

# Stress-Coping Behavior of the Individual as a Psychological Problem in the Context of the Application of Sanogenic Health Thinking

Nina YAROSH<sup>1</sup>,  
Vladyslava ARTIUKHOVA<sup>2</sup>,  
Viktoriia PANCHENKO<sup>3</sup>,  
Svitlana FERA<sup>4</sup>,  
Dmytro PRYKHODKO<sup>5</sup>

<sup>1</sup>V. N. Karazin Kharkiv National University, Ukraine,  
[ninayarosh88@gmail.com](mailto:ninayarosh88@gmail.com)

<sup>2</sup>Kharkiv national University of Air Force, Ukraine,  
[vlada.artyukhova@gmail.com](mailto:vlada.artyukhova@gmail.com)

<sup>3</sup>T.H.Shevchenko National University «Chernihiv Colehium», Ukraine,  
[viktoriia.panch@gmail.com](mailto:viktoriia.panch@gmail.com)

<sup>4</sup>T.H.Shevchenko National University «Chernihiv Colehium», Ukraine,  
[svetlanafera@gmail.com](mailto:svetlanafera@gmail.com)

<sup>5</sup>Kharkiv National University of Air Force, Ukraine,  
[d.petrovich7971@gmail.com](mailto:d.petrovich7971@gmail.com)

**Abstract:** *Psychologists face an urgent task - to teach a person to effectively deal with stressors, which he encounters every day. The aim is to investigate the features of sanogenic thinking as a factor of stress-coping behavior of the individual. The test-persons were of cadets in the amount of 345 people, of whom women - 167 people and men - 178 people. As a result of a formative experiment to teach the skills of sanogenic thinking, the article investigated the presence of changes in the degree of stress using the methods of "Psychological Stress Scale PSM-25" and the questionnaire "Fatigue-Monotony-Satiety-Stress". It is determined that the formation of sanogenic thinking skills as a result of the formative experiment, helps to reduce the level of fatigue, monotony, satiety and stress in the individual. Relationships between the level of development of sanogenic thinking and coping strategies used by the individual are revealed. Regression analysis showed that the study of personality theory and practice of sanogenic thinking allows you to expand awareness of emotional mental operations and acquire skills and abilities to introspect their own emotions, experiences in overcoming stress. That is, sanogenic thinking can be a factor in stressful behavior of the individual.*

**Keywords:** *coping with stress; level of fatigue; monotony and stress; coping strategies; introspection of own emotions; experience in stress-coping.*

**How to cite:** Yarosh, N., Artiukhova, V., Panchenko, V., Fera, S., & Prykhodko, D. (2021). Stress-Coping Behavior of the Individual as a Psychological Problem in the Context of the Application of Sanogenic Health Thinking. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12(1), 183-201.  
<https://doi.org/10.18662/brain/12.1/178>

## Introduction

Society is currently experiencing socio-psychological difficulties, primarily related to the military conflict in the east of the country, the unstable financial and economic situation and socio-political unrest that affected every Ukrainian family. All this creates a significant number of stressors for the population. The constant stay of a person in a state of stress causes difficulties in maintaining the psychological comfort of members of our society.

Psychologists face an urgent task - to teach a person to effectively deal with stressors, which he encounters every day. After all, given the nature of stress and coping behavior, there is no better way to overcome a problematic, emotionally stressful situation than purposeful and systematic build-up for the moment of its occurrence.

The problem of stress-coping behavior has long been the subject of study in both domestic and foreign psychological science. Analysis of the literature shows that this issue remains relevant in light of the emergence of various psychological threats to the individual. Coping behavior is a person's response to stressors, but is not always able to maintain his psychological health and comfort. As practice shows, a person in the vortex of stress is not able to control their own thinking. This is due to the fact that a person cannot comprehend the situation, apply reflection, as a result of which a negative experience of feelings is fixed. This type of thinking is pathogenic, which leads to psychological problems. In contrast to pathogenic thinking, there is sanogenic, which helps to cope negative emotions and psychological recovery. In addition, thinking is an inexhaustible important resource that a person can use to cope stress, and understanding problematic, stressful situations is done by understanding them. In the process of sanogenic thinking, the subject separates himself from his own experiences and seems to observe them. Health-improving thinking is ensured through the use of sanogenic reflection by the individual, Palamarchuk (2020); Nerubasska (2020a); Nerubasska (2020b); Sheremet (2019); Maksymchuk (2020a); Maksymchuk (2020b); Bezliudnyi (2019).

It should be noted that the concept of "sanogenic reflection" has not been widely used so far in domestic research, but many scientists have pointed to this phenomenon and its functions. This concept was introduced into scientific circulation for experimental research, and was defined, first of all, as one that denotes a tool for achieving sanogenic thinking, S. Morozyuk (2006), Y. Orlov (2006). In this article we use the definitions that have been

introduced into scientific circulation in the theory and practice of sanogenic thinking, Yu. Orlov (2006) & S. Morozyuk (2006).

To date, many studies have confirmed the positive effects of sanogenic thinking on the psychological health of the individual, performance, adaptability and stress resistance. Sanogenic thinking helps to cope negative emotions and psychological recovery. However, sanogenic thinking as a factor in stress-coping behavior of the individual was not the subject of psychological research. In the known studies of L. Adamyana (2012), L. Kananchuk (2010), Y. Kraynova (2010) only pointed out the possibilities of sanogenic reflection and its role in coping stress at the theoretical level. To date, there is also no scientific research that would reflect the peculiarities of the process of learning sanogenic thinking, which would allow a person in turn to effectively resist with stress.

