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# THE SIGNIFICANCE OF STRESS AFFECTING SOLDIERS PARTICIPATING IN INTERNATIONAL MISSIONS

**Original article** 

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## Abstract

The objective of the present article is to determine the negative changes that stress experienced by soldiers of participants in international missions may trigger in their functioning. It is assumed that these changes can be so extensive and intense that they will be able to limit the ability of soldiers to take action. Therefore, their participation in the international mission may be limited. This objective can be achieved by using methods of analysis and criticism of subject literature, as well as by induction and deduction. In the result of the carried analysis the author comes to the conclusion that stress can negatively affect the physical and psychological functioning of soldiers participating in international missions. Mission stressors can occur on the physical, cognitive, emotional, social and spiritual levels. They can trigger negative changes that are noticeable in the behaviour of soldiers. Furthermore they can also be so extensive that they can affect their ability to take combat action. The quoted research results are significant, as the description of how exactly the stress-induced negative changes in a single soldier can affect not only the safety of that individual, but also others, and thus the success of the entire mission.

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**Summary:** Stress in normal and similar conditions does not alter the functioning of an individual. Nevertheless long-term, intense stress may, exceed the adaptability limits of individual and therefore lead to changes in its behaviour. This type of stress may be experienced by soldiers participating in international missions. What is particularly burdensome for soldiers is their participation in combat activities posing actual threat to their health and lives. Also then increases the probability of their participation in traumatic events.

#### **1. Introduction**

The participation of the Armed Forces of the Republic of Poland in international operations form an important instrument of the foreign policy of the Polish state. This is further confirmed by such legal acts as the 2014 National Security Strategy of the Republic of Poland from, the 2022 National Security System Development Strategy, or the Strategy for the Participation of the Armed Forces of the Republic of Poland in international operations. It is also noteworthy that, in comparison with recent years, Poland's involvement in missions carried out abroad is increasing. It is expected that in 2019 it was largest for the several years considered. The number of soldiers participating in these missions exceeded 2.5 thousand (portal-mundurowy.pl 2019). On the other hand, it is noted that soldiers participating in international operations experience combat stress. Therefore, they are more likely to suffer from stress-related disorders. In 2016 alone, almost 500 such cases were diagnosed. At the same time, we should take into account the fact, that some of these soldiers were only continuing their treatment in 2016, but also that there were such, who did not seek assistance, albeit suffering from it (www.defence24.pl 2019). Based on this data, it can be assumed that participation in international operations is very stressful.

We should emphasize here, that evidently stress forms inseparable role in human life. Therefore, an individual experiences different types of stressors every day. Everyone develops the mechanisms of reaction to stress, which is then copied and improved, every time they are faced with a stressor. However, some situations are particularly burdensome because they exceed human adaptability. In these cases the stress may trigger numerous negative changes in the functioning of the individual. The developed coping mechanisms are not applicable to such cases. Undoubtedly, participation in international operations belongs to this type of situations. They are called difficult or extreme because they lead to disorders in human behaviour caused by nervous system overload. As a consequence, they can also form the underlying cause of serious conditions (Cenin and Chełpa 1998).

The objective of the present article was to determine the negative changes that stress experienced by soldiers participating in international missions triggers in their functioning. It is believed that these changes may negatively affect soldiers and, as a result of their significant impact, their ability to take action may be diminished. This, in turn, will have an impact on the effectiveness of combat operations undertaken during the mission and, in the result, on the chance of achieving the assumed objectives of the operation. Therefore, their participation in the international mission may be limited, which may translate directly to the security of the conducted operations. This proves the significance of the issue raised in the article. The objective will be completed with use of methods such as analysis and criticism of the subject literature, as well as induction and deduction.

It should be added in this regard that, due to individual characteristics, stress can affect people in various ways. For some people even reduced, low intensity stress may have destructive consequences, causing massive changes in their functioning. The way the stressor affects the reaction also depends on the modifying variables that specific to each person, such as e.g. the level of fatigue or the general health condition (Zimbardo 1999). However, due to the adopted objective and the thematic limitation of the article, this thread will not be further analyzed. The author assumes that the stress experienced by soldiers participating in international operations may exceed their adaptability limits and thus have a negative effect.

