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USE OF CANINE-ASSISTED THERAPY FOR SUPPORTING THE HIGH SCHOOL LEARNERS UNDER STRESS

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ЗАСТОСУВАННЯ КАНІСТЕРАПІЇ ДЛЯ ПІДТРИМКИ ЗДОБУВАЧІВ ВИЩОЇ ОСВІТИ В УМОВАХ СТРЕСУ

Abstract. The article provides a theoretical analysis of current approaches to using the canine-assisted therapy or canine-assisted support as a supportive practice for the high school learners under stress. The relevance of the topic is determined by the growing levels of stress, anxiety, and emotional exhaustion among students, particularly in Ukraine under the wartime conditions, as well as by the need for safe forms of psychological and pedagogical support in educational settings. A synthesis of recent research defines that interaction with therapy dogs is most often associated with reduced state anxiety and stress, improved mood, and increased psychological comfort and engagement. At the same time, current evidence does not yet justify strong claims about a stable long-term impact of canine-assisted therapy or support on cognitive or purely physiological outcomes, which proves the necessity of further quantitative research. The article identifies the main pedagogical conditions for the effective implementation of canine-assisted therapy and support, including voluntariness, prior screening for contraindications, clear programme goals, interdisciplinary support, hygiene and safety measures, systematic outcome evaluation, and priority given to canine welfare. It is concluded that canine-assisted therapy has considerable potential for supporting learners' mental well-being during periods of increased academic pressure, adaptation, or crisis, particularly in Ukraine, provided that its use in education is evidence-based, ethical, and properly structured.

Key words: canine-assisted therapy; canine-assisted support; students, mental state; anxiety; educational environment; psychological and pedagogical support.

Анотація. Стаття присвячена використанню каністерапії та каніс-підтримки як допоміжної практики підтримки психоемоційного благополуччя здобувачів вищої освіти, які навчаються в умовах стресу. Актуальність теми зумовлена зростанням рівня стресу, тривожності та емоційного виснаження, зокрема в контексті російської військової агресії щодо України, та потребою в пошуку безпечних форм психолого-педагогічної підтримки в освітньому середовищі. Узагальнення даних сучасної психологічної та педагогічної літератури показує, що взаємодія з собаками-«терапевтами» найчастіше пов'язана зі зниженням ситуативної тривожності та стресу, покращенням настрою, зростанням відчуття психологічного комфорту й залученості. Водночас наявні дані не дають достатніх підстав стверджувати про стійкий довготривалий вплив каністерапії чи каніс-підтримки на когнітивні або суто фізіологічні показники, що потребує подальших досліджень.

Підкреслено, що каністерапію чи каніс-підтримку доцільно розглядати як допоміжний та альтернативний ресурс гуманізації освітнього простору. Визначено педагогічні умови ефективного впровадження каністерапії чи каніс-підтримки: добровільність участі здобувачів, попередній скринінг протипоказань, чітке визначення мети програми, міждисциплінарний супровід, дотримання санітарно-гігієнічних вимог, системну оцінку результатів і пріоритет благополуччя собаки. Каністерапія має значний потенціал для підтримки ментального стану здобувачів освіти в періоди підвищеного навчального навантаження, адаптації або кризових подій, особливо в Україні, однак її освітнє застосування має спиратися на доказовість, етичність і стандартизовані протоколи.

Ключові слова: каніс-терапія; каніс-підтримка; здобувачі освіти; ментальний стан; тривожність; психолого-педагогічна підтримка.

Introduction. The contemporary educational environment increasingly functions under conditions of chronic psycho-emotional strain (Schraml et al., 2012), where the medical education is associated with particularly high stress levels(Voltmer et al., 2021). Students often experience increased anxiety, emotional exhaustion, reduced concentration, and difficulties with self-regulation, which intensifies the

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need for alternative forms of support. In this context, canis therapy or canis support (as we will define it further) may be defined as an organized interaction between a person and a trained dog in a therapeutic, supportive, or educational setting(Sim et al., 2025). In higher education, such interventions can be held before examinations, while in school settings they may be integrated into programs of adaptation, socio-emotional development, and stress reduction. In the Ukrainian context, this issue is especially acute. The war has placed a substantial burden on students' mental health, with a "high prevalence of mental health problems among Ukrainian students during the war"(4). At the same time, UNICEF notes continuing educational barriers and war-related disruption which affect people across Ukraine(Pinchuk et al., 2025). This necessitates search for and instaneous implementation of the techniques to support the students.

Despite the growing popularity of canis therapy, educational research is quite scarce in assessment of its pedagogical relevance. The key question is whether the therapy produces measurable benefits for mental well-being, under what conditions it is effective, and what its pedagogical limits are, and most these questions are not well studies yet. For Ukraine, this question is particularly important because the search for humane, low-threshold forms of psychosocial support takes place against a background of war-related disruptions(UNICEF, 2025).