The interaction of the individual with the world around him, which has a negative impact on the psychological and physical health of man, is characterized by the concept of "stress". A characteristic response of the individual to the action of stressors is coping behavior. The phenomenon of "coping" in the work is considered as a dynamic phenomenon, which is influenced by cognitive, emotional and behavioral spheres of personality. Coping behavior is the main form of overcoming efforts. The concepts of "coping with stress" and "coping behavior" are understood as various forms of human activity, covering all types of interaction of the subject with the tasks and problems of the external or internal plan. The choice of coping behavior strategies is primarily due to personal characteristics.

The success of solving a complex situation, finding the optimal way to solve it largely depends on the analysis and the degree of human understanding of specific life situations. The individual's understanding of the situation depends, first of all, on the degree of development of reflexive abilities. Through reflection, a person gets the opportunity to more fully assess events and their own resources. Thus, coping a stressful situation is impossible without cognitive "processing", which becomes available through reflection. Reflection is a process of conscious critical reflection of a person what is happening to him. The lack of such an ability in the individual may indicate the predominance of pathogenic thinking, which leads to disease, as well as generates negative emotions and creates emotional stress and adaptation problems, resulting in a person becomes vulnerable to his own mind.

Sanogenic thinking, in contrast to pathogenic, on the contrary, helps to overcome negative emotions and psychological recovery. Sanogenic thinking is characterized by the dynamism of the connection of the

individual with the world of images, which reflects life situations. The theory and practice of sanogenic thinking is a special case of the theory of positive thinking and is focused on the positive reassessment of automatisms related to the affective sphere of personality. Comparing the concept of positive thinking with sanogenic, we can note a common focus on solving internal problems of the individual, reducing the negative emotional charge. However, positive thinking is based on worldviews, features of Ego-concept and personal narratives, as well as the development of optimism, while sanogenic thinking is aimed at adequate reflection and perception of images of this reality. That is, the most significant difference is in the mechanism of each type of thinking.

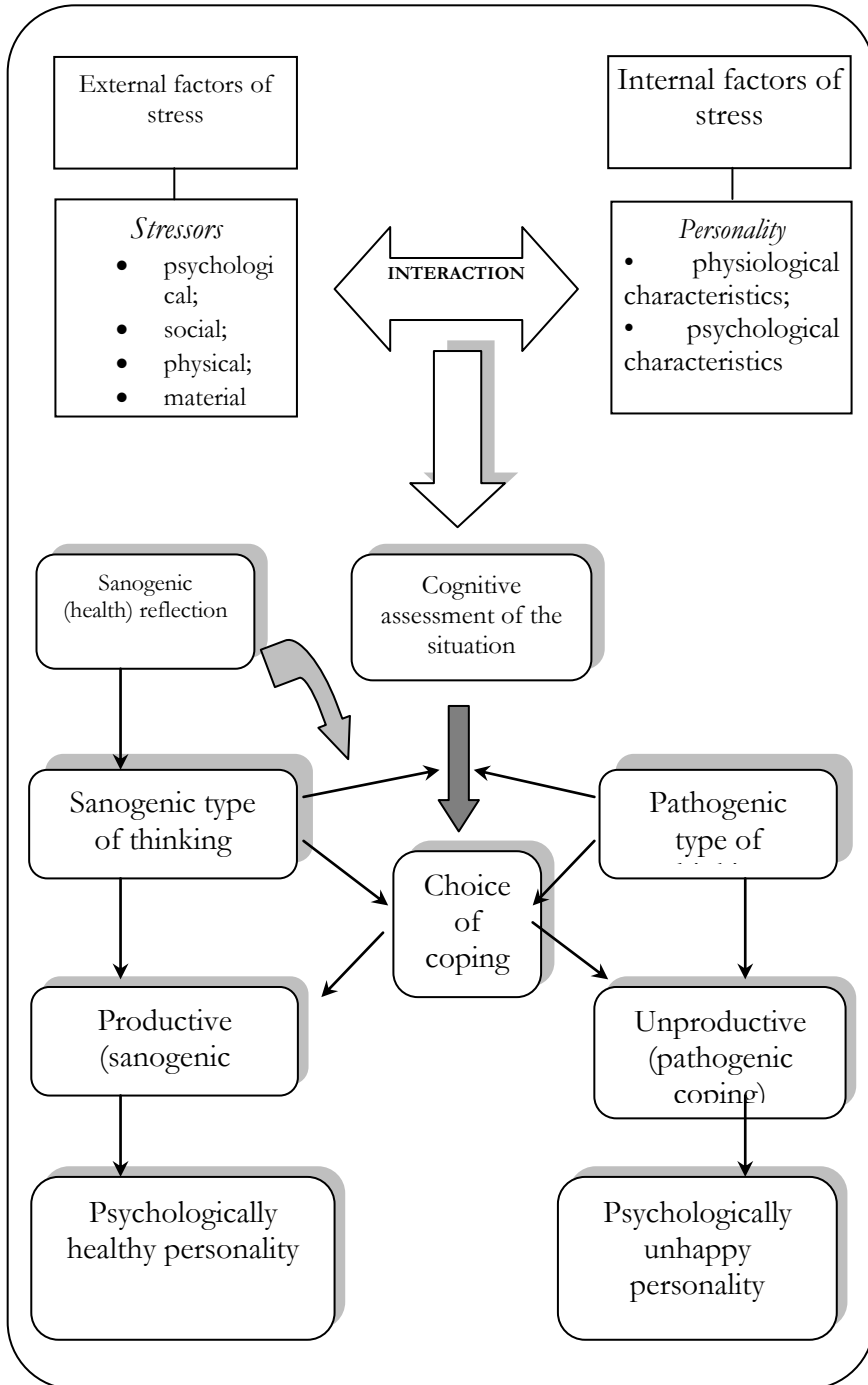
In contrast to the traditional interpretation of thinking as a set of mental actions that solve a problem (basically - external goals), the term "sanogenic thinking" reflects the solution of internal problems (eg, problems of alleviating suffering from resentment, failure, etc.). Sanogenic thinking is one of the effective means of solving psycho-traumatic problems, which is based on their conscious formulation and consideration, conscious reflexive analysis of one's own emotions and emotional (stressful) factors. This type of thinking reduces internal conflict and psychological stress, prevents disease and improves health.

