BRAIN. Broad Research in Artificial Intelligence and Neuroscience

ISSN: 2068-0473 | e-ISSN: 2067-3957

Covered in: Web of Science (WOS); PubMed.gov; IndexCopernicus; The Linguist List; Google Academic; Ulrichs; getCITED; Genamics JournalSeek; J-Gate; SHERPA/RoMEO; Dayang Journal System; Public Knowledge Project; BIUM; NewJour; ArticleReach Direct; Link+; CSB; CiteSeerX; Socolar; KVK; WorldCat; CrossRef; Ideas RePeC; Econpapers; Socionet.

2022, Volume 13, Issue 4, pages: 68-80 | <u>https://doi.org/10.18662/brain/13.4/376</u> Submitted: November 4th, 2022 | Accepted for publication: November 18th, 2022

Art Therapeutic Techniques to Provide Psychological Assistance

Inna IVZHENKO¹, Ganna PODOL'S'KA², Iryna DEMCHENKO³, Liudmyla DZHYHUN⁴, Vitalina LYTVYNENKO⁵, Olha KACHEROVA⁶

¹ National Pedagogical University named after M.P.Dragomanova, Ukraine, Inna ivzhenko@ukr.net, https://orcid.org/0000-0003-2224-3292 ² Institute for the Training of Personnel of the State Employment Service of Ukraine, podolskava8@gmail.com, https://orcid.org/0000-0003-3742-9065 ³ National University of Life and Environmental Sciences of Ukraine, irynadi67@gmail.com, https://orcid.org/0000-0003-4302-7564 ⁴ Khmelnytskyi National University, Ukraine, dlm.757678@gmail.com, https://orcid.org/0000-0003-3367-0716 ⁵ Sumy State Pedagogical University, Ukraine, Lvitaline1982@gmail.com, https://orcid.org/0000-0002-9790-289X ⁶ Berdiansk State Pedagogical University, Ukraine, 850lya85@gmail.com, https://orcid.org/0000-0003-3263-561X **Abstract**: The article considers art-therapeutic means for adults and children during the war. The relevance of the article is to help children and adults to use art therapy to develop vitality, psycho-emotional recovery, adaptation to new social conditions, the formation of emotional and volitional self-regulation of behavior.

Objective of the article: to find out the essence of art therapy; to study the consequences of adults and children during wars; consider popular arttherapeutic techniques for the treatment of psychological disorders in victims.

Methods: analysis of scientific literature, system analysis.

Results: According to research on this issue, art therapies are extremely useful and necessary for the treatment of adults and children affected by war. The consequences of adults and children during wars have been studied. The advantages of using art therapy are highlighted. In addition, popular art-therapeutic techniques for the treatment of psychological disorders in victims are considered: sand therapy, music therapy, phototherapy, isotherapy, neurography, associative metaphorical maps. It has been found out what pictures are being drawn by the victims of the current war in Ukraine. It is proved that the art therapy combines a number of branches: art history, pedagogy, psychology, psychotherapy.

Conclusion: therefore, the use of art therapy techniques improves the emotional state of adults and children: reduces fear and anxiety, anger and depression, and so on.

Keywords: Isotherapy; refugee; stress; sand therapy; fairy tale therapies; music therapy, neurography; phototherapy; anxiety.

How to cite: Ivzhenko, I., Podol's'ka, G., Demchenko, I., Dzhyhun, L., Lytvynenko, V., & Kacherova, O. (2022). Art Therapeutic Techniques to Provide Psychological Assistance. BRAIN. Broad Research in Artificial Intelligence and Neuroscience, 13(4), 68-80. https://doi.org/10.18662/brain/13.4/376

Introduction

Today, Ukrainian society is going through extremely difficult times, as Russia has declared a military operation against Ukraine, i. e. in the XXI century a kind of genocide of the Ukrainian people continues. Martial law has been imposed in the country, Ukrainian cities are being bombed, people are dying, homes are being destroyed, and so on. So now adults and children are experiencing traumatic events, stress, depression. The relevance of the article is to help children and adults to use art therapy to develop vitality, psycho-emotional recovery, adaptation to new social conditions, the formation of emotional and volitional self-regulation of behavior.

