

2. Скрипченко І. Т. Інноваційні технології в туризмі. Дніпро: Журфонд, 2021. 140 с.
3. Seth E., Schary J., Schary D. P. Virtual and «real-life» wall/rock climbing: motor movement comparisons and video gaming pedagogical perceptions. *Sports Technology*, 2015. Vol. 8 (3-4), pp. 100-111.
4. Jenny S. E., Schary D. P. Motion-Based Video Game and Authentic Wall/Rock Climbing: Motivations and Perceptions of Novice Climbers. *International Journal of Technology in Teaching and Learning*, 2015. Vol. 11 (1), pp. 35-49.
5. Bergstrom T. S. Creating PE Class: Climbing. Diss. Worcester Polytechnic Institute, 2013.
6. Özen G., Vatansever Ş. Examining the effect of artificial wall climbing as a leisure time activity on undergraduate's problem-solving skills. *International Journal of Social Sciences and Education Research*, 2017. Vol. 3 (1), pp. 39-48.
7. Скрипченко І., Ластовкін В., Маркечко К. Рекреаційне скелелазіння та мотузкові парки як інновації у фізкультурно-оздоровчій роботі з молоддю. *National Health As Determinant Of Sustainable Development Of Society*. 2021. С. 230.

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STUDENTS' EXPERIENCE OF USING ERGOMETER «CONCEPT-2» DURING INDEPENDENT PHYSICAL EDUCATION IN THE PROCESS OF EDUCATION IN UNIVERSITY

Keywords: *ergometer «Concept-2», independent work, training program, level of physical fitness*

Today it is impossible to imagine the life of an active person without the use of rowing machines. The simulator is used in gyms and fitness clubs, hospital rehabilitation departments and the NASA astronaut-training center, army and police gyms, on oilrigs in the North Sea and in thousands of homes and apartments.

Today there are 35 «dry rowing» Europe Championships and more than 120 in the world. Active users are people of different age categories, and especially students.

Ukrainian students became active participants in rowing competitions on «Concept-2». After all, the use of rowing machine is effective both in training athletes and for recreational purposes, regardless of the time of year. «Concept-2» has become an integral means of special and general physical training [1-3].

If walk into any Cross Fit box or weightlifting gym, and you'll find the rowing machine is virtually always occupied. That's because smart trainees know just how amazing it is as a «clean-up» workout after an intense weight training session. Using a «Concept-2» is also great because it is low impact, meaning it is great for people with injuries and bad knees.

Literature analysis showed that runners and triathletes also train on rowing machines because it's a low-impact and highly-adaptable form of exercise. The studies of foreign scientists also show the effective use of the «Concept-2» for training athletes in such sports as sailing, wrestling, judo, sports games and others [4-5]. Table 1 shows the advantage of erg training over other sports activities.

Table 1

Benefits Concept-2 vs other workouts*

Benefits of Rowing Machine vs. Other Workouts						
Full Comparison	low impact	upper body	lower body	core	range of motion	mental wellbeing
ROWING MACHINE	★★★	★★★	★★★	★★★	★★★	★★★
TREADMILL	★		★★★	★	★★	★★
UPRIGHT BIKE	★★★	★	★★★	★	★★★	★★
RECUMBENT BIKE	★★★		★★★		★	★★
ELLIPTICAL	★★★		★★★	★★	★★	★★
STAIR STEPPER	★★	★	★★★	★	★	★★
SWIMMING	★★★	★★	★★★	★	★★	★★★

* 16 Benefits of Rowing Machine and How to Reap Results Faster. URL: <https://www.topiom.com/benefits-rowing-machine/>

Rowing is unique in that it's one of the few forms of exercise that targets both your cardiovascular and muscular conditioning. Unlike other workout exercisers, a rowing machine gives your entire body a thorough workout in and out while having low impact.

Modern students do not have much free time. In the context of distance learning, students spend a significant part of their time at the computer and phone. Some of the students work in the evenings in order to pay for their education. Therefore, there is very little time left for physical activity, despite the fact that most young people prefer passive recreation [6]. A short training on Concept-2 will allow them to increase the level of physical activity in a short time and maintain your physical shape. Scientists found that those who participate in aerobic exercises, such as rowing, had an increased ability to process information due to a positive impact on the central nervous system.

Thanks to the fact that rowing puzzles mind of person with understanding and learning a new movement pattern in a proper way the student receives an additional cognitive boost.

Not only is an exercise known to improve your general mood thanks to the release of endorphins sportsmen all experience during and after exercise, but it is known to have longer-term benefits too. These include all the mental health benefits of rowing machine workouts that sportsmen likely to experience thanks to the improved sleep they're to be getting as a result of exercising.

Rowing machines are known as a full body workout because they exercise every major muscle group and provide a fantastic cardiovascular workout. Due to a rowing stroke being performed in 4 phases there are different muscle groups worked during each phase.

