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PSYCHOLOGICAL FEATURES OF YOUNG PEOPLE'S STRESS RESISTANCE IN WAR CONDITIONS

У цій статті розкрито сутність феноменів стресостійкості, інтолерантності до невизначеності, тривожності і депресивних проявів та взаємозв'язки цих явищ. Здійснено огляд досліджень щодо особливостей стресостійкості у військової молоді. Рівень стресостійкості особистості є критичною характеристикою в умовах війни і військових конфліктів, оскільки включає в себе здатність адаптуватись до стресових ситуацій та вберегти психіку від руйнування, а також підтримати фізичний стан в межах норми.

Перед нами постала задача дослідити особливості стресостійкості української молоді в особливий період для країни. Така необхідність виникла в зв'язку з потребою психологічної підтримки населення в воєнний період. В дослідженні взяли участь військові Державної прикордонної служби України, а також цивільна молодь різноманітних видів зайнятості.

Результати емпіричного дослідження показали особливості взаємозв'язків стресостійкості з інтолерантністю до невизначеності, тривожністю та депресивними станами. На основі аналізу цих даних було розраховано та обґрунтовано регресійну модель, яка може бути корисною для передбачення та розвитку стресостійкості молоді. В статті також представлені розроблені, з урахуванням отриманих результатів, рекомендації для

практичних психологів щодо роботи з молоддю під час війни. Вони стосуються як важливості дотримання здорового способу життя, харчування, режиму сну, балансування між роботою та вільним часом, якісного планування відпочинку, так і роботи з дихальними техніками, таппінг-технікою, пошуком ресурсів клієнта, тренінгів особистісного розвитку.

Ключові слова: стресостійкість, інтолерантність до невизначеності, тривожність, депресивні стани, молодь.

Introduction

Problem statement. The phenomenon of stress resistance is important in our time because of a constantly increasing rhythm of life, an instable political situation, deteriorated economic conditions, growing competition and high requirements for professional activities, as well as the constantly oversaturated information space. Such national scientists as V. Korolchuk (Korolchuk, 2009), N. Lebid (Lebid, 2016), H. Stelmashchuk (Stelmashchuk, 2014), T. Tsyhanchuk (Tsyhanchuk, 2011) studied tolerance to stress. Among foreign scientists, D. Block (Block, 1980), Lee Kang-hee (Kudinova, 2019) and A. Masten (Masten, 1994) investigated the same issue.

The period of youth, which is in the focus of our research, is full of various events. A person goes through many vicissitudes of life on the way to becoming a personality, finding «his/her» place in life. Therefore, this period requires a high level of stress resistance from a person. For almost two years now, Ukrainians have been living in a situation of uncertainty caused by Russia's full-scale invasion in Ukraine. In turn, acceptance or rejection of uncertainty affects, probably, an individual's anxiety and depressive states, which can have impact on stress resistance. For young people going through a period of formation, life in a state of war is quite a challenge. That is why it is necessary to study the phenomenon of stress resistance.

Review of recent research and publications. There are several approaches to defining the phenomenon of stress resistance. According to the first approach, stress resistance is an individual's integral characteristic. N. Lebid considers stress resistance as a personality characteristic that contributes to successful self-realization, maintaining work capacity and health, achieving individually important goals, maintaining valuable interpersonal relationships and social adaptation (Lebid, 2016, p. 6).

V. Korolchuk, a Ukrainian scientist, considers stress resistance as a structural-functional, integrative, dynamic characteristic. She also understands it as a result of an individual's encounter with stressful factors that includes cognitive representation, self-regulation, an objective view of a situation and emerging requirements (Korolchuk, 2009, p. 74). Kh. Stelmashchuk indicates that stress

resistance is an individual's integral psychological characteristic that ensures internal psychophysiological stability and optimized interaction with external conditions of life that generate emotions (Stelmashchuk, 2014, p. 191).

In general, supporters of this approach define stress resistance as a fairly stable individual psychological characteristic manifesting in human behaviour under stressful factors. Thanks to it, we are able to perform actions necessary for normal life (Kudinova, 2019, p. 138).

Another approach to defining stress resistance is based on its understanding as a complex personality trait. T. Tsyhanchuk gives his own definition: stress resistance is a psychological feature that regulates a personality structure and affects an individual's experience of a stressful situation, as well as lies in the basis of successful work and social activities; it is implemented thanks to self-control, emotional stability, self-regulation and defines development of emotional intelligence and competence (Tsyganchuk, 2011, p. 43). G. Berdnyk believes that thanks to stress resistance, a person is able to endure loads of various nature without grave consequences for his own health and the activities of others (Berdnyk, 2009, p. 19–20). According to L. Karapetyan, the specificity of stress resistance lies in the interrelationship of different-level qualities of integral individuality, which ensures the homeostasis of the entire system and leads to optimal interaction of the subject with the surrounding environment in various conditions of existence (Kudinova, 2019, p. 139).

In general, supporters of this approach define stress resistance as a positive internal personal trait lying at the basis of successful work and social activities.

The third approach claims that stress resistance is a capability to resist a negative impact of stress factors. N. Melnyk points out that this is an individual's capability not to be negatively influenced by circumstances, but to avoid emergence of pathological mental states (Melnyk, 2016, p. 198). H. Mygal and O. Protasenko (Mygal, Protasenko, 2008, p. 249) explained stress resistance as a personal trait determined by an individual set of innate and acquired psychophysiological characteristic properties and processes.

The fourth approach considers stress resistance as a complex systemic personal trait. In particular, D. Block believes that this is a personality trait that protects against the troubles of life and prevents mental disorders appearing due to psychological traumatization; this trait can be described with such characteristics as dexterity, resourcefulness, flexibility, strength of character, as well as flexibility of behaviour in various external conditions (Block, 1980). Stress resistance is considered by A. Masten as a dynamic process of positive adaptation in the face of adversity. That is, it is a continuous active process during which new forces and resources emerge for adaptation and recovery; this process is uneven, as new risks constantly arise (Masten, 1994).