To begin with, we should consider the essence of the concept of "art therapy". The term "art therapy" was first used by the British artist Hill in 1938 in the book "Art Against Disease". The method of art treatment became unique at that time and interested many doctors (Golovatyuk, 2017). The artist painted wounded soldiers returning from the war, patients of the sanatorium where he was at the time. Observations have shown that the fine arts helped to improve the condition and promote the recovery of patients. Hill (1945) later founded the British Association of Art Therapists and became its president.

According to the authors of the manual Kalka and Kovalchuk (2020, p.7), art therapy is one of the most effective ways to work with clients of any age and with any disorders, and for the individual – it is a way of self-disclosure, self-expression, development and the way to one's own harmonization.

According to Voznesenska and Mova (2007, p. 4) art therapy is an innovative method that promotes the creative disclosure of human abilities and essential potential, mobilization of internal mechanisms of self-regulation and healing.

According to Kozigora (2018, p.198) art therapy is a method of teaching, education and healing through creativity, used in psychotherapy, psychosomatic clinics and in the social sphere. That is, a healing tool that helps children overcome psychological problems to stabilize their emotions, to move from negative to positive thoughts.

According to Dimitrova (2011, p. 3) art therapy is able to actualize the inner potential of each person by simple and ecological means, to promote healing and harmony of personality, to form a creative position of man. Golovatyuk (2017, p. 63) has analyzed the specifics of art therapy by foreign scientists and proved that art therapy is not a "teaching" of fine arts, but the means by which an adult or child can express themselves, express negative emotions, share their experiences.

Voznesenskaya (2021) in the publication names 6 methodical principles of teaching art therapy:

• the principle of tolerant acceptance and perception: worthlessness, lack of criticism, comparison;

• the principle of positive thinking: emphasis on potential, support and stimulation of search activity;

• the principle of reliance on uniqueness: each - a unique personality;

• the principle of security and confidentiality of creativity;

• the principle of spontaneity of creativity: freedom in the pace of work, choice of materials, exercises, styles, genres, the right to experiment;

• the principle of improvisation: the search for their own ways of self-expression, looseness.

The novelty is that art therapy is developing, new techniques are emerging that are becoming extremely relevant and useful for the psychological correction of adults and children affected by the Russian military operation in Ukraine in February-May 2022.

Negative effect of war on the child's psychological state

A review of studies by domestic and foreign authors proves that Hill (1945), Gattaa, Gallo, and Vianello (2014), Lvov and Zhabko(2018), Voznesenskaya (2021), Golovatyuk (2017), Kalka and Kovalchuk (2020) worked on the problem.

Preiss Newman (1995) discusses the causes of stress in children who witnessed the war. The most common trauma was to become a refugee, i. e. to flee one's country for fear of saving one's life. The following reasons are: the death of relatives, injuries of loved ones, being in concentration camps, enduring bullying or seeing the torture of others, constant depression of the mother. Symptoms include severe heavy memories that lead to crying, sleep disturbances, anxiety, and systematic fear.

Lvov and Zhabko (2018) note that children who have been on the territory of hostilities suffer psychological trauma. They are not immediately aware of the surrounding actions, because usually a momentary situation is recorded: the roar of military helicopters, the whistling of falling weapons, the terrible sounds of explosions, burning fire. As a result, post-traumatic symptoms appear on the emotional, cognitive, physiological and behavioral levels. In terms of emotional processes, children develop fear, anxiety, irritability, and tearfulness. From cognitive - children become inattentive, memory deteriorates. At the physiological level of sleep disorders, there are pictures of nightmares, they often complain of headaches, tremors, frequent urination, and twitching. Negative changes are also observed in behavior: actions become more similar to behavior at a younger age, manifestations of aggression, anger, stubbornness, hostility, conflict, and so on. Such disorders can appear for a long time, so they need to be corrected.

The authors of the publication Hill and Jones (1997) conducted a study on the condition of primary school children who witnessed violence in the community: homicides during shootings, physical attacks, group abuse, robbery, rape. The results show that the perception of what was seen caused children severe mental trauma.

