

Pedagogicko-psychologické souvislosti vzdělávání budoucích manažerů ve specifickém prostředí z pohledu kompetence zvládání zátěže a stresu

A pedagogical and psychological contexts of education future managers in a specific environment from the perspective of stress management competency

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Abstrakt Zvládání zátěže a stresu je jednou z nejvýznamnějších klíčových kompetencí pro úspěšnou práci ve specifickém prostředí ozbrojených sil. Cílem tohoto příspěvku je poskytnout širší pohled na tuto kompetenci v pedagogicko-psychologických souvislostech z pohledu vzdělávání a rozvoje budoucích vojenských manažerů. Pro řešení tohoto cíle jsou využity metody deskripce, komparace, analýzy a syntézy. Studie vychází z výzkumných zjištění a poznatků vojenské praxe. Na klíčové kompetence nahlíží zejména optikou profesních a manažerských kompetencí včetně kompetence k zvládání zátěže a stresu. Tato studie se primárně opírá o tento rámec. Autor ji zde pojímá v identifikaci dvou rovin, a to z hlediska osobnostních a výkonových charakteristik, které se vzájemně ovlivňují. Z analýzy uvedeného prostředí vyplývá důraz především na vybrané osobnostní rysy, vlastnosti a strategie k zvládnutí stresu a zátěže v první rovině. Druhá rovina

vyzdvihuje nejvíce potřebu schopností spojených s rozhodováním v časovém stresu a kvalitu pozornosti při udržení její koncentrace. V kontextu změn v bezpečnostním prostředí autor v závěru nastiňuje možné směry rozvoje, kam by se mělo vzdělávání budoucích vojenských manažerů ubírat. Upozorňuje mj. na nový typ mentální zátěže spojený se zvládáním hranic mezi reálným a virtuálním světem, který se bude do budoucna ztenčovat a postupně prolínat.

Klíčová slova klíčové kompetence, vojenský manažer, management stresu, copingové strategie, vzdělávání

Abstract Stress management is one of the most important key competencies for successful work in the specific environment of the armed forces. The aim of this contribution is to provide a broader view of this competence in pedagogical-psychological contexts from the point of view of education and development of future military managers. Methods of description, comparison, analysis and synthesis are used to solve this goal. The study is based on research findings and knowledge of military practice. Key competencies are viewed mainly through the lens of professional and managerial competencies, including monitored competence. This study is primarily based on this framework. The author understands it here in the identification of two levels, namely in terms of personality and performance characteristics that influence each other. From the analysis of the mentioned environment, the emphasis is primarily on selected personality traits, characteristics and strategies to cope with stress and burden on the first level. The second level highlights most the need for decision-making abilities under time stress and the quality of attention while maintaining its concentration. In the context of changes in the security environment, the author outlines the possible directions of development where the education of future military managers should be focused. Among other things, it draws attention to a new type of mental load associated with managing the boundaries between the real and virtual world, which will become thinner and gradually blend in the future. There are different divisions of key competencies. From a curricular, i.e. general educational, point of view, these are so-called key competencies that are part of the framework educational programs of schools and form the profile of a graduate (Skalková, 2018; Průcha, Walterová, Mareš, 2013). However, they can also be based on a professional point of view. This study focuses primarily on this framework. Military students at the University of Defense become professional soldiers with all the rights and obligations that belong to them from this role from the first day after starting school. First of all, they are perceived as professional soldiers and only then as students of a higher military school. This is also related to another important aspect of this role, which is that they are subject to annual service evaluation of soldiers, including their academic results, military training and other service duties. This overview study can be used not only for the pregraduate preparation of military managers, but also for the purposes of postgraduate education. This is most often realized at the University of Defense in Brno, especially through various professional courses. Determining personal competencies, whether interpersonal or performance, is already a common part,

for example, when choosing a study specialization at school, or the findings are verified during training or exercises. Their use in psychological and professional counseling is also possible.

