient service and life experience. The average age of respondents was 40.2 years, and the age range was from 21 to 57 years, which allowed considering both the experience of junior officers and representatives of older age groups. The predominance of men in the sample was expected given the professional military context under study; however, the inclusion of 13.6% of women made it possible to partially reflect the gender representation of officers within the professional military education system. Taken together, these characteristics gave grounds to consider the sample as relevant for describing the personal profile of officers undergoing training at the operational level, considering the limitations associated with its targeted and non-random nature.

Participation in the study was voluntary. Before starting the survey, respondents were provided with information about the purpose of the study, the general content of the questionnaire, the approximate time of its completion, and how the aggregated results would be used for research purposes. Completing the electronic form was regarded as confirmation of informed consent to participate in the study and to the use of anonymised results for statistical analysis and subsequent scientific publication. Anonymity and confidentiality were ensured by processing data in an impersonal form. The analysis did not use personal data that would allow identifying a specific respondent, and the results were submitted only in an aggregated form. Participation or refusal to participate in the survey did not imply any organisational, educational, or service consequences for respondents. The research procedure was consistent with the general principles of voluntary, confidential, non-coercive, and non-discriminatory treatment of participants in accordance with the requirements of ICC/ESOMAR International Code on Market, Opinion and Social Research and Data Analytics (2025).

Statistical data processing was carried out using the methods of descriptive and inferential statistics (Field, 2018). At the first stage, mean values, medians, standard deviations, minimum and maximum values were calculated for the domains of conscientiousness and openness to experience, and for the corresponding facets of these domains. At the second stage, the Student's t-test for dependent samples was used to test the statistical significance of differences between the average indicators of conscientiousness and openness to experience, since both indicators were obtained from the same respondents. The

level of statistical significance was set at $p < 0.05$; results with $p < 0.001$ were interpreted as statistically significant. To assess the practical significance of the observed difference, Cohen's d effect size was additionally calculated. Statistical processing was performed using Jamovi software suit. The results were interpreted considering the descriptive nature of the study, the type of sample, and the limitations associated with the lack of repeated measurements or comparative groups.

The chosen methodological procedure allowed combining the descriptive characteristics of the officers' personal profile with checking the statistical significance of the difference between the key domains under study. The findings were interpreted not as evidence of dynamic changes in the personal profile, but as an empirical description of the ratio of conscientiousness and openness to experience within a certain professional and educational group. This approach was consistent with a cross-sectional descriptive study design and helped to avoid drawing excessive causal or longitudinal conclusions.

◆ Results and Discussion

The results of the study are presented in accordance with the logic of the stated objective and hypothesis. First, the general indicators of the two personality domains under study – conscientiousness and openness to experience – were characterised, after which their facet manifestations and the statistical significance of differences between these characteristics were analysed. This order of presentation not only described the personal profile of officers trained to receive an operational level of military education, but also determined the practical significance of the relationship between normative self-regulation and cognitive flexibility. The interpretation of the mean values was carried out based on a five-point rating scale, where scores close to 1 indicate a low level of the trait in question, and scores close to 5 indicate a high level. In this study, scores ranging from 1.00 to 2.49 were interpreted as low, 2.50 to 3.49 – as moderate, 3.50 to 4.49 – as high, and 4.50 to 5.00 – as very high. This interpretation framework was used to describe both common areas and individual aspects of conscientiousness and openness to experience. The empirical study conducted facilitated the identification of specific personality profiles among officers, focusing on two key traits: conscientiousness and openness to experience. Summary descriptive statistics for these domains and their facets were shown in Table 2.

Table 2. Descriptive statistics of indicators of conscientiousness and openness to experience in the personal profile of officers

Descriptive statistics	Conscientiousness	Organisation	Performance	Responsibility	Openness to experience	Aesthetic sensitivity	Intellectual curiosity	Creative imagination
N	424	424	424	424	424	424	424	424
Mean value	3.92	4.07	3.84	3.84	3.60	3.29	3.74	3.77
Median	3.92	4.00	4.00	4.00	3.58	3.25	3.75	3.75
Standard deviation	0.417	0.540	0.474	0.490	0.521	0.763	0.567	0.562
Minimum	2.58	2.00	2.25	2.50	2.08	1.00	2.25	2.00
Maximum	4.92	5.00	5.00	5.00	5.00	5.00	5.00	5.00

Note: the assessment was carried out on a five-point scale, where 1 – minimum and 5 – maximum degree of the corresponding feature or facet. The table shows the results for N = 424 valid profiles

Source: compiled by the authors based on the results of own empirical research

The data in Table 2 indicate that in the personal profile of the studied group of officers, conscientiousness is more pronounced, the average indicator of which is $M = 3.92$ on a five-point scale. This value belongs to a high level and indicates a pronounced orientation of respondents to organisation, responsibility, consistency, and compliance with the requirements of professional activity. Openness to experience is also in the zone of high values, but its mean value is lower – $M = 3.60$, which indicates a less pronounced but available potential for cognitive flexibility, intellectual curiosity, and readiness to work with new ideas. A comparison of standard deviations shows that openness to experience has greater variability in the sample than conscientiousness, and therefore the level of this trait among officers is less uniform.