The strongest recent evidence for the cannis-therapy effectiveness for university students is presented in the 2025 systematic review and meta-analysis by Sim et al., which included 15 studies, and reported an overall effect size of g = -0.67. The authors describe this as a "moderate reduction in stress and anxiety" among university students who received canine-assisted therapy (Sim et al., 2025). The intervention was more effective for students with higher baseline stress and anxiety. These conclusions are consistent with broader evidence, such as, when Huber et al., in a systematic review and meta-analysis of 35 randomized studies in higher education, stated that animal-assisted interventions are "particularly effective at reducing acute feelings of anxiety and stress," while the results turned to be less convincing for cognitive or stable physiological outcomes (Huber et al., 2024). Similarly, Parbery-Clark et al. emphasized the growing relevance of animal-assisted interventions for students' mental health in higher education, and also calledg for stronger evidence (Parbery-Clark et al., 2021).

Empirical studies also reinforce these findings. Peel et al. found that students who engaged with therapy dogs during the examination period were "more likely to have a more positive affect," with significantly higher PANAS scores in the intervention group(Peel et al., 2023). Pendry et al., in a randomized trial of 349 students, showed that at-risk students who interacted with therapy dogs demonstrated better outcomes in motivation, attitude, and self-regulation; the authors reported gains in self-regulation for some groups (Pendry et al., 2020). Evidence from school settings, like the study by Meints et al., reported that dog-assisted interventions carried out twice a week for 20 minutes over four weeks led to "significantly lower stress" in children with and without special educational needs, based on salivary cortisol indicators (Meints et al., 2022). Chronic stress and anxiety, as well as a sense of uncertainty about the future, have an impact not only on a person's mental health, but also on their somatic health. The field of psychosomatic medicine studies the influence of psychological factors on a person's somatic health, and emphasizes the importance of taking care of psycho-emotional well-being. The use of canine therapy is one way to stabilize the human nervous system, affecting the levels of cortisol and oxytocil, which are associated with a sense of security. In 2023, Diana Pela Gil, in co-authorship, conducted a study among Spanish students on the level of perceived stress by assessing the level of cortisol in saliva. The study confirmed a significant improvement in stress levels after a dog-assisted program (Peña et al., 2023). Also in 2023, Joana Pendzis measured basal, daily and instantaneous cortisol levels during a therapeutic dog intervention during the educational process, as well as the impact on social-emotional and cognitive domains. The study aimed to prevent or alleviate students stress in order to reduce the risks of developing mental disorders and improve academic performance. As a conclusion, they recommend the implementation of canine-assisted intervention programs within the educational process for students (Pędzisz, 2023). At the review level, synthesized 30 studies and concluded that animal-assisted services showed positive effects in socio-emotional, behavioral, cognitive, and learning-related domains, though they admitted that many studies had design limitations and "high risk of bias" (Moe, 2021).

As for the Ukrainian context, the need for quick methods of psychoemotional support in education has become particularly urgent since 2022. Several Ukrainian researchers found canis-therapy an alternative and quite accessible method for both civil and military people (Krempa, 2024; Chamlai, 2024; Kravchenko et al., 2026).

The aim of the article. The purpose of the article is to provide a theoretical substantiation of the effectiveness of canis therapy as an innovative means of improving the mental state of high school students, particularly medical ones, as well as to identify the pedagogical conditions for its safe and appropriate implementation in the educational environment.

Theoretical Framework. Canis therapy, or, canis-support, is a valuable method which could be

included into the teaching practice primarily because it combines emotional support, tension reduction, and the creation of a psychologically safe space, which is particularly significant for Ukraine. The provision of an emotionally safe and supportive environment has been emphasized as a basic task for the educational institutions in Ukraine since the full-scale invasion of Russia. For many learners, contact with a dog is a less stigmatized form of help than seeking specialized psychological support. In this sense, on one side, canis therapy or canis support can serve as a "soft entry point" into a system of mental health care, as it promotes emotional relief, restoration of attention, and the development of a sense of acceptance and support(O'Hagan et al., 2024), and, on the other side, it can perform functions of mentoring and support, which are expected to be provided by a teacher. Therapeutic contact with a dog within the framework of canine therapy can contribute to the development of human self-regulation skills, the ability to self-soothe in emotionally healthy ways, improve emotional awareness, recognition of emotions, and increase students' ability to remain involved in the learning process, the formation of motivation for learning and concentration. Such an impact is especially important for working with students and pupils who are in a state of chronic stress, have traumatic experiences, and as a result may have problems with concentration or other cognitive dysfunctions. For example, PTSD and complex PTSD significantly affect a person's cognitive functions, often making it difficult to maintain attention for a long time, negatively affecting short-term memory impairment, difficulties in memorizing new information, disrupting the ability to plan and organize, etc. Given the context, canine therapy can be considered not only as psychological support, but also as a pedagogical tool. Such practice is valuable during periods of adaptation a new environment overall, and under the crisis conditions in particular.