The term "sanogenic reflection" was introduced for research in the field of sanogenic thinking. Sanogenic reflection is the ability to be aware of oneself, one's thoughts, to identify one's emotions and problems, which allows a person to choose the right behavior programs in different situations. It is a means of achieving sanogenic thinking.

Thus, combining theoretical ideas about stress and coping behavior, as well as sanogenic thinking, it is possible to assume that a person who has mastered sanogenic thinking through the development of sanogenic reflection skills and has, as a result, sanogenic behavior, uses "sanogenic coping". It is determined that "**sanogenic coping**" is a general concept for those coping strategies of the individual, which are aimed at maintaining mental health, resolving stressful situations, establishing social contacts and positive reassessment of the situation, as well as self-confidence and control of emotional state. Sanogenic coping includes, first of all, all the properties and characteristics of the actual sanogenic behavior, namely - high activity, positive emotional experiences, motivation to succeed and solve problems, personal development, constructive ideas about one's own health, high quality of life, the presence of psychological support from society. In contrast to sanogenic coping, it is advisable to distinguish "**pathogenic coping**", which is not able to provide the individual with psychological well-

being and causes such coping strategies that are aimed at avoidance, emotional response, confrontation, etc.

As a result of the analysis of theoretical and experimental researches of a problem of stress and stress-coping behavior the model of features of influence of a stressful situation on the person in the context of the theory of sanogenic thinking is offered.. According to this model (see Fig. 1), the stressor that affects a person is characterized by certain parameters of influence and has a psychological, social, material and physical origin. The course of stress is also influenced by personal factors that are in interaction with the peculiarities of external circumstances. Being in a stressful situation, the individual performs a cognitive assessment of the situation. At the stage of cognitive assessment, the decisive factor is the type of personality thinking (sanogenic or pathogenic) and the presence of sanogenic reflection skills. In the process of cognitive assessment, the nature of stress-coping behavior is determined, i.e. the type of coping that will be used to overcome the stressful situation. If a person has developed sanogenic thinking and he actively uses sanogenic reflection, it will be a guarantee of productive coping and psychological health. If, on the contrary, the pathogenic type of thinking prevails in the person, then as a result unproductive coping is involved that leads both to psychological, and to physical troubles.



**Figure 1.** Theoretical model of the impact of a stressful situation on the individual in the context of the theory of sanogenic thinking (developed by the authors)

Given that at present the works devoted to the study of the peculiarities of the influence of sanogenic thinking on the effectiveness of the individual in stressful conditions are relevant, both at the theoretical and practical levels is a study that will promote the theory and practice of sanogenic thinking and introduction of its modernized forms in psychological care. At the same time, it will allow to actualize the issue of finding modern ways to prevent and cope stress that will meet the basic requirements of today.

**The aim is** to investigate the features of sanogenic thinking as a factor of stress-coping behavior of the individual.

### Materials & methods

The test-persons were cadets of the Kharkiv National University of the Air Force named after Ivan Kozhedub in the amount of 345 people, including women - 167 people and men - 178 people. The age of the persons is in the range from 20 to 27 years. The number of people experiencing stress was 116 cadets (women - 63 people, men - 53 people). The research was carried out during 2017-2020 in several stages. The study scheme is presented below in table 1.

**Table 1.** *Scheme of experimental study of the impact of learning the skills of sanogenic thinking on stress and stress-coping behavior of the individual (developed by the authors)*

<b>Theoretical analysis</b>	
-	definition of approaches to understanding stress and stress-coping behavior of the individual;
-	identification of factors and personal factors that affect the nature of coping, which is used by the individual in stressful situations;
-	analysis of experimental studies of the impact of the development of sanogenic thinking in the individual;
-	selection of diagnostic tools
<b>The statement stage of empirical research</b>	
-	diagnosis of the sample for the presence of stress in order to form a control and experimental group;
-	research of coping strategies, level of development of sanogenic thinking of control and experimental group
<b>The formative stage of empirical research</b>	
-	development of a program for training sanogenic

thinking skills; - conducting classes with an experimental group according to the curriculum
<b>The statement stage of empirical research</b>
- re-diagnosis of the sample for the presence of stress in order to identify the results of the formative experiment; - research of coping strategies, level of development of sanogenic thinking in sampling groups
<b>Mathematical analysis and logical-semantic interpretation</b>
- study of the differences between the control and experimental groups before and after the training of sanogenic thinking; - study of the correlations between the indicators of the study of stress, stress-coping behavior and sanogenic thinking; - research of features of connection of sanogenic thinking and level of stress, coping which chooses the person; - testing the hypothesis of sanogenic thinking as a factor in stress-coping behavior of the individual