#### 2. The significance of stress and its impact on humans

The very term stress, albeit known to all of us, requires exact definition. According to Zimbardo (1999), stress is the entire reaction of body to situations that disturb its balance. More specifically, it is assumed to be a psychophysiological response to a certain stimulus. This stimulus can become a stressor whenever the individual, as part of its cognitive assessment, gives it such a meaning (Selye 1977). Situations that cause stress disturb the body's balance and go beyond its coping abilities, thus requiring the individual to take some adaptive reaction. There are three categories of stressors: personal (e.g. failing an exam, divorce), secondary (e.g. car traffic jam), and disasters (e.g. flood). It is worth mentioning that there are stimuli that are able to cause a stress reaction without involving the brain's interpretation mechanisms, e.g. heat, noise, cold, caffeine, nicotine (Zmbardo 1999).

Terelak (2001) defines stressors as source factors of stress. He organizes them into four main categories: physical, chronobiological, psychological and social. Physical factors can generally be defined as external sources of stress, which are additionally measurable, e.g. noise, lighting, climate. Chronobiological factors result from the biological rhythm of the individual and disorders introduced to this rhythm, e.g. a sudden change of the time zone. Psychological sources of stress relate to mental tensions and burdens, e.g. physical or mental effort. Social factors result from the individual's belonging to society, i.e. from relationships established with other people, e.g. stress resulting from belonging to an organization. According to the aforesaid an individual may encounter factors, which will become the source of stress, in every sphere of its functioning.

Lazarus and Folkman (1984) divide stressors into three categories: harm/loss, threat, challenge. The first category refers to events that already took place in the past. They made the individual suffer some specific harm, and some loss. Threat refers to harms and losses that have not yet occurred and are the result of human imaginations. A challenge means that the individual assesses its ability to cope with a stressful situation.

At this point we should note that the subject literature lists the positive, negative and neutral stress, depending on the way it affects the individual. The first of them stimulates the body to action and helps to deal with the problem more effectively and quickly. The second one triggers negative effects in human functioning. Neustress or hidden stress is also mentioned, which does not affect the behaviour of the individual (Hart 2005).

Human response to stress consists of processes occurring at several levels physiological, behavioural, emotional and cognitive. Physiological reactions include accelerated heart rate and breathing, dilated pupils, and muscular tension. Behavioural responses includes, e.g., reduced performance. The emotional reactions to stress are manifested, among others, by alienation, a decrease in motivation, and frustration. Cognitive reactions include, among others, reduced mental performance or visual illusions (Terelak 2001).

Selye (1977) described the pattern of human response to stress. This is called general adaptation system (GAS). It is the first form of reaction of the body to harmful factors. The general adaptation system model is divided into three stages: alarm, resistance and exhaustion. The stage of alarm response is the so-called mobilization, as it manifests itself as a strong reaction of the body to the stimulus. The body's immunity decreases, and the task of the alarm stage is to restore it to normal levels. In the resistance stage, the body's reactions seem to be back to normal, but the body's resources are severely depleted. Stress resistance increases above the normal level. In the exhaustion stage, in the result of prolonged exposure of the stressor, the adaptation fails, and the individual falls sick and may even die. The presented pattern demonstrates that the adaptability of an individual is limited. This means that it is true for every person that a sufficiently persistent stressor will lead to excessive

exhaustion of its body. In this place we should also add, that the duration of each of the said stages will be different, as it will depend on individual resources and characteristics of the person in question. Terelak (2001) notes that the individual's adaptability is depleted in the event of chronic stress. It is also then, when the so called pathological adaptation occurs, manifested by stress-related disorders. These disorders, also called disease, are the result of a breakdown in the functioning of the individual. They manifest themselves at the somatic, social and mental levels. Different symptoms of breakdown are manifested in each of the three zones. At the somatic level, these will include psychosomatic diseases. In the mental zone they will include disorders (e.g. neurosis) and social deviations (e.g. alcoholism, suicides).