Shaw (2003) discusses mental illness in children during the war, i. e. terrorist and bioterrorist acts. Four categories were studied: refugees, children who suffered physical injuries, orphans and children of the military. The consequences of diseases can be classified into 3 stress factors: weak reaction, acute emotional and behavioral disorders, long-term reaction. The affected children were found to have mental disorders, symptoms of post-traumatic stress disorder, mood swings, and aggressive behavior.

Serious negative effects of stress, mental trauma on students' academic performance, and deterioration of mental and physical health are being considered by Beerse et al. (2020).

Noteworthy are studies by Varchmin et al. (2021), which defines the consequences of children's herbs: social exclusion, bullying, discrimination, which at any age can cause serious mental disorders. Such mental disorders are observed in emigrants and refugees (as is typical of the current situation in Ukraine), and can lead to schizophrenia. The main risk factor is child abuse (sexual, physical and emotional). In addition, stressful experiences include bullying, death of parents or relatives, changes in communication with parents.

Advantages of art therapeutics

The study on the development of social skills and skills of psychological recovery is devoted to the textbook by Bogdanova et al. (2017). The authors developed and proposed a correctional and

developmental program for teachers and parents to help children who were in the war zone to overcome stress after psychotraumatic events.

Authors Else et al. (2015) argue that it is art therapy that can influence the development of sensory factors in the cognitive development of a person with mental retardation.

In the social sphere, art therapy is used to help the population in hostilities, in working with offenders, the unemployed and other socially vulnerable groups, pregnant women and their families (Voznesenskaya, & Mova, 2007, p. 18).

Chiang et al. (2019). emphasize the expediency of using art therapy methods (visual arts, music, choreography, drama, writing) for the prevention and treatment of mental disorders in children and adults.

Gattaa, Gallo, and Vianello (2014) prove the effectiveness and necessity of using art therapy with children living in a rehabilitation center. Art therapy as a non-verbal method involves adolescents in both active and passive activities. In this way, children develop their artistic creativity, and thus create their own inner world. Psychiatrists use this technique to overcome depression, post-traumatic stress disorder, and treat schizophrenia. Thus, art therapy will be extremely useful for adolescents, especially in wartime, when children are extremely deeply traced anxiety, fear, panic, and depression.

It should be noted the thesis of Kozigora (2018, p.198), which emphasizes the essence of art therapy. Artistic creative activity is already a kind of art-therapeutic process and gives the opportunity to observe the child in the process of spontaneous creativity, get closer to understanding its interests, values, to see its uniqueness and inner world.

It is worth noting that the publication of Haeyen and Staal (2021), in which the authors determine that art therapy is effective in overcoming traumatic memories that lead to insomnia and nightmares. This treatment method is based on the creation of images, not the use of words. Means of art therapy encourage to imagine, fantasize, play, which creates a creative space of man, which can influence and change the pictures of dreams, the story line to a more positive.

The publication (Smriti et al., 2022) emphasizes that fine arts can restore a person's mental health, i. e. as a result he can feel confident, have sufficient self-esteem, expand social skills and more.

A report from the Vchasno news agency states that the Voice of Children Charitable Foundation conducts art therapy classes for children, as it is known that almost every child in the war zone needs psychosocial support. In their work, teachers and psychologists prefer the art-therapeutic method - "serial drawing". This is "free" drawing, when a child draws for 10 lessons. The negative impact of war on the psycho-emotional state of children can be traced from children's works. First, illustrations of dark colors, which later turn into light shades; sometimes a manifestation of isolation. Anxiety, reluctance to draw. So war, shootings - and as a result of worse grades in education, inattention, forgetfulness and so on. By the way, the traumas of war may not always be immediately felt, seen, because most of them are fixed in the head, heart, soul. Thus, creativity helps a child to improve his mood, reject experiences, makes him become resilient, feel relieved.

