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Challenges of the Tactical Leader in the Context of Multinational Military Operations Process

Výzvy pro taktického velitele v kontextu procesu mnohonárodních vojenských operací v kontextu procesu mnohonárodních vojenských operací

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Abstract: This study explores the main challenges faced by leaders within the multinational military operations process. Based on the aspects addressed in the literature review, the questionnaire survey method will be applied to a representative sample of military personnel who had participated in various multinational activities, as tactical leaders. The findings reveal that the most significant challenges perceived by leaders include linguistic barriers, command and control (C2) issues, and differences in training, endowment, and doctrine, with planning identified as the most challenging operational phase. Statistical analysis further indicates that experienced leaders perceive these challenges more acutely, and the study outlines key solutions proposed by respondents, such as developing language skills, enhancing interoperability, and fostering adaptability as essential traits for overcoming difficulties in multinational military operations.

Abstrakt: Studie zkoumá hlavní výzvy, kterým čelí velitelé v rámci procesu mnohonárodních vojenských operací. Na základě aspektů shrnutých v přehledu literatury byla použita metoda dotazníkového šetření na reprezentativním vzorku vojenského personálu se zkušenostmi na pozici taktického velitele z různých mnohonárodních aktivit. Ze zjištění vyplývá, že mezi nejvýznamnější výzvy, které velitelé vnímají, patří jazykové bariéry, otázky velení a řízení (C2) a rozdíly ve výcviku, vybavení a doktríně, přičemž za nejnáročnější operační fázi bylo označeno plánování. Statistická analýza dále ukazuje, že zkušení velitelé vnímají tyto výzvy naléhavěji, zatímco studie nastiňuje klíčová řešení navrhaná respondenty, jako je rozvoj jazykových dovedností, zvyšování interoperability a podpora adaptability jakožto základních předpokladů pro překonání obtíží v mnohonárodních vojenských operacích.

Keywords: Military Leader; Command and Control; Mission Command; Operations Process; Multinational Operations.

Klíčová slova: velitel; velení a řízení; úkolové velení; proces operací; mnohonárodní operace.

INTRODUCTION

The current security environment is characterized by a high degree of uncertainty and ambiguity, which tends to replace traditional conflicts with asymmetric, non-traditional, hybrid or irregular ones. In a changing geopolitical context, multinational military operations are becoming increasingly frequent and necessary to ensure security and stability. While conducting these operations, military leaders develop plans, make decisions, and take actions under highly complex conditions, relying on the use of mission command carried out through the operations process. In this process, leaders face a variety of challenges and the way they address them is the key to achieving the established objectives. Furthermore, the military leader is considered to be an essential pillar in multinational military operations, as the person who has the ability to harmonize the differences between the participating military forces in order to accomplish the missions and achieve the desired end state, through the effective use of the operations process.

Consequently, the primary concepts that need to be operationalized are military leader, command and control, mission command, military operations process, and multinational operations. Regarding the clarification of these concepts, the situation is relatively straightforward, as their definitions have remained largely unchanged over time, even though they undergo certain adaptations depending on the doctrine of each nation. In the present study, the meanings of the key concepts are as follows:

- Military leader – “anyone who by virtue of assumed role or assigned responsibility inspires and influences people by providing purpose, direction, and motivation to accomplish the mission and improve the organization” (ADP 6-22 2019, 1-3); frequently associated with the commander, the person who exercises the act of command, defined as “the authority vested in a member of the armed forces for the direction, coordination, and control of military forces.” (AAP – 06 2020, 29);
- Command and control (C₂) - “the exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission” (JP 1 2017, GL-5);
- Mission command – represents “the Army’s approach to command and control that empowers subordinate decision making and decentralized execution appropriate to the situation.” (ADP 6-0 2019, 1-3); it plays a crucial role in planning and carrying out an operation, enabling commanders to direct subordinates effectively and fulfil the commander’s intent under evolving conditions (Tudorache 2024, 20-36);

- Operations process – structure for organizing and executing C₂ representing “the major command and control activities performed during operations: planning, preparing, executing, and continuously assessing the operation” (ADP 5-0 2019, 1-4);
- Multinational operations – comprises “military actions conducted by forces of two or more nations, undertaken within the structure of a coalition or alliance.” (FM 6-0 2022, 1-8); “other possible arrangements include supervision by an international organization such as the United Nations (UN), North Atlantic Treaty Organization (NATO), or Organization for Security and Cooperation in Europe (OSCE)” (JP 3-16 2019, I-1).

