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AN OUTLINE OF MILITARY PSYCHOLOGY – HISTORY, CONTEMPORARY CHALLENGES AND EDUCATIONAL IMPLICATIONS

Zarys psychologii wojskowej – historia, współczesne wyzwania i implikacje edukacyjne

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Abstract

The article provides an overview of international practices and strategies in military psychology, highlighting its impact on the education of military personnel. The authors discuss the definitions, purposes and areas of the discipline in the context of historical changes since the 20th century, as well as contemporary challenges that define its role in modern armed forces. Special attention is given to the evolution of training methods and their adaptation to the specific needs of different military domains, which support the individual development and combat effectiveness of soldiers. The article introduces the process of training military psychologists in selected countries, as well as key publications explaining the theoretical and research aspects of psychology in the military field. The study combines historical data with the latest research, demonstrating the importance of the discipline for military education strategies and the training of soldiers' readiness for the challenges of the 21st century.

Keywords: military psychology, military training, education of military psychologists, development of military psychology, military education strategies.

Streszczenie

Artykuł dostarcza przeglądu międzynarodowych praktyk i strategii z zakresu psychologii wojskowej, podkreślając jej wpływ na edukację personelu wojskowego. Autorzy omawiają definicje, cele i obszary działania tej dyscypliny w kontekście zmian historycznych od XX w. oraz współczesne wyzwania, które definiują jej rolę w nowoczesnych siłach zbrojnych. Szczególną uwagę poświęcono ewolucji metod szkoleniowych oraz adaptacji tych metod do specyficznych potrzeb różnych domen wojskowych, co wspiera indywidualny rozwój i efektywność bojową żołnierzy. Artykuł przybliża proces kształcenia psychologów

wojskowych w wybranych krajach oraz kluczowe publikacje wyjaśniające teoretyczne i badawcze aspekty psychologii w obszarze wojska. Opracowanie łączy dane historyczne z najnowszymi badaniami, ukazując znaczenie tej dziedziny dla strategii edukacji wojskowej oraz kształceniu gotowości żołnierzy na wyzwania XXI wieku.

Słowa kluczowe: psychologia wojskowa, szkolenia wojskowe, kształcenie psychologów wojskowych, rozwój psychologii wojskowej, strategie edukacji wojskowej.

Introduction to the military psychology

The formal establishment of military psychology dates back to the early 20th century. Military psychology has developed continuously in response to military events and armed conflicts of various nations, and the resulting needs of the military community (McCauley et al., 2022). This field analyzes various aspects of human behavior and cognition, addressing issues ranging from individual mental toughness to group dynamics and leadership effectiveness. It helps to understand the psychological aspects of military operations during war, the functioning and building of psychosocial resources and soft skills of military personnel in peacetime. Based on this knowledge, military commanders can develop strategies to optimize the success of military operations, while also ensuring the well-being of their subordinates (Matthews, 2020).

A key area of military psychology's work is selection and screening in the process of military recruitment and training soldiers in self-awareness of psychological competencies and skills. Specialists, based on psychological interviewing, observation and psychological testing, identify potential soldiers with the right aptitude for service in the armed forces. They can also exclude those who might face psychological problems and difficulties in acceptance to military service. These activities contribute to the promotion of national defense by being able to match a soldier's competencies and psychosocial profile to the position and assessing his or her fitness for service. In this way, we can build a foundation for maximizing their combat potential and minimizing the risk of problems related to task performance (Keener, Merchant, Morrow, 2022).

Military psychology, as defined by various authors, is a branch of applied psychology within the military context. It encompasses a wide range of research practices and methods. Nemeth and Wiskoff (1984) emphasize that military psychology draws on almost every branch of psychology, from industrial and organizational to clinical and statistical, adapting these disciplines to the specific needs of the military environment. Hall and Eaves (1989) argue that military psychology is not defined by specific techniques or problems, but by its unique application to the military, which differs from the needs of civilian institutions. Sharma (2021) states that military psychology is a subfield that focuses on promoting readiness, mental toughness and military engagement, applying psychological principles to the process of training, research, analysis and military operations. Cronin (1998) believes that the main goal of military psychology is to

apply specific research tools and psychological practices to improve the combat potential of soldiers in the armed forces. Sherin (2022), on the other hand, stresses that contemporary mental health difficulties, such as PTSD, for example, have caught the attention of military psychologists and psychiatrists, which is affecting the growth of mental health support services and the conduct of more accurate diagnosis among soldiers returning from missions.