Among the advantages of art-therapeutic means, noted by Voznesenska and Mova (2007), there are no age restrictions: whether it is a child or an adult; does not require abilities, talent for art; a means of nonverbal communication, i. e. does not require "open" communication; creative activity is a bridge of cooperation for the client and the specialist; a means to explore yourself; when interacting with art, a person freely, independently creates a work; drawing - the result of mood, human thoughts; tunes in to positive emotions, promotes an active life position, increases self-esteem; self-actualization of personality.

Dimitrova investigates the influence of art therapy as a modern method on the development of children with disabilities (2011). The author emphasizes that correctional training through art therapy helps to eliminate psychogenic disorders in children with speech defects, develops communication skills.

Voznesenska (2020) notes that all citizens are "experiencing" collective trauma due to the events of the war in eastern Ukraine. In order to heal, the author emphasizes two ways to use art for therapeutic purposes:

1) receptive (passive) - perception of works of art;

2) creative (active) - creative self-expression.

It should be noted in the letter of Kotlyar (2022), which tells about art therapy classes with children-migrants who were forced by military action to leave their hometown or village and move to a safe area. In 2015, children painted anti-war drawings during art therapy classes, which show that fear settled in their souls. Later, four years later, the children drew illustrations again, but it is clear that they have become accustomed to everyday life. Drawings of current children in 2022 differ from previous ones in that they are extremely realistic: a tank moving on its native street, not drawn from a book, in the sky enemy planes that attack and result in burning houses, concrete checkpoints, "hedgehogs" . In almost every picture, rockets fly, bombs fall on houses, people die. Of course, every child's work is accompanied by fear, anxiety, aggression. The predominant colors are black and red.

Art therapeutic techniques to provide psychological assistance to adults and children

The work of Borshchenko(2021) is devoted to the research of the use of art therapy means in the formation of emotional stability. During the art-therapeutic lesson the specialist can carry out a number of diagnostic, psychotherapeutic, educational developmental, and corrective tasks. In the course of creative activity, which continues in an atmosphere of comfort, trust, friendliness, children develop a sense of peace, joy, success in their achievements, and an emotional stability (Demchenko et al., 2021; Nenko et al., 2022; Sarancha et al., 2021;). Thus, art therapy combines a number of fields: art history, pedagogy, psychology, and psychotherapy, the unity of this knowledge is necessary for the formation and development of a harmonious personality that has adequate self-esteem, who is intelligent, talented, emotionally stable, and successful.

Voznesenska and Mova (2007, p.17) told that there are two functions of art therapy: diagnostic and therapeutic. The picture is always symbolic, reflects the current state of the author, even if he tried to hide it from others and himself. Each image contains a huge amount of diagnostic material, but can not be the basis for diagnosis. Therapeutic - healing of the individual through art, return to psychological integrity. Thus, art therapy as a unique method with the help of symbolic images helps to heal a person both spiritually and physically.

The foundation of art therapy, according to Kalka and Kovalchuk (2020), is isotherapy, because thanks to the drawing an adult or a child can use colors, images to express their thoughts, feelings, joy, fear and more. The authors note that isotherapy activates higher mental processes: helps to improve communication, a person easily perceives, thinks, improves motor coordination. Any picture and image in it, in a way, act as a psychological protection, in which a person accumulates his traumatic and negative experiences (Kalka & Kovalchuk, 2020, p. 16). In addition, isotherapy improves visual perception, develops thinking, the ability to observe, analyze, remember, cultivate such volitional qualities as demanding work,

accuracy, clarity in the performance of work and responsibility (Kozigora, 2018, p.199).

In addition, the manual (Kalka & Kovalchuk, 2020) discusses in detail the essence of the method, the algorithm and principles of the main areas of art therapy: sand therapy, clay therapy, fairy tale therapy, mandala therapy, collage, mask therapy, metaphorical associative maps. In addition, art-therapeutic techniques in order to help individuals calm emotions and feelings, help to set goals, understand the self-concept (self-esteem, self-perception, self-worth), and can motivate. Pay attention to techniques for research of positive and negative sides in the relationship of the couple; on family relationships, awareness of the peculiarities of the "I". There is a separate story about group art therapy, which is designed to develop skills of group work: competition, leadership, conformism.

