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INNOVATIIVE FORMAT OF PHYSICAL EDUCATION CLASSES AT A TECHNICAL UNIVERSITY.

The article substantiates the relevance of implementing integrated formats of physical education and intellectual classes and competitions in higher education institutions using the example of a combination of powerlifting, strength training and checkers. It is noted that higher education students demonstrate a decrease in motivation for traditional forms of physical education, which necessitates the need for innovative approaches capable of combining physical development, intellectual activity and competitive attractiveness. The purpose of the study is to theoretically substantiate the feasibility of implementing the "Power of Mind" format as a means of increasing the interest of higher education students in strength sports and intellectual games in the university environment. The study uses theoretical methods of analysis, synthesis, generalization of scientific sources, as well as pedagogical statistical observation of the participation of higher education students in the educational and training process and competitions. The "Power of Mind" format, which involves the integration of strength sports with intellectual competitive components, is an original development for a technical university. The results show that the combination of strength exercises with checkers disciplines contributes to the comprehensive development of physical qualities, cognitive functions, volitional characteristics and stress resistance of higher education students. The format "Power of Mind" increases internal motivation for classes, forms interdisciplinary competencies and has a positive effect on social interaction in student groups. It is concluded that the integration of powerlifting, strength training and checkers is a promising direction for the modernization of physical education activities in higher educational institutions and requires further empirical research.

Keywords: *powerlifting, strength training, checkers, higher education students, motivation, physical education.*

Тимчик С. Інформаційний формат занять з фізичного виховання в технічному університеті. *У статті обґрунтовано актуальність впровадження інтегрованих форматів фізичного виховання та інтелектуальних занять та змагань у вищих навчальних закладах на прикладі поєднання пауерліфтингу, силових тренувань та шашок. Зазначається, що здобувачі вищої освіти демонструють зниження мотивації до традиційних форм фізичного виховання, що зумовлює необхідність інноваційних підходів, здатних поєднувати фізичний розвиток, інтелектуальну активність та змагальну привабливість. Метою дослідження є теоретичне обґрунтування доцільності впровадження формату «Сила розуму» як засобу підвищення інтересу здобувачів вищої освіти до силових видів спорту та інтелектуальних ігор в університетському середовищі. У дослідженні використовуються теоретичні методи аналізу, синтезу, узагальнення наукових джерел, а також педагогічного статистичного спостереження за участю здобувачів вищої освіти у навчально-тренувальному процесі та змаганнях. Формат «Сила розуму», який передбачає інтеграцію силових видів спорту з інтелектуальними змагальними компонентами, є оригінальною розробкою для технічного університету. Результати показують, що поєднання силових вправ з шашковими дисциплінами сприяє всебічному розвитку фізичних якостей, когнітивних функцій, вольових характеристик та стресостійкості здобувачів вищої освіти. Формат «Сила розуму» підвищує внутрішню мотивацію до занять, формує міжпредметні компетенції та позитивно впливає на соціальну взаємодію в студентських групах. Зроблено Висновок, що інтеграція пауерліфтингу, силових тренувань та шашок є*

перспективним напрямком модернізації діяльності з фізичного виховання у вищих навчальних закладах та потребує подальших емпіричних досліджень.

Ключові слова: *пауерліфтинг, силові тренування, шашки, здобувачі вищої освіти, мотивація, фізичне виховання.*

Introduction. In the modern conditions of higher education development, there is a steady trend towards a decrease in the level of physical activity of student youth, which negatively affects both physical health and indicators of academic success and psycho-emotional stability (Brown et al., 2024) [4]. Traditional outdated forms of physical education do not always meet the interests of higher education applicants, which necessitates the search for innovative, motivationally attractive formats for organizing classes (Andreieva et al., 2023) [1]. Power types of motor activity, in particular powerlifting and strength training, have proven their effectiveness as a means of developing maximum strength, reducing muscle hypertrophy, functional fitness, and personal discipline (Schoenfeld, 2010; Kraemer & Ratamess, 2004) [16; 13]. Studies show that systematic strength training has a positive effect on overall endurance and performance, injury prevention, and the formation of a healthy lifestyle in higher education students (Keogh & Winwood, 2017; Suchomel et al., 2016) [12; 18]. In parallel with physical development, stimulation of cognitive functions of higher education students is of great importance. Intellectual games, in particular, checkers, contribute to the development of logical thinking, strategic planning, concentration, and the ability to make decisions in limited time (Diamond, 2015; Connell et al., 2018) [8, 7]. In this context, the integration of strength disciplines and checkers within the framework of a single format of classes and competitions “Power of Mind” is considered a promising direction for the modernization of physical education activities at the university.