The rowing machine muscles targeted are: Quads, Hamstrings, Glutes, Lats, Core, Shoulders, Triceps, Back, Biceps. With the rowing machine, your lower body does 65-75 % of the work. With the rowing machine, student's lower body does 65-75 % of the work what happens chiefly in the drive part of the stroke, when makes push back with your legs. Even advanced training movements like burpees or walking shoulders presses don't activate as many muscles as rowing machines [7].

As noted by many researchers if person will rowing on a rowing machine for 30 minutes daily so it will help strengthen his the core muscles. Also, this rowing session is sufficient to yield results in your upper and lower body.

To develop the muscles of the hands, you need to take hold of the handles and put your feet on a special platform. During the exercise, your abs should be tense, and your back should be straight. As soon as you find yourself in the desired starting position, you need to start pushing off the platform with your feet and at the same time pull the bar towards you. The legs should be as straight as possible, and the elbows should not go beyond your torso. Correct return to the starting position involves bending the hips, no need to lean forward.

Equipment that allows you to develop the biceps of the shoulders is very popular, and all beginners want to test their strength on it.

Usually, when student row, his rowing workouts engage his abdominal muscles the entire rowing time. Since rowing engages your midsection muscles and is a terrific fat-burning activity, student can expect his midsection muscles to be lean with time. Since engaging your core and strengthening the muscles in your midsection is what a rowing machine does excellently, female need to incorporate rowing into your daily training. With a healthy diet, using a rowing machine consistently is a great way to help you lose weight.

The rowing machine give for student a chance to add variation to your workout. If students are tired of a single dull training, which often happens in physical education classes that rowing is the perfect alternative or companion to other sports, like cycling, running, climbing and even boxing. Rowing on the simulator allows the use of various types of training: from the use of a short distance to marathons, varying the pace of exercise from low to high.

Athletes rowing on the ergometer «Concept-2» to burn anywhere between 400-800 calories an hour on average based upon their current fitness levels which has been confirmed by numerous studies [8].

Ergometers can be used in practice as a tool for managing the training load and for to control the functional readiness of a person.

A mandatory requirement for the configuration of each ergometer is a heart rate monitor. Here, as a rule, modern heart rate monitors are used, connected to Polar software. Pulse indicators in real time are presented on the display of the computer unit in the process of ensuring work on the ergometer. Thus, it can be stated that all ergometers allow solving the problem of sports training individualization. All ergometers allow real-time control of work parameters.

Working on «Concept-2» makes it possible to accurately dose parameters of training work for the development of aerobic power (VO₂max), anaerobic power and capacity (La), anaerobic threshold (anaerobic threshold), fatigue compensation, special strength capabilities.

It is known that rowing on your ergometer uses up to 86 % of muscle groups. So with more muscles used, more oxygen needs to reach the muscles.

In rowing on the ergometer, heart rate will increase to meet the demand for more oxygen by the worked muscle groups. As heart pumps harder throughout the rowing session, it works its muscles to build endurance.

In today's conditions of increased hipodinamia, many males and females are overweight. using an ergometer for their workouts will be most effective. The best way for those who want to burn extra fat in their workouts it's to do 10-20 minutes of low-intensity cardio after a resistance training session.

Medical scientists noticed that one the advantage of an ergometer for student's health is that is improved posture and mobility. Lower back of man is critical for every twisting, turning, bending, standing, and sitting movement. His abs also work with the lower back muscles to support your spine. Because students spend so much time sitting every day, their lower back muscles can actually weaken from reduced use. The weakening is even more prominent in the glutes and hips. These muscles are almost completely sedentary for the long hours they spend sitting down, so they become less effective at facilitating full-body movement. Using the «Concept-2» for training leg muscles as Quads, Hamstrings, Glutes and Core is very effectively.

Experts point out that most of these workouts are interval workouts, meaning there is an alternation of hard work with easy rest. Intervals are a very effective way of increasing both aerobic and anaerobic capacity in a minimal amount of time.

In Table 2, we offer various workouts for independent studies of students who belong to the main medical group, as well as workouts for physically strong students who training of different sports.

Table 2

30 min Workout on the «Concept-2» for students of different category

Workout for students (30 min)	Workout for sportsman students (wrestling, MMA, kickboxing)
Start each workout with the following 5-minute warm-up: Row easily, gradually building pressure for the first two minutes. Then row 10 strokes moderately hard, 10 easy, 20 a little harder, 10 easy, 10 hard, 10 easy, 10 very hard, then row easy until you hit 5 minutes.	1. Details: Do the burpees during the one-minute break between rounds. Keep your rowing pace under your best 2k time plus 40 seconds. Do 3 rounds of: <ul style="list-style-type: none"> – Box for two minutes; – 15 burpees; – Row for 2000 m.