In the manual Gridkovets (2018) believes that the main motto of the specialist to help children and adults to overcome the despair, fear, anxiety that migrants experienced in military territory, is "look - listen - guide." The author draws attention to two approaches to the use of sand therapy: Jungian therapy and art therapy practice with sandbox. Jungian therapy helps to decipher the child's internal conflict with the help of figures. Sand therapy is a set of processes aimed at the participant's awareness of inner experience. This method will be useful for children who feel insecure, have low self-esteem. The article notes the advantages of this technique (Gridkovets, 2018, p.103):

• Development of reflection in adults and children;

• harmonization of the emotional state of the participants in the process;

- detection and resolution of internal conflicts;
- development of the emotional sphere in children and their parents;
- increase the level of emotional intelligence;
- disclosure of creative and personal potential.

Ivanova (2009, p. 45) researched music therapy as one of the methods of art therapy and emphasized that music can eliminate fatigue and charge a person with energy, have a positive effect on the circulatory and respiratory systems. Music therapy is divided into 2 types: active - when a person is directly involved: plays a melody on a musical instrument, performs a piece of music singing or claps his hands to the beat of the melody; passive - when a person just listens to the melody. Music therapists claim that each melody affects the human psyche in different ways: religious

- promotes spiritual harmony, peace, soothes pain; and composers' music becomes a "cure" for fatigue, improves mood and stabilizes sleep. But not all classical or modern music can be useful for a person, so here you need to choose only individually.

One of the interesting areas of art therapy is phototherapy, i. e. the use of photographs, thematic images, metaphorically associative maps to work with patients (Boreychuk, 2014). Metaphorical associative maps are a set of pictures on a certain subject, which depict people ("Person", "Personita"), their interactions, household items, abstract paintings ("Ecco"), life situations ("Be. Act. Possess"), ("Facebook"), landscapes, animals, some decks of cards combine the picture with the inscription ("Hasidic wisdom"), etc. ". (Boreychuk, 2014, pp. 14-15).

The work of Krotenko and Frunze (2019, March 12, pp. 72-77) is devoted to the study of neurography as an effective art-therapeutic method of psychological correction of neurotic states in adolescents. Of course, corrective work should be designed to reduce stress, increase understanding of one's emotions, teach self-control and self-regulation. "Neurography is a technique of transferring the image of problems or complex situations into visual images" (Krotenko & Frunze, 2019, p.74). That is, neurography explores the personality, based on the symbols of geometric shapes: circle, triangle, line. It is appropriate to combine neurography with music therapy or fairy tale therapy, which can relieve stress.

Dragomanova (2020) raises certain aspects of the involvement of the individual in the process of psycho-correctional work. The author notes that the traumatic state of a person can be transformed by influencing self-knowledge, self-motivation and the development of personal qualities. For this purpose, an associative metaphorical deck of cards "Therapeutic Painting" was developed. After all, "scientists and artists have long noticed that simply in the process of contemplating certain landscapes or portraits, a person's mood improves, he feels better on mental and physiological levels" (Dragomanova, 2020, p.41). For this method to be successful, the following are prerequisites: openness, cooperation, non-verbal feedback between the specialist and the patient.

It should be noted the post of Gundertailo (2017), which emphasizes that the use of art therapy techniques improves the emotional state of adults and children: reduces fear and anxiety, anger and depression and more.

Conclusion

Thus, the article emphasizes that art therapy is extremely useful and necessary for the treatment of adults and children affected by the war. The considered issue "Art-therapeutic means for adults and children during the war" is quite relevant for Ukrainians.

Articles and publications of foreign (Hill, 1945; Gattaa et al., 2014) and domestic scientists (Gridkovets, 2018; Gundertailo, 2017; Golovatyuk, 2017; Kalka & Kovalchuk, 2020; Kozigora, 2018; Lvov & Zhabko, 2018; Voznesenska, 2021). The essence of the concept of "art therapy" is given. It has been found that the term "art therapy" was first used by the British artist Hill (1945), who later founded the British Association of Art Therapists. In addition, 6 methodological principles of teaching art therapy are named. The consequences of adults and children during wars have been studied. The advantages of using art therapy are highlighted. In addition, popular art-therapeutic techniques for the treatment of psychological disorders in victims are considered: sand therapy, music therapy, phototherapy, isotherapy, neurography, associative metaphorical maps. It has been found out what pictures are being drawn by the victims of the current war in Ukraine. It is proved that art therapy combines a number of branches: art history, pedagogy, psychology, psychotherapy.