Having clarified the key concepts, the study aims to identify the main challenges faced by tactical leaders in the multinational military operations process, and to establish potential solutions that are regarded as valuable in overcoming them. The research objectives (RObj) were formulated in accordance with the formulated study purpose, as follows:

- RObj₁ – identifying leaders’ opinion regarding the main challenges encountered in the multinational military operations process;
- RObj₂ – identifying the activity within the multinational military operations process that generates the most significant challenges for tactical leaders;
- RObj₃ – determining the correlations between the main challenges faced by tactical leaders in the multinational military operations process on one side, and their operational experience on the other side;
- RObj₄ – identifying potential solutions to assist leaders in overcoming challenges within the multinational military operations process.

Additionally, the following research hypotheses (RH) were formulated to fulfil the research objectives:

- RH₁ - The three main challenges identified by leaders within the multinational military operations process are: command and control, linguistic barriers, exchange and protection of classified information;
- RH₂ - Planning is the most challenging activity for leaders in the multinational military operations process;
- RH₃ - The challenges of the multinational military operations process are less prevalent for more experienced military leaders (over 14 years of active duty) than for less experienced military leaders.
- RH₄ - The potential solutions provided by respondents are directly connected with the most demanding operational challenges.

1 RESEARCH METHODOLOGY

This paper primarily relies on a quantitative approach, represented by the indirect survey based on questionnaire, combined with qualitative methods such as a literature review and indirect observation.

Referring to the application of the questionnaire, it will be utilized as follows:

- The first part composed of 24 questions (set A) – addressing RObj₁ (RH₁) and RObj₃ (RH₃);
- The second part composed of 9 questions (set B) – addressing RObj₂ (RH₂);
- The third part represented by an open question – addressing RObj₄ (RH₄).

For set A, responses were rated using a five-point Likert scale, as follows: 1 - strongly disagree; 2 - disagree; 3 - neither agree nor disagree; 4 - agree; 5 - strongly agree. At the same time, for set B, respondents were given four response options corresponding to the four activities of the military operations process (planning, preparation, execution, assessment).

The study was conducted on a sample of 50 commissioned officers, non-commissioned officers (NCO), and enlisted soldiers from the 18th ISR Brigade from Timisoara, who had participated in various multinational activities, including missions and exercises, as tactical leaders. Moreover, the questionnaire was distributed to both male and female personnel and was self-administered. Respondents were provided with explanations regarding the topic's importance and instructions for completing the questionnaire. In addition, it was completed anonymously, on a voluntary basis, and required approximately 15–20 minutes to fill out.

Also, regarding the sample distribution by staff category, 25 were commissioned officers, 20 NCOs and 5 enlisted soldiers. From the gender distribution's perspective, the sample consists of 40 male military personnel and 10 female military personnel.

2 LITERATURE REVIEW

As an opening remark, even if there are numerous articles and studies that address related topics such as C₂, mission command and the operations process, the same framework does not apply when challenges for leader within the operations process are introduced in the discussion. Additionally, the area of research decreases when the variable given by the multinational environment is brought in. Thus, the articles, documents, and publications that address this topic are primarily based on the idea that multinational operations are characterized by complex challenges throughout the operations process and, most of the time, they come with diverse approaches and opinions.

Regarding this, a first challenge is addressed by the United States Joint Chiefs of Staff (JCS), being represented by the C₂ of the multinational military unit. The main idea stated is that typically, military forces participating in multinational operations will always have at least two distinct chains of command: a national chain of command and a multinational one. The publication highlights the fact that in NATO-led multinational operations, command and control are clarified through specific guidelines and regulations. However, in United Nations (UN) operations, commanders face greater challenges, as C₂ relationships are not clearly defined by regulations (JP 3-16 2019, II-1).

From another perspective, Smolarek presents an additional factor to consider C₂, characterized by varying standards among the member states involved in multinational operations. The key point made is that within NATO, most states use mission command to lead military operations. This approach enables subordinates to earn the commander's

trust and provides them with a high degree of freedom in decision-making and action. However, in some nations outside NATO, subordinate commanders expect detailed and specific orders on how to act, showing little initiative. (Smolarek 2016, 187-188). Differences regarding the level of training, endowment and doctrine represents another challenge pointed out by the same author. The main idea states that, since military training standards are a national concern, based on different standards, techniques, tactics, and national procedures, it is highly unlikely that all military forces under a commander's authority will meet the necessary criteria for all types of missions. Another factor that was analysed is the level of equipment each participating nation provides, emphasizing the idea that less-equipped military force, even if tactically trained, will need time to develop skills in using new types of military equipment. Thus, the article concludes that the multinational force leader must swiftly evaluate personnel readiness to identify gaps, strengths and determine the need for additional training.

