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SPORTS BOARD GAMES AS A MEANS OF PHYSICAL EDUCATION FOR STUDENTS OF SPECIAL MEDICAL GROUPS IN THE CONTEXT OF THE INCLUSIVE EDUCATION DEVELOPMENT

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The article deals with the nuances of organizing work on physical education with students of SMG (special medical groups) by means of sports board games.

The relevance of the study is substantiated by the need to search for new forms of physical activity of students with disabilities (limited health).

The aim of the study is to analyze physical culture and health-improving activity in higher educational institutions using the example of a competitive event in sports board games among students of a special medical group and the main health group (MHG). The emphasis of the work is made on the need to introduce board sports games into the educational activities of higher professional institutions. It is concluded that sports board games contribute to the development of an inclusive educational environment, are a good means of health preservation and are suitable for students with any type of pathology.

Methodology. In accordance with the intended scientific goal and the results of the scientific experiment, points were calculated and converted into a percentage.

Results. As a result of the study, the effectiveness of the use of table sports for the development of an inclusive educational environment in higher educational institutions has been scientifically substantiated and experimentally proven.

Practical implications. The practical application and introduction of board sports games into the educational process will help teachers

and teachers of universities and colleges to adapt extracurricular and competitive activities for students of a special medical group.

Keywords: *sports board games; physical education; students of special medical groups; health care; physical education and health work*

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СПОРТИВНЫЕ НАСТОЛЬНЫЕ ИГРЫ КАК СРЕДСТВО ФИЗИЧЕСКОГО ВОСПИТАНИЯ СТУДЕНТОВ СПЕЦИАЛЬНЫХ МЕДИЦИНСКИХ ГРУПП В УСЛОВИЯХ РАЗВИТИЯ ИНКЛЮЗИВНОГО ОБРАЗОВАНИЯ

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В статье рассматриваются нюансы организации работы по физическому воспитанию со студентами СМГ (специальных медицинских групп) средствами настольно-спортивных игр.

Актуальность исследования обосновывается необходимостью поиска новых форм двигательной активности студентов с ограниченными возможностями.

Цель исследования – проанализировать физкультурно-оздоровительную деятельность в высших учебных заведениях на примере соревновательного мероприятия по спортивным настольным играм среди студентов специальной медицинской группы и основной группы здоровья (ОГЗ). Акцент в работе сделан на необходимости внедрения настольных спортивных игр в образовательную деятельность высших профессиональных учреждений. Делается вывод о том, что спортивные настольные игры способствуют развитию инклюзивной образовательной среды, являются хорошим средством сохранения здоровья и подходят для учащихся с любым видом патологии.

Метод или методология проведения работы. В соответствии с намеченной целью и изученной научной литературой результаты эксперимента были обсчитаны в баллах, переведены в процентный показатель.

Результаты. В результате проведенного исследования научно обоснована и экспериментально доказана эффективность применения настольных спортивных игр для развития инклюзивной образовательной среды в высших учебных заведениях.

Область применения результатов. Практическое применение и внедрение в образовательно-воспитательный процесс настольных спортивных игр поможет педагогам и преподавателям вузов, колледжей адаптировать внеучебную и соревновательную деятельность для студентов специальной медицинской группы.

Ключевые слова: спортивные настольные игры; физическая культура; студенты специальных медицинских групп; здравоохранение; физкультурно-оздоровительная работа

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Introduction

Studies conducted in different countries show that a fairly significant part of the population, including children and young people, is not engaged in physical activity. This problem is very acute in the Russian Federation. There is a decrease in the motor activity of students around the world [1; 14].

Any sports games are a universal means of physical education, which does not lose its relevance throughout a person's life [5]. Such sports board games as sjoelbak and novuss are available to everyone, especially students with disabilities. These sports games are democratic, since the chance of winning does not depend on the build and athleticism of

the player. A student of a special medical group can play on a par with a student of the main health group, the outcome of the game in the competition is decided only by skill and endurance. This helps to solve the more inclusive task of education, which is very important.