Daniels and co-authors (2015), in their meta-analysis, point out that military psychology combines multiple disciplines and psychological specialties. Psychologists are tasked with conducting research and implementing psychological practices in the military environment. The field, as it relates to the armed forces, covers a variety of areas, and the scope of work of the specialists themselves is very broad. Military psychologists can therefore be described as: researchers, practitioners, as well as teachers and trainers/coaches.

Unlike other fields of psychology, that applied to the military is not based on a single theoretical, empirical or practical foundation. It is widely represented by clinicians in clinical psychology, specialists in psychological diagnosis, counselors, experimental psychologists, social psychologists, psychologists of work, organization and management, as well as family and other fields (Kennedy & Zillmer, 2022; Matthews & Laurence, 2012). The field of military psychology draws from parallel and interdependent fields that are complementary and dynamic, such as sport, clinical, work and organizational, family, health, and applied psychology in other uniformed services. It deals with issues of affective, cognitive and behavioral processes. Clinical problems, psychological challenges, and the conduct of crisis intervention are similar in all types of psychology, allowing them to complement each other and contribute to each other's empirical relevance (Miller, 2008). For example, in military tasks and in the sports arena, one often has to operate in a complex and dynamic environment, gaining a tactical advantage over the opponent, even when only partial or incomplete information is available. Success in both fields usually depends on the ability to work both independently and in task forces. In an effective way, one combines one's own skills, perceptual, cognitive, motor and social abilities. Often operating under severe stress (Ward et al., 2008).

Military psychology is increasingly drawing on the work of civilian psychologists, effectively adapting to military conditions, such as crisis intervention for those at risk of substance abuse. Military psychologists around the world, working in various military organizations, including universities, conduct research in both laboratory and field settings. They also work in military hospitals or mental health centers and family counseling centers. Uniformed military psychologists serve in military units and take part in missions overseas (Keener, Merchant, Morrow, 2022).

Specialists in the field, highlight leading 21st century topics of relevance to the military community, such as adapting the growing number of women in the military,

which is nevertheless still male-dominated. Other key issues include conducting effective, modern recruiting and dealing with the process of computerization on the battlefield, including developing cyber defense and harnessing the technological potential of younger generations. Addressing these challenges requires the implementation of numerous innovative social-psychological programs on how the military collaborates with civilian institutions, or promoting the "military lifestyle" as an exciting and attractive career option for younger generations (Krueger, 2012; Keener et al., 2022).

The specifics and scope of military psychology vary in intensity and area of application depending on the needs and requirements of the armed forces and, in particular, the needs of each type of armed forces (Keener, Merchant, Morrow, 2022). Psychology in this area, is characterized by a high level of demands and full uncertainty, especially in the face of continual challenges on the battlefield and also constant and unpredictable social changes in peacetime. Those in charge of border defense must be extremely careful when implementing technical solutions, planning strategies, organizing military operations and managing personnel (Sharma, 2021). This requires not only knowledge of the art of war but also an understanding of complex human nature (Matthews, 2020; Kennedy & Zillmer, 2022).

Origins and brief historical overview of military psychology in the world

In 1917, a team of prominent psychologists, including Robert Yerkes, Lewis Terman, Edward Thorndike and Robert S. Woodworth, was appointed to prepare a research project aimed at improving the selection of soldiers for military service. The specialists met in 1917 at Harvard University to discuss how psychology could help improve the combat potential of soldiers in the army. In less than a few months, they prepared a series of tests to assess the state of mental development of recruits, so that by 1918 they were conducting mass psychological tests on hundreds of thousands of soldiers. The results of these tests made it possible to profile positions by selecting suitable individuals for officer and non-commissioned officer schools with different military specialties (Ciosek, 1998).

Although the role of psychologists during this period was relatively limited, they definitely prepared the ground for the expansion of their activities during World War II. However, the United States, facing the uncertainty of World War I, was able to draw on the achievements of its 141-year history. The field of psychology, as a structured science, was then only 25 years old and had only 336 members in its association (Driskell, Olmstead, 1989). At the same time, French specialists also recognized the importance of applying psychological knowledge to the military. They focused particularly on the selection of candidates for specific domains of military service, as well as on training and propaganda activities (Ciosek, 1998).

