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## **HEALTH METHODOLOGY FOR REDUCING ANXIETY AND SUPPORTING THE FUNCTIONAL HEALTH OF CHILDREN**

The health deterioration of children in Ukraine largely depends on such factors as economic instability in the country, environmental pollution, poor nutrition, lack of health intervention. A particularly important factor is the lifestyle.

Health is an integral characteristic of an individual and determines the quality of life. Preservation and strengthening of student's health, the increase of motor activity level, development and further improvement of basic physical qualities are the main tasks of physical education of primary school children and the priority directions of the development of our society. Health-improving, pedagogical and educational tasks should be solved in a complex, only in this case the effective multipurpose influence and development of primary school children will be effective. The purpose of the study – to develop the methodology of using health-improving exercises aimed at reducing the level of anxiety and maintaining the optimal level of the functional state for primary school children during a full-fledged war. Research organization. The study was performed from April 2022 to October 2022 (including the summer holidays) at the premises of General Academic School № 35, Dnipro. The experimental groups consisted of 17 boys and 13 girls; the control groups consisted of 16 boys and 14 girls, who were classified into the main medical group according to the health condition. The developed methodology consists of two blocks that complement each other and thus have a comprehensive impact on the children: theoretical and practical. Results. The data obtained during the research revealed both positive and negative dynamics. The obtained data of the analysis of anxiety according to the Philips psychology test showed very interesting results. Thanks to the developed methodology, such aspects as: experiencing social stress, frustration of the need to achieve success, fear of self-expression and low physiological resistance to stress were eliminated for children. The obtained data will complement the existing ones and will make it possible to contribute to the study. In our research, the data obtained by the Kettle index after the implementation of the developed health-improving methodology were arranged as follows - in the experimental group the indicators increased by 16.72% ( $p < 0.05$ ), and in the control group only by 8.51% ( $p < 0.05$ ). Movement is very important for primary school children and has a positive effect on weight and height. Analysing the data obtained according to the Skibinski index, it was noted that all of them significantly increased, which means the functions of the respiratory and cardiovascular systems of schoolchildren were within the norm and developed in accordance with the laws of child's age physiology. The data of the Ruffier's functional

test in the control group became lower (position average 55.62% and below average 44.38% level for the assessment of physical performance ( $p < 0.05$ ) under the influence of distance learning, because it led to a sedentary lifestyle. On the contrary, the data of the experimental group improved due to the developed method – the position of the average 71.58% and above the average 28.42% level for the assessment of physical performance ( $p < 0.05$ ). But the experimental groups showed the best result, this is due to the fact that while building the methodology we took into account not only sensitive development, but also those aspects that would motivate children to develop and maintain both mental and physical health. Conclusion. The obtained results testify the effectiveness of developed methodology, which consisted of two blocks with the prioritized use of health-improving exercises as a new tool for the healthy lifestyle formation.

*Keywords: primary school children, functional health, methodology, health activities, anxiety, pedagogical tools to overcome anxiety states.*

### **Шуба Л.В, Шуба В.В, Шуба В.О. Оздоровча методика нівелювання тривожності та підтримки функціонального здоров'я дітей.**

Здоров'я є інтегральною характеристикою особистості і визначає якість життя. Збереження та зміцнення здоров'я дітей, підвищення рівня рухової активності, розвиток і подальше вдосконалення основних фізичних якостей є основними завданнями фізичного виховання молодших школярів і пріоритетними напрямками розвитку нашого суспільства. Оздоровчі, педагогічні та виховні завдання мають вирішуватися в комплексі. Тільки в цьому випадку результативним та ефективним буде багаточільовий вплив на розвиток учнів початкової школи. Мета дослідження – розробити методику використання вправ оздоровчої спрямованості, спрямовану на зниження рівня тривожності та підтримку оптимального рівня функціонального стану дітей початкової школи під час повномасштабної війни. Організація дослідження. Дослідження проводилося з квітня 2022 р. по жовтень 2022 р. (включаючи літні канікули) на базі загальноосвітньої школи № 35 м. Дніпра. Експериментальні групи склалися з 17 хлопців і 13 дівчат; контрольні групи склали 16 хлопців і 14 дівчат, які за станом здоров'я були віднесені до основної медичної групи. Розроблена методика включала два блоки, що доповнювали один одного і, таким чином, мали комплексний вплив на дітей: теоретичний і практичний. Результати. Отримані дані протягом дослідження виявили як позитивну, так і негативну динаміку. Показники тривожності коливались залежно від емоційного стану дитини. Але найкращий результат показала експериментальна група. Це пов'язано з тим, що при побудові методики врахували не тільки сенситивний розвиток, а ще й ті аспекти, які б мотивували дітей до розвитку та збереження здоров'я як ментального, так і фізичного. Висновки. Отримані результати свідчать про ефективність розробленої нами методики, яка складалася з двох блоків із пріоритетним використанням вправ оздоровчої спрямованості як нового засобу формування здорового способу життя.

