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USAGE OF SPORTS AND PEDAGOGICAL IMPROVEMENT FOR PHYSICAL CULTURE AND SPORTS SPECIALISTS TRAINING

Physical education - a pedagogical process aimed at physical development, functional improvement of the body, teaching the basic vital motor skills and abilities related to knowledge for future successful professional activities. The purpose of the study is – obtainment and acquisition of basic knowledge and skills in professional work for future specialists in the sphere of physical culture and sports. The study was performed at the National University "Zaporizhzhia Polytechnic". It was attended by 61 women aged 17-20, who were divided into control (CG n=31) and experimental (EG n=30) groups. All women were classified in the main medical group. The following methods were used as a solution to the research problems: scientific literature analysis; pedagogical experiment (to conduct a pedagogical experiment participants were separated into control and experimental groups. But the groups took part in different programs to determine which program was most effective for the discipline "Sports and pedagogical improvement (fitness)"); pedagogical testing; statistical analysis of data was carried out using the SPSS Statistics program. The goal of the course is to solve effectively complex specialized tasks in the process of studying the discipline "Sports and pedagogical improvement (fitness)", which involves using of theoretical and practical methods of health improvement, and is characterized by universality of this motor activity type and promotes health competence in future physical culture and sports specialists. The percentage increase in indicators was divided into three groups: the lowest ("One-km event" and "Floor dip" $p<0,05$), average and highest ("Middle split" and "Angled position" $p<0,001$). But in the experimental group all indicators improved, in the control group - some of them improved slightly, others did not undergo significant changes. It's noted that the evolved program is really positive and can be used during training process for teaching the discipline of "Sports and pedagogical improvement (fitness)" for 17-20 year old students.

Key words: subject, students, Moodle platform, level of physical.

Шуба Л.В., Шуба В.В., Корж Н.Л., Шуба В.О. Використання спортивно-педагогічного вдосконалення для підготовки спеціалістів з фізичного виховання і спорту. Мета дослідження - отримання та засвоєння основних знань та умінь у професійній роботі для майбутнього спеціаліста в сфері фізичної культури і спорту. Дослідження проводилось в Національному університеті «Запорізька політехніка». У ньому взяло участь 61 жінок віком 17-20 років, які були поділені на контрольну (КГ n=31) та експериментальну (ЕГ n=30) групи. Всі жінки біли віднесені до основної медичної групи. Відсотковий приріст показників розподілювався на три групи: найменший ("1 кілометр" та "Згинання та розгинання рук в упорі лежачі" $p<0,05$), середній та найвищий ("Поперечний шпагат" та "Нахил тулуба вперед" $p<0,001$). Але в експериментальній групі всі показники покращились, в контрольній – деякі з них дещо покращились, інші не зазнали значних змін. Відмічаємо, що удосконалена програма дійсно має позитивний характер та може використовуватись у процесі викладання дисципліни спортивно-педагогічне вдосконалення (фітнес) для студенток 17-20 років.

Ключові слова: предмет, студентки, Moodle платформа, рівень фізичної підготовленості.

Articulation of issue and literature route. Sports and pedagogical improvement (fitness) is one of the main disciplines in the curriculum of the physical culture faculties. The basic definitions and terms, particular qualities of the future experts occupational activity are studied. Because the modern trends in the global health movement are accompanied by the emergence of new trends in the socio-cultural phenomenon. One such timely trend is health related fitness. This is one of the modern systems of health gymnastics, which is aimed at: the formation of the body sculpt for girls and women, the ability to move beautifully [4, 10, 11].

Despite of numerous research works of scientists: N. Cokorilo, M. Mikalacki, D. Rakic, & I. Radjo [1], W. Kraemer, M. Keuning, N. Ratamess, J. Volek, et al. [3], I. Masliak, I. Bodrenkova [5], A. Oleynik, V. Annenko [6], N. Pyastolova [7] – the problem of finding effective programs is currently important which helps to increase students motor activity aimed at improving their health and physical fitness due to the introduction of modern sports and health technologies. All these would promote the development of positive motivation for physical education, form the basis of own health activity both in the education system of higher education institutes and in leisure time.

Constant increase of requirements for training of future specialists in the sphere of physical education, needs urgent pressure from the education institutions to improve the content, forms and methods for training specialists in the shape of the

physical culture and sports. In addition, the introduction of new training modules in physical education for school, which involve the teaching variable modules in different sports, put high level requirements to sports and pedagogical training for students of the physical education faculties [8, 10, 13].

To meet these standards raise the possibility of increasing teaching effectiveness for the discipline "Sports and pedagogical improvement" in the chosen sports, which has established itself as a leader in the training of future professionals in the physical education sphere.

Therefore, in connection with the above, it was noted that our research topic is currently important and timely.

The purpose of the study is – obtainment and acquisition of basic knowledge and skills in professional work for future specialists in the sphere of physical culture and sports.

Presentation of the main study material.