Lee Kang-hee considers stress resistance as a psychophysiological state that allows optimal adaptation to extreme conditions, ensures resolution to work and everyday tasks without physical or mental losses, that is, maintains the entire system in homeostasis (Kudinova, 2019). V. Mozgovyi singled out four main types of conceptualization of a stress-resistant individual, when resistance can be considered as a result of adaptive cognitions, specific personal formations, adequate protective processes, coping strategies and search activities. The scientist pays special attention to behaviour and psychological methods that allow a person to overcome difficulties, despite the negative experiences that accompany the process (Mozgovyi, 2006, p. 7).

Stress resilience is related to locus of control, as it is based on such aspects of life as susceptibility to stress and responsibility. The locus of control is defined as a psychological factor that characterizes a person's tendency to be responsible for the results of his/her own activities and events that occur in his/her life, the responsibility to manage his/her capabilities. People with an internal locus of control are emotionally stable, but have higher personal and reactive anxiety, which is associated with a tendency towards an increased need for achievement. This combination sets the background for possible greater frustration and less resilience to failures. People with an external locus of control are emotional instable. They are unsure of their individual capabilities, constantly need support and approval from others, are very often excessively anxious and prone to unjustified frustration. Most people have an intermediate locus of control and combine the features of each of the poles (Venher, Shahai, 2019).

Another factor of stress resistance is self-regulation, which allows a person to maintain internal balance by controlling his/her own consciousness. This is a volitional component manifesting in conscious regulation of actions and bringing them into line with a situation (Bilova, 2009, p. 12).

According to one of the theories of stress resistance, four groups of people are distinguished:

1. Those who are most prone to negative influences of external factors. Such people cannot adapt to new realities and are not inclined to change their behaviour.
2. Those who are internally ready for smooth changes. Such people perceive only gradual changes, drastic ones can lead them to nervous breakdowns and depression.
3. Those who are principled in their own beliefs and moderately loyal to external changes. Such people can accept sudden changes faster than waiting for slow changes. However, if stress becomes constant in their lives, their strength may fall: self-control and inner spirit disappear, negative emotions and breakdowns arise.

4. Those who stoically endure negative effects of external factors. The psyche of such people is protected from the destruction of the changing environment (Venher, Shahai, 2019).

The study performed by S. Vadziuk and V. Sas showed that service members with high level stress resistance restored the level of volitional regulation better and faster (Vadziuk, Sas, 2023). The research of N. Burban and I. Huzenko revealed that military personnel had higher stress resistance, better adaptability to stress compared to civilians, which ensures their effective social and professional functioning under stress with minimal expenditure of individual psychophysiological resources and preservation of mental and somatic health (Burban, Huzenko, 2019).

In modern literature, tolerance to uncertainty is described as an individual's ability to self-regulate in the conditions when a ready-made decision option cannot be applied, external reference points that could be relied on to make a choice are absent. At one pole of this construct lays a certain productivity, readiness to function fully in any life conditions; the other pole means a stressful state in new situations, their complete avoidance. This position is echoed in humanistic concepts highlighting that an actualized, open personality strives for situations that reveal his/her potential the most, and such situations are the least defined. Therefore, a mature and open to new experiences personality accepts uncertainty, and avoiding uncertainty indicates the opposite orientation (Kuzikova, 2018).

A person tolerant to uncertainty is characterized by accepting the unknown, pondering over a problem even if all possible consequences of a made decision are not yet known and being ready to adapt to an ambiguous situation or idea. Such person can actively look for situations of uncertainty, because he/she considers it as an opportunity to gain new experience, so such situations are stimulating and even desirable (Pisotskyi, Horienska, 2020). Vice versa, intolerance to uncertainty is a personal trait when uncertainty is perceived as undesirable and as a threat.

An array of data collected over the past decade shows that intolerance to uncertainty leads to the development of various psychopathologies (Einstein, 2014). In the clinical sample, its level usually prevails and increases into the direction of comorbidity. Intolerance to uncertainty is a transdiagnostic factor. The transdiagnostic approach in therapy is based on the idea that common factors that do not fall within the limits of traditional diagnostic criteria and are tracked in certain disorders lay the heart of emotional disorders (Gromova, 2020b).

Anxiety means a stable personality trait manifesting in a person's tendency to experience often anxiety states. Anxiety is defined as a temporary negative emotional state of concern (Hromova, 2020a p. 44). In general, anxiety is a

state of emotional tension, excitement, vigilance, a certain discomfort in the soul, a heightened sense of guilt, increased vulnerability to complications in life circumstances, underestimation of oneself in situations of uncertainty, expectation or anticipation of an incomprehensible threat to the personality balance (Atamanchuk, 2022).

If an individual finds him/herself in a stressful situation that does not end, but continues constantly and at the same time there is no way to restore his/her own stability, then the body's resources begin to burn out. The individual falls into apathy, the desire to any activity disappears, depression occurs, immunity decreases accordingly, and all chronic diseases worsen. Under such constant stress, the human brain turns to the evolutionarily older structures, which are tasked only with survival, and therefore the individual makes quick decisions, turning off logic. Thanks to this, in dangerous situations, the individual's reaction is very fast, only one of the commands is chosen: fight, run, die (Atamanchuk, 2022).

The link between anxiety and intolerance to uncertainty has been studied by foreign scientists for a long period. As a result, it was found that these constructs are quite close as for their experiencing. The relations of intolerance to uncertainty with the development of PTSD, anxiety symptoms, phobias and depression was investigated also (Hromova, 2020a, p. 44). The study of P. Bolen and A. Reijntjes determined that intolerance to uncertainty explained a significant variance in social anxiety. In addition, correlations of intolerance to uncertainty with generalized anxiety disorder and obsessive-compulsive disorder were found out (Boelen, Reijntjes, 2009).