The scientific novelty of the research consists in the study of the results of the implementation of physical education and health-improving work on physical education in higher educational institutions of sports board games as an instrument of inclusive education.

The aim of the study is to analyze physical culture and health-improving activity in higher educational institutions using the example of a competitive event in sports board games among students of a special medical group and the main health group.

The research objective structured the following tasks:

1. To study the possibility of using sports board games in the process of physical education of students of a special medical group as a means of health preservation;
2. To substantiate the possibility of using sports board games in the physical education of students of a special medical group and the main health group for the development of an inclusive educational environment in higher educational institutions.

The theoretical significance of the study is determined by the fact that the necessity of introducing sports board games into the educational process of physical education for the development of an inclusive environment in higher educational institutions is substantiated. Practical significance. The conducted research will allow developing new approaches for improving programs, methodological documents regulating the work of higher educational institutions in the field of physical culture.

Theoretical framework

Today, the issue of developing an inclusive educational environment is very acute. Specialists all over the world work on the problems of inclusive education in physical culture [7; 9; 12; 15]. Russian scientists and specialists are also trying to solve a number of issues that arose during the introduction of inclusive education in higher educational institutions [3].

The main group of health includes students without deviations in health, with good physical development. Their classes are held in full physical education programs. Students of the main medical groups are allowed to participate in sports sections and participate in sports competitions in any kind of sports.

A special medical group includes persons with permanent or temporary health abnormalities, requiring restriction of physical activity, but admitted for health reasons to perform educational and industrial work. As an exception, students of a special medical group can engage in sports sections and participate in sports competitions, which are allowed by a specialist doctor. The topic of the need to search for new forms of work with this category is touched upon in many studies [3; 6; 10].

It is very difficult to find games and competitions in which students of different physical conditions can participate together.

Some physical education specialists working in institutions of higher professional education doubt the possibility of joint training and competition between students with disabilities from different nosological groups with different functional disorders and their healthy peers. Their fears are based on the fact that the differences between young people are especially clearly manifested in the motor sphere during purposeful motor actions. While the teachers are faced with the task of developing physical abilities, teaching motor actions, and educating students' personal qualities.

In our opinion, sports board games are best suited for these purposes. To prove this hypothesis, we compared the results of sports meetings between students assigned to the special medical group and the main health group.

Sjoelbak and novuss, being sports games, are also a means of communication and training, since all strikes can be analyzed and learned. A friendly game party does not interfere with discussing general news during the game. In this way, one more educational task is being solved, i.e., educational and communicative. Students of the special medical group are increasingly isolated and removed from the main health group; it is sports board games that make it possible to interact in the smallest and most comfortable groups, teams.

The strength of board sports games is their compactness, portability and economic availability of equipment. The sports game sjoelbak, the essence of which is rolling 30 wooden pucks into 4 special pockets on the board, was adapted in Holland two centuries ago. Now the game sjoelbak is gaining popularity among young people. The pocketed pucks are placed on top of each other at the end of the pockets, the unpoiled pucks return to their original position, and the participant tries to score them again. There are 3 attempts in total. A certain number of points is added for getting into the player's pocket.

A square wooden table with sides is necessary for playing novuss. There are 4 pockets in the corners of the table. The table surface is divided by markings into several zones. Each player has 8 pawns (wooden pucks, similar to ordinary checkers, only with a hole in the center), one of them is red, and the other is black; one bit (the puck is large in weight and size) and a cue. Having placed the pawns, the player who received the right to start the game by drawing of lots tries to hit the bat with a cue so that it hits the pawns and drives as many of his pawns into the pockets. There are a number of restrictions and penalties in the game [16].