*Ключові слова: учні початкової школи, функціональне здоров'я, методика, оздоровчі вправи, тривожність, педагогічні засоби подолання тривожних станів.*

**A**rticulation of issue and literature route. The modern world of the Ukrainian children changed February 24, 2022, which was the beginning of constant anxiety and fear for themselves and their relatives. Anxiety is a negative emotional experience characterized by the expectation of an uncertain danger, diffuse and undifferentiated fears. Fear is a negative emotional reaction to a specific (real or imagined) source of danger. Systematic experience of emotions such as fear, anxiety and the development of personal anxiety can lead to persistent psycho-emotional disorders, the emergence of inhibitions, behavioural disorders, communication problems, general adaptation and disorders of personal development. Today the number of anxious children has increased, characterized by high anxiety, uncertainty, and emotional instability. Anxiety disturbs not only educational activities; it begins to destroy personal structures.

Many psychologists and teachers dealt with the problem of children's anxiety and its level reduction: R. Nemov (identified the peculiarities of children's age development, their education), A. Pryhozhan (studied anxiety as a state and a stable functional organization at different stages of childhood: from older preschool to early adolescence), E. Rogov (designated a complex of corrective methods and exercises necessary in the work of a psychologist in the educational sphere.) and others [И.Д. Бех, 2015; В.И. Воронова, 2017; Toner, Claire, 2021].

Anxiety must be distinguished from disturbance, as these at first glance similar concepts do not mean the same thing. Disturbance is a manifestation of concern that has unstable and situational nature. Anxiety manifests itself in any kind of human activity, it is not related to a certain situation and always accompanies a person. It is also worth distinguishing a person's fear of some-

thing specific. In this case, it should be stated about the fear manifestation, e. g. fear of darkness or heights. Fear should be considered as a reaction to a very certain and immediate threat. But anxiety is considered as a feeling of an uncertain threat, which does not have a specific object and in most cases has an imaginary nature [И.Д. Бех, 2015]. Taking into account the above analytical material, it is very important to preserve the mental health of the Ukrainian children.

A child's health (mental and physical) is the resistance expression of the growing organism to extreme and painful influences. At each stage of ontogenesis, stability is determined by achieving optimal compliance with the basic physiological functions of the body [Ю. Павлова, 2016; Lopes, Santos, Pereira, Lopes, 2013; Shuba, 2016].

Health-improving technologies and systems are the ways of activities realization aimed at achieving and supporting physical development and reducing the incidence of diseases by means of physical education and health improvement. These are the basic rules for the use of knowledge and skills, ways of organizing specific actions necessary for the implementation of physical culture and recreational activities. During exercising, there is a purposeful impact on the complex of natural body properties, which belong to the physical qualities of a person. It is possible to strengthen the functional state of the organism in a certain range and lead to progressive adaptation changes with the help of recreational physical exercises and other means of physical education [B.I. Воронова, 2017; Gaetano, 2016; Ghyppo, Tkachov, Orlenko, 2016]. It manifests itself in increased level of efficiency, health strengthening, reducing the level of anxiety, body building improvement, positively influences the development of memory, thinking, children's attention, improvement of physical qualities, motor preparedness and physical readiness for life, increases and diversifies their physical abilities [И.Д. Бех, 2015; Shuba, 2016].

A rational motor regime is necessary in order to solve health-improving problems. Adequate physical activity contributes to the activation of phagocytosis (consequently the increase of immunity), and excessive – its suppression, which coincides with a decrease in a number of other vital functions of the body [Ю. Павлова, 2016; Lopes, Santos, Pereira, Lopes, 2013; Toner, Claire, 2021].