## Results and Discussion

Analysis of the sample (at the stage of the observational experiment) according to the methods of studying stress and coping behavior shows that the representatives of this group of test-persons are characterized by high rates of stress and non-adaptive nature of coping. The coping strategies used are not able to fully reduce the effects of stress. Avoiding a stressful situation, not controlling emotions and reconciling with the problem is not a way out of stress, but, on the contrary, extend its effect on the human body and psyche. The individual becomes dependent on the circumstances and his own way of perception, he can not consciously control their own reactions, and also feels unable to break this circle. The characteristics described above are manifestations and symptoms of a pathogenic type of thinking. The study of the sample using the method of "Cognitive-emotional test" confirms the low development of sanogenic thinking and the high frequency of psychological protection, Yu. Orlov (2006).

As a result of a formative experiment to teach the skills of sanogenic thinking, the study investigated the presence of changes in the degree of stress using the methods "Psychological Stress Scale PSM-25" and the questionnaire "Fatigue-Monotony-Satiety-Stress", A. Leonov (1988). It is determined that the formation of skills of sanogenic thinking as a result of a

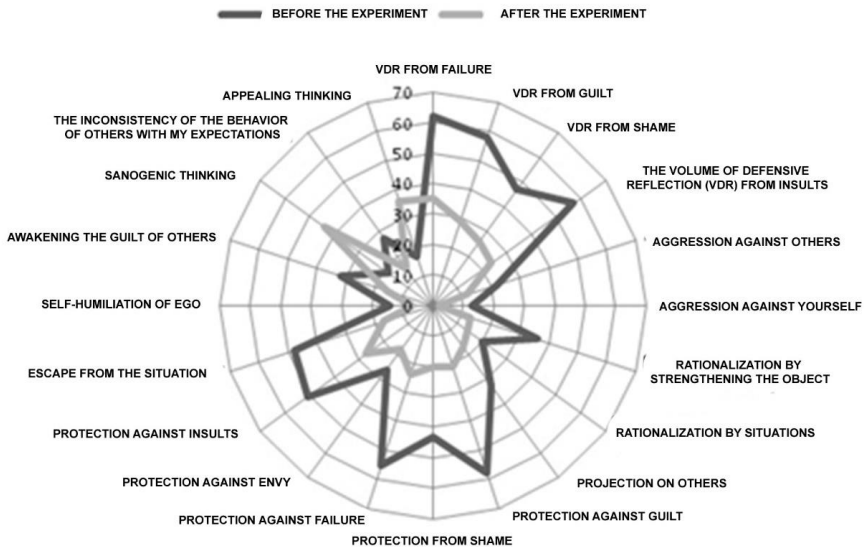


formative experiment, helps to reduce the level of fatigue, monotony, satiety and stress in the individual.

The analysis of correlations of indicators of methods of studying of stress with methods of studying of stress-coping behavior of the person in experimental group (bilateral Pearson's correlation coefficient) shows that increase in an indicator of sanogenic thinking leads to decrease in indicators of stress ( $r=-0,872$ ,  $p\leq 0,01$ ). An equally important result is that in this group, all indicators of stress are inversely correlated with the scale "Avoidance of the situation." This indicates that this group does not use this coping strategy in stress, but, on the contrary, turns to strategies that are aimed at solving the problem. This vector of change, from the point of view of psychological health, is useful, because in the case of avoiding negative events and emotions associated with them, negative energy does not come out and thus destroys the personality. Improving indicators on the "Fatigue" scales ( $r=0,302$ ,  $p\leq 0,05$ ), "Monotony" ( $r=0,335$ ,  $p\leq 0,05$ ), "Satiety" ( $r=0,366$ ,  $p\leq 0,05$ ) leads to an increase in the amount of protective reflection when experiencing shame. That is, an increase in mental stress in humans causes a sense of shame, which is to reduce self-esteem and loss of activity.

The study of the control group using methods to study the level of stress showed that the values of indicators decreased (on average by 8%) is not significant compared with changes in indicators in the experimental group (on average by 35%).

Figure 2 shows the changes in the indicators of the "Cognitive-emotional test", Yu. Orlov (2006), which clearly demonstrates the effectiveness of the acquired skills of sanogenic thinking in the experimental group before and after learning the theory and practice of sanogenic thinking in the formative experiment. The obtained result is expressed in reduction of frequency of use of protective reflection and psychological protection at experience of negative emotions by the person.



**Figure 2.** Comparative analysis of indicators of the "Cognitive-emotional test" in the experimental group before and after the formative experiment, Yu. Orlov (2006)

The control group was also studied twice, but this group was not trained in the course of sanogenic thinking. The analysis of the control group showed that no significant changes occurred. Indicators of protective reflection exceed the norm. The rate of sanogenic thinking and reflection is too low - 17%.