General characteristics of the personal profile in the measurement of conscientiousness

Analysis of descriptive statistics showed that the study sample was dominated by a high level of conscientiousness ($M = 3.92$; $SD = 0.417$). Given the five-point scale used, this value indicates a pronounced orientation of officers to organisation, responsibility, self-discipline, and consistent performance of professional tasks. A relatively small standard deviation indicates a relatively high homogeneity of the sample in this domain, which may be conditioned by the specifics of military professional selection, service socialisation, and requirements for officers who are trained at the operational level. At the facet level, the highest score was recorded on the organisation scale ($M = 4.07$), which is the most pronounced component of conscientiousness in the study group. This may indicate the formed ability of officers to structure activities, plan a sequence of actions, maintain order in performing tasks, and act in accordance with certain procedures. For an operational officer, this characteristic is of particular importance, since staff and management activities require the ability to work with a large amount of information, coordinate interaction between various elements of the management system, and ensure control over the implementation of decisions.

Performance and responsibility indicators have the same mean value ($M = 3.84$), which also corresponds to a high level of severity, but is slightly lower compared to organisation. This configuration may indicate that the profile of officers more clearly presents the component of structuring and ordering of activities, while the parameters of persistent performance and personal responsibility, although they remain high, are less dominant. This should not be interpreted as a lack of productivity or responsibility, but rather as a feature of balance within the domain of conscientiousness, where the organisational and procedural aspect is most pronounced. The practical significance of such a profile lies in the fact that conscientiousness creates a psychological basis for reliable performance of managerial functions in a complex military environment. High organisation supports the officer's ability to act systematically, follow the planning logic, and ensure consistency of decisions with the requirements of the headquarters, senior commander, and overall plan of the operation. However, a certain lag of productivity and responsibility from organisation may indicate the need for educational tasks that not only support procedural discipline, but also develop the ability to independently bring complex solutions to practical results in conditions of uncertainty.

Therefore, conscientiousness in the study sample can be interpreted as a basic stabilising characteristic of the personal profile of officers who are being trained to receive an operational level of military education. It ensures predictability, consistency and manageability of professional behaviour, which is a necessary condition for the effective functioning of a military organisation. Furthermore, facet analysis shows that this domain is not internally homogeneous: its strongest component is organisation, while productivity and responsibility require further development through practice-oriented, problem-based, and scenario-based forms of training.

General characteristics of a personal profile in terms of openness to experience

In contrast to conscientiousness, openness to experience in the study sample has a lower, but still quite

pronounced level ($M = 3.60$; $SD = 0.521$). According to the interpretation scale used, this indicator is on the verge of moderate and high levels, which gives grounds to speak about the existing potential for cognitive flexibility, intellectual curiosity, and receptivity to new ideas. Simultaneously, a higher standard deviation compared to conscientiousness indicates a higher variability of this trait among respondents, that is, openness to experience in the officer sample is less uniform. Facet analysis showed that the highest components of openness to experience are creative imagination ($M = 3.77$) and intellectual curiosity ($M = 3.74$). This may indicate the ability of a significant part of officers to mentally model situations, search for alternative options for action, analyse complex problems, and be interested in new approaches to solving professional tasks. For the operational level of military management, such characteristics are of particular importance, since it is at this level that the need increases not only for performing specified procedures, but also for the ability to work with incomplete information, predict the development of the situation, and form several possible solutions. The lowest indicator in the structure of openness to experience was recorded by the aspect of aesthetic sensitivity ($M = 3.29$; $SD = 0.763$). This value is in the zone of moderate severity and has the greatest variability among all the analysed facets, which indicates the heterogeneity of respondents in this parameter. In the context of military professional activity, such a result is expected, since the educational and service environment of an officer traditionally actualises the instrumental and cognitive, analytical, and managerial aspects of the activity more than emotional and aesthetic receptivity.