As a separate field of study, psychology developed at its own pace as an academic and scientific discipline. However, the enormous scope and scale of the armed conflict

of World War I and World War II created an opportunity for psychologists to demonstrate the applicability of their knowledge and skills in a military environment as well, which definitely expanded the area of application of psychological practices. The outbreak of World War I caused a rapid increase in the number of soldiers in the U.S. Army, which in 1917 prompted the National Research Council Committee to request the hiring of psychologists at the rank of officers to implement new recruitment tests. The participation of psychologists in active military service was intended to ensure the continuity of the rapid appointment of recruits to the army and their enlistment, while eliminating during screening those who might suffer from mental illness (Hopewell, 2013).

In the United States, many well-known psychologists have become involved in the military, both as active duty and as civilian employees. A team led by Robert Yerkes, then president of the American Psychological Association (APA), identified areas within the military where psychology could support the army, including selection, motivational training for soldiers. Many of the subjects he mentioned were taken into account in developing research programs during the war, and psychology played a significant role in battlefield successes. This was the first attempt to use scientific psychological knowledge to effectively manage people during military operations. The group, under the same leadership, also developed a series of tests to measure intelligence quotient, modeled on those already developed by Alfred Binet, which were conducted on a large scale among soldiers enlisted for service. The questionnaires were called the "Army Alpha" and "Beta" tests. The Army test were designed for soldiers who could read and write (Alpha), and those who could neither read nor write (Beta). There was also the possibility of conducting individual tests on soldiers. Tests to measure intelligence, developed for the U.S. armed forces, were still widely used in schools a decade after World War I (Mastroianni, 2022).

During the interwar period, the German army made extensive use of the potential of psychologists. By 1939, psychological tools had also found extensive use in the study of military personnel in other countries in Europe and North America (Hall & Eaves, 1989).

By the end of World War II, military psychology had begun to develop intensively. The most important aspects of this development were the participation of military psychologists: in leadership research, training in psychological warfare techniques, and influencing the morale and motivation of soldiers. Social and cultural changes resulted in stronger racial and gender integration in the armed forces, which opened up opportunities for previously excluded groups to serve, and gave psychologists another topic to work on (Gal & Mangelsdorff, 1991).

Technological advances have had a significant impact on the development of disciplines concerning soldier-machine interaction. In particular, military aviation, which used new technologies that were complex for the time and required pilots to have high substantive and psychological skills. Pilot errors generated high costs for the armed

forces, which necessitated appropriate, specialized training of aviation personnel. The Air Force therefore engaged psychologists for the demanding selection and training of aircrews, and military psychology in this domain remains to this day one of the most demanding areas in recruitment and selection, as well as in maintaining emotional, cognitive and behavioral stability among military personnel (Koonce, 1984).

The nature of military action has changed. After World War II, when large-scale conventional conflicts did not escalate into global conflict with nuclear weapons, they gave way to local battles. As a result, there were new challenges for military psychologists, who focused mainly on the applicability of their research results, which embedded it in applied science.

Military operations during World War II significantly expanded the scope of conducting psychological activities, going beyond the use of test questionnaires and assessments during the qualification and selection of soldiers. Psychologists contributed to the effectiveness of military operations by developing the research process, supporting weapons design (which gave rise to engineering psychology) and studying social psychology constructs such as morale, leadership and motivation (Krueger, 2012). These activities were so visible to military commanders that in 1940 the National Research Council asked psychologists and anthropologists to provide information on the mechanisms of human action for the military (Pratt, 1941). This was the time when the term "military psychology" was first used in the United States.

In 1943, University of Iowa psychologist Norman Meier published the first known book on military psychology, which contains content that is still useful today. Meier introduced many issues that are still relevant in modern military psychology, such as the psychology of propaganda, morale, leadership and command in both peacetime and war, and psychological adaptation to combat stress (Meier, 1943).

Before the advent of scientific psychology, three areas of pre-scientific psychological thinking and its practical application were used in the military community:

1. Selection and preparation of soldiers for service and training.
2. Using social influence in leadership to create cohesive and committed fighting groups.
3. Managing the impact of war trauma on soldiers' functioning and mitigating its effects (Mastroianni, 2022).

After the war ended, Edward Boring (1945), who at the time was serving with the rank of captain under Major Yerkes, edited an influential text summarizing "the psychological affairs of the Army and Navy" in seven main categories that still form the basis of modern military psychology: observation, performance, selection, training, adaptation, social relations, public opinion and propaganda (Boring, 1945, p. 3).