The novelty is that art therapy is developing, new techniques are emerging that are becoming extremely relevant and useful for the psychological correction of adults and children affected by the Russian military operation in Ukraine in February-May 2022.

Thus, the use of art therapy techniques improves the emotional state of adults and children: reduces fear and anxiety, anger and depression, etc.

References

- Beerse, M. E., Van Lith, T., & Stanwood G. (2020). Therapeutic psychological and biological responses to mindfulness-based art therapy. *Stress & Health*, 36(4), 419-432. <u>https://doi.org/10.1002/SMI.2937</u>
- Bogdanov, S. O., Gnida, T. B., Zaleska, O. V., Lunchenko, N. V., Panok, VG, & Solovyova, V. V. (2017). Correctional and developmental program for the formation of resistance to stress in preschool children and schoolchildren "Safe Space". Unicef.
- Boreychuk, I. (2014). Mechanisms of functioning of metaphorical associative maps in psychological counseling. Space of art therapy: healing resources: *Proceedings of the XI International Interdisciplinary Scientific and Practical Conference. Kyiv.* <u>https://ispp.org.ua/wp-content/uploads/2021/12/art-conf-14.pdf</u>

- Borshchenko, N. O. (2021). The use of art therapy in the formation of emotional stability of preschool children. Pednauk.
- Chiang, Mathew, Reid-Varley, Bernard, W., Fan, & Xiaoduo (2019). Creative art therapy for mental illness. *Psychiatry Research*, 275, 129-136. https://doi.org/10.1016/j.psychres.2019.03.025
- Demchenko, I., Maksymchuk, B., Bilan, V., Maksymchuk, I., & Kalynovska, I. (2021). Training Future Physical Education Teachers for Professional Activities under the Conditions of Inclusive Education. BRAIN. Broad Research in Artificial Intelligence and Neuroscience, 12(3), 191-213. https://doi.org/10.18662/brain/12.3/227
- Dimitrova, L. M. (2011). Art therapy as a modern method of integrating children with physical disabilities into society. Core. <u>https://core.ac.uk/download/pdf/47219191.pdf</u>
- Drahomanova, T. (2020). Attracting personal resources in the process of psychocorrectional work with the help of metaphorical maps "Therapeutic Painting". Proceedings of the XVIII International Interdisciplinary Scientific and Practical Conference Kyiv, 2020 (pp. 40-41). National Academy of Pedagogical Sciences of Ukraine. <u>https://ispp.org.ua/wpcontent/uploads/2021/02/art-conf-20.pdf</u>
- Else, J., Ellis, J. E., & Orme, E. (2015). Art expertise modulates the emotional response to modern art, especially abstract. *Frontiers in Human Neuroscience*. https://doi.org/10.3389/FNHUM.2015.00525
- Gattaa, M., Gallo, C., & Vianello, M. (2014). Art therapy groups for adolescents with personality disorders. *The Arts in Psychotherapy*, *41*(1), 1-6. https://doi.org/10.1016/j.aip.2013.11.001
- Golovatyuk, I. G. (2017). Art therapy in a foreign scientific tradition. *Scientific* Bulletin of Uzbgorod University. <u>https://cutt.ly/lHzMvV7</u>
- Gridkovets, L. (2018). Fundamentals of rehabilitation psychology: overcoming the consequences of the crisis. Osce.
- Gundertailo, Yu. D. (2017). Art-therapeutic technologies of providing psychological assistance to internally displaced. Academia.edu. <u>https://cutt.ly/4Hkw7Vd</u>
- Haeyen, S., & Staal, M. (2021). Imagery Rehearsal Based Art Therapy: Treatment of Post-traumatic Nightmares in Art Therapy. *Frontiers in Psychology*. <u>https://doi.org/10.3389/FPSYG.2020.628717</u>
- Hill, A. (1945). Art Versus Illness: A Story of Art Therapy. George Allen & Unwin.
- Hill, H. M., & Jones, L. P. (1997). Children's and parents' perceptions of children's exposure to violence in urban neighborhoods. *Journal of the National Medical Association, 89*(4), 270-276.
- Ivanova, V. L. (2009). Art therapy: problems of formation and development. Peter.
- Kalka, N., & Kovalchuk, Z. (2020). Workshop on art therapy: teaching method. Academic Council Lviv State University of Internal Affairs.