The practical significance of the results obtained lies in the fact that openness to experience in this sample is manifested primarily through those components that are directly related to thinking, learning, and decision-making. Higher levels of creative imagination and intellectual curiosity can be a resource for developing scenario analysis, critical thinking, working with alternative hypotheses, and “red team” methods. A moderate overall level of openness indicates that this potential needs targeted support in the educational process, especially through tasks that encourage independent analysis, interdisciplinary vision of the problem, and rethinking established ways of acting. Therefore, openness to experience in the study group can be interpreted as a predominantly cognitive and instrumental characteristic. It manifests itself primarily in the ability to intellectual search, mental modelling, analyse complex situations, and learn new experiences, while the emotional and aesthetic component is less pronounced. Such a profile does not deny the presence of adaptive potential in operational-level officers, but indicates the need for its purposeful development through educational methods focused on flexibility of thinking, alternative analysis, and professional reflection.

The ratio of conscientiousness and openness to experience

A comparative analysis of the two domains showed that the personal profile of officers is characterised by more pronounced conscientiousness compared to openness to experience. The average conscientiousness score was $M = 3.92$, and the average openness to experience score was $M = 3.60$. This difference gives grounds to speak not about the opposition of these traits, but about a certain asymmetry in their severity, in which the regulatory and normative component of the personal profile is stronger than the component of cognitive flexibility and innovative receptivity. In a professional context, this configuration is functionally understandable, since military activities require a high level of discipline, organisation, responsibility, and the ability to act in accordance with certain procedures. The dominance of conscientiousness can support the stability of management processes, the sequence of tasks performed, and the predictability of an officer's behaviour in complex service and combat activities. At the same time, a relatively lower level of openness to experience may indicate potential limitations in quickly adapting to new conditions, rethinking non-standard situations, and generating alternative solutions, especially when the situation goes beyond established procedures.

To test the statistical significance of this difference, the Student's t-test was used for dependent samples, since indicators of conscientiousness and openness to experience were obtained from the same respondents. The results of the analysis showed that the difference between the level of conscientiousness ($M = 3.92$; $SD = 0.417$) and openness to experience ($M = 3.60$; $SD = 0.521$) is statistically significant ($t = 9.88$; $p < 0.001$). Thus, the revealed difference is not accidental within the study sample and can be considered as an empirically confirmed feature of the personal profile of officers who are trained for obtaining an operational level of military education. The calculated size of the Cohen effect $d \approx 0.68$ indicates the average strength of the practical significance of the detected difference. This means that the distinction between conscientiousness and openness to experience has not only statistical, but also applied content for analysing officer training. In particular, the data obtained indicate the need to preserve the strengths of the regulatory profile – organisation, responsibility and discipline – and purposefully develop those components that are associated with cognitive flexibility, alternative analysis, intellectual curiosity, and willingness to work with new management situations.

Thus, it is advisable to interpret the identified difference as an empirically recorded asymmetry between two important personal characteristics, and not as direct evidence of internal conflict between them. In theoretical terms, this asymmetry may reflect the tension between normative and adaptive requirements in military management, but this explanation requires caution given the descriptive design of the study. In practical terms, the results indicate the feasibility of such an educational impact that does not

reduce the importance of discipline and organisation, but enhances the ability of officers to think flexibly, search innovatively, and work with uncertainty. The obtained empirical results should be interpreted not as a contrast of conscientiousness and openness to experience, but as a revealed asymmetry between the regulatory and normative, and adaptive and cognitive components of the personal profile of officers. The dominance of integrity reflects the importance of discipline, organisation, responsibility, and procedural reliability for military professional activities. A moderately high level of openness to experience indicates an existing but less pronounced potential for cognitive flexibility, intellectual search, and readiness to rethink the situation. This interpretation is consistent with approaches to organisational behaviour, in which the effectiveness of activities is considered through a combination of two complementary modes: exploitation, that is, the effective use of existing procedures, resources, and methods of action and exploration, that is, the search for new solutions, experimentation, and adaptation to changes. The study by M. Park *et al.* (2021) showed that personality traits and team context influence innovative behaviour through exploration and exploitation mechanisms. Within the framework of this study, conscientiousness can be correlated primarily with the regulatory dimension of performance and maintaining the stability of activities, while openness to experience – with the potential for finding alternatives, intellectual renewal, and innovative behaviour. The findings also indicate a growing need for a combination of stability and adaptability at the level of organisational culture and personal qualities of an officer. This is reflected in the need to maintain conventional hierarchical coordination mechanisms, while increasing the importance of flexibility, initiative, trust, and adaptability. In this context, conscientiousness remains a key foundation for manageability, while openness to new experiences becomes an important psychological resource for learning, rethinking experiences, and finding effective solutions. A similar logic can be traced in studies of the professionalisation of officers in the system of continuing education. A. Vitchenko *et al.* (2024) emphasised that the development of the contemporary officer leader involves a combination of convergent thinking related to accuracy, consistency, and task execution in regulated environments, with divergent thinking that enables the generation of new ideas, creative reinterpretation of experience, and innovation. In the context of the results obtained, this gives grounds to consider conscientiousness and openness to experience as psychological prerequisites for two complementary ways of professional thinking of an officer.