In fundamental works of J. Best, N. Khan, C. Hillman, Yu. Pavlova, L. Shuba, V. Shuba is established the integration of cognitive and motor activities in the system of educating and upbringing schoolchildren [Best, 2010; Khan, Hillman, 2014; Lopes, Santos, Pereira, Lopes, 2013; L. Shuba, V Shuba, 2020]; F. Fuaddi, T. Tomoliyus, P. Sukoco, S. Nopembri, A. Van der Niet, E. Hartman, J. Smith, C. Visscher – identified varieties of motor activity and their influence on the development of motor qualities [Fuaddi, Tomoliyus, Sukoco, Nopembri, 2020; Van der Niet, Hartman, Smith, Visscher, 2014]; N. Khan, C. Hillman, M. Schmidt, F. Egger, V. Benzing, K. Jäger, A. Conzelmann, C. Roebbers, C. Pesce – the influence of common forms, methods and principles on the development of mobile knowledge and skills that contribute to increasing the level of motor activity among primary school children [Kirk, 2010; Schmidt, Egger, Benzing, Jäger, Conzelmann, Roebbers, Pesce, 2017]. These studies reflect the main aspects of the influence of various ways of using physical education for the harmonious development of a young person.

Therefore, in connection with the foregoing, it was noted that our research topic is relevant and timely.

**The purpose of the study** – develop the methodology of using health-improving exercises aimed at reducing the level of anxiety and maintaining the optimal level of functional state for primary school children during a full-fledged war.

**Presentation of the main study material.** The study was performed April 2022 – October 2022 (including summer holidays) at the premises of General Academic School № 35, Dnipro. Experimental groups consisted of 17 boys and 13 girls; control groups consisted of 16 boys and 14 girls, who were classified into the main medical group according to health condition.

Taking into account the emotional and anxious state of primary school children and their parents, we developed a health-improving methodology that contributed to the levelling of negative aspects. It included two blocks that complement each other and thus have a comprehensive impact on the children: theoretical and practical.

1. The theoretical block included topics aimed at understanding the healthy way of life and the impact of physical exercises on the body; behavioural safety; first aid basics; the ability to react "correctly" to specific phenomena – lack of light, water, the Internet; also, if he / she is lost,

where to go; explain to the child the thing he / she is afraid of, how this object is built. And when children talk about all these aspects together with their parents, they all become more emotionally calm, confident, and the feeling of anxiety is reduced.

We also used fairy tale therapy in the methodology. Fairy tale therapy is the oldest method of practical psychology in human civilization and one of the youngest methods in modern scientific practice. Fairy tale therapeutic influence is carried out with the help of five types of fairy tales: artistic, didactic, psych corrective, psychotherapeutic and meditative. Appropriate fairy tales were selected for each situation and case, so that the child together with his/her parents could analyse each situation. Fairy tale therapy in the correction of children's anxiety is the safest and most interesting methodology. With the help of the fairy tale, you can understand and discuss with the child the reasons for his / her insecurity, anxiety, timidity, and what is quite important, the child processes his / her problem through his / her own emotional state.

2. The practical block. When the appropriate exercises are included in health activities, they can influence the stimulation of certain systems, thereby increasing their level of functioning, moreover, the level of health.

The developed method consists of ten sets, which were conducted in the form of games with child's favourite music and changed every three weeks. We left a few exercises from the previous set to make the child comfortable while changing the set. That's why a pupil was positive about the changes in the complex and always ready to perform the following proposed exercises. But the selected physical exercises were appropriate not only in terms of physiological and functional orientation, but also in terms of education and aesthetic. Due to the large number of exercises in physical education, the developed complexes could be performed indoor and outdoor [Best, 2010; Kuffner, 2013]. Special equipment and a lot of space are not needed. It was also very important to eliminate anxiety that the children performed these complexes with their parents, which contributed to the restoration of emotional peace and confidence.

There was always musical accompaniment. Firstly, it contributed to the emotional return of children to a "peaceful" life, and secondly, it taught them that life went on and it is necessary to adapt and see positive moments.