People can react differently to stress depending on their anxiety and acceptance or rejection of uncertainty. Recovery after traumatic events also depends on these factors. At the moment, scientists are considering the version that intolerance to uncertainty is at the root of development of negative emotional states, including anxiety disorders (McEvoy, 2019). Depressive states are typically described as constant depressed mood, loss of interest in life, inability to get pleasure from previously pleasant activities, neurovegetative disorders, decreased energy manifested in dysfunction of social and professional activities, excessive guilt, emergence of suicidal thoughts, decreased concentration of attention. However, in some cases, on the contrary, increased anxiety, irritability and emotional instability may be observed (Depression in adults: treatment and management).

According to many English-language studies, intolerance to uncertainty correlates significantly with depressive states and is even one of the factors that complicate the treatment of depression (Mahoney, McEvoy, 2012).

Based on the reviewed latest studies on the selected issues, we developed a conceptual model of our research (Fig. 1):

Highlighting previously unresolved parts of the problem. Military personnel have always been characterized by higher stress resistance compared to civilians. However, the level of stress since the beginning of the full-scale invasion into Ukraine has increased sharply, the situation has become more acute, new threats and uncertainties have arisen. Military, as well as civilians, found themselves in new realities of life. That is why it is interesting to compare the stress resistance of military and civilian youth in new living conditions.

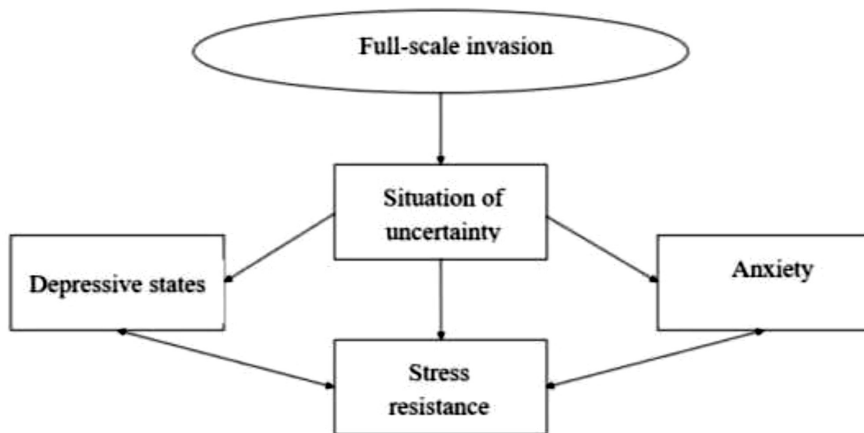


Fig. 1. Conceptual model of our research

The article purpose: to reveal the features of young people's stress resistance during the war and to present the empirical study examining correlations among intolerance to uncertainty, anxiety and depressive manifestations.

Presenting main material. The period of youth is characterized by people's professional and social self-determination. This period is considered the most optimal for self-realization. The success of a young person is closely related to his/her family relationships and labour activities, which are the main new psychological formation of this age. The family influences an individual's meaningful preferences and labour is a component of integral life self-determination. The age of early adulthood is the period of development of moral and ethical feelings, stabilization of character, mastery of a full set of social roles. An important stage during early adulthood is the crisis of 30 years. It is characterized by the search for the meaning of life, as people change their ideas about their life, and sometimes even loses interest in it at whole (Spielberg, Gorsuch, Lushene, 1970). No personality can be fully fulfilled, and namely introspection allows an adult to discover which aspects are not fulfilled. Thus, a person, constantly reflecting and searching for his/her non-realization, changes

the system of values built from the desire for self-actualization. On the contrary, fulfilled values allows a person to enjoy the feeling of satisfaction and happiness.

We can conclude that the period of youth is rather uncertain, dynamic in people's life, creates a certain situation of stress and requires developed stress resistance. Young people have certain psychological features of stress resistance. High stress resistance means high self-control over emotions, optimism, even in a hopeless situation, flexible thinking, capability to use stressful situations for personal development, strong social ties, wide external support.

However, the full-scale invasion is superimposed on the conditions of today's changing world, which creates a situation of uncertainty where people are forced to live. This affect an individual's anxiety and support development of depressive states, which in turn is likely to be associated with an individual's stress resistance.

The following methods were used in our study on psychological features of stress resistance: Connor-Davidson Resilience Scale 10-Item (CD-RISC-10) (adapted by N. Shkolina and others), Spielberger State-Trait Anxiety Inventory, «Differential diagnosis of depressive states», Intolerance of Uncertainty Scale-12 of N. Carleton et al. (adapted by H. Hromova).

Our research was conducted on the basis of a military division of the State Border Guard Service of Ukraine, where military youth were selected; also civilian youth from various employment fields took part in the research. The total sample consisted of 73 people aged 20 to 35, including 37 women and 36 men. Among them, 45.2% (33 people) were military and 54.8% (40 people) were civilians.

The research tasks included: determination of correlations between variables, the comparison of civilian and military groups, as well as the construction of a regression model. The Shapiro-Wilk test was used to check the normality of the distribution of variables in military and civilian groups. The obtained results confirmed normal distribution for all scales, except for «Depressive states», since $p \leq 0.05$ for it. Therefore, for this variable, correlations were checked using the non-parametric Spearman test.

Let us examine the existing correlation of stress resistance with other research variables (Table 1).