Literature review

Today, there is a tendency towards a decrease in physical activity around the world, which naturally affects the health of the younger generation. A huge amount of research has been carried out by specialists in the field of physiology and physical culture, which indicate a decrease in morphological and functional indicators in the learning process not only in the school system, but also in a higher educational institution [2; 11; 13].

Canadian scientists investigated the intensity of physical activity and psychological well-being among young people during the transition from high school to the first year of university (sample of 145 Canadian students). One third of students were active in high school but became not active enough during their university studies; 33% showed sufficient physical activity before and after entering the university; 23%

showed no physical activity anywhere and only 11% became active at the university. Students who became insufficiently active reported higher levels of fatigue and lower levels of alertness compared to those who continued to be active [8].

The modern system of physical education is a priority in the formation of physical culture of young people, but, unfortunately, research results show that this system does not in all cases contribute to the preservation of health. Moreover, the effectiveness of the process of physical development decreases even more in connection with a decrease in the number of hours and the transfer of physical education classes to classroom or independent work.

All this once again confirms the need to increase students' motor activity. This problem is especially acute for students of a special medical group.

Lack of sufficient physical activity (physical inactivity) affects the state of the musculoskeletal system, cardiovascular and respiratory systems, and as a result, the psychological state of students of institutions of higher professional education, as a result of which the student's learning ability deteriorates [1; 2].

Methods

Currently, no studies have been conducted that would consider the results of the introduction of table sports games in institutions of higher professional education in terms of competitive activities as a means of developing an inclusive educational environment. Previously, we have published works on the positive impact of table sports games on the functional state of SMG students and on the formation of their personal qualities [4].

We assume that students assigned to a special medical group with proper preparation can have an advantage in winning games in sjoelbak and novuss over students from the main health group.

Our study involved 48 students (17-20 y.o.). Competitions were held between girls and boys of the main and special medical health groups (see Table 1).

Table 1.

Quantitative composition of the students who took part in the study (people)

	Sjoelbak	Novuss	Total
Girls of the special medical group (SMG)	6	6	48
Girls of the main health group (MHG)	6	6	
Boys of the special medical group (SMG)	6	6	
Boys of the main health group (MHG)	6	6	

The main pathological abnormalities in students of special medical groups for diseases: cardiovascular system – 46% (11 people); respiratory organs – 8% (2 person); hearing – 4% (1 person); vision – 17% (4 people); endocrine system and metabolism – 4% (1 person); musculo-skeletal system – 21% (5 people).

The winner of the rogue game is determined by counting the points scored for getting into the pockets with pucks. The basic principle of playing novuss: the set is won by the player who is the first to score all 8 of his pawns into the pocket with a cue.

Results

It should be noted that a methodology with the use of sports board games was introduced into the program of physical culture among students of a special medical group. At the time of the competition, the students of the special medical group had already mastered the technical and tactical techniques of the game. 5 special preparatory workouts for the competition were held with the students of the main health group, which gave them the opportunity to learn well the rules of the game and some features in game tactics and technique.

The results of the competition are shown below (see Table 2).

Students of the special medical group, having comprehended the technique and tactics of playing board sports games, were able to take a higher place in the rating table than students of the main health group. It should be noted that students of the special medical group in the rating table do not fall below the ninth place. If we translate it into a point-based assessment system for statistical processing of results, then we will assign 12 points to the first place, and 1 point to the twelfth place (see Table 3).

Table 2.

Rating table of girls and boys of the special medical group and the main health group (personal credit)

No	Sjoelbak		Novuss	
	Girls	Boys	Girls	Boys
1	SMG	SMG	SMG	SMG
2	SMG	MHG	SMG	SMG
3	MHG	SMG	MHG	MHG
4	SMG	MHG	SMG	SMG
5	SMG	SMG	SMG	SMG
6	SMG	SMG	SMG	SMG
7	MHG	SMG	MHG	SMG
8	MHG	SMG	SMG	MHG
9	SMG	MHG	MHG	MHG
10	MHG	MHG	MHG	MHG
11	MHG	MHG	MHG	MHG
12	MHG	MHG	MHG	MHG

Table 3.