Keywords key competencies, military manager, stress management, coping strategies, education

The military environment is very specific compared to that of the civilian environment. One may find oneself in danger to life or health or be injured in combat, during which the mental stress may be sometimes borderline. Stress management is considered one of the key competencies that is already under development during the demanding studies at the University of Defence in Brno, and thus this study's main focus is on this topic. The University of Defence is the only military university and at the same time the only state university in the Czech Republic. The Faculty of Military Leadership (formerly the Faculty of Economics and Management) has long specialized in the development of the required competencies. It focuses primarily on the university studies of future officers of the Armed Forces of the Czech Republic, which is carried out in accredited degree programmes in the field of management and resource management applied to the sector of defence and security. In addition to the preparation of future officers, the Faculty of Military Leadership also provides higher education to civilian students in selected degree programmes. Graduates of civilian studies are prepared for employment in managerial positions related to process security in both public and private sector organisations (<https://fvl.unob.cz/fakulta/zamereni-fakulty/>). This theoretical overview study focuses primarily on future military managers.

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Psychological understanding and knowledge find application in a range of soft competencies that relate to a variety of social skills and abilities. Many studies have shown that social competencies are an important factor in student achievement (e.g., Durlak, Weissberg, Dymnicki, Taylor & Schellinger, 2011; Magelinskaitė-Legkauskienė, Legkauskas & Kepalaitė, 2018). Researchers should try to answer the question of how newly promoted managers will develop emotional and social competencies in order to

understand their own and others' emotions, and for personal growth (Park & Faerman, 2019). According to Vidic et al. (2016), leaders must possess highly developed interpersonal, motivational, social, and emotional competencies. The nature of today's military operations around the world suggests that practical success in the military profession will be increasingly associated with the assessment of social and emotional personality attributes. In contrast, assessment criteria based primarily on measurement of cognitive ability or psychometric intelligence may more often be seen as benchmarks of academic success. Academic or school achievement should not evaluate the student as an individual who "merely" receives and acquires new knowledge, but who also develops his or her own personality in line with educational objectives of the school.

From the perspective of educational psychology, we understand competencies as defining frameworks for identification of goals, methods and forms, possibly creation of preparation and education (training) models and programmes. When conceptualizing the mental training of future military leaders in the Armed Forces of the Czech Republic, this means respecting an interconnected system that accepts three basic components: specific military-professional requirements, social-psychological characteristics and command-management skills.

The educational process based on the general requirements for the personality of a military professional should trigger independent and creative thinking for cognitive processes and decision-making and develop students towards the ability to deal with change and stress.

Managerial competencies in the pedagogical and psychological context

Managerial competence is explained by Prokopenko and Kubr (1996, p. 23) as "the ability to perform a particular function or set of functions while achieving a certain level of performance in doing so.". According to them, the most common definition of a managerial competence is through an expression of his or her knowledge, character traits, attitudes, and skills. Such a concept does not differ much from Veteška et al. (2011, p. 72) when they define the term "abilities". They consider these as "mental characteristics of personality that co-determine the magnitude of performance in a particular activity". The distinction between competencies needed for learning and professional competencies does need to be too strictly separated if we understand them as parts of the overall learning process. This is the view of, for example, Brassard (1992) who believes that learning competencies and professional competencies do not stand side by side in isolation. It is important that universities also examine non-academic factors of success, e.g., achievements in organisation, leadership, science, etc. This has been pointed out, for example, by Bowen and Bok (1998) based on a study conducted in 28 universities and colleges in the USA.

The concept of competence was introduced into the area of educational-psychological diagnostics as a certain counterpoint to the generalised, context-independent, cognitive performance constructs that are characteristic for intelligence research and diagnostics.

In an escalated critical review of these constructs (*“Testing for competence rather than for intelligence”*), McClelland (1973) associated the research on “competence” with the belief that better correspondence would be achieved between test content and the demands of actual (e.g., profession-related) situations and thus have better prediction of performance differentials in those situations. What is interesting from the perspective of military optics is that the starting points were, among others, findings from the 1941–1946 testing of military pilots, where successful passing of Army Alpha and Beta tests often did not translate to expected performance in practice (Hersey, Blanchard & Johnson, 1996).

From an educational and psychological perspective, it would not be right to evaluate students only based on their achieved performance, but we should also take their future potential into consideration. There are many different characteristics, benchmarks, and indicators that can be used to identify school achievement. Despite their frequent criticism, mainly due to the danger of the subjectivity of evaluation, school grades and/or grade point average are one of the most commonly used parameters in student evaluation. York, Gibson & Ranking (2015) consider grades and grade point average (GPA) as the most commonly used measures of academic achievement. Grade point average may also indicate more stable personality factors, motivation, responsibility to learn and study, etc.