- Kotlyar, A. (2022, April 24). War and children. Drawings from the broken world. Art therapy lessons for migrants. ZN,UA. <u>https://zn.ua/ukr/SOCIUM/vijna-ta-diti-maljunki-z-rozbitoho-svitu.html</u>
- Kozigora, M. A. (2018). Art therapy as a means of teaching and educating primary school students. *Molodyy vchenyy [Young Scientist]*, 7(59), 198-201.<u>http://molodyvcheny.in.ua/files/journal/2018/7/44.pdf</u>
- Krotenko, V., & Frunze, A. (2019). Neurography as an effective art-therapeutic method of psychological correction of neurotic states in adolescents. Academia.edu. <u>https://cutt.ly/kHzTOeF</u>
- Lvov, O. O., & Zhabko, N. V. (2018). The importance of prevention and correction of posttraumatic stress disorder. Art-therapeutic approach. Psychological and psychotherapeutic aspects. Academia.edu. <u>https://cutt.ly/1HkrjO7</u>
- Nenko, Y., Medynskyi, S., Maksymchuk, B., Lymarenko, L., Rudenko, L., Kharchenko, S., Kolomiets, A., & Maksymchuk, I. (2022). Communication Training of Future Sports Coaches in the Context of Neurophysiological Patterns. BRAIN. Broad Research in Artificial Intelligence and Neuroscience, 13(1), 42-60. https://doi.org/10.18662/brain/13.1/268
- Preiss, M., & Newman, M. (1995). War stress in children from Bosnia. Univers.
- Sarancha, I., Maksymchuk, B., Gordiichuk, G., Berbets, T., Berbets, V., Chepurna, L., Golub, V., Chernichenko, L., Behas, L., Roienko, S., Bezliudna, N., Rassskazova, O., & Maksymchuk, I. (2021). Neuroscientific Principles in Labour Adaptation of People with Musculoskeletal Disorders. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, *12*(4), 206-223. https://doi.org/10.18662/brain/12.4/245
- Shaw, J. A. (2003). Children Exposed to War/Terrorism. *Clinical Child and Family Psychology Review, 6*, 237–246. <u>https://doi.org/10.1023/B:CCFP.0000006291.10180.bd</u>
- Smriti, D., Ambulkar, S., Meng, Q., Kaimal, G., Ramotar, K., Park, S.Y., & Huh-Yoo, J. (2022). Creative arts therapies for the mental health of emerging adults: A systematic review. <u>https://doi.org/10.1016/j.aip.2021.101861</u>
- Varchmin, L., Monday, C., Treusch, Y., Kaminski, J., & Heinz, A. (2021). Traumatic Events, Social Adversity and Discrimination as Risk Factors for Psychosis. *Frontiers in Psychiatry*. https://doi.org/10.3389/fpsyt.2021.665957
- Voznesenska, O. (2020). Art therapy of communities: art as a means of overcoming collective trauma. Space of art therapy: creativity as a mirror of reality: materials of the XVII International interdisciplinary scientific-practical conference. Kyiv. Retrieved from https://ispp.org.ua/wp-content/uploads/2021/02/art-conf-20.pdf
- Voznesenska, O. (2021). Theory and practice of art therapy: a variety of approaches. Facebook.

https://www.facebook.com/groups/158280630927838/posts/439478052 0611140/

Voznesenska, O., & Mova, L. (2007). Art therapy in the work of a practical psychologist. The use of art technology in education. Doshkillia.