In the historical context, the Korean and Vietnam wars were also important for the development of military psychology. During the Korean War in 1953, psychologists performed several new tasks. They worked outside their country in new areas of warfare

and on ships performing ambulatory functions. Torture and execution of prisoners was common in this conflict. American troops were subjected to forced marches, extreme malnutrition, inhumane treatment and constant propaganda and "re-education" about communism (McCauley et al., 2022). The experience of the Korean War prompted the military there to make significant changes in training programs to help soldiers who were captured as prisoners of war survive. Separated from their own military forces, soldiers during the Korean conflict are credited with initiating the SERE (*Survival, Evasion, Resistance, Escape*) training model, which is still practiced in various forms today, including the Polish military (Moore, 2010; Koscielniak, 2013).

After the Korean War, in 1958, the U.S. Air Force introduced a qualification exam for this type of armed forces, which was administered to high school students. Shortly thereafter, the U.S. Army developed its own battery of group tests, which were put into use in 1968 as the Armed Forces Vocational Aptitude Test (ASVAB – Armed Services Vocational Aptitude Battery). The goal of this effort was to standardize qualification tools that examine four different areas of human functioning. The test has become an integral screening tool for assessing the abilities of military recruits. It is also regularly used by military neuropsychologists when evaluating soldiers with head injuries, as its composite score has proven to be a reliable indicator of intellectual functioning prior to illness (McCauley et al., 2022). This tool was not revised and updated until the 2000's.

The Vietnam War was a complex conflict that used unprecedented weapons technology capable of significant damage both globally and on individual units (Zeidner & Drucker, 1988). U.S. soldiers faced well-trained enemy forces, facing battles in difficult terrain previously unknown to them, such as jungles. They also experienced severe and traumatic events as prisoners of war (Moore, 2010). In addition, the army's rotation policy mandated frequent changes of soldiers within subdivisions rather than entire units, resulting in adaptation problems and reduced group cohesion due to the constant comings and goings of individuals (Zeidner & Drucker, 1988). There were many critical voices in American society questioning the legitimacy of the war. All of the aforementioned factors had a significant impact on the psyche of soldiers, which probably contributed to the increase in the rate of PTSD among them. Some war veterans, as a result of these experiences, are still struggling with the resulting symptoms today (McCauley et al., 2022).

The crises in Lebanon and the 1990 Gulf War with Iraq laid the groundwork for the Global War on Terror (GWOT), which began in the United States on September 11, 2001. Although military and counter-terrorism operations have been ongoing for more than 20 years, much of the effort of military psychologists' work has focused on supporting soldiers during military operations, and their mental and psychological health. As a result of the war effort, thousands of prisoners were taken into the custody of the US Army. This, in turn, necessitated the presence of psychologists in dealing with prisoners, whether in Iraq, Afghanistan or Guantanamo Bay (Kennedy et al., 2009). For the

first time in history, captured enemy combatants were given free access to health assessments and mental health treatment during their detention, thanks in large part to psychologists. In the early days of expanding the scope of psychologists' competence, there was a dilemma regarding the participation of psychologists as behavioral science technicians-consultants (BSCT – Behavioral Science Consultant Technician), especially when conducting intelligence interrogations. The BSC (Behavioral Science Consultant) and BSCT teams were established to support the activities of medical personnel, ensuring humane treatment of detainees and protecting detainees from possible abuse. The American Psychological Association's Presidential Task Force on Psychological Ethics and National Security (PENS Report) focused on the question of psychologists' participation in non-standard national security roles. However, audits to date have shown that mental health providers at Guantanamo have continuously provided care adhering to APA and American Psychiatric Association ethical principles that far exceed the Geneva Convention guidelines (Hopewell, 2013). Nevertheless, the ethical aspect of military psychologists' work during interrogations and their role in BSCT operations remains controversial. Criticism of their role concerns the potential conflict between ethical principles and operational requirements (Hopewell, 2013; Kennedy & Zillmer, 2022). The introduction of the PENS Report by ATP aimed to establish clear boundaries for psychologists' roles in these activities, but the ethical debate continues to this day.

Military psychologists also play an important role in activities related to the repatriation, evaluation and selection of soldiers for special military operations. They also take part in hostage negotiations, as well as study the mechanisms of human action during the performance of official tasks. Specialists in this field also operate in counterintelligence, counterterrorism operations. They also provide support during interrogations. In addition, they help women, who make up an increasing percentage of the US armed forces, adapt to the military in combat units of the US Army ground forces. As a result, there is a wide range of opportunities to harness the potential of psychology in the military environment (McCauley et al., 2022).