The process of doing exercises with the help of music is divided into three stages:

– 1<sup>st</sup> stage – initial training for new movements with music – the main actions at this study stage include: the formation of motor task; an indication of requirements to students; the allocation of a new movement link with the previously studied, an explanation and a display of the corresponding content of the pace and rhythm of motion using music;

– 2<sup>nd</sup> stage – advanced learning – children master the ability to understand correctly music and perform movements according to the means of musical expression, we constantly monitor the children's fulfilment of movements according to the pace and rhythm, correct mistakes;

– 3<sup>d</sup> stage – the consolidation and improvement of musical-rhythmic exercises – is aimed to stabilize and improve movements in correlation to music.

We picked up the music, both for individual exercises and tasks and for completed groups or series of exercises using different kinds of music.

To determine the effectiveness of the developed methodology, we selected indexes (Kettle Index, Skibinski Index), Ruffier's functional test and Philips psychology test – that could be done by parents themselves. This allowed parents to monitor positive changes in the proposed methodology.

The psychology test of diagnosing the level of school anxiety accelerated test to Philips allows assessing not only the level of school anxiety but also the components of general anxiety associated with various areas of a child's life. The questionnaire is quite simple to conduct and process.

The procedure for carrying out the Philips psychology test. The test consists of 58 questions that can be read to students and can be completed in writing. Each question must be answered "yes" or "no". When answering a question, you need to write down its number and the answer "+" if you agree with it and "-" if you disagree. When processing the research results, we use a table with presented anxiety factors (syndromes), which we use to process the research results. The answers that match the key are manifestations of anxiety. During processing, the total number of discrepancies in the entire text is counted. If it is more than 50%, we can talk about the

increased anxiety of the child; if it is more than 75% of the total number of test questions, it is about a high level of anxiety. The number of matches for each of the 8 anxiety factors highlighted in the text is also counted. The anxiety level is defined as in the first case. The general internal emotional state of the student is analysed, which is largely determined by the presence of certain anxiety syndromes (factors) and their quantities.

The study was aimed not only at identifying the level of anxiety during a full-scale war, but also identifying the health level and physical fitness for primary school children. The level of health was determined with the help of functional tests to identify the physical health rate [И.Д. Бех, 2015; Toner, Claire, 2021].

Mass-growth index Kettle (IK), with the help of which estimated the level of physical development of children, is calculated with the formula:

$$IK = \frac{\text{body mass}}{\text{body length}} (g \cdot \text{cm}^{-1}), \quad (1)$$

Figures of this index allowed to determine a periodic-oriented assessment of changes in the physical development proportionality of the surveyed students. With the help of the Skibinski index ( $IS_k$ ), the combined function of the respiratory and cardiovascular systems was assessed. A spirometer and a stopwatch were used to determine it. Child's VLC (Vital Lungs Capacity) was identified. Then, after a rest for 1-2 minutes, we determined his heart rate in a sitting position. After that, the child performed an inspiration breath hold. The Skibinski index ( $IS_k$ ) was identified with the formula:

$$ISk = \frac{VLC, \frac{ml}{100} * \text{breath holding, c}}{\text{heart rate, hold} * \text{min}} (c.u.) \quad (2)$$

The assessment of the child's functional state was carried out on the basis of the Skibinski index values: less than 5 – low; from 5,1 to 10 – below average; from 10,1 to 30 – average; from 30,1 to 60 – above average; more than 60 – high level [Winnick, Short, 2014].

The obtained data was compared with the middle-aged norms for the children of the chosen age.

The parents were offered Ruffier's functional test to determine the level of physical performance and function of the cardiovascular system. The peculiarity of this test is that after a relatively small load is determined heart rate in different recovery periods. To perform the test, the heart rate of the child was measured for 15 seconds (P1) in a sitting position. After that during 45 seconds the pupil performed 30 squats, bringing his hands forward. Following the exercise in the sitting position, the heart rate was calculated for the first 15 seconds (P2) and the last 15 seconds (P3) of the first minute of the recovery period. Also, due to the fact that the parents performed the tests themselves, they were able to determine to which group their child's health belongs [Winnick, Short, 2014].

Statistical analysis of data was carried out using the SPSS Statistics program.

Every day Ukrainian society in particular children fight for the right of harmonious personality development. Anxiety is inevitable for the primary school age. Moreover, in "moderate doses" it motivates and mobilizes the student. But there is a certain critical point, individual for each person. If the intensity of anxiety is exceeded, a destructive effect on the child's psyche and body takes place. This aspect allowed us to use the Philips psychology test and to analyse in more detail the changes in the indicators of syndromes (factors) before and after the implementation of the developed health-improving methodology.