The following methods were used as a solution to the research problems: scientific literature analysis; pedagogical experiment (to conduct a pedagogical experiment participants were separated into control and experimental groups. But the groups took part in different programs to determine which program was most effective for the discipline "Sports and pedagogical improvement (fitness)"); pedagogical testing; statistical analysis of data was carried out using the SPSS Statistics program [2].

The research was performed at the "Zaporizhzhia Polytechnic" National University. It was attended by 61 women aged 17-20, who were divided into control (CG n=31) and experimental (EG n=30) groups. All women were classified in the main medical group.

The discipline of the "Sports and pedagogical improvement (fitness)" is taught for three and a half years. The total amount of the course of "Sports and pedagogical improvement (fitness)" for full-time students is 645 hours of which: 194 hours - practicals, 451 hours - self-study. Despite the variety of training, the theoretical part was always present in the form of a lectures course.

The goal of the course is to solve effectively complex specialized tasks in the process of studying the discipline "Sports and pedagogical improvement (fitness)", which involves using of theoretical and practical methods of health improvement, and is characterized by universality of this motor activity type and promotes health competence in future physical culture and sports specialists.

According to the epidemiological situation in the world, our research was conducted in two "realities" - off-line and on-line.

The theoretical part included a lecture course and test tasks located on the Moodle platform. The lecture course was aimed at acquiring the following knowledge:

- use basic knowledge of the theory and methods from physical education and sports training while performing professional tasks;
- ability to use knowledge about the structure of the human body, physiological and biochemical bases of adaptation to physical activity of different orientations during training and performance of professional tasks;
- general orientation in the application of basic theoretical principles and technologies of health and recreational physical activity;
- features of the using modern sports equipment;
- organize activities using different types and forms of physical activity for active recreation and healthy living, in particular, health gymnastics.

The purpose of the test tasks determined and analyzed the level of theoretical knowledge. In case of receiving more than 50% negative answers – the educator had the opportunity to adjust the lecture material for each student. But this correction was only for the students of the experimental group. This careful approach is due to the fact that the discipline "Sports and pedagogical improvement (fitness)" combines both theoretical and practical knowledge that will be used in professional activities in the future.

It is very important that, along with the theoretical knowledge, specialists in the sphere of physical education have a medium or high physical fitness level. But during the research, the control group was engaged in a standard program, and the experimental group used modern trends of health related fitness and equipment. With the object of determine the physical fitness level for future specialists in the sphere of physical education and sports, we used tests of general and special physical training. Pedagogical testing was carried out taking into account the recommendations of the professional literature. Based on the conducted pedagogical testing, the level of physical fitness for 17-20 year old women was determined.

The following tests were used in the research [9, 12]:

1. One-km event (minutes) – testing of endurance ability.

The result was time to overcome the distance.

2. 100-metres race (seconds) – testing of speed abilities.

At the signal, the students start running from a high start one by one. Trying to overcome the distance as soon as possible. Time to overcome the distance, determined with an accuracy of 0,1 seconds.

3. Ten Eights (Kopylov test) (seconds) – testing of coordination ability.

The test participant acquires the starting position of the body tilt forward, holding the ball in one hand. With the command "Start" as quickly as possible, the ball makes an imaginary eight between legs at the knee level. At the same time the ball is transferred from hand to hand. Time of execution of ten "Eight", registered up to 0,1 seconds

4. Floor dip (quantity of repetition) – testing of strength ability.

The test result is the number of error-free flexion and extension of the arms in one attempt.

5. Angled position (cm) – testing of flexibility.

The test result is a mark on the perpendicular marking in centimeters, to which the participant reached with his fingertips in the best of two attempts.

6. Abdominal raise (number of times) – testing of the maximum dynamic strength of the abdominal muscles (strength endurance).

7. Do sit-ups for 1 minute (quantity of repetition) – strength testing.

The test result is the number of lifts from the supine position to the sitting position for 1 minute.

8. Middle split (cm) – flexibility testing.

Statistical analysis: data was performed using the program SPSS Statistica

The obtained data show that the groups are homogeneous in all indicators of motor abilities testing: "100-metres race" (V – 6,46% CG, V– 6,07% EG), "Angled position" (V – 7,11% CG, V – 7,16% EG), "Abdominal raise" (V – 5,61% CG, V – 5,48% EG), "Do sit-ups for 1 minute" (V – 6,05% CG, V – 6,19% EG), "Middle split" (V – 4,27% CG, V – 4,36% EG).

For the tests: "One-km event" (V– 13,21% CG, V– 12,96% EG), "Floor dip" (V – 13,95% CG, V – 14,01% EG), "Ten Eights" (V– 14,74% CG, V – 14,69% EG) – the fluctuations of the results were average.

Table 1 presents level of the physical fitness indicators before and after the research with using experimental program.

