

Adaptability Issues in Professional Training of the Military

Alexander V. Belin

Ryazan Guard Higher Airborne Command School
Ministry of Defence of the Russian Federation
Ryazan, Russia

Alexey A. Mikerin

Ryazan Guard Higher Airborne Command School
Ministry of Defence of the Russian Federation
Ryazan, Russia

Lidia P. Kostikova*

Ryazan State University Named After S.A. Yesenin
Ryazan, Russia
E-mail: l.p.kostikova@gmail.com
*Corresponding Author

Maksim P. Berendeev

Ryazan Guard Higher Airborne Command School
Ministry of Defence of the Russian Federation
Ryazan, Russia

Pavel F. Kotov

Ryazan Guard Higher Airborne Command School
Ministry of Defence of the Russian Federation
Ryazan, Russia

Anatoly Yu. Belogurov

Moscow State Institute for International Relations
(University)
Ministry of International Affairs of the Russian Federation,
Moscow, Russia

Abstract—Military education has its own specific features. It is assumed that professional training of future officers requires special attention to adaptability issues. The present study investigates this assumption. Adaptability is a crucial issue for operating in the dynamic military environment and future officers should be prepared to respond effectively and appropriately to their professional challenges and demands. In the context of professional military training, it enables future military leaders to adjust their patterns of thinking, feeling or behavior in response to new situational contingencies, experiences, encounters and information. This study also shows that a variety of personal characteristics influence different dimensions of adaptability. Cognitive flexibility was found to be one of the main constituencies of adaptability in general. Results of this study contribute to a better understanding of adaptability issues in professional training of the military and influencing personality characteristics. A questionnaire was used to measure self-assessed and peer assessed adaptability. Thirty respondents participated in the study all being cadets of the third year of study at Ryazan Guard Higher Airborne Command School. Self-assessment in most cases was higher than peer assessment. It shows that the cadets have very strong desire to achieve high adaptability in the professional training and assess their adaptability at the best of their understanding. The instructors see the perspectives of the cadets' future professional training. That is why they assess the cadets' adaptability from the point of view of the officer of the airborne troops.

Keywords: *adaptability, professional training, the military, cadets, military school*

I. INTRODUCTION

Adaptability issues in professional training of the military personnel are urgent for the military domain all over the world. Adaptability is critical for operating in the dynamic highly interactive modern military missions, carrying ample threats. Recent rapidly changing operational environments require that military commander should generate and deploy the resources needed to control a conflict, to win it, or to end it. Adaptability is needed to respond appropriately to arising threats, to be resilient to stress and shock, to have the desire to shift from one strategy to another if it is needed by the changing environment [1].

Adaptability is a very complicated many sided phenomenon. It is not easy to define. Most researchers pay attention to an effective change in response to an altered situation. "Adaptability is the skill that is required to adjust one's thoughts, feelings or behaviours in a principled manner to new contexts and situations so that one can respond effectively and appropriately to their challenges, demands and opportunities" [2].

There are three main points to note about this definition. First, adjusting thoughts, feelings and behaviour is at the core of the definition. Persistence on the same course of action despite new demands and changes is not adaptive - even if it is effective. In other words, continuing to do what one has been doing is not an issue of adaptability. Second, the change that is made must be effective and appropriate. It is not adaptive to make a change that makes it more difficult to fulfil a professional task. Adaptive proficiency means that

the adjustment that is made must work. Third, adjusting must be a response to some new demands and opportunities. Changing one's behaviour in a random way is not adaptive. Rather, adaptation arises from challenges or situational changes.

Modern researches write about different dimensions of adaptability. Pulakos, Arad, Donovan, and Plamondon [3] analysed different kinds of adaptive behaviour coming from military settings. From this analysis eight dimensions of adaptability emerged, describing different kinds of adaptive behaviour that might be displayed. These dimensions are as follows: handling emergencies or crisis situations, handling work stress, solving problems creatively, dealing with uncertain and unpredictable work situations, learning work tasks, technologies, and procedures, demonstrating interpersonal adaptability, demonstrating cultural adaptability, demonstrating physically oriented adaptability.

Certain personality traits such as self-efficacy, tolerance of ambiguity [4], communicative skills [5] also influence adaptability. Cognitive flexibility is found by many researchers as one of the most important characteristics for developing effective adaptability. Cognitive flexibility is strongly related to adaptability [6]. When the environment changes, cognitively flexible individuals recognize this change. After assessing the new situation, they are capable of adjusting strategies under new conditions. They can provide appropriate responses to successfully perform in the new environment. In effective training of cognitive flexibility, it is important to focus on learning how to detect the change of the environment and on how to change strategies according to the environment [7].