The examination period is often considered one of the most stressful situations when studying at university. The stress to the body during both the examination preparation period and the actual examinations can be significant and sometimes extreme. In her investigation of 120 Czech and Slovak university students aged 19–35 years (42 males and 78 females; the average age of the students was 22.9 years), Castagnola (2010) found that examinations were the most stressful factor for students, followed by time pressure, lack of rest and sleep, demanding course content, and personal failures. Similarly, a study by Cabanach et al. (2010) claimed that exams are the greatest stressors at universities, along with public speaking. Thus, in terms of stress, it appears that the focus should be on the examination situation and the period preceding it. We always need to bear in mind that personality traits and other factors of a personal nature will play a much greater role in examinations, where we can expect greater emotional strain than in everyday learning. Boyle (1983) demonstrates this using the example of neurotics, where the correlation between academic achievement and psychometric intelligence has dropped from $r = 0.35$ in a neutral environment to $r = 0.21$ under stressful conditions.

Academic achievement will never simply be a matter of success but will always involve multiple aspects that will more or less influence this measured indicator, and the sources of success or failure in studies may also come from a non-academic sphere (Křeménková & Novotný, 2020; Bedewy & Gabriel, 2015). In this context, academic stress can be understood rather as a subset of general stress, as suggested by Křeménková et al. (2020). Factors determining success in university studies are very complex, and we can try to identify them inter- and intra-individually. The use of effective stress coping strategies and possession of necessary personality dispositions, traits, and abilities seem quite important here.

Key competencies in the armed forces and stress management competence

Belz & Siegrist (2001, p. 17) argue that “key competencies are acquired mainly in the education process”. These competencies include a spectrum of competences that extend beyond the boundaries of individual expertise and are an expression of man’s ability to appropriately adjust to the situation, in accordance with oneself, that is, to act competently. Key competencies are more general in nature compared to basic competences. Such an approach can be seen, for example, in Richter (1995), according to whom key competencies transcend the boundaries of individual expertise. The higher degree of generality is linked to the lower number of competencies described in the competence models.

In military-management studies, there is a prevailing approach based on personality traits, those which imply an estimation of future successful performance. Practical applications can be found particularly in professional competencies (e.g., Horey et al., 2004; Yong & Dulevycz, 2006) or in staff recruitment and selection processes (e.g., Pospíšil, 2007, 2011; Ng, Ang & Chan, 2008). In HR activities, Krontorád & Trčka (2005) note increased success rates due to the use of “competency management”:

- 5–10% in the selection of (successful) applicants,
- 15–20% in the stabilisation of desirable employees,
- 15–25% in employee satisfaction surveys,
- 20% in evaluations of goal achievement by individuals or teams.

In the Czech Republic, professional competencies derive from the National Occupational System (NOP) and represent competencies for individual job positions. The original inspiration for the use of this tool came from the UK, where it has been in operation for a number of years (Mužík, 2012). From the departmental investigation to date, it has emerged that it can be considered the only competency model developed so far even for the Armed Forces of the Czech Republic, which represents a set of competency requirements for the performance of the soldier’s profession (Kuba & Seibert, 2020). This central database describes the requirements for the worker in the form of required competencies for the purpose of defining qualification requirements. It includes 15 soft skills: effective communication, cooperation, creativity, flexibility, satisfaction of customer needs, performance, independence, problem solving, planning and organization of work, lifelong learning, active approach, stress management, discovery and orientation in information, leadership, influencing others. NOS also differentiates levels of competence, on a 1–5 scale (1 = lowest, 5 = highest). For example, the competency to manage stress and strain for the rank of lieutenant is at level 3, i.e. above average. ([www.https://nsp.cz](https://nsp.cz)).