Stress affects people and causes changes in their physiological, behavioural, cognitive and emotional functioning. The severity of changes in the functioning of an individual depend from the intensity of the stimulus and the individual's ability to cope with stress. Small stress, which is perceived by the individual as an obstacle, effects only small changes in its behaviour. Permanent stress affecting a person significantly affects its functioning. It is even more acute because it may lead to the occurrence of diseases, disorders and deviations in the individual (Selye 1977).

#### 3. Stress factors of international missions

It should be noted that the exercise of any profession involves the occurrence of a certain number of stressors that affect the individual. There is a very large amount of literature devoted to workplace stress related to this topic. However, when referring to the profession of a soldier, it should be noted that it is very mentally burdensome because of the number of stressors it is associated with. These are specific factors, that are otherwise rare in other professions. They arise even from the specifics of this work, i.e. service. It imposes certain requirements and rules also regarding social relations on the individual. The examples include the domination of formal bonds, organizational hierarchy and uniformization (Gąsiorowska 2006).

Kanarski and Rokicki (1998) distinguish and describe stressors characteristic for the service in the Armed Forces. The authors list the following ones:

- physical and organizational stress, conditions for performing service tasks (pace, extended work time, excess of tasks, lack of equipment),
- professional role (ambiguity of objectives, excessive or conflicting requirements, difficulty reconciling professional and private responsibilities),

- responsibility for subordinates,
- interpersonal relations (low level of delegation of powers, insufficient support from superiors),
- service atmosphere (reduction of initiatives, low level of participation in decision making, inadequate assessment of service),
- conditions for personal development and professional safety (too fast or too slow pace of professional development, uncertain future, no development prospects).

According to Piotrowski (2014), military service generates professional stress due to the need to carry out orders and tasks in a limited time, the large number of duties per soldier and improper relations with superiors. These factors are associated with the exercise of the profession of soldier, but do not include specific conditions associated with participation in international missions. So their occurrence forms an additional load for the soldiers.

International missions are described as the battlefield of modern wars. Unfortunately, the nature of today's fighting is a much more stressful experience for soldiers than the traditional way for waging conflicts. First of all, they are associated with more unknowns. Until now, during the war, belligerents knew the weapons their opponents had access to, and could foresee where a clash would occur. Nowadays, these are difficult to define, which causes a greater sense of uncertainty among soldiers. It is often impossible to predict, what weapons do the opponents have, once a confrontation occurs. What's more, the threat is connected not just with armed persons, but also civilians, who often get involved in combat operations or support terrorists (www.wim.mil.pl 2019).

It should be noted that the very nature of international missions is already mentally burdensome for their participants. Occurring stressors can be divided into physical, cognitive, emotional and social ones. Physical include temperature and humidity, which is different from that known in the home country, dehydration, air dustiness, sleep disturbances, high noise levels and unpleasant odours. Cognitive stressors include the lack or excess of information, unexpected changes in missions, and the occurring conflicts. Emotional stressors include fear of performing combat operations, fear of death, loss of honor, a sense of helplessness and powerlessness, and shame or guilt in the event of failure to perform the assigned task. Social stressors include the lack of close relationships with the family and a low level of privacy and personal space (Ogińska-Bulik 2013). P. Nash (2010) further mentions spiritual stressors, including loss of faith in God and inability to forgive.

Netczuk-Gwoździewicz and Gołębiowski (2017) indicate the most common stressors experienced by soldiers during their participation in international missions include parting

with family, limiting personal space and civil liberties, climatic conditions, differences in the cultural zone, and the constant awareness of the threat.