Correlation analysis for stress resistance, personal and reactive anxiety showed the following:

- A statistically significant ($p < 0.001$) strong positive correlation ($r = 0.760$) was observed between personal and reactive anxiety, which indicated that with the growth of one type of anxiety, the other one also grew proportionally;
- A statistically significant correlations ($p < 0.001$), but negative ($r = -0.530$ and $r = -0.707$, respectively) were found between stress resistance and both reactive and personal anxiety. That is, as stress resistance increased, anxiety decreased proportionally and vice versa;

- In addition, the correlation with personal anxiety was strong, and it with reactivity was medium. This indicates that stress resistance is a property of the body that acts mainly during the long time period.

Table 1

Correlations of stress resistance with anxiety, intolerance to uncertainty and depressive states

	Stress resistance	
	R	p
Personal anxiety	-0.707	<0.001
Reactive anxiety	-0.530	<0.001
Depressive states	-0.477	<0.001
Intolerance to uncertainty	-0.464	<0.001
Prognostic anxiety	-0.242	<0.05
Oppressive anxiety	-0.625	<0.001

Analysing the obtained data to clarify the correlation between stress resistance and depressive states, we should indicate a statistically significant ($p < 0.001$), but medium strength correlation between stress resistance and depressive states ($r = -0.477$).

Stress resistance decreasing with increased manifestations of depressive states can be explained by the general deterioration of both an individual's physical and psychological state in such case. The body's homeostasis is disturbed by such negative conditions and, accordingly, the protective properties of the body, including stress resistance, deteriorate.

Intolerance to uncertainty correlated negatively with stress resistance at the medium ($r = -0.464$) significant ($p < 0.001$) level. Therefore, with the growth of intolerance to uncertainty, stress resistance decreases. This fully explains the inability of an uncertainty-intolerant individual to accept a situation of uncertainty and effectively make decisions under such conditions. We also separately selected for analysis oppressive and prognostic anxiety from Intolerance of Uncertainty Scale-12 of N. Carleton et al. Interestingly, correlation of stress resistance with prognostic anxiety was less significant ($p < 0.05$) than that with depressive anxiety ($p < 0.001$) and weaker ($r = -0.242$ and $r = -0.625$, respectively). Thus, stress tolerance correlated more strongly with the emotional component of uncertainty intolerance, which in turn was stronger related to anxiety. Thus, increasing stress resistance regulates our bodily-emotional responses in a situation of uncertainty more than cognitive attitudes.

We also found statistically significant correlations between intolerance of uncertainty, anxiety and depressive states (Table 2).

Table 2

Correlations of intolerance of uncertainty with anxiety and depressive states

	Intolerance of uncertainty		Oppressive anxiety		Anticipatory anxiety	
	R	p	R	p	r	p
Personal anxiety	0.715	<0.001	0.808	<0.001	0.502	<0.001
Reactive anxiety	0.517	<0.001	0.616	<0.001	0.338	<0.01
Depressive states	0.616	<0.001	0.727	<0.001	0.391	<0.001

As for correlations between intolerance of uncertainty and anxiety, we should note that a medium-power and highly statistically significant correlations were found ($p < 0.001$). The observed correlations were positive, therefore, with the growth of personal ($r = 0.715$) and reactive anxiety ($r = 0.517$), intolerance to uncertainty also increased. In addition, the «depressive anxiety» scale correlated stronger with anxiety ($r = 0.808$ for personal anxiety and $r = 0.616$ for reactive) than the «anticipatory anxiety» scale ($r = 0.502$ for personal anxiety and $r = 0.338$ for reactive). This can be explained by the fact that oppressive anxiety, as already mentioned, is a physical-emotional component of intolerance to uncertainty, appearing in the form of confusion, stress in an uncertain situation, so it has more in common with anxiety than predictive anxiety, which is an individual's cognitive attitude to a situation of uncertainty.

We also found a highly statistically significant correlation ($p < 0.001$) between intolerance of uncertainty and depressive states ($r = 0.616$). In addition, the correlation was positive, so the variables grew proportionally. Depressive states correlated significantly and more strongly with oppressive anxiety ($r = 0.727$) than those with prognostic anxiety ($r = 0.391$). This is also explained by the physical-emotional nature of the «oppressive anxiety» component. In addition, according to the research of other scientists, intolerance to uncertainty leads to the development of various psychopathologies, probably depressive ones.

We should also note correlations between depressive states and anxiety (Table 3).

Table 3

Correlations between anxiety and depressive states

	Depressive states	
	R	p
Personal anxiety	0.765	<0.001
Reactive anxiety	0.804	<0.001

Both personal ($r = 0.765$) and reactive anxiety ($r = 0.804$) had strong, statistically significant positive correlations with depressive states ($p < 0.001$). Therefore, these states increased or decreased proportionally to anxiety. Depression often occurs in a long-term stressful situation, as a result of which the human body is exhausted. In this case, the evolutionarily older brain is turned on with the primary task to survive. In this rhythm of life, the human body is constantly in anticipation of a threat, which in turn provokes an increase of anxiety. Therefore, a correlation between anxiety and depressive states is absolutely obvious.

In general, all the variables of our study correlated statistically significantly with each other confirming the correctness of our conceptual research model developed by us after review of scientific literature and available modern studies on this issue.

Regarding the comparison of civilian and military youth groups, we found out with the help of the Student's t-test and the Mann-Whitney U-test that military personnel had higher stress resistance, less manifestations of anxiety, depressive states and better tolerance to uncertainty. This is probably related to the specifics of their activities, and in addition, before hiring, they went through a selection process with certain criteria that a candidate for the service must meet. Also, the military personnel can be better informed about the war course, and therefore have a clearer picture of the likely future that awaits them. In addition, military activities also require decision-making in uncertain situations, which is probably why military personnel's tolerance for uncertainty was higher.