The use of level competency models highlights the need for a criteria-oriented interpretation of quantitative performance values (Hartig & Jude, 2007). We find competency models very useful because they contribute to the unification of selection and evaluation criteria. In addition, they are also beneficial in the design of development programmes. The proposals in the Armed Forces of the Czech Republic are primarily aimed at descri-

bing the service positions of professional soldiers in officer ranks. This solution will require continuous updating of all sets of competency requirements according to the NOS competency model. This should make it possible to describe a specific combination of knowledge, skills and other characteristics, down to the detail of the description of the soldier's duty station, for example by pairing, kinship, clustering of individual competences, searching by synonyms or classifying new competences according to the needs of the Armed Forces of the Czech Republic. From a pedagogical point of view, its benefit can be seen especially in the creation of an education plan, updating the contents of individual study programs, selecting soldiers for their further career growth and selecting ideal candidates for specific service positions, especially from the point of view of the systematic development of desirable key competencies (Kuba & Seibert, 2020).

From the point of view of identifying professional competences, it is important that we conduct research studies more often in the future according to the branch specialization of the troops. An example of this is the study by Heřman et al. (2024), which aimed to map how cadets and professional soldiers of the Army of the Czech Republic perceive the character strengths of those officers they consider to be the best under whom they served. Respondents (N = 199) were recruited from three different subpopulations of the Army of the Czech Republic – serving members of two reconnaissance units (N = 38), and 1st (N = 81) and 5th (N = 80) year cadets at the University of Defense. They rated the character strengths of selected officers. Subordinates rated honesty, leadership, perspective, teamwork, fairness, creativity, love of learning, and zest highest in their chosen officers.

The current, polarized world will probably further influence the dynamics of changes in the security environment, which will require constant monitoring and update of the requirements for military professionals in general, regardless of whether they are “just” managerial or command positions. The army and ground forces are not an inexpensive matter, and from a perspective of long-term demographic trends, in the Czech Republic and beyond, this suggests that the human potential will not be quantitatively sufficient for personnel renewal. The problem of insufficient staffing is also evident, for example, in the current military conflict in Ukraine, especially when it comes to longer deployments abroad. Another risk factor in this respect will also be the declining physical competence of the younger generation and their deteriorating health. The impact of the changing social environment can also be expected. All this may affect the ability of the Ministry of Defence to retain and further develop competent and motivated personnel.

In the chapters to follow, we will attempt to provide an overview and deeper analysis from the perspective of the topic using the results of research studies. We assume that there are at least two basic characteristic levels intertwined in stress management competence from a psychological perspective that need attention – personality and performance.

Personality characteristics in relation to stress management

Říčan (2007) argues that personality determines how consciously and responsibly we can perform our tasks and control our actions. It can be viewed as a set of relatively permanent traits that are characterised by their dynamism. They gradually form in the course of development and predetermine an individual's ability to adapt (Höschl, Libinger & Švestka, 2002). Since the emergence of the Big Five model, an increasing number of researchers are now leaning towards more general personality traits and their influence on coping with stress and the preference of coping strategies. This interest is understandable, according to Kohoutek (2007), because general traits have substantial implications for the types of adaptive resources an individual possesses and ultimately for the course or expectancy of the outcome of a coping event.

Strategies aimed at reducing emotions, which are generally considered less effective, can often serve much better when the need for more immediate stress reduction arises, e.g., right before an examination. In contrast, in situations that are perceived as long-term, it is preferable to use cognitive factors, e.g., effective time management for exam preparation, analyses of various problems and their comprehensive and systematic solution, following mental hygiene rules, etc.

Personality research has led to the finding that personality characteristics (e.g., sense of coherence, hardiness, type A behaviour, the five-factor model of personality, etc.) explain approximately the same percentage of variance in stress behaviour as situational variables, which has resulted in the current study of both sets of variables, their interactions, and their interactions on stress behaviour (Suls, David & Harvey, 1996).

In a research study by Doron et al. (2009) with 410 university and college students (263 male and 147 female) aged 17–26, the regression analysis used showed that high confidence in one's own abilities is associated with active coping, active problem solving, and acceptance of the situation, planning, venting emotions, and asking for social support for emotional and tangible reasons. In contrast, low confidence in one's own abilities was positively related to resignation. High confidence in one's own abilities was associated with coping strategies through control over examinations among students. Academic achievement was conditioned by differences in students' personal beliefs about their ability to apply this strategy. Although this was a study carried out in civilian universities, we may notice a number of similar aspects that are mentioned in the characteristics of stress management in military managers in the Czech armed forces.