All the stressors of international missions results from the very character of these missions. However, they do not include the stress occurring in soldiers during combat operations, and this is particularly mentally burdensome. This is further confirmed by the results of studies conducted on American soldiers, who participated in international missions in Iraq and in Afghanistan. They listed the traumatic events most frequently experienced by them. They included being attacked, shelled, ambushed, shooting someone, responsibility for the death of others, sight of dead bodies or parts of them, being wounded (Ogińska-Bulik 2013, p. 124). It should also be added at this point that each these situations can, evidently, occur more than once, leading to repeated traumatization. The most severe include activities that put the health and lives of soldiers at threat, as well as observing the death of colleagues and seeing victims. These types of events are often the cause of later stress-related disorders in soldiers. It can therefore be assumed that the tasks performed during the mission have an impact on the level of stress experienced by soldiers (Kwiatkowski, 2014).

Military service exposes soldiers to stress. It results from the very specifics of the soldier's profession. In addition, there are also the burdens associated with participation in an international mission. The rules for the conducted activities are different from those applied in the past. Soldiers are in a permanent stimulation resulting from the constant awareness of the threat to life. Moreover, they are not sure of the future. This, in turn, triggers a condition of permanent anxiety. Research indicates that soldiers participating in international missions are affected by numerous different strong stressors, which do not necessarily result from participating in combat operations. The soldiers experience a sense of threat to life and health throughout the entire duration of the international mission (Karakiewicz et al. 2018).

#### 4. Impact of stress on soldiers participating in international missions

Stress related to participation in an international mission is revealed as soon as the soldier receives information about the consent for its participation in the mission. Everyday stressors are then joined by those related to the candidate's preparation for travelling abroad (Pępkowska 2016). As noted by Nash (2010), some stressors occur before soldier's departure, others appear during participation in an international mission, and the subsequent ones after returning to the country. Then there is stress associated with re-adaptation to formerly held roles. It is worth bearing in mind that changes in the functioning of soldiers may manifest

themselves already at the stage of preparation for departure and also after returning to the country (Pępkowska 2016).

Stress experienced by soldiers participating in international operations can affect them in two ways: positively or negatively. According to the results of conducted research, stress can have a mobilizing effect on an individual, increasing the effectiveness of the tasks performed by it. It can also increase its creativity (Strelau and Doliński 2008). In the case of international missions, prolonged intense stress experienced by soldiers can, however, trigger negative consequences. Pępkowska (2016) lists the consequences of stress experienced by soldiers, depending on its intensity. Moderate stress causes the following changes:

- physical tirednesss, flinch reflex, excessive sweating, sleep disorders, accelerated heart rhythm, dizziness, stomach problems, slow reactions, muscle tension,
- emotional anxietyy, sadness, problems with concentration, nightmares, low self-esteem, anger, inability to trust,
- in behaviour indecision, problems with concentration, lack of own initiative, crying, the feeling of constant tension, predisposition to argue.

High levels of stress trigger the following symptoms:

- physical excessive mobility, tremor, general weakness or exhaustion of the body, impaired senses of sight, hearing, touch, abdominal pain, speech and breathing disorders, insomnia,
- emotional feelings of anxiety, fear and sadness, nightmares, inability to concentrate or excessive concentration on small issues, inability to trust,
- in behaviour indecision, problems with concentration, decrease in motivation, carelessness, irritability, lack of own initiative, predisposition to argue, inability to rest.

The aforementioned responses to medium and high intensity stress indicate that they cause similar changes in human functioning. The biggest difference concerns the group of physical symptoms. High intensity stress affects the individual much more than that of medium intensity. Consequently, high stress levels contribute to significantly more profound changes in the physical sphere. The behaviour of soldiers affected by medium and high levels of stress demonstrates similarity. The biggest difference concerns the reduction of motivation among soldiers affected by high stress levels. At the emotional level, the symptoms are similar. It should be noted that stress of medium intensity negatively affects the combat capability of soldiers, limiting their physical and intellectual fitness and altering their behaviour. High intensity stress increases the scope of changes observable in the individual.