At the next stage of our research, we developed a regression model. Our model had the following features:

- the calculated model was adequate, since the coefficient of multiple correlation was 0.712, and the coefficient of multiple determination was 0.507, so the variation of the independent variables explained 50% of the dependent variable variation;
- the adjusted coefficient of multiple determination was 0.478, i.e. the forecast is qualitative by 48%;

- the statistical significance of the calculated model was sufficient, since $p \leq 0.05$, and there were no systematic relationships between the residuals of neighbouring cases according to the Durbin-Watson coefficient (coefficient = 1.91);
- VIF indicator was less than 5, so multicollinearity was absent;
- the stable influence of the constant (which was significant – $p < 0.001$) indicated the model quality

The obtained results can be explained by the fact that a situation of uncertainty and stress exist in the current conditions of a long-term war. It is a factor that leads to appearance of depressive states and anxiety; their growth, in turn, leads to increased intolerance to uncertainty. The growth of all these factors together leads to worsened stress resistance of people. At the same time, our study involved young people who, according to their social situation, were going through the process of becoming, finding their place in life - graduating, finding a job, starting a family. The period of youth is full of ups and downs, which requires stress resistance, but the war can only increase anxiety and other negative states, which already have a greater manifestation in this period of life.

Based on the obtained results, we formulated the following recommendations for psychologists who work with young people during the full-scale war:

1. First of all, it is recommended to eat well, healthy and vitamin-enriched foods. Because thanks to the correct diet, a person harmonizes various neurotransmitters in his/her body. Their excess or lack affects an individual's emotional state and appearance of negative experiences. Stress resistance increases with decreased anxiety and depressive states.

2. As for provided basic needs, it is worth emphasizing the importance of observing the sleeping regime and physical activities for one's life. Sleep, alternating the functional states of the brain, restores an individual's mental and physical strength. Physical exercises switch attention, concentrate, calm because a person is focused on his/her body, sensations, and bodily sensations calm the nervous system; sport activities also supports muscle tone and contributes to energy enrichment.

3. Performance of stabilization techniques, for example, meditative practices, deep breathing techniques, relieving muscle tension, increasing the feeling of peace. It is important for a person to feel inner harmony and balance, thus enhancing his/her ability to self-regulate. For example, a simple technique of diaphragmatic breathing can be offered. To do this, to put your hands on the chest and stomach, to feel that the stomach inflates during inhalation. During an inhaling phase a person should count of one to four, then hold his/her breath for 3-4 seconds, then he/she should exhale for 3-4 seconds and hold his/her breath again. This exercise must be performed several times until the tension decreases.

4. The tapping technique also help people to reduce anxiety in a stressful or post-stressful situation. This technique consists in tapping certain points of the body. Tapping should be rhythmical, simultaneous with two hands. First, tap the middle of the head with the fingertips for a few seconds; further along the area above the eyebrows; on the temples; under the eyes; under the nose; in the middle of the chin; along the entire length of the clavicles; under each armpit in turn; on «karate zone» - the middle of the lateral part of the palm; the last zone is the fingertips, first of one hand and then of the other. This technique must be repeated at least three times.

5. Personal developmental trainings can also be offered. The desire for self-improvement also somewhat reduces the manifestations of negative states, motivates a person, fills him/her with energy. A person has a goal and, striving for it, is filled with energy and enthusiasm, the desire to overcome obstacles on the way, which contributes to stress resistance development.

6. The balance of work and rest is also important. Continuous work without days off should not be allowed, as this is a direct path to burnout and, as a result, a decreased capability to withstand stress. It is necessary to help a person to balance his/her schedule. For this, time management techniques can be used.

7. Quality planning of time for rest also plays a role in maintaining stress resistance, since emotional relief is an effective way to fight stress and fatigue. Filling free time with bright emotions is a good preventive measure against chronic fatigue.

8. It is important to determine a client's internal resources that help the person to reduce his/her personal anxiety and also prevent the growth of reactive anxiety, that is, anxiety in certain life situations.

Discussion. According to reviewed studies, there is close relations between intolerance of uncertainty and anxiety. In addition to anxiety, intolerance of uncertainty is related with phobias, the development of PTSD, depression and obsessive-compulsive disorder. According to many English-language studies, intolerance to uncertainty also is linked strongly with depressive states and is one of the factors that complicate the treatment of depression. The existence of such correlations between the mentioned constructs was also confirmed in our research. Namely, we have determined the following:

- The correlation between stress resilience and personality anxiety is stronger, indicating that stress resilience is a trait that operates more during the long run.
- Negative states and intolerance of uncertainty were positively correlated.
- The correlation between anxiety and depressive states was stronger for oppressive anxiety, which is the physical-emotional component of intolerance to uncertainty.

Also, our study demonstrated that military youth had higher stress resistance and, accordingly, lower indicators of negative states. Such results are correlated

with the research of N. Burban and I. Huzenko that military personnel compared to civilians had stronger stress resistance, better adaptability to stress, which ensured their effective social and professional functioning under stressful conditions, with minimal expenses of individual and psychophysiological resources and with preservation of mental and somatic health (Burban, Huzenko, 2019). Also, military personnel, characterized by highly developed stress resistance, restored volitional regulation quickly, as was shown by the research of S. Vadziuk and V. Sas (Vadziuk, Sas, 2023).

Conclusions. Stress means specific body reactions to stimuli, both positive and negative. As part of our research, stress resistance was defined as a specific personal characteristic to resist negative impacts of external stress factors, which allows people to protect the psyche from destruction. The period of youth is characterized by the dynamism of life events, the moment of finding one's place in life, which requires stress resistance from an individual. Intolerance of uncertainty is the personality trait of perceiving uncertainty as undesirable and reacting to it as a threat. Anxiety is a depressing state of emotional tension, excitement, vigilance, certain discomfort in the soul, heightened sense of guilt, increased vulnerability to complications in life circumstances, underestimation of oneself in situations of uncertainty, expectation or premonition of an incomprehensible threat to the personality balance.