Moreover, the mentioned study emphasised that an adult officer is simultaneously characterised by both stability and predictability of behaviour, and the desire for self-realisation, development, and professional growth (Vitchenko *et al.*, 2024). This confirms that the combination of “normativity” and “adaptability” is not a contradiction, but a natural characteristic of an officer's

development in a difficult environment. The relationship of the results obtained with the broader scientific discourse is also confirmed by meta-analytical data. S. Mammadov (2022) showed that conscientiousness is one of the most stable predictors of academic performance, as it is associated with self-regulation, responsibility, and purposefulness. However, H. Zhu *et al.* (2025) demonstrated that openness to experience is an important personal predictor of innovative behaviour. Together, these results allow considering conscientiousness and openness not as competitive features, but as characteristics that perform various functions: the first supports reliability and completeness of actions, the second – adaptability, intellectual flexibility, and susceptibility to change.

In a military context, the identified profile may indicate a predominance of a regulatory model of professional behaviour focused on ensuring manageability, reliability, and procedural consistency. It is a moderately high, but lower level of openness to experience compared to conscientiousness that indicates the scope of potential development in the system of professional military education. This interpretation is consistent with the findings of N.M. Sekel *et al.* (2023), which showed that adaptive decision-making under simulated operational stress depends on a combination of personal, cognitive, physical, and psychological factors. It is important to emphasise that conscientiousness and openness to experience are not mutually exclusive characteristics. S. Bekesiene (2023) found that both traits are positively associated with academic and military performance in cadets, and M.A. Dean *et al.* (2006) showed the predictive significance of Big Five measurements for various learning performance criteria. This suggests that the potential tension between normativity and adaptability manifests itself not as a psychological conflict of traits, but as a task of their pedagogical and managerial coordination in a specific professional context.

In a broader theoretical dimension, the results can be cautiously correlated with the concept of organisational ambidexterity, which implies the ability to simultaneously support the effective performance of existing tasks and carry out innovative search (Gibson & Birkinshaw, 2004). For an operational officer, this means the need to act in two interrelated modes: to ensure that the tasks set are clearly performed and simultaneously remain ready to rethink them in the face of a change in the situation. That is why the results of the study are of practical importance for professional military education, since they indicate the need not to reduce the role of discipline, but to supplement it with the development of cognitive flexibility, critical thinking and alternative analysis.

The practical interpretation of the results obtained is that the training of operational-level officers should create conditions for the simultaneous development of normative self-regulation and adaptive thinking. Conscientiousness supports the ability to act in a structured, responsible, and consistent way, while openness to experience helps to deal with uncertainty, generate alternatives, and adopt new

management approaches. In this context, it is advisable to widely use problem-oriented training, scenario analysis, analysis of complex management situations and methods of “red teams”, which allow simultaneously updating the discipline of thinking and the ability to critically rethink decisions. Thus, the results of the study do not give grounds to assert the dynamic transformation of the personal profile of officers, but they allow describing the characteristic correlation of two important features within a certain professional and educational group. The identified asymmetry between conscientiousness and openness to experience can be seen as an empirical argument in favour of the fact that professional military education should not only maintain organisation and responsibility, but also purposefully develop intellectual curiosity, the ability to alternative analysis, and readiness to work with uncertainty. This approach allows aligning the requirements of military discipline with the need for adaptive thinking, without contrasting these characteristics with each other.

◆ Conclusions

The study showed that the personal profile of officers who are trained at the operational level of military education is characterised by a high level of conscientiousness ($M = 3.92$) and a moderate level of openness to experience ($M = 3.60$). Conscientiousness is manifested through organisation ($M = 4.07$), responsibility, and discipline, ensuring the reliability and manageability of management activities. Openness to experience is mainly cognitive in nature (creative imagination – 3.77; intellectual curiosity – 3.74) and is a prerequisite for adaptability and the search for non-standard solutions. The most pronounced aspect of conscientiousness was organisation, which indicates the predominance of structure, planning, and procedural order in the professional behaviour of officers. In the structure of openness to experience, higher indicators of creative imagination and intellectual curiosity compared to aesthetic sensitivity indicate that the adaptive potential of officers is mainly cognitive and analytical, rather than emotional and aesthetic. The statistically significant difference between conscientiousness and openness to experience ($t = 9.88$; $p < 0.001$; Cohen's $d \approx 0.68$) confirms the practical relevance of the identified asymmetry for analysing operational-level officer training.