As highlighted by McCauley et al. (2022), the emergence of the COVID-19 pandemic in 2020 caused military psychologists to be redeployed to military and civilian medical facilities. At these facilities, they supported other clinicians in responding to the biggest public health crisis the world had faced in more than a century. Faced with a coronavirus pandemic, military psychologists faced new and unusual challenges that required them to be both flexible and innovative in their approach to mental health in the military environment.

Selected items of contemporary literature on military psychology

A relatively contemporary overview of the applications of psychology in the military is provided by Matthews (2012), and Laurence and Matthews (2020) describe its various

sub-areas of activity. The authors detail various aspects of cutting-edge psychological research and practice as it relates to the military environment, in four volumes devoted to the field. It is a compendium of scientific knowledge on: soldier recruitment and selection, the training process, applied experimental and engineering psychology, combat stress and mental toughness, leadership, organizational culture and morale.

Other researchers, such as Bowles and Bartone (2017) discuss clinical and organizational applications of psychological knowledge in the military, expanding on this to include the role of psychology in the process of enlisting soldiers, as well as the essence of supporting their well-being and mental health. They also describe modern areas of interest for military psychologists, such as the prevention and treatment of sexual assault and harassment. They concern the use of virtual reality in mental health programs. Specialized sections of military psychology, such as aeromedical psychology and the challenges facing American military psychology students, are also addressed. Much attention is given to the international perspective of military psychology, discussing its applications in countries such as India, China, Australia, Sweden, and Singapore.

In contrast, Hughes and other researchers (2019) provide a British perspective on military psychology, tracing its history and describing contemporary issues, including techniques and methods to ensure professional and timely mental health services for military personnel. Kumar (2019) provides a broad overview of the discipline, focusing on the contributions of the work of military psychologists from different regions of the world to the development of soldiers' combat capability. He also discusses the evolution of military psychology and the challenges of the ever-changing conditions of service, and addresses the issue of soldiers' motivation to stay in the military.

Expanding the focus of military psychology, researchers such as Kennedy and Zillmer (2022) take a modern look at combat trauma and other clinical issues in their latest monograph. The researchers also present updated information on mental health services in the military, and present modern evidence-based treatments. A comprehensive overview of the history and development of military psychology is provided by the previously cited Mastroianni (2022), who describes the dynamics of the discipline, focusing on stable areas of research that flexibly adapt to the increasingly new challenges of today's military environment.

Another well-known military psychologist whose publications are noteworthy is India's Colonel Rawat (2017), who was the first of India's psychologists to become an advisor to the National Defense Academy (NDA). He is the author of a monograph that addresses obvious topics such as stress and leadership, but also the resilience of military families, *resilience*, cyberpsychology and visions of the soldier of the future. The book also presents aspects of the impact of culture on international operations. The author has extensive international cooperation in the field of military psychology, conducting joint research with specialists from different countries, which is noticeable in most of his publications.

Also noteworthy are publications by Norwegian leadership and organizational psychologist Boe (2023b), a former special forces soldier who uses his own extensive professional experience to conduct research of high applied value. He describes character strengths broadly based on studies of Norwegian army officers. He adapts positive psychology to military conditions by addressing the concept of *resilience* in many of his publications (Boe, 2016; Boe, Rawat, Piotrowski, 2021). The professor also presents the results of his research in collaboration with many specialists around the world, showing the effects of long-term programs conducted on Norwegian soldiers on such topics as building mental resilience and leadership (Boe, 2023a).

Military psychology – educational implications and ethical challenges

In some countries, such as, for example, the United States, military psychology can be studied as a post-graduate degree, or be chosen, as a specialty of psychology studies. Most people who want to work as a psychologist in the military begin their education with a four-year undergraduate degree in general psychology, clinical psychology or psychological counseling. Those aspiring to become military psychologists must also obtain master's and doctoral degrees in psychology. These degrees can be obtained at standard universities or some military schools. For students choosing military schools, as is usual at such universities, the army finances tuition and living expenses during their studies. After earning a Doctor of Psychology (Psy.D.) or Doctor of Philosophy in Psychology (Ph.D.), students usually have to complete an internship before beginning their career. The student declares the domain of the armed forces for which he or she wants to work, then completes an internship that usually lasts a year (Careers in Psychology, n.d.).