In the experimental group, after learning the skills of sanogenic thinking and reflection, they began to use a more coping strategy focused on solving problems (72%), which is a more effective and productive way to cope stress and crisis situations. There was a decrease in the average indicators of coping strategy "emotional response" (19%) and "avoidance" (9%). Thus, learning leads to the fact that the individual begins to use not emotionally-oriented coping and avoidance to remove negative feelings, but involves problem-oriented strategies to change the real situation. This characterizes a person as psychologically mature and able to successfully adapt to a stressful situation. A repeated study of coping behavior in the control group showed that its representatives most often use coping strategy, focused on avoidance - 43%, focused on emotions - 37% and problem-solving - only 20% (method of S. Norman (2017) (adapted version of T. Kryukova).

Analyzing the results of re-study of the experimental group according to the method for psychological diagnosis of coping mechanisms by E. Heim (1986), we note an increase in the use of adaptive cognitive coping strategies (57%), such as "Problem analysis", "Self-control", "Self-importance" » and relatively adaptive strategies (35%). The percentage of use of adaptive emotional coping strategies increased to 43% ("Protest" and "Optimism") and relatively adaptive behavioral coping strategies to 26%. Increase in the use of adaptive behavioral coping strategies (47%), such as "Altruism", "Cooperation", "Appeal" and increase in the rate of adaptive coping strategies - 42%.

The results of the re-study do not reflect significant changes in the nature of stress-coping behavior of the control group - their coping strategies remained unadaptive and ineffective. This group still has a low adaptability of cognitive coping strategies: non-adaptive cognitive strategies - 75%, non-adaptive emotional coping strategies - 71% and non-adaptive behavioral strategies - 50%.

A study of the differences between the indicators of the method of E. Heim (1986) between the control and experimental groups after the experiment using  $\chi^2$  - McNemar test. The results of statistical analysis make it possible to argue that the practice of the ability to think sanogenically leads to a change in coping strategies of the individual from non-adaptive to adaptive.

For a deeper understanding of the features and characteristics of stress-coping behavior of the experimental group of subjects, an additional study was conducted using the questionnaire "Ways of Coping Behavior", S. Folkman (1986), adapted by L. Wasserman (2010). According to the authors of the questionnaire, the effectiveness of a strategy depends on the characteristics of the current situation, as well as on the personal resources that a person has. The predominant strategy in the experimental group of subjects is "Positive revaluation". This strategy involves trying to overcome the negative feelings about the problem by positively rethinking it, looking at the problem and the stressful situation as an incentive for personal development. Also characteristic is the focus on philosophical understanding of the situation, its inclusion in the broader context of the individual's work on self-development. In addition, the coping strategy "Acceptance of responsibility" is expressed, which is to recognize the subject of his role in the problem facing the individual, and responsibility for its solution.

The stress-coping behavior of the experimental group is characterized by the strategy "Planning problem solving", which involves attempts to

overcome the problem through targeted analysis of the situation and possible behaviors, building a strategy for solving the problem, planning their own actions based on objective conditions, past experience and available resources. Strategies such as "Confrontational coping" and "Escape-avoidance" are rarely used by the subjects of the experimental group.

Correlations with the "Sanogenic Thinking" scale were analyzed in accordance with the identified objectives of the study. The conducted correlation analysis indicates the feedback of the scale "Sanogenic thinking" with the scales "Confrontational coping" ( $r=-0,938$ ,  $p\leq 0,01$ ), "Distancing" ( $r=-0,794$ ,  $p\leq 0,01$ ), "Escape-avoidance" ( $r=-0,794$ ,  $p\leq 0,01$ ), indicating that the development of sanogenic thinking reduces the frequency of use of the above coping strategies of the individual and, conversely, increases the frequency of application of strategies "Self-control" ( $r=0,933$ ,  $p\leq 0,01$ ), "Task planning" ( $r=0,922$ ,  $p\leq 0,01$ ), "Positive reevaluation" ( $r=0,853$ ,  $p\leq 0,01$ ). It can be concluded that the individual's choice of these strategies is a factor in the successful psychological adaptation of man.

The stress-coping behavior of the control group is characterized by such types of coping strategies as "Confrontational coping", "Distancing" and "Escape-avoidance". These strategies do not involve resolving a stressful situation, but push the problem "into the background" and provide a temporary reduction in the tension of the emotional sphere of the individual. As practice shows, these strategies are not purposeful and rational enough.

Interpreting the data obtained in the experimental group (SACS method, S. Hobfall (1996), whose subjects have the skills of sanogenic thinking, we can talk about a large number of effective models for coping complex (stressful) situations. This result is expressed in higher rates of assertive behavior, entering into social contact, seeking social support and lower rates of aggressive and antisocial behavior. Behavioral patterns of the experimental group are characterized by activity, prosociality and flexibility. It is worth noting that patterns of behavior may contribute to or hinder the success of coping with stress, depending on the constructiveness of the strategy. The index of constructiveness of strategies of stress-coping behavior in the experimental group was 1.6 points, which indicates a high constructiveness of coping behavior. Comparing the control group with the experimental group of the sample, we see that the results are at opposite poles: activity / passivity, prosociality / asociality. It is also worth noting that the index of constructiveness of stress-coping behavior strategy is different

for both groups. Thus, we can conclude that the sanogenic type of thinking affects the constructiveness of stress-coping behavior of the individual.