In his frequently cited study with 1,143 students at West Point, a U.S. Military Academy, Bartone (1999) investigated the precursors of success for future military leaders. The assessment was conducted through Military Development grade, referred to as MD, over the course of 4 years of study. Multiple regression analysis identified "university entrance examination" as the most significant cognitive predictor of MD (Beta = 0.12; T = 4.1), and from the personality dimensions the author identified "hardiness" (Beta = 0.10; T = 3.4). In a similar study, the construct of "hardiness" proved to be an even stronger predictor of leader success in women compared to men (Bartone & Snook, 2000; Bartone, 2024).

The results created a comprehensive picture of the factors that influence leader development over time and were based on an integrated model of cognitive, emotional, and personality variables. Overall, these studies demonstrated that military students with high levels of “hardiness” are more effective in stress management and also receive better evaluation.

In a military environment, Mikulincer & Florian (1995) found that recruits who engaged in emotion-focused coping perceived basic training as threatening, whereas recruits who engaged in problem-focused coping viewed it as challenging. Those who were emerging leaders, adapted better to stressful situations (Judge, Bono, Ilies & Gerhardt, 2002) and showed higher levels of agreeableness and openness to new experiences (Hogan & Holland, 2003; Salgado, 2003). The military environment is specific in its emphasis on team leadership, that is, how to align commander’s perceptions and expectations with those of his subordinates, and thus affect leadership effectiveness (Dixon, Weeks, Boland Jr & Perelli, 2017). The ability to manage socially stressful situations and maintain influence in a social group is related to lower levels of socially adverse stress reactions, which can act somehow as a buffer.

Mikšík (1994, 2009) is the author of the SPARO method designed to determine the basal structure and dynamics of self-regulation, integration, and psychological resilience of personality, which is also frequently used in the environment of the Armed Forces of the Czech Republic, including the selection of future military managers. Some attributes of the personality profile of persons prone to risky decision-making in stressful situations are emphasised, e.g., in military missions: lower personality self-regulation and internal control associated with reduced foresight and responsibility, with negligence and a tendency to rely on chance; emotional excitability and instability, immediate susceptibility to the emotional effects of the situational psychological context, and unregulated emotionality; reduced emotional adaptive variability, situational disorientation, loss of confidence, breakdown of an integrated approach to unexpected (life-threatening) development of a situation, as well as a tendency to follow rigid patterns of reactive behaviour. The author argues that military professionals with high cognitive dynamics, emotional stability, anticipation of behaviour regulation, and strong adjustability perform best. In the research survey by Pindešová (2010) using the above method, the component CO – cognitive variability in the study sample of 126 military students of the University of Defence (UD) was close to the border of the 7th sten RE – regulatory and AD – adaptive variability were in the average range (5th – 6th sten), which indicated a positive trend in terms of the quality of self-regulation in the context of resilience. In addition, the author found a statistically significant linear correlation between the RE component and academic achievement.

The right choice of coping strategies contributes significantly to academic and practical achievement. Schneider & Preckel (2017) include coping strategies among the factors that are directly student related. In addition, they also list intelligence, previous academic performance, and motivation. Intelligence is particularly emphasised by Průcha (2020), because, according to him, this factor is present in any learning process

and always influences it in some way. Thus, despite the changing security conditions that co-determine the composition and level of competencies of future military managers, it can be assumed that each individual will enter stressful situations with a pre-preferred set of practices.

A research study by Cassidi & Eachus (2000) confirmed psychological resilience as an important quality in relation to student academic study achievement. The choice of coping strategies is quite crucial for students in academic environment because it affects approaches to learning strategies during examination preparation (Moneta, Spada & Rost, 2007), adaptation to university (Aspinwall & Taylor, 1992), and academic underachievement (Mantzicopoulos, 1990). Many studies have emphasised that students' coping strategies change as a function of anxiety style (Raffety, Smith & Ptacek, 1997), extroversion and neuroticism (Gallagher, 1996), levels of self-esteem, optimism and psychological control (Aspinwall & Taylor, 1992).