Results of sjoelbak and novuss among girls and boys in the special medical group and the main health group in points (personal classification)

Category	Sjoelbak	Novuss
Girls of the special medical group (SMG)	51	52
Girls of the main health group (MHG)	27	26
Boys of the special medical group (SMG)	48	53
Boys of the main health group (MHG)	30	25

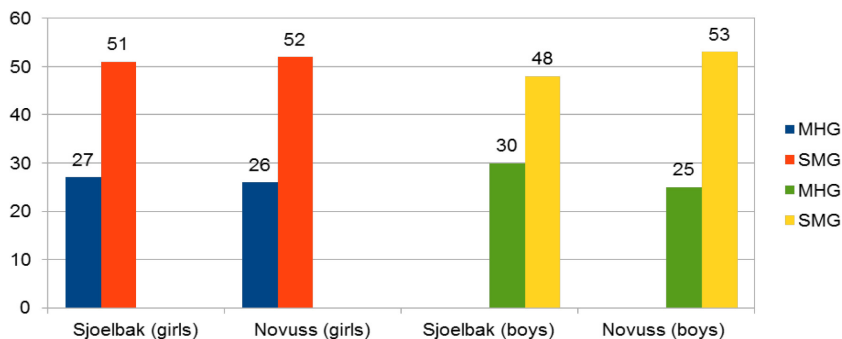


Fig. 1. Boys' and girls' game results in points

The tabular data in the point system give a clear idea that the results of girls and boys from the special medical group are almost twice high-

er than the results of girls and boys from the main health group due to skill and endurance, as well as knowledge of tactical techniques. The data obtained are presented in a diagram for a clearer presentation of the results (Fig. 1).

Conclusion

As a result of the experiment, the hypothesis was confirmed that, when playing board sports games, students of special medical groups with proper preparation can have an advantage over their rivals without health restrictions. The physical activity of students significantly increases, as well as the interest in classes in the process of being engaged in a competitive activity. The indisputable advantage of board sports games is their compactness, mobility and economic availability of equipment. These factors have a positive effect on improving the quality of the physical culture and recreation process in higher educational institutions.

Based on the data obtained, we can recommend including board sports games in the educational program in physical culture for students of a special medical group.

Thus, it can be argued that sports board games contribute to the development of an inclusive educational environment in higher professional institutions, being both a good means of health preservation suitable type of sports activity for students with any health issues.

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Список литературы

1. Богданов И., Рычкова Н. Влияние эмоционального состояния и личности на физическую готовность молодежи // Человек. Спорт. Медицина. 2019. № 19(1). С. 80-85. <https://doi.org/10.14529/hsm190111>