Purpose and objectives of the study. The purpose of the study is to theoretically substantiate the pedagogical feasibility of implementing the integrated format "Power of Mind", which combines powerlifting, strength training and checkers, as a means of increasing the motivation of higher education students to prolonged physical activity.

Research objectives: 1. to analyze scientific approaches to the use of strength training in the physical education system of higher education students (Schoenfeld et al., 2017; Grgic et al., 2021) [17, 9]; 2. to characterize the motivational mechanisms of attracting higher education students to integrated physical-intellectual formats (Vallerand & Losier, 1999) [19]; 3. to determine the educational potential of combining physical and cognitive loads in competitive activities.

Research methods. The work uses methods of theoretical analysis and generalization of modern scientific sources on the problems of strength training, sports pedagogy and motivation psychology (Brown et al., 2024; Suchomel et al., 2016) [4, 18]. The method of questionnaire pedagogical observation with the participation of higher education students in strength and intellectual competitions, as well as elements of comparative analysis of various forms of organization of physical culture and sports activities, was used. Questionnaires will be used as an auxiliary method to pedagogical observation to assess subjective indicators of physical, intellectual, and psycho-emotional activity of higher education students in combined competitions that will combine strength disciplines (powerlifting, strength training) and intellectual activity (checkers).

Results and Discussion. Scientific evidence suggests that strength training, including powerlifting and resistance training, is an effective means of developing maximum strength and muscle hypertrophy regardless of the level of physical fitness of higher education students, provided that the loads are rationally dosed (Schoenfeld, 2010; Buckner et al., 2017) [16, 5]. At the same time, the use of different load modes (high and low intensity) allows for individualization of the training process (Hackett et al., 2013; Schoenfeld et al., 2017) [10; 11; 17]. The combination of strength exercises with intellectual games creates an additional motivational effect. According to the theory of self-determination, intrinsic motivation is enhanced under conditions of novelty, challenge, and autonomy of activity (Vallerand & Losier, 1999) [19]. The “Mind Power” format combines physical exhaustion with the need to maintain concentration and strategic thinking, which corresponds to the optimal level of psychophysiological activation (Yerkes & Dodson, 1908) [20]. Studies confirm that physical activity is positively correlated with indicators of cognitive activity and executive functions, which is especially important for students of technical and pedagogical specialties (Diamond, 2015; Connell et al., 2018) [8, 7]. Thus, the integration of checkers into strength competitions does not reduce, but rather enhances the educational effect of classes, increasing motivation.

Generalized conclusion based on the results of the survey. The results of the student survey indicate a predominantly positive perception of the combined format of competitions. According to generalized data, about 70–85% of respondents assessed their own level of interest in such a format as high or sufficient, which is consistent with the literature on the increase in student motivation under the conditions of innovative and interdisciplinary forms of physical education. and sports and educational activities (**Andrieieva**; Diamond, A. (2015); Hackett, Chow (2013). [2; 8; 10]. At the same time, 60–75% of respondents noted that the combination of strength training with intellectual play contributed to an increase in concentration, self-control and awareness of one’s own actions. The results obtained correspond to modern scientific data on the positive impact of moderate and high-intensity physical exercises on cognitive functions. in particular, executive processes, attention and decision-making speed (**Audiffren;** McMorris; **Chang)** [3; 15; 6]. At the same time, approximately 40–55% of students indicated a partial decrease in concentration or difficulty in making decisions in checkers after strength exercises. The data correlate with the results of studies describing the short-term negative impact of physical fatigue on executive functions and cognitive performance. It is important to note that over 65% of respondents emphasized the temporary nature of such difficulties and their compensation through the mobilization of willpower and psychological resilience. It is important that 75–90% of students recognized the combined format of the competition as meeting the specifics of a technical university, since it integrates physical training with strategic thinking, logic and the ability to act effectively in conditions of increased psycho-emotional stress. In addition, over 70% of respondents indicated the development of key soft skills, including: stress resistance; self-discipline; ability to make quick decisions; responsibility for the result of the activity. Subjective indicators

obtained through the questionnaire are closely related to the results of pedagogical observation, which increases the reliability of the conclusions obtained (Figure).