According to Transactional Model (Lazarus & Folkman, 1984) and some documented research such as by Cheng and Cheung (2005), perceived control is a key factor in the person's assessment of a stressful event and influences his or her choice of coping strategies. Individuals who perceive events as within their control are more likely to use problem-focused coping strategies, whereas individuals who perceive events as out of their control may use emotion-focused and emotion release-oriented strategies (Roussi, Miller & Shoda, 2000). During military operations, the new military environment will place increasing demands on the complexity and dynamism of the context in which future leaders will operate, and therefore we can expect greater uncertainty and a decreased sense of perceived control. Educators who will be working in military universities in the coming years should be particularly aware of this.

Watson & Hubbard (1996, 2006) found that the factor "conscientiousness" was most positively correlated with active, problem-focused strategies within the Big Five personality traits taxonomy. Conscientious individuals reflected that they carefully think of and choose strategies through which they eliminate the problems they face (situation control and positive self-instruction). At the same time, they reduce the number of other activities so that they can better focus on effectively solving the problem by using an active process of planning, organizing, and implementing of tasks. These individuals exhibit ambition and determination, are persistent, systematic, disciplined, and reliable. They do not give up in achieving their goals, do not try to distract themselves from the problem, and do not use alcohol and drugs as a solution to difficult situations (negatively correlated with escape tendencies and resignation). Balaštíková & Blatný (2003), for example, argue in the same regard. From the military environment, we may be interested in Pindešová's (2010) research findings, where the Pearson correlation coefficient value reached a medium strength ($r = 0.401$) between the "responsibility" of the SPARO method and the "situation control" strategy of the SVF 78 questionnaire used. An almost identical, statistically significant relationship was also found by the author between the "conscientiousness" of the NEO FFI questionnaire and the "situation control" ($r = 0.411$).

There is a great number of international studies that focus on the relationships between various personality traits and coping strategies with much attention being paid to the influence of neuroticism in these studies. Mathews et al. (2006) found that neuroticism is related to anxiety, fear, and emotion-focused coping strategies. Hampel & Petermann (2005) identify maladaptive strategies with passive avoidance, resignation, rumination and aggression. In a study of 562 university students (mostly aged 21–25) in the UK, France, Germany, Austria, Spain, Italy and Greece, higher levels of stress were found to be positively correlated with neuroticism and negative coping (Lyrakos, 2012). In Josífková's research (2013), neuroticism was correlated with the use of negative coping strategies by university students and, besides that it was related to their lower academic satisfaction.

Nilsen, Bang, and Røysamb (2024) examined the associations of Big Five traits with self-control (general, inhibitory, and initiatory self-control) in two cohorts of Army cadets ($n = 480, 331$ males and 149 females) who were enrolled in an undergraduate military studies program from 2018 to 2022. Self-control is important for mental and physical health, and personality traits are vital antecedents for self-control. Previous studies suggest that conscientiousness and extraversion enhance self-control, whereas neuroticism hampers it. However, the link between personality and self-control has mostly been studied using a narrow conceptualization of self-control, as the ability to resist impulses, thus excluding initiatory self-control. Also, no studies have examined whether and how personality traits interact with one another to increase, or reduce, self-control. Although neuroticism correlated negatively with all self-control dimensions, there were unique relations only with general and inhibitory self-control. Extraversion correlated positively with all self-control dimensions but was only uniquely related to initiatory self-control. Conscientiousness correlated positively with all self-control dimensions. Openness to experience and agreeableness correlated positively with general and inhibitory self-control. Neuroticism negatively moderated the relationship between extraversion and both general and inhibitory self-control, and the relationship between conscientiousness and both general and initiatory self-control.

Most of the research studies that have been oriented to the identification of emotion-focused coping strategies and problem-focused coping strategies have reported that the former explain a larger proportion of the variance in personality than the latter (e.g., Hooker, Frazier & Monahan, 1994; Long & Sangster, 1993). It seems that the emotional aspect of personality needs to be given much more attention in the processes of preparation for future careers, as they significantly affect the performance quality.