However, the pedagogical effectiveness of canis therapy largely depends on whether this practice is embedded in a well-designed psycho-pedagogical support program. As for any method, the best outcomes are observed when interaction with a dog has a clear purpose, limited duration, a structured format, and is combined with other supportive strategies, such as stress management, reflective techniques, the work of a psychologist, or facilitated group communication (see fig.1). Therefore, canis therapy in education should not be regarded as entertainment.

Basing on the experience of teaching in high school, we would define several conditions for the successful implementation of canis therapy or canis support in educational institutions. First, such intervention should be appropriately agreed with appropriate authorities of the educational institution, the organizers guarantying safety and security of the process. It is important to comply with the sanitary requirements, to provide the staff training, etc. Participation must be entirely voluntary, with the obtained consent for it from all participants of the study process. Before the intervention, organisers should identify allergies, phobias, cultural or religious objections, both at the national and individual level. Then, the canine support specialists must clearly explain to the participants the purpose of the program: reducing examination stress, improving the emotional climate, developing socio-emotional competence, and so forth. safety of the environment, and provide staff training (fig 2).

The issue of animal welfare is equally important. Contraindications or limitations for the canis support implementation include participants' fear of animals, allergic reactions, sanitation difficulties, risks for the heatlh and overburdening of the animal due to sanitary or other conditions. It is also important to consider the importance of carefully selecting dogs and groups for ethical reasons, it is important to consider the temperament of the animals, their experience, group size, activity format, etc. to prevent psychological discomfort of the group, participants and the animals themselves. Participants and animals should feel comfortable during the meetings and avoid the risks of stress directly from the meetings (fig 3).

The literature specifically stresses the need for veterinary control, behavioral assessment of the

Fig. 1. Principles of providing canis-support in educational settings

Fig. 2. Organizing conditions of canis support in educational establishments

Fig. 3. Integrating a trained therapy dog into medical education: Pre-session interaction briefing by specialists to mitigate student academic stress

dog, regulated breaks, limitations on working time, and continuous monitoring of signs of stress in the animal by the handler (Glenk & Foltin, 2021).

For this reason, in educational settings it is advisable to use the standardized protocols: selection and training of dogs, support by a certified or properly trained handler, involvement of a psychologist or support specialist, a clear schedule of sessions, determination of effectiveness criteria, and a feedback system. It is appropriate to assess the changes in levels of stress, anxiety, mood, engagement, sense of safety, and readiness for educational activity. Where possible, a multimodal assessment approach may be beneficial, combining self-report measures with behavioral observations or physiological indicators. All this moves canis therapy into the realm of a pedagogically substantiated innovation (fig 4).

Thus, canis therapy may be especially useful for three groups of tasks: 1) rapid emotional relief during periods of acute stress, particularly of the Ukrainian students, after the attacks; 2) support for adaptation and the creation of a psychologically comfortable educational environment, which is also relevant in the stressful crisis-stricken environment; 3) an auxiliary resource in comprehensive mental health and well-being programs. At the same time, it should not replace crisis psychological support, psychotherapy, or medical treatment. Its strength lies in its ability to complement other forms of support.

Conclusions. Thus, the analysis of contemporary research provides grounds for asserting that canis therapy is a promising tool for supporting the mental state of students. The evidence concerns the reduction of situational stress and anxiety, improvement of mood, and enhancement of the sense of psychological

Fig. 4. Canine-Assisted Education (CAE) session for medical students: Interdisciplinary collaboration between a psychotherapist and an animal behaviorist using a trained therapy dog to reduce academic stress and enhance student well-being

comfort. The conducted studies indicate short-term (due to the current lack of long-term research) improvements in concentration, attention, and emotional regulation. In addition, studies have shown increased levels of social trust and willingness to seek social support. However, all of the above effects require further, deeper, and longer-term empirical validation. For university students, the results are generally positive, although they vary in reliability because of the not well defined designs, samples, and assessment methods. Therefore, canis therapy should be implemented as an auxiliary technology of psycho-pedagogical support.

The practical value of canis therapy and canis supportfor education, particularly under the crisis condition, lies in the fact that it contributes to the humanization of the educational space, expands the range of supporting learners methods, and can be integrated into programs of students' adaptation, prevention of emotional exhaustion, and the development of a safe environment. Prospects for further research include the creation of standardized educational protocols for canis therapy and canis support in Ukraine, long-term monitoring of its effects, comparison of individual and group formats, and the study of combining canis therapy and canis support with other methods of psycho-pedagogical support.

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Information on the use of artificial intelligence. The authors certify that, in the course of conducting the research and preparing this manuscript, they did not use any generative artificial intelligence tools or services to perform any of the tasks listed in the Generative Artificial Intelligence Delegation Taxonomy (GAIDeT, 2025). All stages of the work – from conceptualization to final editing – were carried out exclusively by the authors, without the use of generative artificial intelligence.

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