Furthermore, another challenge according to the United States Joint Chiefs of Staff is achieving unity of effort. The publication presents the principles of unity of effort as the fundamental pillars for achieving the desired relations. As presented in the paper, all partners must be included in the operational process, and their opinions must be understood, discussed, and considered. To enhance credibility and respect among partners and conduct more effective military actions, the multinational commander is recommended to develop and demonstrate communication skills, regional knowledge, and familiarity with local customs, values, and cultures (JP 3-16 2019, I-3 – I-4).

Additionally, linguistic barriers present significant challenges for C₂, communications and achieving unity of effort, according to the views of several authors. Despite the notion that English serves as the primary language of communication in multinational operations, Smolarek emphasizes that commanders frequently face varying levels of language proficiency, particularly among lower-ranking personnel, as well as challenges related to accents, pronunciation, and unfamiliar vocabulary. This includes also the unofficial "mission language" developed over time within the area of operation consisting of abbreviations, acronyms, and terms referring to equipment, geographical locations, or terrain features (Smolarek 2016, 189-190).

In the same manner, cultural and religious considerations are extensive issues that can significantly impact military operations. These differences, especially regarding religious aspects, can lead to tensions among different nations according to some studies. In this regard, Georgieva and Marinov promote the idea that commanders should understand and respect their subordinates' religious principles and be familiar with their culture. Moreover, military actions should consider the cultural and religious aspects of the host nation and the military and civilian personnel in the operational area (Georgieva and Marinov 2017, 153-161).

From another point of view, other authors addressed a sensitive issue regarding the exploitation of emerging and disruptive technologies (EDT) such as artificial intelligence (AI) to boost leader decision-making during the operations process. If during planning the most demanding challenge is to integrate AI during intelligence of the battlefield (IPB) to footprint the most likely enemy courses of action (MLECOA), during execution the AI is required to fuel commander's mental agility to overcome adjustment decisions (Tudorache 2021, 52).

Legal considerations and political restrictions represent another challenge addressed by some authors. As noted by Katze and Kashgar, most military operations also have a political dimension. Consequently, certain political considerations influence the achievement of military objectives. Typically, political factors take precedence, with 'national caveats' presenting significant challenges for multinational military leaders. As recommended by the authors, the commanders must identify and integrate these limitations into operational planning, ensure legal compliance of their subordinates, and seek legal counsel when needed (Katze and Kashgar 2019, 393-405).

Another peculiarity of multinational operations is the variety of rules of engagement (ROE), as highlighted in the relevant literature. A pertinent chapter written by Prescott emphasizes that securing agreements from national authorities on the implementation of specific ROE is a critical aspect to be addressed during the planning phase. Although ROE may be similar, differences often exist between participating states, managing them being essential for the success of the operation (Prescott 2015, 249-274).

Another reference highlights force protection as a significant challenge, which involves maintaining combat power through both active and passive defensive measures, implementing risk-reduction procedures for fratricide, and effectively managing extreme situations. It is emphasized that protection applies not only to own forces but also to non-combatants. A key challenge for the multinational force commander is managing the risk of fratricide, which is notably higher in multinational operations (Handbook 16-18, 2016, 17-18). This point is further supported by other studies, which argue that the destructive power and range of modern weapon systems, combined with the rapid pace of contemporary conflicts and the presence of civilians, could increase the likelihood of fratricide, particularly in a multinational environment. (Schiller 2016, 112-114).

One last reference source illustrates that in a multinational environment, information access and sharing present challenges, particularly when systems with different classification levels must operate together. It is stated that, commanders need the right information, at the right place and time, to achieve success, and establishing a secure and stable informational environment is critical for enabling members to share information safely. (Toth 2021, 22-30).

3 RESULTS AND DISCUSSIONS

The Statistical Package for the Social Sciences (IBM SPSS) software, version 30, served as the foundation for data processing, essential for testing the validity of the hypotheses and achieving the research objectives.