There is a close two-way relationship between the scales "Assertive Action" and "Sanogenic Thinking" ( $r=0,679$  at  $p\leq 0,05$ ) and feedback - with "Fatigue" scales ( $r=-0,439$  at  $p\leq 0,01$ ), "Monotony" ( $r=-0,428$  at  $p\leq 0,05$ ), "Satiety" ( $r=-0,45$  at  $p\leq 0,01$ ), "Stress" ( $r=-0,265$  at  $p\leq 0,01$ ). This means that the presence of sanogenic thinking in the individual causes the use of assertive, confident behavior, which also reduces stress. The low level of development of sanogenic thinking of the person correlates with high frequency of use of strategies "Escape" ( $r=-0,712$  at  $p\leq 0,05$ ) and "Impulsive actions" ( $r=-0,627$  at  $p\leq 0,05$ ). That is, a person who is dominated by a pathogenic type of thinking, in the case of a stressful situation, resorts or to avoid, or to impulsive, illconsidered actions. The use of the "Escape" coping strategy also affects the increase in the stress index according to the PSM-25 method ( $r=0,384$  at  $p\leq 0,05$ ), and to increase the use of psychological protection against guilt ( $r=0,597$  at  $p\leq 0,05$ ) and shame ( $r=0,263$  at  $p\leq 0,01$ ).

Thus, summarizing the results of the formative experiment, it is possible to argue that there is a pattern of influence of sanogenic thinking on stress-coping behavior of the individual and the level of stress in general. To confirm this experimental hypothesis, the method of linear regression equations was used. Analysis of the equations suggests that sanogenic thinking can be a factor in constructive, adaptive and effective stress-coping behavior. High levels of stress and a state of psychological fatigue, which may indicate maladaptation and mental discomfort, can be reduced and significantly reduced by the individual by changing the style of thinking from pathogenic to sanogenic. The reduction of stress is due to the fact that the individual begins to use proactive coping strategies: "Positive reassessment", "Self-control", "Planning to solve the problem", "Assertive action", "Problem solving" - as well as adaptive cognitive, emotional and behavioral strategy. In addition, stress reduction is also due to a reduction in the use of ineffective coping strategies ("Confrontation", "Distancing", "Escape", "Impulsive actions"). Below is a description of the coping behavior of a person who is dominated by sanogenic type of thinking.

The individual is able to control their own negative experiences that arise in connection with the problem, minimizing the impact of negative emotions on the assessment of the situation and the choice of behavioral strategy. The analysis of a stressful situation has a purposeful character, focused on development of strategies of the decision of problems and planning of own actions taking into account objective conditions, past

experience and available resources. The individual is able to constructively solve difficulties through a comprehensive analysis of their own emotional state and positive rethinking. Negative events are seen as an incentive for personal growth. There is also the independence of the individual from external evaluations, independence in regulating their own behavior and responsibility for it. A person who thinks sanogenically is able to better assess their own resources in coping difficult situations, accompanied by an optimistic attitude to the future. There is also the ability to assess their own expectations, which a person attributes to a partner, events, circumstances and which, in case of disagreement, cause resentment, make it impossible to realize the unconscious. The individual perceives both himself and others as "real", refuses to compare himself, thereby reducing the stress of experiencing negative emotions, which, in turn, reduces the level of effort from stress.

The analysis showed that the study of personality theory and practice of sanogenic thinking allows you to expand awareness of emotional mental operations and acquire skills and abilities to introspect their own emotions when experiencing stress. That is, sanogenic thinking can be a factor in stress-coping behavior of the individual.

Strategies that a person begins to use in stress, using in the process of coping sanogenic reflection and thinking, can be combined into one group - sanogenic type of coping. This type of coping includes coping strategies, which are primarily aimed at solving problems and controlling emotions, as well as confident actions and a positive reassessment of the situation. Sanogenic coping helps to reduce the level of stress experienced by the individual.

Thus, it should be noted that sanogenic thinking in this model of stress-coping behavior of the individual acts as a factor influencing the component of cognitive assessment of the situation. Sanogenic reflection skills allow a person to think about a crisis situation and give it a new meaning, thus coping stress. In the framework of this work, under the "reflection" of the situation is meant a cognitive processing of information that allows individuals to successfully allocate their own resources to maintain health and use effective and adaptive coping strategies.

**The scientific novelty of the obtained results is that in the work for the first time:**

- the place of sanogenic thinking in the process of overcoming stress by a person is substantiated;
- developed a theoretical model of the influence of sanogenic thinking on the choice of coping strategy of the individual;

- the influence of sanogenic thinking on stress-overcoming behavior of the person is proved;  
**expanded and deepened:**
- provisions on sanogenic thinking, determines the style of psychological response of the individual to the action of external factors and is based on the mechanism of sanogenic reflection;
- the concept of "sanogenic reflection", which is defined as a special type of systemic reflection, which consists in the possibility of identifying and "thinking" affective programs of personality behavior;
- ideas about the types of existing coping strategies: sanogenic and pathogenic type of coping;  
**specified:**
- the concept of sanogenic reflection in the context of stress-coping behavior of the individual.