The predominant emotional tuning of personality is closely related to temperament. Within the trait approach to personality, the concepts of “temperament” and “personality” are often used interchangeably. Chamoro-Premuzic & Furnham (2005) report that extroverts and introverts perform differently in examinations depending on examination style, particularly in terms of time pressure and speed of decision making. Extroverts are at an advantage when tests are short (2–5 minutes). In contrast, introverts are better in longer tests (e.g., 40 minutes). The differences may be related to brain arousability

(arousal and inhibition of the autonomic system), with extroverts finding it harder to concentrate on tasks lasting longer periods of time and vice versa. Most researchers agree that there is a correlation between intellectual ability and processing speed (e.g., Ackerman, 1996; Stankov, 1999).

Performance characteristics in relation to stress management

A high percentage of stress in the current military conditions is represented by demands on certain psychological (mental) functions. Most of the resources are contained in the category of sensory stress, especially in the demands on the quality of attention (Dziaková, 2009). Numerous stimuli of different modalities act on the senses of military professionals at any given moment. Today's methods of conducting modern combat often generate situations where even a perfectly trained military professional is no longer able to process such a quantity of stimuli effectively. Overwhelmed by the sheer quantity of these stimuli, the human brain can become overwhelmed and sometimes even completely paralysed. An attention function allows us to deliberately select many stimuli and become aware of only those that we need and wish to be aware of at any given moment. By doing so, we unconsciously protect consciousness from being overwhelmed (Čechová & Rozsypalová, 2001).

New types of stress are represented by mainly those activities that are closely related to the collection and search for information from various sources. Information and communication means used in the armed forces allow tracking objects and targets in near real-time, which significantly increases the demands on observation and distinction skills of individuals (faster attention switching, ability to timely distinguish the substantial from the less substantial, etc.). In this regard the "concentration" (focus) of attention is key, which Plháková (2007, p. 81) understands as "the allocation of a limited number of mental contents that we consciously attend to". Concentration of attention in combat conditions can be influenced by many environmental factors such as noise, reduced visibility, etc. Although the soldier is systematically prepared for these aspects during training, there are differences between individuals. The importance of individual differences has been emphasised by a number of authors (e.g., Davies & Parasuraman, 1982; Koelega, 1992). The influence of neurotic and anxiety traits that may impair performance is often emphasised (e.g., Machač, Macháčová & Hoskovec, 1988). The presence of anxiety symptoms in military conditions may be more important for attention focus than the ability to sustain attention, or avoid distraction (Smith, Smoll & Schutz, 1990).

In terms of cognitive abilities, the ability to multitask stands to have the most value in the future. It is possible that the brains of the younger generation of students will be different from those of previous generations given that thought patterns will be more influenced by computers, especially given the prevalence of visual imagery as a representation of 3D space and the resulting presentation competences, as well as the ability to multitask. However, the influence of computers may also have negative effects, for example, because of the increasingly apparent impact on short attention spans (US Army TRADOC pamphlet 525-3-7-01, 2008).

In current combat, the demands increase especially in “decision-making and choice situations”, where a military professional must navigate not only very quickly, but also often in ambiguous and chaotic situations. The military professional’s decision-making process involves choosing among multiple motives and means. He or she must be able to choose the most appropriate solution and consider within a short time such factors as difficulty/ease, certainty/uncertainty, gain/loss, etc. He or she must be also aware of the responsibility for his or her decisions. This is even more true for officers. It can be expected that one of the most important tasks in the future will be to develop the ability to distinguish between relevant, sufficiently flexible, and basic information so that they are able to adjust plans and avoid information overload. This will require improved information sharing, understanding, and synchronisation in order to establish decision superiority (US Army TRADOC pamphlet 525-3-7-01, 2008). For this reason, the assessment of response to time stress is one of the fundamental factors in determining candidates’ prerequisites for service in the Army of the Czech Republic (Pospíšil, 2011).

Conclusion

Professional literature search and analysis of the specific environment of the armed forces, using multiple research studies show that stress management is a complex matter and is reflected both in personality and performance level. Personality will always influence the evaluation of stressor situations, including the selection of coping strategies (Slavík, 2012). Emotional personality characteristics in particular have been shown to be significant mediators in this regard. Considering the changed conditions of military operations, we have identified the need to focus more on time stress management in decision-making at the performance level in the future, and also on the ability to focus attention.