Adaptability is of great importance for military leaders in unexpected threatening situations [8]. That is why it is important to study adaptability issues in the context of professional training of future officers.

- Research question 1: What is the level of the cadets' adaptability according to their self-assessment and peer assessment?

- Research question 2: Why is there a difference in self-assessment and peer assessment of the cadets' adaptability?

II. METHODS AND MATERIALS

The present study dwells upon the adaptability issues in the process of professional training of cadets at higher airborne command school. The study was founded on the anthropological [9] and systematic [10] methodological approaches to research and professional education. In the process of work, we used theoretical and empirical methods of study.

A. The theoretical methods

The theoretical methods are represented by analysis and systematization of publications of Russian, American and European scientists on the problem of the research. We investigated trends and challenges in higher education on the worldwide research agenda [11], trends of digitalization [12] and others. We also analyzed professional adaptation of the service men of the Airborne Forces of Russia [13], suggestions for improving the system of professional development of young officers in military units and divisions of airborne troops [14], ideas on the professional training of battalion tactical groups in airborne troops [15], etc.

B. The empirical methods

The empirical methods include: observation of the cadets' academic activity; systematization of the authors' personal practical experience of paratroopers' professional training; observation of paratroopers' adaptability in military exercises; informal talks and interviews; questionnaire; comparative data analysis. Based on Reference Framework of Competences for Democratic Culture [16] a special questionnaire was developed. Quantitative data were collected through the analysis of the scores of opinions received from questionnaires of 30 respondents, aged 20-22 years all being cadets of the 3d year of study at Ryazan Guard Higher Airborne Command School. ("Table I")

TABLE I. CARD OF ADAPTABILITY (SELF-ASSESSMENT AND PEER ASSESSMENT)

No	The key descriptors	(-) Scores (+)
1.	Modifies his opinions if he is shown through rational argument that this is required	1 2 3 4 5 6 7 8 9 10
2.	Can change the decisions that he has made if the consequences of those decisions show that this is required	1 2 3 4 5 6 7 8 9 10
3.	Adapts to new situations by using a new skill	1 2 3 4 5 6 7 8 9 10
4.	Adapts to new situations by applying knowledge in a different way	1 2 3 4 5 6 7 8 9 10
5.	Adopts the new conventions of other target groups when interacting with members of those groups	1 2 3 4 5 6 7 8 9 10
6.	Can modify his own behaviour to make it appropriate to other professional contexts or situations	1 2 3 4 5 6 7 8 9 10
		Total scores:
	SELF-ASSESSMENT:	
	PEER ASSESSMENT:	

The data provide the material for comparative analysis of the cadets' self-assessment and peer assessment of adaptability.

III. RESULTS AND DISCUSSION

- Research question 1: What is the level of the cadets' adaptability according to their self-assessment and peer assessment?

The first research task was to analyse the set of data, which contained the cadets' self-assessment and peer assessment of adaptability in the situations of their future professional activity. To answer this research question a special questionnaire was developed. It had 6 descriptors borrowed from the Reference Framework of Competences for Democratic Culture (Council of Europe, 2017b, p. 18). The descriptors were modified for the purposes of self-assessment and peer assessment. The results of the study are presented in "Table II".

TABLE II. THE CADETS' SELF-ASSESSMENT AND PEER ASSESSMENT OF ADAPTABILITY (30 RESPONDENTS)

The level of adaptability	The key descriptors	Max	An average score	
			Self-assessment	Peer assessment
<i>Basic 1</i>	1. Modifies his opinions if he is shown through rational argument that this is required	10	8.9	8.7
<i>Basic 2</i>	2. Can change the decisions that he has made if the consequences of those decisions show that this is required	10	8.7	8.6
<i>Intermediate 3</i>	3. Adapts to new situations by using a new skill	10	7.8	6.8
<i>Intermediate 4</i>	4. Adapts to new situations by applying knowledge in a different way	10	7.4	6.7
<i>Advanced 5</i>	5. Adopts the new conventions of other target groups when interacting with members of those groups	10	7.8	6.5
<i>Advanced 6</i>	6. Can modify his own behaviour to make it appropriate to other professional contexts or situations	10	7.6	6.2
An average total score:		10	8.03	7.25

The results of the questionnaire revealed differences in self-assessment and peer assessment of the cadets of the 3d year of study, who are going to graduate from the higher airborne command school as officers in two years.