Content characteristics of each syndrome (factor) before and after the research:

1. General anxiety at school – the child's general emotional state is related to various forms of his involvement in school life. Before the research, this scale had a raised level both in experimental and control groups (54% – 16 children and 56% – 17 children) and a normal level (46% – 14 children and 44% – 13 children). After the research, the indicators improved slightly. This is due to the fact that the children were already on distance learning and they clearly understood how their educational process would take place. After the research, the indicators of the exper-

imental and control groups: increased level (43% – 10 children, 50% – 15 children), normal level (66% – 20 children, 50% – 15 children).

2. Experiencing social stress is a child's emotional state against which his social contacts develop. Before the research, this scale had a high and increased level of social stress both in the experimental (60% – 18 children and 23% – 7 children) and in the control (63% – 19 children and 20% – 6 children) groups. It is connected not only to the "school" stress, but also to the beginning of a full-fledged war. Children felt the general emotional tension of society and the inability to react to circumstances. After the implementation of the technique, the results improved in the experimental group due to the theoretical block, where parents allocated time to communicate and explain to their children the features of this period of life. After the research, the indicators of the experimental and control groups: high level (13% – 4 children, 26% – 8 children), increasing level (53% – 16 children, 63% – 19 children), normal level (33% – 10 children, 10% – 3 children).

3. Frustration of the need for success - an unfavourable mental background that does not allow the child to develop his needs for success, in achieving high results, etc. Before the research, this scale in the experimental and control groups had a high level (70% – 21 children and 70% – 21 children), an increased level (30% – 9 children and 30% – 9 children). This is due to the fact that children generally do not understand how to realize their potential, if the main task now is to stay alive. After the research, the indicators of the experimental and control groups, respectively: high level (40% – 12 children, 56% – 17 children) increased level (40% – 12 children, 44% – 13 children), normal level (20% – 6 children, 0 – children). In our opinion, such a good result in the experimental groups is related to fairy tale therapy. Thanks to correctly selected fairy tales, we were able to convey to children the possibility of achieving success regardless of life circumstances.

4. Fear of self-expression – negative emotional experiences of situations connected with the need for self-expression, self-disclosure, presentation of himself / herself to others, demonstration of capabilities. According to this scale, we obtained the most interesting indicators. Analysing the indicators before and after the experiment it is noted that it is very important for a person, regardless the age and the situation, to demonstrate his / her capabilities even in extreme situations. Therefore, the indicators of the experimental and control groups before/after the study were located at all three levels, respectively: high level (40% / 6% – 12 / 2 children, 46% / 30% – 14 / 9 children), increased level (40% / 30% – 12 / 9 children, 36% / 50% – 11 / 15 children), normal level (20% / 63% – 6 / 19 children, 18% / 20% – 5 / 6 children). But as we can see from the indicators of the experimental groups, the children are more confident in themselves thanks to the developed methodology that gave them skills and abilities for various situations.

5. Fear of a knowledge test – a negative attitude and anxiety in situations of testing (especially public) knowledge, achievements and opportunities. The fear of the knowledge test at the beginning of the study was minimal because almost all of the children's activities were aimed at distracting them from the full-scale invasion. Therefore, in April, 90% of children were at a normal level and only 10% at an increased level, this percentage was observed in the study groups. Even when the emotional state more or less stabilized, the percentages did not change. In our opinion, the fear of knowledge test is more common in middle and high school classes.

6. Fear of not meeting the expectations – orientation to the importance of others in evaluating results, actions, thoughts, anxiety about evaluations. This fear for most children was receded into insignificance, so at the moment, most people have forgotten about "conceived styles of behaviour" and began to behave according to the canons of morality. Therefore, the data before/after the research did not change much: increased level (44% / 34% – 13 / 10 children, 46% / 40% – 14 / 12 children), normal level (56% / 66% – 17 / 20 children, 53% / 60% – 16 / 18 children).