Table 1: Statistical analysis of items within Set A

Descriptive Statistics							
	N	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance
A1	50	1.00	5.00	203.00	4.0600	1.30008	1.690
A2	50	1.00	5.00	201.00	4.0200	1.18649	1.408
A3	50	1.00	5.00	208.00	4.1600	1.18425	1.402
A4	50	1.00	5.00	195.00	3.9000	1.21638	1.480
A5	50	1.00	5.00	203.00	4.0600	1.18511	1.404
A6	50	1.00	5.00	202.00	4.0400	1.24474	1.549
A7	50	1.00	5.00	180.00	3.6000	1.16058	1.347
A8	50	1.00	5.00	186.00	3.7200	1.17872	1.389
A9	50	1.00	5.00	185.00	3.7000	1.16496	1.357
A10	50	1.00	5.00	209.00	4.1800	1.22374	1.498
A11	50	2.00	5.00	217.00	4.3400	1.00224	1.004
A12	50	1.00	5.00	205.00	4.1000	1.26572	1.602
A13	50	1.00	5.00	185.00	3.7000	1.16496	1.357
A14	50	1.00	5.00	182.00	3.6400	1.13856	1.296
A15	50	1.00	5.00	191.00	3.8200	1.15511	1.334
A16	50	1.00	5.00	199.00	3.9800	1.16916	1.367
A17	50	1.00	5.00	153.00	3.0600	1.46259	2.139
A18	50	1.00	5.00	175.00	3.5000	1.24949	1.561
A19	50	1.00	5.00	197.00	3.9400	1.15016	1.323
A20	50	1.00	5.00	165.00	3.3000	1.32865	1.765
A21	50	1.00	5.00	194.00	3.8800	1.20611	1.455
A22	50	1.00	5.00	181.00	3.6200	1.35360	1.832
A23	50	1.00	5.00	170.00	3.4000	1.41421	2.000
A24	50	1.00	5.00	204.00	4.0800	1.20949	1.463
R	50	1.17	5.00	191.25	3.8250	.86799	.753
Valid N (listwise)	50						

As outlined in Table 1, the statistical data processing began with a descriptive analysis of the variable R (the variable composed of the 24 items from Set A), which yielded the following results: Mean = 3.825 and Standard Deviation = 0.8678. By subtracting/adding the standard deviation from/to the mean, the lower/upper limits of typical variation were determined (Lower Limit = 2.957 / Upper Limit = 4.692). Furthermore, by comparing the scores of the 24 items in Set A to the Z-distribution, it was concluded that these scores are average, with values ranging between 3.06 and 4.34, which fall within the limits of typical variation.

3.1 Testing RH_1

To address the RH_1 , the data extracted from the first part of the questionnaire (set A) were thoroughly analysed. In the context of multinational military operations, the leader encounters complex challenges, as previously mentioned and analysed. Within the questionnaire, three items were dedicated to each identified challenge, thus constituting 8 subsets of questions as follows: challenges regarding the C_2 (subset C - items A1, A2, A3), differences regarding the level of training, endowment and doctrine (subset D - items A4, A5, A6), challenges for achieving unity of effort (subset E - items A7, A8, A9), linguistic barriers (subset F - items A10, A11, A12), cultural and religious barriers (subset G - items A13, A14, A15), legal considerations, political restrictions and ROE (subset H - items A16, A17, A18), force protection (subset K - items A19, A20, A21), the access,

exchange and protection of classified information (subset M - items A22, A23, A24). Following the analysis of the subsets, the results obtained are presented in Table 2.

Table 2: Statistical analysis of items subsets

		Statistics							
		C	D	E	F	G	H	K	M
N	Valid	50	50	50	50	50	50	50	50
	Missing	0	0	0	0	0	0	0	0
Mean		4.0800	4.0000	3.6733	4.2067	3.7200	3.5133	3.7067	3.7000
Std. Deviation		1.16167	1.15274	1.06157	1.08982	1.05916	1.01956	.99805	1.07592
Variance		1.349	1.329	1.127	1.188	1.122	1.040	.996	1.158
Sum		204.00	200.00	183.67	210.33	186.00	175.67	185.33	185.00

Item A11 (I believe that language misunderstandings, miscommunications and lost information are a significant challenge for the leader in accomplishing the objectives) scored the highest (mean=4.34) of the 24 items studied in the first part of the questionnaire. It is considered that miscommunication, loss of information or misinterpretations limit leaders' ability to react quickly to unpredictable situations that characterize the multinational environment. Thus, linguistic barriers were widely recognized as a major challenge, with 78% of respondents strongly expressing agreement. Notably, no "Strongly disagree" responses were recorded. Furthermore, the similarity in results for related items A10 (mean=4.18) and A12 (mean=4.10) confirms the significance of this challenge for leaders in multinational military operations.

The second most significant challenge for the military leader, according to the research sample, is the C₂ of multinational forces, with item A3 ("In multinational military operations, the direction, coordination, and control of participating forces is more complex") scoring the highest (mean = 4.16) among items from subset C.

The interpretation of the data reveals that, for the analysed item, 37 out of 50 respondents (64% of the research sample) adopted a positive attitude, with 8 participants expressing agreement and 29 participants expressing total agreement. These findings suggest that the exercise of C₂ is notably more complex in the context of multinational operations. Additionally, within the same subset, item A1 received a score of 4.06, and item A2 scored 4.02, results that further reinforce the previously stated argument.