The basic level: the cadets believe that they could change their opinions if they were shown through rational argument that this is required and had an average score of 8.9. Most respondents also admit that they can change the decisions that they had made if the consequences of those decisions show that this is required with an average score — 8.7. Peer assessment in both cases is a bit lower — 8.7 and 8.6 correspondingly. At the basic level of adaptability, the cadets have the highest scores and the peer assessment is almost equal to self-assessment.

The intermediate level: the cadets do not demonstrate high average scores, assessing their adaptation to new situations by using a new skill and by applying knowledge in a different way — 7.8 and 7.4 correspondingly. Peer assessment given by instructors is even lower — 6.8 and 6.7. It means that the instructors know that the cadets will get better skills and more knowledge in their future studies.

The advanced level: naturally, it is not easy to adopt the new conventions of other target groups when interacting with members of those groups and the respondents indicate an average score of 7.8. The sixth descriptor concerned the change of behaviour to make it appropriate to other professional contexts or situations. It was assessed by the cadets as 7.6 on average. The instructors assessed the advanced level of adaptability with lowest scores — 6.5 and

6.2. It is understood, that they understand that there is much room for developing adaptive proficiency in professional training yet.

- Research question 2: Why is there a difference in self-assessment and peer assessment of the cadets' adaptability?

An average total score of the cadets' self-assessment is 8.03 and the instructors' peer assessment is 7.25. This difference can be explained by understanding the perspectives of future studies. The cadets assessed their present state of adaptability whereas the instructors assessed their adaptability as professionals ready for active participation in active and very turbulent missions.

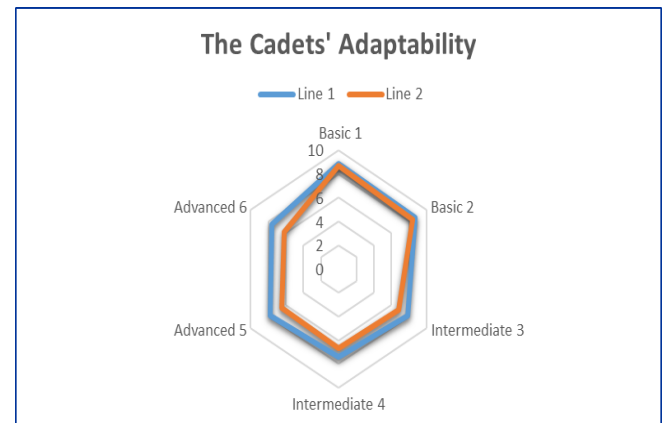


Fig. 1. The cadets' adaptability: self-assessment and peer assessment.

The comparison of the average scores of self-assessment and peer assessment in the three levels and 6 descriptors of adaptability of the cadets of the 3d year of study is shown in the chart of “Fig. 1”.

In the context of professional training, adaptability enables cadets to adjust their patterns of thinking, feeling or behaviour in response to new situational contingencies, experiences, encounters and information, and that is very important. Thus, developing adaptability in the cadets of the military school include adjusting their thinking to changing circumstances, or shifting into a different cognitive perspective in response to new professional demands; reconsidering opinion in the light of new professional tasks. It also means controlling and regulating emotions and feelings in order to facilitate more effective and appropriate communication and co-operation with other officers and soldiers, overcoming anxieties, worries and insecurities about meeting professional challenges and opportunities; adapting to different communication styles and behaviours, and to communicate with other officers and soldiers through means which they are able to understand.

IV. CONCLUSION

The results of this study show that adaptability is a very complicated phenomenon and it is of great importance for the military dimension. Adaptability helps military to be maximally prepared to act in uncertain, dynamic, and changing operational situations. Commanders and their units improve their decision-making and performance in these dynamic situations, resulting in high operational readiness.

For military education, it is important that adaptability is trainable and measurable. Cognitive flexibility, problem solving, theoretical knowledge of strategy and tactics are predictors of effective adaptability and therefore should be included in training and assessment. They can be improved or practiced before the performance in the military environment. Adaptability trainable traits are different. Some of them are harder to train which depend on prior knowledge. Certain features of adaptability are more trainable compared to others.

Very effective technologies in developing adaptability are using virtual games and simulators. These technologies enable participants to practice different situations in their professional activity based both on similarity and on dissimilarity.

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