7. Low physiological resistance to stress – features of the psychophysiological organization, reduced by the child's adaptation to situations of a stressful nature, which increase the likelihood of an inadequate, destructive response to an alarming factor in the environment. At the beginning of the study, this scale had very poor indicators in all groups: high level (56% – 17 children – experimental groups, 60% – 18 children – control groups), increased level (44% – 13 children – experimental groups, 40% – 12 children – control groups). After the implementation of the developed methodology, where two blocks are combined and complement each other, the indicators of the experimental groups improved significantly. So: high level (10% – 3 children, 50% –

15 children), increased level (33% – 10 children, 40% – 12 children), normal level (56% – 17 children, 10% – 3 children).

8. Problems and fears in relations with teachers – a general negative emotional background of relations with adults at school, which reduces the success of a child’s studies. This question did not cause a negative reaction, because the children already know all their teachers and have only a positive attitude. Therefore, both in the experimental and control groups before and after the research, all children reached a normal level of anxiety (100%).

It is worth noting that the test not only allows to study the expressiveness and causes of anxiety, but also helps the child to realize his excessive excitement and anxiety.

One of the main indicators of health is physical development, which is characterized by a set of indicators. Anthropometric indexes were used in the work: Kettle mass-growth index, Skibinski index (combined assessment of respiratory and cardiovascular functions) (Table 1).

Table 1

**Statistical values of the Kettle index and the Skibinski index before and after the experiment in the study groups**

Measurements			Kettle index, g · cm <sup>-1</sup>				Skibinski index			
Statistical characteristics			$\bar{x}$	$\sigma$	$V$	$m$	$\bar{x}$	$\sigma$	$V$	$m$
Boys										
Before	experiment	KG (n = 16)	224,51	14,17	7,35	2,81	48,68	3,00	6,16	0,6
		EG (n = 17)	223,08	10,10	5,18	2,01	50,92	3,08	6,04	0,61
After		KG (n = 16)	233,22	11,30	5,2	2,25	52,60	3,39	6,02	0,67
		EG (n = 17)	251,41	10,41	5,03	2,07	59,41	5,09	8,56	1,01
Girls										
Before	experiment	KG (n = 14)	221,07	10,72	5,76	2,77	46,03	2,87	6,16	0,73
		EG (n = 13)	221,63	10,66	5,68	2,75	46,03	2,43	5,20	0,65
After		KG (n = 14)	232,39	8,84	4,41	2,28	50,81	2,45	4,79	0,60
		EG (n = 13)	249,77	9,02	4,47	2,33	54,45	3,12	5,75	0,88

Indexes of physical development reflect the relationship between individual anthropometric indicators and provide an opportunity to evaluate qualitative changes in physical development indicators. We used the Kettle mass-growth index in the study, which allows to estimate the level of physical development; The Skibinski index, with the help of which the function of the respiratory and cardiovascular systems can be combined.

Analysing the data in Table 1, it was noted that according to the coefficient of variation  $V$  to 7,36% in the Kettle index and  $V$  to 6,16% in the Skibinski index, the fluctuations of the results were insignificant. Based on this, we can say that the groups are homogeneous. The Weight-Growth Index of Kettle is within the normal range (220.0-236.4 g · cm<sup>-1</sup>) [Winnick, Short, 2014] for boys and girls in both groups.

After the experiment, the Kettle index data rose to above the average level of physical development in experimental groups, and controlled groups remained at an average level. The increase in the results of the Kettle index was in control and experimental groups, respectively: 10.4% and 13.3% for boys; 9.5% and 12.9% for girls.

In all examined groups, during the experiment, the figures of the Skibinski index were within the range – above the average level of functional state of the child (30-60 c. u). But in this index, the increase in results was in controlled and experimental groups, respectively: 10.0% and 12.8% for boys; 9.9% and 11.3% for girls.

For high-quality and productive research of the child's body we determined physical performance. Physical performance is an integrative expression of human capabilities, refers to the concept of health and is characterized by a number of objective factors. But in a narrower sense, physical performance is considered as a functional state of the cardiovascular and respiratory systems. This approach is fully justified by people who do not go in for sports.

Assessment of children's physical performance by Ruffier's functional test before the experiment characterizes the average level of indicators in both control and experimental groups. This indicates that all children who took part in our research were classified in the main medical group.