Negative correlations of stress resistance with anxiety, depressive states and intolerance of uncertainty were found in our study. We should emphasize that the correlation of stress resistance with personality anxiety was stronger than that with reactivity, which suggests that stress resistance is a trait that acts more in the long term. Negative states and intolerance of uncertainty correlated positively. Interestingly, the correlation between anxiety and depression was stronger for oppressing anxiety, which is the somatic-emotional component of uncertainty intolerance. That is, in the conditions of war, a situation of uncertainty and stress is created. It is a factor that affects depressive states and anxiety, the growth of which leads to increased intolerance to uncertainty. The growth of all these factors together leads to a decreased stress resistance of an individual.

A comparison of military and civilian groups allowed us to assert that military personnel had higher stress resistance, better tolerance to uncertainty and less manifestations of negative states. This was probably related to the specifics of their activities, readiness to perform military service. Also, the military personnel could be more informed about the war progress, had analytic skills and predicted more accurately the future, which reduced their anxiety. In addition, the military activities also require decision-making in uncertain situations, which was why military personnel's tolerance for uncertainty was higher.

The regression model calculated by us allowed us to claim that such variables as: intolerance to uncertainty, anxiety and depressive states partially explained stress resistance as a dependent variable.

Prospects for further research. We see the prospects for further studies on stress resistance in the searches for those components that explain another 50% of the variation of stress resistance in order to have a holistic picture of what affects an individual's stress resistance. Such knowledge will allow us to more effectively develop this quality in young people.

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References

Block, J. H. (1980). The role of ego-control and ego resiliency in the organization of behavior. *Minnesota Symposium on Child Psychology*, 13, 39–101.

Boelen, P. A., & Reijntjes, A. (2009). Intolerance of uncertainty and social anxiety. *Journal of Anxiety Disorders*, 23(1), 130–135. DOI: <https://doi.org/10.1016/j.janxdis.2008.04.007>

Depression in adults: treatment and management. The National Institute for Health and Care Excellence. Retrieved from: <https://www.nice.org.uk/guidance/ng222>

Einstein, D. A. (2014). Extension of the transdiagnostic model to focus on intolerance of uncertainty: a review of the literature and implications for treatment. *Clinical psychology: science and practice*, 21(3), 280–300.

Kovalenko, A. B., & Yatsenko, A. O. (2022). Psychological well-being of Ukrainians at the beginning of the full-scale Russian invasion. *Ukrainian Psychological Journal*, 2(18), 91–108. DOI: [https://doi.org/10.17721/upj.2022.2\(18\).5](https://doi.org/10.17721/upj.2022.2(18).5)

Mahoney, A. E. J., & McEvoy, P. M. (2012). Transdiagnostic examination of intolerance of uncertainty across anxiety and depressive disorders. *Cognitive Behaviour Therapy*, 41(3), 212–222.

Masten, A. S. (1994). Resilience in individual development: Successful adaptation despite risk and adversity. *Educational Resilience in Inner City America: Challenges and Prospects*, 18, 3–25.

McEvoy, P. M. (2019). The impact of methodological and measurement factors on transdiagnostic associations with intolerance of uncertainty: A meta-analysis. *Clinical Psychology Review*, 73.

Spiegelberger, C. D., Gorsuch, R. L., & Lushene, R. E. (1970). Manual for the state-trait-anxiety inventory. *Consulting Psychologists Press*.

Атаманчук, Н. М. (2022). Підвищення стресостійкості підлітків в умовах військової агресії: ресурс арт-технік. 30–42. DOI: <https://doi.org/10.30525/978-9934-26-282-1-2>

Бердник, Г. Б. (2009). Дослідження стресостійкості особистості майбутнього практичного психолога в процесі професійної підготовки у ВНЗ. *Вісник післядипломної освіти*, 11(2), 19–28.

Білова, М. Е. (2009). Психологічні особливості осіб з різним рівнем стресостійкості. (Автореф. дис. канд. психол. наук). Одеса.

Бурбан, Н., & Гузенко, І. (2019). Особливості стресостійкості й адаптивних здібностей до стресу майбутніх військовослужбовців. *Психопедагогіка безпеки людини Педагогіка і психологія професійної освіти*, 1, 105–116.

Вадзюк, С. Н., & Сас, В. В. (2023). Особливості вольової саморегуляції у військових із різною стресостійкістю. *Здобутки клінічної і експериментальної медицини*, 1, 53–59. DOI: <https://doi.org/10.11603/1811-2471.2023.v.i1.13658>

Венгер, Г., & Шагай, М. (2019). Теоретико-методологічні засади дослідження стресостійкості у особистості. *Матеріали V Міжнародної науково-практичної конференції «Особистість у кризових умовах та критичних ситуаціях життя» (м. Суми, 28 лютого – 1 березня 2019 року)*. (с. 20–22). Суми : СумДПУ ім. А. С. Макаренка.

Громова, Г. М. (2020a). Інтолерантність до невизначеності і тривожність у студентів різних професій. Т. М. Титаренко (Ред.), *Матеріали Всеукраїнського науково-практичного семінару «Горизонти посттравматичного особистісного життєтворення» (м. Київ)*. (с. 44–48). Київ : ІСПП НАПН України.

Громова, Г. М. (2020b). Методики дослідження зв'язків інтолерантності до невизначеності з наслідками травматичного життєвого досвіду. *Наукові студії із соціальної та політичної психології*, 45(48), 88–99.

Корольчук, В. М. (2009). Психологія стресостійкості особистості. (Дис. д-ра психол. наук). Київ.

Кудінова, М. (2019). Теоретичні підходи до визначення сутності поняття «стресостійкість». *Young Scientist*, 3(67), 137–143. DOI: <https://doi.org/10.32839/2304-5809/2019-3-67-28>.