Subset D, designed to interrogate the challenge posed by differences regarding the level of training, endowment and doctrine of forces participating in multinational operations scored 4.00. Within this subset, item A5 ("Commanders need to give time to less trained military forces to develop skills in the use of new types of techniques and equipment") scored the highest (mean = 4.06). The data show that 35 military respondents (70% of the research sample) believe that developing skills in the use of certain military equipment, techniques, or software programs requires additional training time. Consequently, the leader, together with their subordinates, can only achieve their objectives after successfully mastering specific theoretical and practical skills—a factor that constitutes a minor disadvantage in ensuring the efficient execution of multinational military operations. The results highlight that, differences in the level of training, equipment, and

doctrine represent the third most significant challenge for military leaders operating in multinational environments.

3.2 Testing RH₂

To address the RH₂, the data extracted from the second part of the questionnaire were scrutinized (set B).

The analysis of item B9 (“In the multinational military operations process, the commander encounters the most challenges in the ... phase”) indicates that most of the research sample perceive planning as the most challenging activity for a leader within the multinational operations process (29 out of 50 responses). At this phase, the leader’s vision plays a crucial role in understanding the current state of the operational environment and anticipating its evolution to achieve the desired end state. The commander’s work during the planning phase is of critical importance, as this stage culminates in the development of a plan or order through which the leader communicates his vision and directs subordinate forces to execute it. While the situation and course of action may change during the execution phase, the initial order serves as a robust foundation that aligns all participating forces, mitigates risks, and enhances the likelihood of operational success. In practice, without effective planning, subsequent activities cannot be executed properly, significantly diminishing the probability of success and the attainment of the desired end state.

3.3 Testing RH₃

Furthermore, to address the RH₃, correlations between the three main challenges faced by the leader in the multinational military operations process, as identified above, will be analysed to clarify the nature of their relationships.

The first correlation will be conducted between the linguistic barriers (represented by item A11) and the challenges generated by the command and control of multinational forces (represented by item A3).

Table 3: Correlation between linguistic barriers and C₂ of the employed forces

Correlations			
		A3	A11
A3	Pearson Correlation	1	.727**
	Sig. (2-tailed)		<.001
	N	50	50
A11	Pearson Correlation	.727**	1
	Sig. (2-tailed)	<.001	
	N	50	50

** . Correlation is significant at the 0.01 level (2-tailed).

As shown in the table above, the resulting significance threshold ($p < 0.001$) indicates a significant relationship between the two variables, with a probability of error of less than 0.1%. Additionally, the correlation is positive, and the strength of the relationship is strong, with a value of 0.727, well above the minimum required threshold of 0.5. Finally, the proportion of variance ($r^2 = 0.53$) suggests that the correlation is present in approximately 53% of the sample studied.

In multinational operations, the complexity of C_2 is heightened by differences in C_2 systems, reporting methods, and doctrines. Linguistic barriers further complicate effective C_2 by leading to misinterpretations, errors, and potential accidents. Moreover, these barriers slow decision-making, hinder information flow, and reduce operational tempo, ultimately impacting the quality of decisions. Consequently, linguistic challenges can exacerbate C_2 difficulties, making direction and coordination less precise and more error prone.

The next correlation will be performed between linguistic barriers (represented by item A11) and differences in the level of training, endowment and doctrine (represented by item A6).

Table 4: Correlation between C_2 of the employed forces and differences regarding the level of training, endowment and doctrine

Correlations

		A11	A6
A11	Pearson Correlation	1	.725**
	Sig. (2-tailed)		<.001
	N	50	50
A6	Pearson Correlation	.725**	1
	Sig. (2-tailed)	<.001	
	N	50	50

** . Correlation is significant at the 0.01 level (2-tailed).

From a statistical perspective, the results presented are consistent with the previous correlation. In this correlation, $r = 0.725$, demonstrating a strong positive relationship between the two variables analysed. Moreover, a significant correlation can be established between the two variables, as the significance threshold ($p < 0.001$) is much lower than the conventional level of 0.05. Finally, the proportion of variance ($r^2 = 0.525$) indicates that the correlation is present in approximately 53% of the studied sample.

Similar to the effect of C_2 on engaged forces, it can be concluded that the two challenges analysed are mutually reinforcing, in the sense that linguistic barriers increase the risk of misunderstandings, errors and misinterpretations, and these become even more prominent in situations where forces have different levels of training and distinct doctrines. The interpretation of orders varies from nation to nation, according to their respective doctrines. As such, the process of resolving misunderstandings and clarifying orders and missions becomes more complicated due to linguistic barriers.