2. Влияние физических упражнений на показатели коэффициента здоровья, физическую подготовленность, физическое состояние и работоспособность студентов в процессе занятий физической культурой / Голубятникова М.В., Яковлева В.Н., Макарова Л.Н., Агеева М.В. // Спортивная медицина: наука и практика. 2017. Т. 7. № 3. С. 14-21. DOI 10.17238/ISSN2223-2524.2017.3.14.
3. Кетриш Е.В. О проблеме инклюзивного образования в сфере физической культуры // Сибирский педагогический журнал. 2015. № 3. С. 121-124.
4. Козлов А.В., Каткова А.М., Козлова М.А. Влияние унифицированной методики преподавания физической культуры с применением спортивных настольных игр на функциональное состояние организма студентов специальной медицинской группы // Siberian Journal of Life Sciences and Agriculture. 2020. Т. 12. № 3. С. 80-93. DOI 10.12731/2658-6649-2020-12-3-80-93.
5. Освоение дисциплины «Физическая культура и спорт» в вузе с применением инновационных технологий / Лукина С.М., Лобанов Ю.Я., Шаронова А.В., Ярчиковская Л.В., Миронова О.В. // Теория и практика физической культуры. 2019. № 4. С. 44-46.
6. Рютин Л.Н., Мацейканец А.М. Концепция физической культуры для студентов с ослабленным здоровьем // Colloquium-Journal. 2019. № 9-4(33). С. 58-60.
7. Block M.E., Obrusnikova I. What is Inclusion? // A Teacher's Guide to Adapted Physical Education (4th ed.), Baltimore (MD): Paul H. Brookes, 2016, pp. 19-34.
8. Bray S.R., Born H.A. Transition to university and vigorous physical activity: implications for health and psychological well-being during transition to university life // J Am Coll Health, 2004, no. 52, pp. 11-15. URL: <https://pubmed.ncbi.nlm.nih.gov/15018429/> (дата обращения: 07.12.2022)
9. Cordente D., González S., Block M.E., Contreras O. Validity and reliability of the Children's Attitudes Towards Integrated Physical Education-Spanish version (CAIPE-SP) // European Journal of Adapted Physical Activity, 2016, no. 9 (2), pp. 3-12.

10. Haegele J., Zhu X., Davis S. Barriers and facilitators of physical education participation for students with disabilities: an exploratory study // *International Journal of Inclusive Education*, 2017, no. 22(2), pp. 181-188. doi: 10.1080/13603116.2017.1362046
11. Marko M., Rozim R., Kurková P., Bendíková E. Level of students' posture in adolescence in relation to physical activity // *European Journal of Physical Education and Sport*, 2018, no. 6-2, pp. 61-67.
12. McKay C., Block M., Park J.Y. The Impact of Paralympic School Day on Student Attitudes Toward Inclusion in Physical Education // *Adapted Physical Activity Quarterly*, 2016, no. 32, pp. 331-348. doi: 10.1123/APAQ.2015-0045
13. Mohammadi E., Saberi A. The relationship between body composition, anthropometry, and physical fitness in female university students // *TSS*, 2016, no. 3(23), pp. 155-158.
14. Pistlova L., Balint G., Sedlacek J. Physical development and general motor performance of Bratislava university students // *Procedia – Social and Behavioral Sciences*, 2014, pp. 234-246.
15. Ruscitti R., Thomas S.G., Bentley D. The experiences of students without disabilities in inclusive physical education classrooms: a review of literature // *Asia-Pacific Journal of Health, Sport and Physical Education*, 2017, no. 8(3), pp. 741-747. doi.org/10.1080/18377122.2017.1345286
16. Сайт Московской федерации новуса. URL: <http://www.novus-sport.ru/about-federation/mfn-history-menu> (дата обращения: 07.12.2022).

References

1. Bogdanov I., Rychkova N. Vlijanie jemocional'nogo sostojanija i lichnosti na fizicheskuju gotovnost' molodezhi [Effect of emotional status and personality traits on physical preparedness in young people]. *Chelovek. Sport. Medicina* [Human. Sport. Medicine], 2019, no.19 (1), pp. 80-85. <https://doi.org/10.14529/hsm190111>
2. Golubyatnikova M.V., Yakovleva V.N., Makarova L.N., Ageeva M.V. Vlijanie fizicheskijh uprazhnenij na pokazateli kojefficienta zdorov'ja, fizicheskuju podgotovlennost', fizicheskoe sostojanie i rabotosposobnost' studentov v processe zanjatij fizicheskijh kul'turoj [The influence