Кузікова, С. Б. (2018). Толерантність до невизначеності: теоретико-емпіричні розвідки. *Науковий вісник Херсонського державного університету*, 1(3), 67–72.

Лебідь, Н. (2016). *Стресостійкість як особистісна властивість керівників-лідерів закладів середньої освіти : навчальний посібник*. Київ : «Пріоритети».

Мельник, Н. М. (2016). Психологічний аспект формування стресостійкості педагога. *Вісник ОНУ ім. І.І. Мечникова. Психологія*, 21, 3(41), 194–203.

Мигаль, Г. В., & Протасенко, О. Ф. (2008). Стресостійкість людини-оператора. *Методи підвищення стресостійкості. Открытые информационные и компьютерные интегрированные технологии*, 39, 248–252.

Мозговий, В. І. (2006). Особистісний симптомокомплекс стресостійкості / стресовразливості у військовослужбовців служби правопорядку. (Автореф. дис. канд. психол. наук). Хмельницький.

Пісоцький, В. П., & Горянська, А. М. (2020). Толерантність в умовах невизначеності: виклики сьогодення. Т. М. Титаренко (Ред.), *Матеріали Всеукраїнського науково-практичного семінару «Горизонти посттравматичного особистісного життєтворення» (м. Київ)*. (с. 14–18). Київ : ІСПП НАПН України.

Стельмашук, Х. (2014). Психологічний механізм стресостійкості підлітків-сиріт. *Педагогіка і психологія професійної освіти*, 4, 189–198.

Циганчук, Т. В. (2011). *Динаміка переживання стресу студентами вищих навчальних закладів*. (Дис. канд. психол. наук). Київ.

References

Block, J. H. (1980). The role of ego-control and ego resiliency in the organization of behavior. *Minnesota Symposium on Child Psychology*, 13, 39–101.

Boelen, P. A., & Reijntjes, A. (2009). Intolerance of uncertainty and social anxiety. *Journal of Anxiety Disorders*, 23(1), 130–135. DOI: <https://doi.org/10.1016/j.janxdis.2008.04.007>

Depression in adults: treatment and management. The National Institute for Health and Care Excellence. Retrieved from: <https://www.nice.org.uk/guidance/ng222>

Einstein, D. A. (2014). Extension of the transdiagnostic model to focus on intolerance of uncertainty: a review of the literature and implications for treatment. *Clinical psychology: science and practice*, 21(3), 280–300.

Kovalenko, A. B., & Yatsenko, A. O. (2022). Psychological well-being of Ukrainians at the beginning of the full-scale Russian invasion. *Ukrainian Psychological Journal*, 2(18), 91–108. DOI: [https://doi.org/10.17721/upj.2022.2\(18\).5](https://doi.org/10.17721/upj.2022.2(18).5)

Mahoney, A. E. J., & McEvoy, P. M. (2012). Transdiagnostic examination of intolerance of uncertainty across anxiety and depressive disorders. *Cognitive Behaviour Therapy*, 41(3), 212–222.

Masten, A. S. (1994). Resilience in individual development: Successful adaptation despite risk and adversity. *Educational Resilience in Inner City America: Challenges and Prospects*, 18, 3–25.

McEvoy, P. M. (2019). The impact of methodological and measurement factors on transdiagnostic associations with intolerance of uncertainty: A meta-analysis. *Clinical Psychology Review*, 73.

Spiegelberger, C. D., Gorsuch, R. L., & Lushene, R. E. (1970). Manual for the state–trait–anxiety inventory. *Consulting Psychologists Press*.

Atamanchuk, N. M. (2022). Pidvyshhennja stresostijkosti pidlitkiv v umovah vijs'kovoї agresii: resurs art-tehnik [Increasing the stress resistance of teenagers in conditions of military aggression: a resource of art techniques]. 30–42. [in Ukrainian]. DOI: <https://doi.org/10.30525/978-9934-26-282-1-2>

Berdnyk, G. B. (2009). Doslidzhennja stresostijkosti osobystosti majbutnogo praktynogo psyhologa v procesi profesijnoi pidgotovky u VNZ [Research on the stress resistance of the personality of a future practical psychologist in the process of professional training at a university]. *Visnyk pisljadyplomnoi osvity*, 11(2), 19–28. [in Ukrainian].

Bilova, M. E. (2009). Psyhologichni osoblyvosti osib z riznym rivnem stresostijkosti [Psychological features of people with different levels of stress resistance]. *Extended abstract of Candidate's thesis*. Odesa. [in Ukrainian].

Burban, N., & Huzenko, I. (2019). Osoblyvosti stresostijkosti j adaptyvnyh zdibnostej do stresu majbutnih vijs'kovosluzhbovciv [Peculiarities of stress resistance and adaptive abilities to stress of future military personnel]. *Psyhopedagogika bezpeky ljudy ny Pedagogika i psyhologija profesijnoi osvity*, 1, 105–116. [in Ukrainian].

Vadziuk, S. N., & Sas, V. V. (2023). Osoblyvosti vol'ovoї samoreguljacji u vijs'kovykh iz riznoju stresostijkistju [Peculiarities of volitional self-regulation in military personnel with different stress resistance]. *Zdobutky klinichnoi i eksperymental'noi medycyny*, 1, 53–59. [in Ukrainian]. DOI: <https://doi.org/10.11603/1811-2471.2023.v.i1.13658>

Venher, H., & Shahai, M. (2019). Teoretyko-metodologichni zasady doslidzhennja stresostijkosti u osobystosti [Theoretical and methodological principles of the study of stress resistance in the individual]. *Materialy V Mizhnarodnoi naukovopraktychnoi konferencii «Osobystist' u kryzovykh umovah ta krytychnykh sytuacijah zhyttja» (m. Sumy, 28 ljutogo – 1 bereznja 2019 roku)*. (s. 20–22). Sumy : SumDPU im. A. S. Makarenka. [in Ukrainian].