Soldiers participating in international missions often take part in combat operations. They are particularly stressful, because during them soldiers can experience traumatic events. The participation of soldiers in these types of situations may become the underlying cause for diseases such as acute stress disorder (ASD) and post-traumatic stress disorder (PTSD) (Wysocka-Pleczyk and Passowicz 2007). Both of these disorders may occur following the participation of an individual in a situation perceived by it as threatening, such that made the individual experience fear, helplessness or terror. The PTSD is generally manifested by more changes in the functioning of the soldier. In the case of ASD, however, there occurs a dissociative disorder, which is not present in PTSD-related disorders. This manifests itself, among others, with amnesia, reduction of consciousness, and numbness. There is also clear difference in the duration of both disorders. ASD occurs immediately after experiencing the traumatic event. At least 2 days, but less than 1 month after the trauma. Whereas PTSD manifests itself at least 1 month after the trauma (Bryant and Harvey 2003). Therefore soldiers may suffer from ASD while they are still participating in the mission, while PTSD affect them once they are back in their home country. Therefore, it is important to observe the soldier in terms of disease symptoms not only during the operation, but also after it.

The 2016 data acquired from the Command of the Armed Forces Types demonstrates that a total of about 500 soldiers were diagnosed with stress disorders, of which 186 soldiers were diagnosed with PTSD ( www.defence24.pl 2019). Moreover, 3 out of every 1000 soldiers of the Polish Armed Forces participating in peacekeeping missions were evacuated to the country because of mental disorders (Ogińska-Bulik 2013). The presented data confirms that soldiers participating in international operations suffer from stress-related disorders. These reduce their ability to perform combat operations and even to function in a manner accepted by themselves. Furthermore, they may even lead to evacuation of soldiers from the mission area, which directly affects the weakening of unit, by decreasing the number of its soldiers.

#### **5.** Conclusion

The extent of stress impact on humans depends on the individual characteristics of a person. However, regardless of how people cope with it, the long-term persistence of a stress response is dangerous and may lead to disorders in both mental and somatic functioning (Pępkowska 2016, p. 114). Stress experienced by soldiers during participation in international operations is prolonged and intense, as it affects many levels (physical, cognitive, emotional, social, spiritual). Therefore, it affects their functioning. What's more, stress affects the quality

of the tasks performed by an individual. As long as simple tasks are considered, we may fail to notice these correlations. However, with prolonged action, severe stress will already reduce the quality of the tasks performed. Whenever an individual is subject to very strong stress, the results of its actions will be qualitatively worse already in the early stages (Kalina et al. 2002).

The tasks of Polish soldiers participating in international missions included, among others, maintaining order on communication routes, searching for weapons, explosives and hiding rebels. The implementation of this type of tasks was associated with the exposure of soldiers to loss of their health or life. This increased the likelihood of developing various types of disorders, including those related to mental health (Pępkowska 2016). Participation in traumatic situations causes negative consequences in the functioning of a soldier, rendering the performance of its obligations difficult (Piotrowski 2012). Already a medium intensity stress can negatively affect a soldier by reducing its combat capability. The soldier's operational capabilities are limited. Furthermore, it will also affect other mission participants. Their security is limited because of the incomplete ability of the soldier affected by stress to take action. Such a person can therefore affect the safety and success of the mission (Kwiatkowski 2014).

Awareness of exposure to stressful situations and their impact on the functioning of the individual allows us for more effective prevention of the negative effects of such situations. That is why psychological aid is provided to soldiers at all stages, before they depart, during the mission, and after their return to the country. In 2010, a program of psychological protection for participants of missions outside the state and their families was launched. It presents the most important assumptions concerning the provision of psychological assistance to soldiers at all three stages (before leaving for the mission, during its duration, and after returning to the country). This may translate into a smaller number of soldiers suffering from post-traumatic stress disorder (PTSD). However, it should also be noted that the relatively low severity of symptoms of this syndrome, demonstrated by soldiers participating in international operations, does not eliminate the possibility of developing other stress-related disorders. In order to preserve the soldiers' combat capabilities, it is important to properly prepare them to participate in an international mission, and provide them with prompt and effective assistance, whenever required. It should be continued after the soldiers' return to the country (Ogińska-Bulik 2013).