A similar process for training military psychologists has been maintained in Germany since World War II (Wysocki, 1981). Military psychology studies in Germany, offered, among others, by the Bundeswehr University in Munich, are primarily designed for officers and officer candidates who must commit to a 13-year service obligation. The program includes Bachelor's (B.Sc.) and Master's (M.Sc.) degrees and follows the Bologna system, with the Bachelor's degree requiring 180 ECTS credits and the Master's degree requiring 120 ECTS credits.

The study program is structured modularly, with continuous assessments instead of traditional final exams. Education is conducted in a trimester system, allowing students to complete their Master's degree within four years. Thanks to the intensive curriculum and the well-developed campus infrastructure, students acquire both theoretical knowledge and practical skills, preparing them for careers in the Bundeswehr or the civilian sector (University of the Bundeswehr Munich, n.d.).

In the U.S. military, a military psychologist can also obtain a license. Obtaining such a qualification requires meeting several criteria. First of all, a person with a doctorate can apply for a license as a military psychologist. The process of acquiring the

license last at least two years. In addition, such a specialist is required to practice under the supervision of another licensed military psychologist, as well as the requirement to pass state and/or national exams (Psychology Schools and Colleges Guide, n.d.). Working in the field of military psychology is an interesting career that can give practicing psychologists the opportunity to travel around the world. A military psychologist who manages to pass the indicated educational path and additionally obtain a Certificate awarded by the American Board of Professional Psychology, can enjoy a well-paid rewarding job. Employment in one of the armed forces can additionally give the psychologist the opportunity for further professional development, providing a starting point for a prestigious position in the future (Best Psychology Degrees, n.d.).

For example, the University of Denver's Graduate School of Professional Psychology, as part of its specialization in military psychology, provides research-based training for students, providing support and consultation to groups focused on soldiers, including veterans. The school creates a comprehensive system of psychological training and care. The curricula are particularly focused on the difficulties currently faced by veterans of missions abroad. The programs include content on the culture of military organizations, mental health, as well as issues of national policy and the physiological and psychological effects of service. As part of the training at the clinical centers, psychological care is provided to veterans, service comrades (including members of the National Guard and reserve soldiers) and the families of the aforementioned beneficiaries (Graduate School of Professional Psychology, n.d.).

Another example of effective training in the field of military psychology is the Master of Arts (M.A.) program at the Adler University, which trains students responsible for mental health by providing them with highly specialized knowledge. Graduates of the university are professionally prepared to work in military units, as well as in research and educational positions, medical facilities, military institutions, veterans' support organizations and government agencies (Health Sciences University, n.d.). Such trained psychologists, in addition to serving in the military or working for the government as a civilian employee, can be employed by outside companies involved in research for defense development. These range from huge corporations to small, specialized companies (Matthews, 2023).

In other countries, such as the United Kingdom, military psychology education includes specialized knowledge and skills essential for working with military personnel, veterans, and their families. One of the available programs is the online MSc Military Psychology course offered by Health Sciences University, which lasts one or two years.

The program aims to develop skills in assessment, intervention, and psychological support for military personnel. The course covers topics such as operational psychology, mental health in a military context, and strategies for coping with combat stress (Health Sciences University, n.d.).

Military psychologists, prepared and trained in this way, play a key role in the context of preparing soldiers and monitoring their mental condition, creating psychosocial conditions for them to acquire the necessary knowledge and professional skills.

As it is crucial in the military to find leaders who can cope with difficult, changing situations, psychology focuses on fostering leadership qualities. Soldiers need to be mentally resilient and ready to face the various challenges of military service, both combat and those related to managing people and themselves (Boe et al., 2021). Training and coaching are now focusing on introducing elements of positive psychology into the military environment. Psychologists emphasize that a high level of resilience as the ability to "bounce back" from difficult, traumatic life experiences, gives an ability to cope with adversity and seize opportunities that life brings, extremely useful in leading people. According to Boe (2016), this ability can be developed, as can character strengths, the development of which is particularly important in the context of leadership (Callina et al., 2018). Wanting to build mental resilience, the main focus should be on strengthening perseverance as one of the character strengths that is helpful in completing activities once started (Peterson, Seligman, 2004). The trait of perseverance is closely correlated with the level of resilience, being an elementary component of it (Ogińska-Bulik & Juczyński, 2010). Personal development in soldiers, therefore, should specifically include the formation of the said ability by strengthening the said trait of strong character. Various military doctrines around the world emphasize that working on character strengths is essential in becoming an effective leader (Matthews, et al., 2006).