- of physical exercises on the indicators of the coefficient of health, physical fitness, physical condition and working capacity of students in the process of physical education]. *Sportivnaja medicina: nauka i praktika* [Sports Medicine: Science and Practice], 2017, vol. 7, no. 3, pp. 14-21.
3. Ketrish E.V. O probleme inkluzivnogo obrazovanija v sfere fizicheskoj kul'tury [On the problem of inclusive education in the field of physical culture]. *Sibirskij pedagogičeskij žurnal* [Siberian Pedagogical Journal], 2015, no. 3, pp. 121-124.
 4. Kozlov A.V., Katkova A.M., Kozlova M.A. Vlijanie unificirovannoj metodiki prepodavanija fizicheskoj kul'tury s primeneniem sportivnyh nastol'nyh igr na funkcional'noe sostojanie organizma studentov special'noj medicinskoj gruppy [Influence of the unified methodology on the functional state of the organism of students of a special medical group]. *Siberian Journal of Life Sciences and Agriculture*, 2020, vol. 12, no. 3. pp. 80-93. <https://doi.org/10.12731/2658-6649-2020-12-3-80-93>
 5. Lukina S.M., Lobanov Yu.Ya., Sharonova A.V. Osvoenie discipliny «Fizicheskaja kul'tura i sport» v vuze s primeneniem innovacionnyh tehnologij [Mastering the discipline «Physical culture and sport» at the university with the use of innovative technologies]. *Teorija i praktika fizicheskoj kul'tury* [Theory and Practice of Physical Education], 2019, no. 4, pp. 44-46.
 6. Ryutina L.N., Matseikanets A.M. Konceptcija fizicheskoj kul'tury dlja studentov s oslablennym zdorov'em [The concept of physical education for students with impaired health]. *Colloquium-Journal*, 2019, no. 9-4 (33), pp. 58-60.
 7. Block M.E., Obrusnikova I. What is Inclusion? *A Teacher's Guide to Adapted Physical Education (4th ed.)*, Baltimore (MD): Paul H. Brookes, 2016, pp. 19-34.
 8. Bray S.R., Born H.A. Transition to university and vigorous physical activity: implications for health and psychological well-being during transition to university life. *J Am Coll Health*, 2004, no. 52, pp. 11-15. URL: <https://pubmed.ncbi.nlm.nih.gov/15018429/> (accessed November 10, 2022).
 9. Cordente D., González S., Block M.E., Contreras O. Validity and reliability of the Children's Attitudes Towards Integrated Physical Ed-

- education-Spanish version (CAIPE-SP). *European Journal of Adapted Physical Activity*, 2016, no. 9 (2), pp. 3-12.
10. Haegele J., Zhu X., Davis S. Barriers and facilitators of physical education participation for students with disabilities: an exploratory study. *International Journal of Inclusive Education*, 2017 no. 22 (2), pp. 181-188 <https://doi.org/10.1080/13603116.2017.1362046>
 11. Marko M., Rozim R., Kurková P., Bendíková E. Level of students posture in adolescence in relation to physical activity. *European Journal of Physical Education and Sport*, 2018, no. 6 (2), pp. 61-67.
 12. McKay C., Block M., Park J.Y. The Impact of Paralympic School Day on Student Attitudes Toward Inclusion in Physical Education. *Adapted Physical Activity Quarterly*, 2016, no. 32, pp. 331-348. <https://doi.org/10.1123/APAQ.2015-0045>
 13. Mohammadi E., Saberi A. The relationship between body composition, anthropometry, and physical fitness in female university students. *TSS*, 2016, no. 3 (23), pp. 155-158.
 14. Pistlova L., Balint G., Sedlacek J. Physical development and general motor performance of Bratislava university students. *Procedia – Social and Behavioral Sciences*, 2014, pp. 234-246.
 15. Ruscitti R., Thomas S.G., Bentley D. The experiences of students without disabilities in inclusive physical education classrooms: a review of literature. *Asia-Pacific Journal of Health, Sport and Physical Education*, 2017, no. 8 (3), pp. 741-747. <https://doi.org/10.1080/18377122.2017.1345286>
 16. The Moscow novuss federation. URL: <http://www.novus-sport.ru/about-federation/mfn-history-menu> (accessed December 7, 2022).

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