Hromova, H. M. (2020a). Intolerantnist' do nevyznachenosti i tryvozhnist' u studentiv riznykh profesij [Intolerance to uncertainty and anxiety in students of various professions]. T. M. Tytarenko (Red.), *Materialy Vseukrai'ns'kogo naukovopraktychnogo seminaru «Goryzonty posttravmatychnogo osobystynogo zhyttjetvorennja» (m. Kyi'v)*. (s. 44–48). Kyi'v : ISPP NAPN Ukraїny. [in Ukrainian].

Hromova, H. M. (2020b). Metodyky doslidzhennja zv'jazkiv intolerantnosti do nevyznachenosti z naslidkamy travmatychnogo zhyttjevoogo dosvidu [Methods of research on the relationship between intolerance to uncertainty and the consequences of traumatic life experience]. *Naukovi studii' iz social'noi' ta politychnoi' psihologii'*, 45(48), 88–99. [in Ukrainian].

Korolchuk, V. M. (2009). Psihologija stresostijkosti osobystosti [[Psychology of personality stress resistance]. *Doctor's thesis*. Kyi'v. [in Ukrainian].

Kudinova, M. (2019). Teoretychni pidhody do vyznachennja sutnosti ponjattja «stresostijkist'» [Theoretical approaches to defining the essence of the concept of «stress resistance»]. *Young Scientist*, 3(67), 137–143. [in Ukrainian]. DOI: <https://doi.org/10.32839/2304-5809/2019-3-67-28>

Kuzikova, S. B. (2018). Tolerantnist' do nevyznachenosti: teoretyko-empyrychni rozvidky [Tolerance to uncertainty: theoretical and empirical explorations]. *Naukovyj visnyk Hersons'kogo derzhavnogo universytetu*, 1(3), 67–72. [in Ukrainian].

Lebid, N. (2016). Stresostijkist' jak osobystisna vlastyvyt' kerivnykiv-lideriv zakladiv serednoi' osvity : navchal'nyj posibnyk [Stress resistance as a personal property of managers-leaders of secondary education institutions: study guide]. Kyi'v : «Priorityety». [in Ukrainian].

Melnyk, N. M. (2016). Psihologichnyj aspekt formuvannja stresostijkosti pedagoga [Psychological aspect of the formation of stress resistance of the teacher]. *Visnyk ONU im. I.I. Mechnykova. Psihologija*, 21, 3(41), 194–203. [in Ukrainian].

Myhal, H. V., & Protasenko, O. F. (2008). Stresostijkist' ljudyne-operatora. Metody pidvyshhennja stresostijkosti [Stress tolerance of the human operator. Methods of increasing stress resistance]. *Otkrytye informacionnye i komp'juternye integrirovannje tehnologii*, 39, 248–252. [in Ukrainian].

Mozhovyj, V. I. (2006). Osobystisnyj symptomokompleks stresostijkosti / stresovrazlyvosti u vijs'kovosluzhbovciv sluzhby pravoporjadku [[Personal symptom complex of stress resistance / stress vulnerability in law enforcement officers]. *Extended abstract of Candidate's thesis*. Hmel'nyč'kyj. [in Ukrainian].

Pisotskyi, V. P., & Horianska, A. M. (2020). Tolerantnist' v umovah nevyznachenosti: vytkyky s'ogodennja [Tolerance in conditions of uncertainty: challenges of today]. T. M. Tytarenko (Red.), *Materialy Vseukrai'ns'kogo naukovy-praktychnogo seminaru «Goryzonty posttravmatychnogo osobystisnogo zhyttjetvorenja» (m. Kyi'v)*. (s. 14–18). Kyi'v : ISPP NAPN Ukrai'ny. [in Ukrainian].

Stelmashhuk, H. (2014). Psihologichnyj mehanizm stresostijkosti pidlitkiv-syrit [Psychological mechanism of stress resistance of orphaned teenagers]. *Pedagogika i psihologija profesijnoi' osvity*, 4, 189–198. [in Ukrainian].

Tsyhanchuk, T. V. (2011). Dynamika Perezhyvannja stresu studentamy vyshhyh navchal'nyh zakladiv [Dynamics of experiencing stress by students of higher educational institutions]. *Candidate's thesis*. Kyi'v. [in Ukrainian].

Abstract

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PSYCHOLOGICAL FEATURES OF YOUNG PEOPLE'S STRESS RESISTANCE IN WAR CONDITIONS

This article examines the concepts of stress resistance, intolerance to uncertainty, anxiety and depressive manifestations. The available data on their interrelationships and the studies on the specifics of military youth stress resistance were reviewed. High stress resistance becomes critical in conditions of war and military conflicts. It includes adaptability to stressful situations and protecting the psyche from destruction, as well as maintaining a normal physical condition.

Our task was to investigate the peculiarities of Ukrainian youth's stress resistance in a current special period for the country. The necessity to do this arose because of the need for psychological support of the population during the war period. Military personnel of the State Border Guard Service of Ukraine, as well as civilian youth having different jobs took part in the survey.

The performed empirical study showed peculiarities of correlations of stress resistance with intolerance of uncertainty, anxiety and depressive states. Based on the obtained data, a regression model was calculated and substantiated, which was quite successful and could be useful for predicting and developing stress resistance of young people. The article also presents the recommendations, developed taking into account the results, for practical psychologists on working with youth during the war. They stress the importance of maintaining a healthy lifestyle, nutrition, sleep patterns, balancing work and free time, planning quality

rest and propose breathing techniques, tapping techniques, search for a client's resources and personal developmental trainings.

Key words: *youth, stress resistance, intolerance to uncertainty, anxiety, depressive states.*

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