Another important area of activity for psychologists is the introduction of preventive, corrective and psychoeducation programs into the military environment. These programs are mostly created on the basis of regular research and observation conducted in the military environment in which the programs will be applied (Kennedy & Zilmer, 2022). Whether the prevention programs work is checked on an ongoing basis, and the results of these studies are made public, even after only two weeks of implementation of the objectives. As in the case of testing the effectiveness of a novel program using "cognitive processing therapy" (CPT) among soldiers diagnosed with PTSD syndrome (Bryan, 2018). Another interesting, equally brief program, the results of which we quickly read about, offered treatment for PTSD symptoms using psychiatric service dogs. A six-month follow-up of patients showed a gradual withdrawal of clinical symptoms, a reduction in anger, an improvement in perceived social support, and an increase in quality of life scores. Dogotherapy, combined with an intensive traumatic event resilience training program applied to veterans, proved to be an effective and original, educational and therapeutic intervention (Kloep et al., 2017). In this context, also the discovery of the concept of "post-traumatic growth" (PTG) has definitely changed our previous view of traumatic events and their consequences (Dell'Osso et al. 2022; Boe et al.,). All of the aforementioned psychoeducational and therapeutic interactions can sig-

nificantly affect the acceleration of PTG. In the absence of a positive impact of the implemented prevention and training programs on the mental condition of soldiers and their psychosocial development, the programs are changed and improved almost immediately. All practice, training and prevention activities, therefore, must first and foremost be useful (Kennedy & Zillmer, 2022).

An example of incorporating psychology into primary healthcare services in the military is the flagship Air Force Suicide Prevention Program (AFSPP) in the United States, which was evaluated as a "model program" in 2003. AFSPP integrates educational initiatives, social support, and rapid access to psychological care, significantly contributing to the reduction of suicide rates within military units. The implementation of this program led to a decrease in the suicide rate in the U.S. Air Force from 16.4 to 9.1 per 100,000 personnel between 1997 and 2008, marking a significant success (Knox et al., 2010). It is important to note that less rigorous implementation of the program in 2004 resulted in a temporary increase in suicidal behaviors, emphasizing the importance of consistency in executing both educational and preventive programs. Another example of a program with similar health benefits is OSCAR (Operational Stress Control and Readiness), developed for the Marine Corps to monitor stress levels and ensure soldiers' operational readiness. OSCAR has been found to be equally effective as AFSPP (Ralph & Sammons, 2006).

The potential of positive psychology is increasingly being recognized in military education, which begins to play a significant role in the development of military psychology, especially in military training to support the psychological well-being of the soldier, but also their family (Matthews, 2008; Rawat, 2011; Boe, 2016). In response to these needs, psychological training, in the areas of locus of control (Singh et al., 2018) and self-esteem through courses to strengthen self-esteem (Hammermeister, Pickering, & Ohlson, 2009), or programs to raise the resilience level of military families (Hoshmand, 2007) are being developed. Since the concept of *resilience* has proven to be an extremely protective factor in difficult work environments such as the military (Boe et al., 2021), it has become the subject of much research and educational impact in the uniformed services. An example of such an effort is the Master Resilience Trainer (MRT) course conducted in the US Army, which is a core pillar of the Comprehensive Soldier Fitness program (Reivich et al., 2011). Building mental resilience in the military environment is thus a standard activity today (Boe et al., 2021).

The attention of military psychologists today is also focused on working on the soldier's resources by supporting the psychological condition of his family. To this end, measures are being introduced to build resilience in the closest people around soldiers. They are offered various types of programs to strengthen psychological resilience (Fernandes & Rawat, 2021), and family situations and the psychological well-being of family members are studied, indicating the need to provide support to families while soldiers are serving (Forouzan et al., 2021; Kapadia & Rawat, 2021).

An example of such an approach based on virtual reality (VR) is the SimCoach training program, developed by the University of Southern California. This program is designed to provide realistic simulations of stressful situations, such as interrogations, hostage negotiations, or crisis interventions. These simulations allow future military psychologists to practice their skills in a safe, controlled environment (Rizzo et al., 2010) without the risk of harming a real person. While these training programs can be highly beneficial, they cannot replace real-life human interaction for obvious reasons. Other modern approaches include interdisciplinary educational programs in Norway and Canada, integrating psychology, artificial intelligence, and data analysis to better prepare military psychologists for supporting soldiers in cyber defense and addressing challenges related to digital warfare (Boe et al., 2023b). In the Australian Armed Forces, the NeuroLeadership for Soldiers program is being developed, utilizing biofeedback and neurofeedback for resilience training and stress management (Hughes et al., 2019).