The results of the study can be recommended for use in the educational work of school teachers, high education institutions teachers, psychologists, social workers, deputy company commanders for moral and psychological support in the Armed Forces of Ukraine. The main provisions and conclusions allow to enrich the curriculum in general psychology, social psychology, psychology of crisis situations, psychology of social work, psychology of emergency actions, psychotherapy, psychological counseling, psychodiagnostics on aspects of stress-coping behavior and its characteristics that affect efficiency and psychological health of the individual. The obtained data can be the basis for the development of trainings on the formation of effective coping behavior in stressful situations. Practical psychologists receive a new tool in dealing with psychological stress and prevention of its further occurrence. Thanks to the research, the practice of teaching sanogenic thinking in the mobile application "Sanogenic Thinking" by Yu. Orlov (2006) was scientifically substantiated, modernized and modified.

## Conclusions

Based on the analysis of theoretical and methodological development of the problem, it is determined that one of the key components in the process of human response to stress is a cognitive assessment of the situation, which is determined by the peculiarities of human understanding of events that occur with it. Coping a stressful situation is impossible without cognitive "processing", which becomes available through reflection. The role of the influence of reflection on the choice of coping strategy of

the individual is that reflective individuals choose more adaptive and effective strategies. The position on sanogenic reflection and sanogenic thinking is generalized and expanded. Sanogenic reflection is defined in the work as a special type of systemic reflection, which consists in the ability to identify and "reflect" on negative affective behavior programs, which in turn leads to physical and psychological well-being. Under "reflection" is understood the possibility of isolating in your own consciousness your own Ego, emotion, and its reasons. Sanogenic reflection is a means of achieving sanogenic thinking. Sanogenic thinking is a style of psychological response of an individual to the action of external factors, which is based on the mechanism of sanogenic reflection. It is the presence of sanogenic reflection in the individual and determines the nature of his thinking - sanogenic or pathogenic.

Taking into account the theoretical and methodological analysis of the psychological nature of stress and personal conditions of stress-coping behavior of the individual, a theoretical model of the influence of sanogenic thinking on the choice of coping strategy is organized. Strategies that a person begins to use in stress, using in the process of coping sanogenic reflection and thinking, are combined into one group - sanogenic type of coping. This type of coping includes coping strategies, which are primarily aimed at solving the problem and controlling emotions, as well as confident actions and a positive reassessment of the situation.. Sanogenic coping helps to reduce the level of stress experienced by the individual. Sanogenic thinking in this model of stress-coping behavior of the individual acts as a factor influencing the component of cognitive assessment of the situation.

The diagnostic stage of the study of the control and experimental group allowed to determine that both groups are characterized by a manifestation of a high degree of mental stress, are pronounced components of stress, dominated by strategies "Avoidance" and "Emotional response"; cognitive, emotional and behavioral copings are ineffective and non-adaptive; stress-coping behavior of the subjects indicates the predominance of pathogenic type of thinking and protective reflection from shame, resentment, guilt and failure.

Analysis of the results of the formative experiment showed that the high level of stress and psychological fatigue is reduced by changing the style of thinking from pathogenic to sanogenic. The individual is able to control their own negative experiences that arise in connection with the problem, minimizing the impact of negative emotions on the assessment of the situation and the choice of behavioral strategy. The analysis of a stressful situation has a purposeful character, focused on development of strategies of



the decision of problems and planning of own actions taking into account objective conditions, past experience and available resources. The individual is able to constructively solve difficulties through a comprehensive analysis of their own emotional state and positive rethinking. Negative events are seen as an incentive for personal growth. There is also the independence of the individual from external evaluations, independence in regulating their own behavior and responsibility for it. A person who thinks sanogenically is able to better assess their own resources in overcoming difficult situations, accompanied by an optimistic attitude to the future. There is also the ability to assess their own expectations, which a person attributes to a partner, events, circumstances and which, in case of disagreement, cause resentment, make it impossible to realize the unconscious. The individual perceives both himself and others as "real", refuses to compare himself, thereby reducing the stress of experiencing negative emotions, which, in turn, reduces the level of effort from stress state.

Relationships between the level of development of sanogenic thinking and coping strategies used by the individual are revealed. Regression analysis showed that the study of personality theory and practice of sanogenic thinking allows you to expand awareness of emotional mental operations and acquire skills and abilities to introspect their own emotions, experiences in coping stress. That is, sanogenic thinking can be a factor in stress-coping behavior of the individual.

---

## References

---

- Adamyan L. I., (2012) *Sanogennaya refleksiya kak faktor psikhologicheskoy ustoychivosti lichnosti* [Sanogenic reflection as a factor of psychological stability of a person]: dissertation of a Candidate of Psychological Sciences: specialty 19.00.01 "General psychology, personality psychology, history of psychology." Moscow, 172 p.
- Bezliudnyi O., Kravchenko O., Maksymchuk B., Mishchenko M., Maksymchuk, I. (2019) Psycho-correction of burnout syndrome in sports educators (2019). *Journal of Physical Education and Sport*, 19 (3), Art 230 pp. 1585.  
<http://efsupit.ro/images/stories/septembrie2019/Art%20230.pdf>
- Folkman S., Lazarus R. S., DunkelSchetter C., DeLongis A., Gruen R., (1986) The dynamics of a stressful encounter: Cognitive appraisal, coping and encounter outcomes // *Journal of Personality and Social Psychology*. № 50. P. 992–1003.
- Gerasymova, I., Maksymchuk, B., Bilozeroва, M., Chernetska, Yu., Matviichuk, T., Solovyov, V., & Maksymchuk, I. (2019). Forming professional mobility in future agricultural specialists: the sociohistorical context. *Revista Romaneasca*