The last correlation will be performed between the challenges generated by the C₂ of multinational forces (item A3) and the differences in the level of training, endowment, and doctrine (item A6).

Table 5: Correlation between linguistic barriers and differences regarding the level of training, endowment and doctrine

		A6	A3
A6	Pearson Correlation	1	.854**
	Sig. (2-tailed)		<.001
	N	50	50
A3	Pearson Correlation	.854**	1
	Sig. (2-tailed)	<.001	
	N	50	50

** Correlation is significant at the 0.01 level (2-tailed).

Data interpretation brought to attention the correlation coefficient $r=0.854$, which indicates a strong relationship, the value far exceeding the minimum criteria of 0.5. In addition, the positive sign indicates that there is a positive relationship between item A3 and item A6. Moreover, this correlation is significant, with a significance level below 0.05. Also, the proportion of value ($r^2=0.729$) indicates that such a relationship occurs in the sample studied in about 73% of the subjects, which is considered statistically significant.

The challenges posed by differences in the level of training, endowment and doctrine have the potential to complicate the C₂ process. Even with standardized procedures, in high-stress situations, there is a very high risk that forces of participating nations will use their own standing operating procedures (SOP), which affects unity of effort and the ability to respond promptly and correctly to changes in the battlespace.

Furthermore, in order to fulfil the stated objective and to test the validity of the hypothesis, the aim was to collect data from a wide variety of military personnel, which in terms of experience ranged from 2 to 25 years. The respondents were divided into two groups in accordance with the median, a statistical indicator that divided the set of values into two equal parts. In this case, the median value was 14 years, and the research sample was divided according to the value of this indicator. Out of the 50 military personnel, 24 were placed in the first group with less than 14 years of experience, the remaining 26 military personnel were automatically placed in the second group with more than 14 years of experience.

The T-test for comparing two independent samples is used to analyse the effect of an independent variable involving independent samples of subjects. The application and interpretation of the tests revealed the following results:

- the challenges regarding C₂ of participating forces are more pronounced among military personnel with more than 14 years of experience (mean=4.23) than military

personnel with less than 14 years of experience (mean=3.92), with statistically significant differences ($t=-0.940$, $df=40.120$, $p=0.045$);

- differences in the level of training, endowment and doctrine are perceived in a similar way by both experienced (mean=4.29) and less experienced (mean=3.68) military personnel, with no statistically significant differences ($t=-1.903$, $df=38.938$, $p=0.064$);

- linguistic barriers are perceived in a similar way among both less experienced (mean=4.01) and experienced military personnel (mean=4.38), with no statistically significant differences ($t=-1.188$, $df=39.364$, $p=0.199$).

Thus, following the results obtained, the T-test was applied to the dependent variable that values the degree of perceived challenges by the sample interviewed (variable R). The statistical analysis revealed that more experienced military personnel (mean=4.06) perceive the challenges of multinational military operations process much more strongly than those less experienced (mean=3.57), with differences that are statistically significant ($t=-2.007$, $df=45.439$, $p=0.043$). The result attained appears surprising at first glance but can be motivated from several points of view. The main reason is that career advancement often comes with responsibilities more commensurate with the position. The more senior the leader's role, the more complex and pronounced some of the challenges. While in the case of linguistic barriers, cultural and religious considerations, or access to and exchange of information, it has been shown above that the level of prominence does not differ greatly in terms of experience, in the case of certain challenges, such as exercising C_2 over subordinate forces, the complexity of the commander's duties and responsibilities rises to a considerable level, being much more pronounced than for leaders at lower levels.

In addition, a particularity to be highlighted is provided by the application of the same T-test but on the sample consisting only of officers and non-commissioned officers. The results highlight the same result, the military personnel more experienced (mean=4.18) feel much more strongly the challenges of multinational military operations process in comparison with the military personnel less experienced (mean=3.54), the difference being much more significant compared to the previous case, which is due to the much lower significance threshold ($t=-2.558$, $df=42.086$, $p=0.014$). The results indicate that professional soldiers experience challenges at a similar level throughout their career. This may be argued since, regardless of their seniority, they can carry out similar duties, which do not require them to take on additional responsibilities.

3.4 Testing RH_4

In order to pursue the last research hypothesis (RH_4), the responses given by the research sample to the third part of the questionnaire will be analysed. Respondents were not restricted to provide a single solution, as the open question facilitated multiple responses. Bearing this consideration, the 50 military personnel surveyed provided 157 answers.