The rapid advancement of technology allows for its application in the education of both current and future military psychologists. However, it is important to recognize that exploring new areas also involves ethical dilemmas. A notable example is the use of artificial intelligence algorithms in soldier selection processes and mental health assessments, which raises concerns regarding data privacy, the risk of discrimination, and the autonomy of decision-making (Rahmanalievna, 2020).

The cited educational, therapeutic and scientific research practices are just a few examples of intensive activities in the field of military psychology around the world. Developing the psychological resilience of soldiers is undoubtedly the right direction to open up the positive aspects of service, emphasizing in soldiers the essence of the human factor. Psychological education and training in the area of building *resilience*, strengthening self-esteem, a sense of coherence, working on character strengths, as well as continuous monitoring of their psycho-physical state, followed by real professional psychological support, are the foundation for effective coping with the difficulties arising from service, which increases soldiers' combat readiness. Military psychology, by integrating the latest research and techniques, introducing cutting-edge programs, and conducting active, inspiring research to this end, not only improves soldiers' ability to cope with service-related stressors but also strengthens the support system of their families, which translates into the overall mental toughness of the armed forces.

The training of military psychologists in many countries has become structured and professionalized. Military psychologists can serve as a safe bridge between the military and civilian worlds. While the role of psychology in the military may seem evident, it entails numerous ethical dilemmas that are rarely addressed but deserve attention.

A military psychologist combines two key roles: a mental health specialist and a member of the military structure, often leading to conflicts of interest. They must ensure soldiers' well-being while also fulfilling the expectations of commanding officers.

Professional practice shows that these two responsibilities are often at odds with each other.

One of the most significant ethical challenges is confidentiality. According to professional ethics, military psychologists have a duty to protect patient data. However, situations arise where sensitive information obtained during psychological consultations may be required by superiors to assess a soldier's combat readiness. Such data may also serve as a basis for granting or revoking security clearances, or even be sought by foreign military intelligence agencies. These practices can undermine soldiers' trust, hinder the development of therapeutic relationships, and discourage seeking psychological help, even when it is necessary (Kennedy & Zillmer, 2022).

The relationships built by military psychologists may exclude them from a neutral position, making it difficult to provide effective psychological support. On the other hand, civilian psychologists often lack an understanding of military life, which can lead to misdiagnoses and inadequate psychological support.

Another significant concern is the role of psychologists in the selection and evaluation of soldiers. There is a risk that their assessments and interventions may be used for unethical purposes, such as interrogations of detainees (Hopewell, 2013).

To address these challenges, it is essential to develop universal guidelines on confidentiality, independent assessments, and procedures for handling ethical dilemmas. These guidelines should include clear rules on confidentiality, autonomy in mental health evaluations, and standardized procedures for handling sensitive cases. This issue should be widely discussed in military psychology training programs to better prepare psychologists for the complexities of working in the military environment.

Summary

The discussed branch of psychology supports the development of personnel's psychosocial resources during both peacetime and wartime, enhancing the efficiency of their combat readiness. With this knowledge and skills at their disposal, military commanders can shape their subordinates in a certain direction for their own benefit, while responding to the needs of the army (Kennedy et al., 2012).

As history shows, psychologists began their work in the military field during World War I, to make a significant contribution to the effectiveness of military operations already in the following decades, developing the research and scientific, preventive, training, as well as clinical process (Kennedy et al., 2012; Kennedy & Zilmer, 2022). Contemporary research and practice in the military environment covers a very broad spectrum of issues, from combat stress, leadership, PTSD, supporting veterans in returning home, to participation in interrogations, care of prisoners of war, and the application of positive psychology in the military environment, affecting the competencies of the 21st century soldier.

Military psychology, by integrating the latest research and techniques and introducing innovative programs while conducting active and inspiring studies, enhances not only soldiers' ability to cope with stressors related to military service but also strengthens the support system for their families. This, in turn, contributes to the overall psychological resilience of soldiers in the armed forces. The incorporation of psychology into the military domain holds immense potential; however, it also brings new ethical challenges.

The developed article provides a basis and reference point for further consideration of the development of military psychology in various countries. For example, the historical and current shape of psychology in the military environment in the Polish Armed Forces, has been described in another article – *The development and importance of military psychology in Poland. Directions of change and vision of new practices in the reflection of military psychologists* (text in print).

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