According to the results of re-testing of physical performance, the Ruffier's functional test, we obtained the next results after the introduction of the experimental methodology. The results in the experimental group remained positive. Test data were confidently placed at the position of the average 71.58% and above the average 28.42% levels for assessing physical performance ( $p < 0.05$ ). The control group also showed changes, but unfortunately the data displace to the position of the average 55.62% and below the average 44.38% level for assessing physical performance ( $p < 0.05$ ). Such data changes indicate that the children of the experimental group had more active lifestyle due to the introduction of the developed methodology, which they performed every day, despite distance studying and limited communication.

Consequently, the consideration of age-related anatomical and physiological features and level of anxiety is the basis for the construction of a health-improving methodology which will help to stabilize the emotional state, reduce the level of anxiety and improve the health of the younger generation.

**Conclusion.** The established problem of the investigated issue allowed defining and developing experimental health-improving methodology aimed at reducing the level of anxiety and maintaining the optimal level of functional status in primary school children during a full-fledged war.

The team work with parents is important, who for the first time in their lives took indicators for each test and performed exercises with their children. This experience contributed to a more positive attitude towards the means of physical education.

The results presented in the article testify the effectiveness of the developed methodology of using health-improving exercises aimed at reducing the level of anxiety and maintaining the optimal level of functional status for primary school children during a full-fledged war.

**The prospects of further research** are connected with the study of schoolchildren with different health adaptations to physical loads under the influence of mobile games; further study of the personality-oriented approach to physical education of primary school pupils with the accent on memory, thinking, attention, physical qualities and motor skills increment and health strengthening.

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#### **HEALTH METHODOLOGY FOR REDUCING ANXIETY AND SUPPORTING THE FUNCTIONAL HEALTH OF CHILDREN**

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The health deterioration of children in Ukraine largely depends on such factors as economic instability in the country, environmental pollution, poor nutrition, lack of health intervention. A particularly important factor is the lifestyle.

Health is an integral characteristic of an individual and determines the quality of life. Preservation and strengthening of student's health, the increase of motor activity level, development and further improvement of basic physical qualities are the main tasks of physical education of primary school children and the priority directions of the development of our society. Health-improving, pedagogical and educational tasks should be solved in a complex, only in this case the effective multipurpose influence and development of primary school children will be effective. The purpose of the study – to develop the methodology of using health-improving exercises aimed at reducing the level of anxiety and maintaining the optimal level of the functional state for primary school children during a full-fledged war. Research organization. The study was performed from April 2022 to October 2022 (including the summer holidays) at the premises of General Academic School № 35, Dnipro. The experimental groups consisted of 17 boys and 13 girls; the control groups consisted of 16 boys and 14 girls, who were classified into the main medical group according to the health condition. The developed methodology consists of two blocks that

complement each other and thus have a comprehensive impact on the children: theoretical and practical. Results. The data obtained during the research revealed both positive and negative dynamics. The obtained data of the analysis of anxiety according to the Philips psychology test showed very interesting results. Thanks to the developed methodology, such aspects as: experiencing social stress, frustration of the need to achieve success, fear of self-expression and low physiological resistance to stress were eliminated for children. The obtained data will complement the existing ones and will make it possible to contribute to the study. In our research, the data obtained by the Kettle index after the implementation of the developed health-improving methodology were arranged as follows - in the experimental group the indicators increased by 16.72% ( $p < 0.05$ ), and in the control group only by 8.51% ( $p < 0.05$ ). Movement is very important for primary school children and has a positive effect on weight and height. Analysing the data obtained according to the Skibinski index, it was noted that all of them significantly increased, which means the functions of the respiratory and cardiovascular systems of schoolchildren were within the norm and developed in accordance with the laws of child's age physiology. The data of the Ruffier's functional test in the control group became lower (position average 55.62% and below average 44.38% level for the assessment of physical performance ( $p < 0.05$ ) under the influence of distance learning, because it led to a sedentary lifestyle. On the contrary, the data of the experimental group improved due to the developed method – the position of the average 71.58% and above the average 28.42% level for the assessment of physical performance ( $p < 0.05$ ). But the experimental groups showed the best result, this is due to the fact that while building the methodology we took into account not only sensitive development, but also those aspects that would motivate children to develop and maintain both mental and physical health. Conclusion. The obtained results testify the effectiveness of developed methodology, which consisted of two blocks with the prioritized use of health-improving exercises as a new tool for the healthy lifestyle formation.

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