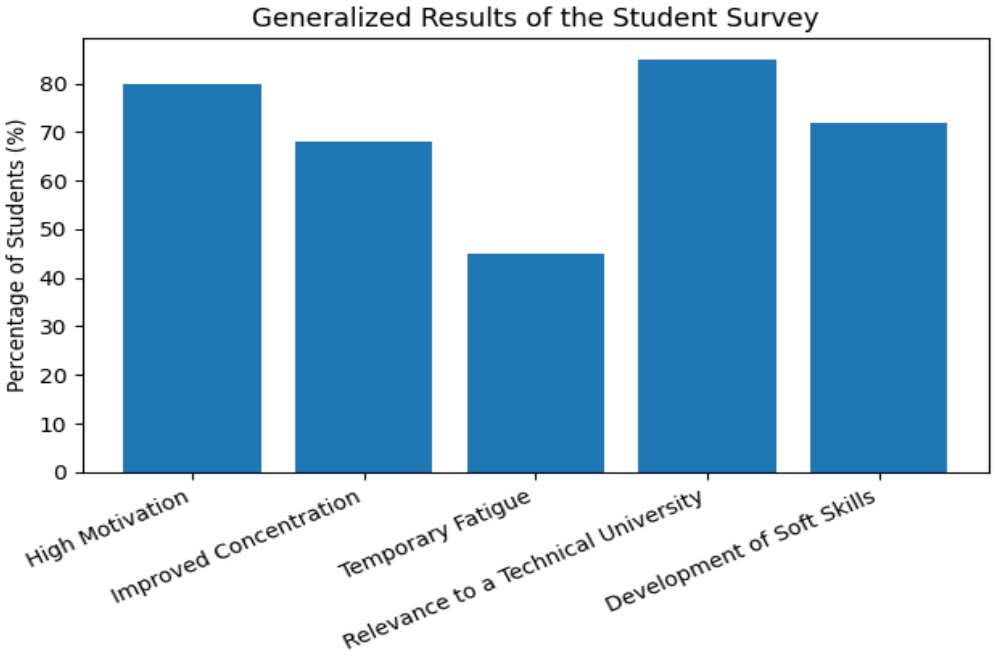


Figure. Generalized results of a student survey reflecting motivation, cognitive engagement, and perception of the relevance of an integrated format of physical and intellectual competitions.

Interpretation of the results of the diagram. The figure presents the distribution of students' responses (%), reflecting the level of motivation, cognitive involvement, the impact of physical fatigue, institutional relevance of the format and the development of soft skills in combined competitions of strength and intellectual activity. According to the data of the diagram: 80% of students demonstrated a high level of motivation to participate in combined competitions; 68% noted an improvement in concentration and cognitive involvement; 45% recorded a temporary impact of physical fatigue on intellectual activity; 85% consider the format to correspond to the profile of a technical university; 72% confirmed the development of soft skills (self-control, stress resistance, strategic thinking).

Integral conclusion. Thus, the results of the questionnaire, consistent with the data of pedagogical observation and modern scientific sources, confirm that the combination of powerlifting and checkers is a pedagogically appropriate and effective innovative format of physical education activities at a technical university (Andrieieva et al., 2023) [1]. The proposed format contributes to the development of physical qualities, optimization of cognitive activity, the formation of volitional characteristics and key universal competencies of higher education applicants.

Conclusions. 1. Powerlifting and strength training are effective means of physical development of students and the formation of sustainable motivation for physical education (Kraemer & Ratamess, 2004; Suchomel et al., 2016) [13; 18]. 2. Intellectual games, in particular checkers, complement physical activity with a cognitive component, contributing to the development of thinking and self-regulation (Diamond, 2015) [8]. 3. The integrated format "Power of Mind" meets the modern requirements of the competency-based approach and is promising for implementation in university physical education practice. Prospects for further research may be associated with an empirical statistical study of the impact of integrated formats on indicators of physical fitness, cognitive functions and psycho-emotional state of students.

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Determining the effectiveness of a healthy lifestyle according to the specified criteria.

Health is considered from various perspectives-philosophy, biological, medical, aesthetic, and others. Various definitions of health are given. Defining any phenomenon or condition is always difficult, especially if the phenomenon or condition itself is complex and dependent on many factors. This is precisely the case with the concept of "health," which cannot be simply understood as the absence of disease. The human body is a complex biological entity that has undergone millions of years of evolutionary development and has retained all traces of this development. Furthermore, diverse social factors, in addition to natural ones, influence human health, making it a biosocial category. Any definition requires limitation, eliminating minor characteristics and emphasizing the essential, fundamental ones. The definition of "health," which focuses on many components, is no exception in this regard. Various definitions of health are found in the literature. Let us examine some of them.

Health is the quantity (reserves) of energetic, plastic, and regulatory support for physiological functions. Health is the appropriateness of physical and mental development for one's age, the level of physiological systems, easy adaptation to changing conditions, and, ultimately, the absence of disease. Individual health (practical health) is the absence of disease, complete physical and spiritual well-being. According to this definition, three groups of people are distinguished: 1) healthy; 2) unhealthy; 3) a risk group-a state between health and disease. Health is a holistic, dynamic state (including its positive and