- pentru Educatie Multidimensionala*, 11(4), 345-361.  
<https://doi.org/10.18662/rrem/195>
- Heim E. , Willi J. (1986). *Psychosoziale Medizin: Gesundheit und Krankheit in bio-sozialer. Sicht* Springer. № 1. P. 132–137.
- Hobfoll S. E. Social Support: Will you be there when I need you? // *A lifetime of relationships* / N. Vanzetti and S. Duck (eds.). California: Brooks/Cole Publishing Co, 1996. P. 12.
- Kananchuk L. A. (2010). *Sanogennaya refleksiya kak faktor adaptatsii studentov v polietnicheskoy srede vuz'a* [Sanogenic reflection as a factor of adaptation of students in the multiethnic environment of the university: dissertation of a Candidate of Psychological Sciences: specialty 19.00.01 "General psychology, personality psychology, history of psychology." Moscow, 174 P.
- Kraynova Yu. N. (2010). *Sanogennaya refleksiya v strukture emotsional'noy kompetentnosti budushchikh pedagogov* [Sanogenic reflection in the structure of emotional competence of future teachers: dissertation of the candidate of pedagogical sciences: specialty 19.00.07 "Educational psychology". Moscow, 166 p.
- Leontiev A. N., (1988) *Deyatel'nost'. Soznanie. Lichnost'* [Activity. Consciousness. Personality] // Selected psychological works: in 2 volumes. Moscow, Volume 2. pp. 94–231.
- Maksymchuk, B., Gurevych, R., Matviichuk, T., Surovov, O., Stepanchenko, N., Opushko, N., Sitovskiy, A., Kosynskiy, E., Bogdanyuk, A., Vakoliuk, A., Solovyov, V., & Maksymchuk, I. (2020a). Training Future Teachers to Organize School Sport. *Revista Romaneasca Pentru Educatie Multidimensionala*, 12(4), 310-327. <https://doi.org/10.18662/rrem/12.4/347>
- Maksymchuk, B., Matviichuk, T., Solovyov, V., Davydenko, H., Soichuk, R., Khurtenko, O., Groshovenko, O., Stepanchenko, N., Andriychuk, Y., Grygorenko, T., Duka, T., Pidlypniak, I., Gurevych, R., Kuzmenko, V., & Maksymchuk, I. (2020b). Developing Healthcare Competency in Future Teachers. *Revista Romaneasca Pentru Educatie Multidimensionala*, 12(3), 24-43. <https://doi.org/10.18662/rrem/12.3/307>
- Morozyuk S. N., Miroshnik E. V., (2006) *Sanogennyi stil' myshleniya. Upravleniye emotsiyami. «Obida»: modul'no-kodovoye uchebnoye posobiye v mobil'noy sisteme obucheniya KIPM k tsiklu kursov po beskonfliktnoy adaptatsii i samorazvitiyu lichnosti* [Sanogenic style of thinking. Emotion management. "Resentment": a modular-code textbook in the KIPM mobile training system for a cycle of courses on conflict-free adaptation and personality self-development]. Moscow: Prometheus, 102 p.
- Nerubasska, A., Maksymchuk, B. (2020a). The Demarkation of Creativity, Talent and Genius in Humans: a Systemic Aspect. *Postmodern Openings*, 11 (2), 240-255.

<https://www.lumenpublishing.com/journals/index.php/po/article/view/2625>

- Nerubasska, A., Palshkov, K., & Maksymchuk, B. (2020b). A Systemic Philosophical Analysis of the Contemporary Society and the Human: New Potential. *Postmodern Openings*, 11(4), 275-292.  
<https://doi.org/10.18662/po/11.4/235>
- Norman S. (2017) *Koping-povedeniye v stressovykh situatsiyakh* [Coping behavior in stressful situations] (D.F. Endler, D.A. James, M.I. Parker; adapted version by T.A. Kryukova). URL : <http://www.gurutestov.ru/test/193> (date of the application: 12.07.2017 )
- Orlov Yu. M., (2006) *Ozdoravlivayushcheye (sanogennoye) myshleniye* [Health (sanogenic) thinking. Book 1, Moscow: Sliding, 2nd edition, revised 90 p. (Series: Behavior Management).
- Palamarchuk, O., Gurevych, R., Maksymchuk, B., Gerasymova, I., Fushtey, O., Logutina, N., Kalashnik, N., Kylivnyk, A., Haba, I., Matviichuk, T., Solovyov, V., & Maksymchuk, I. (2020). Studying Innovation as the Factor in Professional Self-Development of Specialists in Physical Education and Sport. *Revista Romaneasca Pentru Educatie Multidimensionala*, 12(4), 118-136.  
<https://doi.org/10.18662/rrem/12.4/337>
- Sheremet M., Leniv Z., Loboda V., Maksymchuk B. (2019) The development level of smart information criterion for specialists' readiness for inclusion implementation in education. *Information Technologies and Learning Tools*, 72, 273-285. <https://journal.iitta.gov.ua/index.php/itlt/article/view/2561>
- Wasserman L.I., Ababkov V.A., Trifonova E.A., (2010) *Sovladaniye so stressom: teoriya i psikhodiagnostika* [Coping with stress: theory and psychodiagnostics]. St. Petersburg: Rech, 192 p.