The information processing revealed a very wide range of potential solutions or strategies that, according to the opinion of the research sample, can support leaders in overcoming the obstacles encountered in the multinational military operations process. Following the analysis, due to the multitude of solutions identified, they have been summarized and grouped into several categories (as illustrated in Table 6 alongside the frequency of responses), facilitating a simpler approach in understanding the concepts presented.

The primary solution identified by military leaders to address challenges in multinational operations is developing and maintaining language skills, referenced 22 times in the responses. To improve language skills, tools such as e-learning, language courses, and STANAG 6001 tests are recommended. Additionally, adaptability, mentioned 13 times, is crucial, as leaders must adjust to uncertainty and complex situations on the modern battlefield. Moreover, effective operations rely on time management, while unity of effort is driven by interoperability, standardization, and enhanced cooperation across forces. Furthermore, leadership by example, emphasized 10 times, helps commanders build trust and inspire collaboration across cultural differences. In addition, discipline, cited 8 times, minimizes errors and ensures adherence to standards, which is essential for decision-making and coordination in multinational operations. Finally, leaders must embrace calculated risks and learn from mistakes to improve performance and ultimately achieve their objectives.

Table 6: Potential solutions to overcome challenges within multinational operations

Category of solutions	Frequency of Responses	Identified Solutions	Frequency of Responses
Language and communication skills	30	develop and maintain adequate language skills	22
		promoting dialog between participating forces	2
		clarity and brevity in the transmission of orders	1
		accepting feedback on how the leader conveys certain messages	4
		use of interpreters	1
Adaptability	34	increase the level of adaptability	13
		flexibility and simplicity in thinking and action	8
		high level of resilience	3
		maintain operational environment awareness	3
		critical thinking	2
		initiative	3
		strategic thinking	2
Achieving unity of effort	36	enhancing interoperability and standardization	10
		enhancing the level of cooperation and collaboration within the multinational force	26

Time management skills	18	setting clear objectives	3
		task delegation	11
		time prioritization	4
Leadership by example	19	displaying a positive personal example	10
		continuous learning	6
		developing a long-term vision	1
		courage and curiosity	2
Discipline and risk assumption	20	increase the level of discipline	8
		assume risks when necessary	4
		present self-confidence	2
		overcoming the fear of making mistakes	6
Total	157	N/A	157

CONCLUSION

At the end of the study, it can be stated that all the research objectives have been successfully addressed. Regarding the formulated research hypotheses, the interpretation of the data allows for the following conclusions:

- RH₁ may be considered partially validated, since the three most pronounced challenges identified by the research sample were linguistic barriers, C₂ of participating forces, and differences regarding the level of training, endowment and doctrine;
- RH₂ has been validated, planning is being the most challenging activity in the multinational military operations process;
- RH₃ was invalidated, with military personnel with more than 14 years' experience perceiving the challenges to the multinational military operations process more pronounced than less experienced military personnel;
- RH₄ has been validated, the potential solutions provided by respondents being directly connected with the most demanding operational challenges.

While existing research has extensively outlined the challenges faced by tactical leaders in multinational military operations, the empirical data gathered in this study offers a more nuanced perspective of how these challenges manifest in real-world operations. By surveying military personnel with direct experience in such operations, this research not only reaffirms the challenges identified in the literature review but also provides deeper insights into the specific operational contexts where these issues are most pronounced. Notably, planning emerged as the most challenging phase within the operations process, something that had been noted only marginally in earlier studies. Moreover, the study's results indicate that more experienced military personnel perceive the challenges of multinational military operations more acutely. This finding is relevant

because it challenges the conventional view that increased experience naturally mitigates the difficulties of complex operations. Furthermore, the study highlights the dynamic relationship between these challenges and the importance of experience, adaptability, and ongoing training in mitigating their impact. By integrating the findings of this research with the existing body of knowledge, a more comprehensive understanding of the complex challenges faced by tactical leaders in multinational settings is achieved, thus enhancing the practical relevance of both the study and the theoretical framework. This comparative analysis underscores the importance of continually refining strategies and solutions that have been presented in this study to better equip military leaders for the evolving nature of multinational military operations.

Additionally, to cope with the uncertainty and ambiguity that characterize the modern operational environments, especially hybrid ones, leaders must demonstrate continuously adapting attributes and competencies. In this regard, it is recommended the implementation and exploitation of modern educational and training strategies adapted to the new hybrid operational challenges: “the desideratum of teaching and learning of HW must be supported by a specific design at the level of reference curriculum, teaching methodology, and in terms of online support capabilities” (Massive Open Online Course – MOOC) (Tudorache et al. 2023, 248).