Table 1

Statistical indicators of the motor abilities development before and after the research

Tests	Before research		P	After research		P
	CG (n=31)	EG (n=30)		CG (n=61)	EG (n=60)	
	X±m	X±m		X±m	X±m	
One-km event, min	251,2±6,1	252,8±6,2	>0,05	241,8±7,1	234,2±6,8	<0,05
100-metres race, s	16,8±0,2	16,6±0,2	>0,05	14,9±0,1	13,1±0,2	<0,01
Ten Eights, s	11,35±0,7	11,29±0,8	>0,05	9,11±0,4	7,94±0,9	<0,01
Floor dip, quantity of repetition	12±0,5	12±0,4	>0,05	18±0,4	21±0,2	<0,05
Angled position, cm	11,31±0,2	11,70±0,2	>0,05	15,89±0,3	20,11±0,7	<0,001
Abdominal raise, number of times	19±0,5	20±0,4	>0,05	23±0,7	28±0,4	<0,01
Do sit-ups for 1 minute, quantity of repetition	27±0,2	27±0,2	>0,05	33±0,3	39±0,6	<0,01
Middle split, cm	6,44±0,1	6,14±0,2	>0,05	5,4±0,5	3,18±0,4	<0,001

Analyzed the percentage increase in the development of physical abilities.

The lowest increase in indicators was in the tests: "One-km event": in the control group increased by 2,41% and in the experimental group increased by 4,82%, in our opinion, the lowest increase in this test is due to the fact that 17-20 year old students are no longer emotionally ready to monotonous "work"; "Floor dip": in the control group increased by 5,78% and in the experimental group increased by 9,29%, The low increase in this test is due to the fact that the students avoided related exercises during on-line training, so the muscles were not ready for a qualitative performance of test.

The average increase in indicators was in the tests: "100-metres race": in the control group increased by 7,19% and in the experimental group increased by 11,18%; "Abdominal raise": in the control group increased by 10,48% and in the experimental group increased by 15,52%; "Do sit-ups for 1 minute": in the control group increased by 10,74% and in the experimental group increased by 15,67%; "Ten Eights": in the control group increased by 10,73% and in the experimental group increased by 16,11%. The highest increase in indicators was in the tests: "Middle split": in the control group increased by 12,19% and in the experimental group increased by 19,03%; "Angled position" in the control group increased by 13,88% and in the experimental group increased by 20,48%. The highest increase in these tests are naturally determined. Because students of the selected age category are young girls who study at the university, has structured time, do not work and keep track of body sculpt. Analyzed the results, it was noted that the different increase in the motor abilities development 17-20 year old women, indicates, that the using experimental program contributed to the more intensive development of general and special physical training for women in the experimental group.

Conclusion. Analysis of the original and international science works, identified a variety of theoretical and methodological approaches to the fitness using in the teaching process of the discipline – "Sports and pedagogical improvement (fitness)" for 17-20 year old students. The efficiency of the evolved program was investigated when comparing the obtained indicators in the control and experimental groups. The percentage increase in indicators was divided into three groups: the lowest, average and highest. But in the experimental group all indicators improved, in the control group - some of them improved slightly, others did not undergo significant changes. It was noted that the evolved program is really positive and can be used during training process for teaching the discipline "Sports and pedagogical improvement (fitness)" for 17-20 year old students.

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THE PECULIARITIES OF KYU DEGREE CHILDREN'S ATTESTATION IN AIKIDO

The article analyzes the peculiarities of the approach to the certification of children in aikido at the level of kyu. It is determined that the lack of regulations for attestations and the use of outdated programs does not allow to fully unleash the potential of children and leads to their loss of interest in aikido classes and further development.

The state of physical culture and sports activities of children in terms of preparation for certification at the children's level is revealed. It is determined that the absence of a competitive factor is not an obstacle to the formation of a special attitude to certification, but cultivates a special attitude to the partner on the tatami, based on respect for physical characteristics and psychological comfort and mental balance of the partner. All these factors teach to build competently not only the training process, but also the skill of social connections and relationships both on the tatami and in society.

It was found that the proposed optimization of children's physical culture and sports activities has a positive effect on the results of certification, the attitude of athletes and their parents to the training process, as well as improves the psycho-emotional and physical condition of children.

It is established that the traditional approach to the certification of children in aikido, assumes that the child is admitted to practice, and, accordingly, to the exam, from the age of eight. Under such conditions, the child reaches the first kyu and moves to adult certification levels at the age of fourteen, which is fully consistent with the conditions of the start of certification for adults. But the realities show that, today, more and more children begin to practice aikido at 6-7, and even at 4-5 years. It seems impossible for such children to wait 2-4 years to be admitted to the exam, because there are no competitions in aikido, and other forms of motivation, except for the exam and participation in children's educational seminars are not provided.

The authors of this article, based on their own experience and urgent needs of the organization, provide recommendations on the rules of aikido certification for children, as well as amendments to the provisions on certification requirements for children's Aikido athletes. In addition to the above, we consider important the fact that, given the age and level of prior training of children, we emphasize safety in performing both general and special physical training, which is