<p>The Workout:</p> <ul style="list-style-type: none"> - Alternate 1 minute of hard rowing with 30 seconds of easy rowing. (Start with 10 of these, and work up to as many as 15); - Alternate 2 minutes of hard rowing with 2 minutes of easy rowing. (Do 4 to 6 of these intervals); - Alternate 4 minutes of hard rowing with 2 minutes of easy rowing. (These intervals should be done at a moderately intense pace, not at max); - Alternate 8 minutes of hard rowing with 4 minutes of easy rowing. (For this workout, aim for a steady pace that you can maintain for the entire 8 minutes. Better to start a little slowly than to start too hard). - Work pieces: 1 minute, 2 minutes, 3 minutes, 4 minutes, 3 minutes, 2 minutes, 1 minute. <p>1 minute rest in between work pieces. (Keep the pace moderately intense on the way up the pyramid, and then work toward max intensity on the way back down).</p> <ul style="list-style-type: none"> - Alternate 500 meters of work with 1 minute of rest. (Into the PM as a Standard Workout. Start with four 500 meter pieces and build from there). 	<p>Do 3 rounds of:</p> <ul style="list-style-type: none"> - Kickbox for two minutes; - 15 burpees; - Row for 2000 m. <p>Do 3 rounds of:</p> <ul style="list-style-type: none"> - Fight for two minutes; - 15 burpees; - - Row for 2000 m. <p>2. In workout to combine rowing with sets of exercises such as squats, deadlifts and pull-ups. In conclusion, rowing exercises could be a great addition to your workout routine or program as active recovery (For more advanced sport-lovers).</p> <p>3. Standard training on «Concept-2» typically involves a session of 2000 m of rowing for 10 or more minutes. But you are free to adjust training to your demands. You could do longer sessions by choosing a moderate tempo for 15-20 minutes just to experience a higher aerobic load. Or you can raise the resistance or speed, trying to adjust your workout to Olympic standards of rowing in 8 minutes (for sportsmen).</p>
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Sometimes, in a pandemic or military situation, a student does not have the opportunity to train regularly. In such situations, we recommend at least a week of easy to moderate rowing before taking on these workouts. And student always need to remember to warm up before every row.

Thus, we have shown that rowing lessons on «Conceptpe-2» is an affordable and effective means for independent physical education. Training programs for students with different levels of physical fitness are proposed. And the use of an ergometer monitor will allow you to individualize the training process.

For those students who began to train regularly on «Concept-2», an offer to become a member of the «Million Meters» club and receive a special certificate for their achievement will be interesting.

Reference:

1. Бондаренко І. Веслування в системі фізичного виховання студентів. *Спортивний вісник Придніпров'я*. 2010. Vol. 3, pp. 103-105.
2. Височіна Н. Л., Іванченко О. М., Карасевич С. А. Перспективи впровадження в систему фізичної підготовки майбутніх офіцерів інституцій сектора безпеки і оборони України сучасних тренажерних засобів. *Науковий часопис НПУ ім. М. П. Драгоманова*. Серія 5: Педагогічні науки: реалії та перспективи. 2021. Вип. 80 (1), с. 46-51.
3. Хацаюк О. В., Гіренко С. П., Ванюк Д. В. та ін. Впровадження сучасних технічних засобів навчання в систему СФП майбутніх офіцерів. *Науковий часопис НПУ ім. М. П. Драгоманова*. Серія 15: Науково-педагогічні проблеми фізичної культури (фізична культура і спорт). 2022. № 8 (153), с. 104-109.
4. Monplaisir M. Rowing for Crossfitters: Rowing Machine Basic Setup. Kindle Edition, 2011. 120 p.
5. Skrypchenko I. Indoor rowing for sportsmen in sailing. *Молодь та олімпійський рух: тези доповідей X міжнар. наук. конф. молодих учених (24-25 травня 2017 р.)*. Київ: НУФВіС, 2017. С. 170-172.
6. Kosheleva O, Skrypchenko I, Singh Ram Mohan, Porohnyavyi A, Schastlyvets V, Lastovkin V. Curricular Analysis And Student Engagement as an Indicator of the Efficiency of the Physical Education System In University. *Науковий вісник ДДУВС*. 2021; 2:415-427.
7. Скрипченко І. Т., Омельченко О. С. Використання ергометра «Консепт-2» в спортивному тренуванні та оздоровчих заняттях. Дніпро: ПФ «Стандарт-Сервіс», 2017. 132 с.
8. Скрипченко І. Т., Омельченко О. С. Порівняльний аналіз проходження змагальної дистанції на весловому ергометрі «Консепт-2» спортсменами різної ваги. *Слобожанський науково-спортивний вісник*. 2008. Вип. 1 (2), с. 52-54.

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ROLE OF SPORTS EVENTS IN THE FORMATION OF PATRIOTIC FEELINGS IN YOUTH

Abstract. The main tasks of attracting the younger generation to regular physical education and sports activities, selection, training and skill development of talented athletes in sports, strengthening of material and technical bases and development of physical education and sports are covered in this article.

Keywords: *youth, education, sports, patriotic, nation, People, National Games, sports events, hopeful peasantry, harmonious generation, Universiade*

Today, the fundamental reforms in our political, social, economic and spiritual-educational life carried out under the leadership of Mirziyoyev including the organization of education and sports and wellness activities in completely new content, forms and tools, and the unprecedented opportunities created for them. It