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The results obtained give grounds to interpret the revealed difference between conscientiousness and openness to experience as an asymmetry between the normative and regulatory, and adaptive and cognitive components of the personal profile of an operational officer. The dominance of conscientiousness ensures stability and performance of tasks, but a relatively low level of openness can limit the flexibility of thinking and the speed of adaptation to changes in the combat environment. This confirms that the effectiveness of military leadership is determined not by individual traits, but by their correlation. The results of the study are consistent with contemporary scientific approaches and empirical data that consider conscientiousness as a predictor of performance, and openness to experience as a factor of innovation and adaptability. Combined with data on the transformation of military organisational culture, this indicates a growing demand for flexibility, initiative, and the ability to rethink experience, and maintaining discipline and manageability.

The practical significance of the results obtained is to substantiate the need to create a manageable balance between conscientiousness and openness to experience in the process of training officers. This includes strengthening components in educational programmes aimed at developing critical thinking, cognitive flexibility, and alternative analysis, using problem-based learning, scenario modelling, and “red team” techniques. This suggests that the personal profile of an operational officer reflects the transition from a predominantly normative to a more adaptive model of military leadership, where the key factor in effectiveness is the ability to combine discipline and flexibility in decision-making. Further research should be directed to the investigation of the relationship between personal characteristics and leadership styles, and to the creation of psychological and pedagogical models for the development of adaptive thinking in the system of professional military education.

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Баланс сумлінності та відкритості до досвіду в підготовці офіцерів оперативного рівня: емпіричне дослідження

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♦ **Анотація.** Актуальність дослідження зумовлена потребою уточнення ролі особистісних характеристик офіцерів у забезпеченні ефективного військового управління в умовах складного, динамічного та невизначеного операційного середовища. Метою дослідження було виявлення особливостей співвідношення сумлінності та відкритості до досвіду в особистісному профілі офіцерів, які проходять підготовку для здобуття оперативного рівня військової освіти, а також обґрунтування психолого-педагогічних підходів до формування балансу між нормативною саморегуляцією та когнітивною гнучкістю у системі професійної військової освіти. У дослідженні застосовано психометричний підхід на основі п'ятифакторної моделі особистості (Big Five). Емпіричні дані отримано за допомогою опитувальника Big Five Inventory-2 (BFI-2), реалізованого на платформі «Я-Психолог». До статистичного аналізу включено 424 валідні профілі офіцерів. Для обробки даних використано методи описової статистики, зокрема обчислення середніх значень і стандартних відхилень. Для перевірки статистичної значущості відмінностей між показниками сумлінності та відкритості до досвіду застосовано t-критерій Стюдента. Результати засвідчили, що в досліджуваній вибірці найбільш вираженою рисою була сумлінність ($M = 3,92$; $SD = 0,417$), яка проявляється насамперед через організованість ($M = 4,07$), а також продуктивність і відповідальність ($M = 3,84$). Відкритість до досвіду мала помірний рівень вираженості ($M = 3,60$; $SD = 0,521$) і переважно когнітивний характер, що підтверджується вищими показниками творчої уяви ($M = 3,77$) та інтелектуальної допитливості ($M = 3,74$) порівняно з естетичною чутливістю ($M = 3,29$). Статистичний аналіз підтвердив значущу різницю між показниками сумлінності та відкритості до досвіду ($t = 9,88$; $p < 0,001$), а розмір ефекту Cohen's $d \approx 0,68$ свідчить про практичну релевантність цієї відмінності. Отримані дані дають підстави інтерпретувати особистісний профіль офіцерів як такий, у якому переважає регулятивно-нормативний компонент, водночас зберігається потенціал для розвитку адаптивності, альтернативного аналізу й інноваційного мислення. Практичне значення результатів полягає в обґрунтуванні доцільності посилення в системі професійної військової освіти методів проблемно-орієнтованого навчання, сценарного моделювання та «червоних команд»

♦ **Ключові слова:** військове лідерство; когнітивна гнучкість; нормативна саморегуляція; управлінська поведінка; адаптивність; професійна військова освіта