### References

- Bryant, R.A. and Harvey, A.G., 2003. Zespół ostrego stresu. Teoria, pomiar, terapia. Warszawa: Wydawnictwo naukowe PWN.
- Cenin, M. and Chełpa, S., 1998. *Psychologia wojskowa. Teoria i praktyka*. Warszawa: Ministerstwo Obrony Narodowej Departament Społeczno-Wychowawczy.
- Hart, A.D., 2005. Adrenalina a stres. Poznań: Wydawnictwo W drodze.
- Kalina, R.M., Tomczak, A. and Jasiński, T., 2002. Stres a szkoła przetrwania. *Polski Przegląd Medycyny Lotniczej, 4*.
- Kanarski, L. and Rokicki, B., 1998. *Przełożony i podwładni. Psychospołeczne aspekty relacji.* Warszawa: Ministerstwo Obrony Narodowej Departament Społeczno-Wychowawczy.
- Karakiewicz, B., Rozmarynowska, B., Paszkiewicz, M. and Zabielska, P., 2018. Aspekty psychologiczno-społeczne uczestnictwa żołnierzy Wojska Polskiego w misjach bojowych. *Psychiatr. Pol.*, 52.
- Kwiatkowski, W., 2014. Jak żołnierz walczy ze stresem bojowym w strefie działań wojennych. Zeszyty Naukowe Uniwersytetu Jagiellońskiego, Prace Historyczne.
- Lazarus, R. and Folkman, S., 1984. Stress, appraisal and coping. New York: Longman.
- Maciejewski, J., 2006. *Grupy dyspozycyjne społeczeństwa polskiego*. Wrocław: Wydawnictwo Uniwersytetu Wrocławskiego.
- Nash, W.P., 2010. Stresory wojny. In: Ch.R. Figley and W.P. Nash, eds. *Stres bojowy. Teoria, badania, profilaktyka i terapia*. Warszawa: Wydawnictwo Naukowe PWN.
- Netczuk-Gwoździewicz, M. and Gołebiowski, A., 2017. Wsparcie psychologiczne żołnierzy uczestników misji poza granicami państwa. *Bezpieczeństwo i ekologia*, *12*.
- Ogińska-Bulik, N., 2013. Negatywne i pozytywne skutki doświadczanych zdarzeń traumatycznych u żołnierzy uczestniczących w misjach wojskowych rola zasobów osobistych. *Psychiatria*, *3*.
- Pępkowska, B., 2016. Życie w stresie. Trudności, jakich mogą doświadczać żołnierze przed, w czasie działań zbrojnych i po ich zakończeniu. *Colloquium Wydziału Nauk Humanistycznych i Społecznych Kwartalnik, 3.*
- Piotrowski, A., 2012. Psychospołeczne konsekwencje stresu operacyjno-bojowego. Zeszyty Naukowe WSOWL, 2(164).

Piotrowski, A, 2014. Stres w warunkach zawodowej służby wojskowej. Przegląd Naukowo-Metodyczny. Edukacja dla Bezpieczeństwa.

Selye, H., 1977. Stres okielznany. Warszawa: Państwowy Instytut Wydawniczy.

Strelau, J. and Doliński, D., 2008. *Psychologia. Podręcznik akademicki*. Gdański: Gdańskie Wydawnictwo Psychologiczne.

Terelak, J., 2001. Psychologia stresu. Bydgoszcz: Oficyna Wydawnicza Branta.

Wysocka-Pleczyk, M. and Passowicz, P., 2007. Możliwość zapobiegania rozwojowi PTSD u świadków katastrof. In: K. Popiołek and A. Bańki, eds. *Kryzysy Katastrofy Kataklizmy*. W kontekście narastania zagrożeń. Poznań: Stowarzyszenie Psychologia i Architektura.

Zimbardo, P. G., 1999. Psychologia i życie. Warszawa: Wydawnictwo Naukowe PWN.