A domain of traditional military training is the use of drill to reduce an aversion to the influence of stress on performance. Drilled reactions become automated through repetition. However, stress cannot be eliminated even for experienced commanders when they are put in a complex, non-standard situation that is new and surprising to them. All ranks of commanders are expected to be more likely under time pressure when making decisions in complex and ambiguous information environments (Priopae-Serpanescu, 2012). Therefore, when educating future military managers, more weight should be shifted to adaptive and intuitive thinking, which is related to less structured forms of decision making. Such thinking involves cognitive processes that allow monitoring and adapting to unexpected circumstances. This cognitive flexibility is not possible without the development of creativity, where divergent thinking prevails over convergent thinking. The pressure to ever more rapidly acquire and master the required competences for the military will be a challenge, especially for young and less experienced cadet officers, and will probably require increased investment in new technical means of learning, including virtual and simulation technologies, which could greatly accelerate the process. Future military managers will be exposed to new mental stressors to manage the boundaries between the real and virtual worlds, which will become thinner and progressively

more blurred. Currently, in addition to the concept of “cognitive warrior”, which uses cognition-based strategies, the concept of “software warrior” is already commonly used in military environments to refer to software specialists who create and maintain the software to support the processes of creating, processing, and transmitting information (Toffler & Tofflerová, 2002).

In today’s changing environment, the importance of capabilities is growing related to the issue of asymmetric action. This approach it is related to proactivity versus a symmetrical (linear) approach to conflict management. However, this is not enough for success in military operations. It is necessary for the individual to have mental and physical resilience (Stříbrný et al., 2022). To succeed in a volatile, uncertain, complex, and ambiguous environment, military personnel must be able to respond quickly and comprehensively to enemy actions (Culkin, 2019). Technological innovation has given rise to new applications such as human-machine interface, artificial intelligence and drones, with significant impacts on the organization of military operations. In the future, it can therefore be assumed that digital competence with an emphasis on development in ICT will become increasingly important for military managers (Frank, 2020). The incorporation of ICT in education requires careful consideration of the goals and challenges of education. It is crucial to determine how and under what conditions the presence of ICT in education contributes to its improvement. The first and most important step is to determine the purpose of ICT in education and identify the pedagogical model that can directly contribute to improving the quality and equity of education (Díaz, Carneiro, & Toscano, 2021).

According to Prykhodko et al. (2024), one of the most important directions in the development of military psychology will be the study of the problem of stress. They base this claim on the leading modern paradigm of stress, which is used by both scientists and practical psychologists in their work, is the conservation of resource theory proposed by Stephen Hobfoll. According to this theory, stress arises from motivation that encourages people to both maintain their current psychological resources and seek new opportunities. Its main principle is that individuals strive to obtain, retain, foster, and protect those things they centrally value. The main postulates of this theory are understanding that stress occurs when: (a) central or key resources are threatened with loss, (b) central or key resources are lost, or (c) there is a failure to gain central or key resources following significant effort (Hobfoll, 1989).

Recently, research studies have focused on self-efficacy leadership cohesion, and emotional intelligence (e.g., Hughes, Schell & Tallman, 2018; Khorakian & Sharifirad, 2019; Mullen, Limberg, Tuazon & Romagnolo, 2019). The above may be a good topic for quality improvement in the area of military management also in the Army of the Czech Republic. We also need to address the issue of motivation in relation to learning outcomes, which we consider to be an important determinant of achievement. This fact is demonstrated by an extensive body of research by Marsh et al. (2005), Dicke (2018), Postigo (2020). In particular, we should not forget the fact, pointed out by Dejmalová (2018), that students adapt better to new conditions at university when their interest is greater in the field of study

they chose. However, we need to continue to pay attention to more stable personality traits, especially in the selection of applicants for study, and also to their appropriate placement in professional specialisations. In this direction, the competence for resilience is also very important for future commanders.

Resilience competence can also depend on the specific military context, which was found in a research study by Bekesiene et al. (2024). The research findings highlight the critical importance of three core resilience competencies: self-regulation, mental agility and strength of character. While, during the defense of the territory of one's own country, the strength of character proved to be a key factor in increasing the mental resilience of soldiers, on the contrary, during military operations abroad, the primary factor was self-regulation, which supported mental resilience.

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