To sum up, considering the results obtained, I deem that the present study should be followed by further research, as current studies on this topic are insufficient to explore all relevant aspects. The proposed solutions require validation through implementation in international contexts, and their integration with current findings can provide a solid foundation for future studies. Expanding the research to larger, more diverse samples and analyzing specific multinational operations, through both quantitative and qualitative methods, will deepen understanding of the challenges faced by tactical leaders.

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REFERENCES

Allied Administrative Publication (AAP) 006. 2020. NATO Glossary of Terms and Definitions (English and French). NATO Standardization Office (NSO). <https://tinyurl.com/mruj2km8>.

Army Doctrine Publication (ADP) 5-0. 2019. *The Operations Process*. Washington, DC: Headquarters, Department of the Army. <https://bit.ly/3RHPI8f>.

- Army Doctrine Publication (ADP) 6-0. 2019. *Mission Command. Command and Control of Army Forces*. Washington, DC: Headquarters, Department of the Army. <https://bit.ly/3KL5j2Y>.
- Army Doctrine Publication (ADP) 6-22. 2019. *Army Leadership and the Profession*. Washington, DC: Headquarters, Department of the Army. <https://bit.ly/49ehf9b>.
- Dunn, Ryan. 2020. „Adaptive Leadership: Leading Through Complexity.“ *Journal of the Commonwealth Council for Educational Administration & Management* 48(1). pp. 31-38.
- Field Manual (FM) 6-0. 2022. *Commander and Staff Organization and Operations*. Washington, DC: Headquarters, Department of the Army. <https://bit.ly/4gcFsPb>.
- Georgieva, Valentina, and Marinov, Petar. 2017. „Intercultural Interactions in a Military Context.“ *Land Forces Academy Review* 87(3). pp. 153-161.
- Handbook No 16-18. 2016. *Multinational Interoperability Reference Guide*. Center for Army Lesson Learned.
- Joint Publication (JP) 1. 2017. *Doctrine for the Armed Forces of the United States*. Washington, DC: U.S. Department of Defense. <https://irp.fas.org/doddir/dod/jp1.pdf>.
- Joint Publication (JP) 3-16. 2019. *Multinational Operations*. Washington, DC: U.S. Department of Defense. <https://bit.ly/49fg8pH>.
- Katze, Jochen, and Kashgar, Maral. 2019. „Legal Challenges in Multinational Military Operations: The Role of National Caveats.“ In *The ‚Legal Pluriverse‘ Surrounding Multinational Military Operations*. pp. 393-405. doi: 10.1093/oso/9780198842965.003.0020.
- Petrusic, Michael. 2020. „Discipline as a Vital Tool to Maintain the Army Profession.“ *Military Review - The Professional Journal of the U.S. Army* 100(6). pp. 112-121.
- Prescott, Jody M. 2015. „Tactical Implementation of Rules of Engagement in a Multinational Force Reality.“ *U.S. Military Operations: Law, Policy, and Practice*. pp. 249-274. <https://doi.org/10.1093/acprof:oso/9780199328574.003.0008>.
- Schiller, Mark. 2016. „NATO Multinational Brigade Interoperability: Issues, Mitigating Solutions, and Is It Time for a NATO Multinational Brigade Doctrine?“ *Journal on Baltic Security* 2(1). pp. 112-114. DOI:10.1515/jobs-2016-0032.
- Smolarek, Mirosław. 2016. „Challenges for Leading Multinational and Multicultural Military Units.“ *Journal on Baltic Security* 2(1). pp. 183-196. DOI:10.1515/jobs-2016-0036.
- Toth, Andras. 2021. „Information-Sharing Challenges and Issues in Multinational Operations, Part 2.“ *Land Forces Academy Review* 101(1). pp. 22-30. DOI:10.2478/raft-2021-0004.
- Tudorache, Paul, Bârsan, Ghiță, Jobbágy, Zoltán, Cîrdei, Alin and Gligorea, Ilie. 2023. “An innovative conceptual model for education and training on hybrid warfare”. In *Management & Marketing* 18(3). pp. 234-250. doi: 10.2478/mmcks-2023-0013.
- Tudorache, Paul. 2021. “Applicability of Artificial Intelligence in Decision-Making for Land Forces”. In *Czech Military Review* 30(2). pp. 39-54. doi: 10.3849/2336-2995.30.2021.02.039-054.
- Tudorache, Paul. 2024. “Enhancing Decision-Making Resilience through Mission Command. The particular case of Ukraine”. In *Czech Military Review* 33(4). pp. 20-36. doi: 10.3849/2336-2995.33.2024.04.020-036.