

9. Костюкевич В.М. Побудова тренувального процесу спортсменів високої кваліфікації у футболі і хокеї на траві в річному циклі підготовки // Педагогіка, психологія та медико-біологічні проблеми фізичного виховання і спорту. – 2013. – № 8 – С. 51-55.
10. Таран В.С. Совершенствование профессионально-прикладной физической подготовки курсантов высших военных учебных заведений / В.С. Таран, С.В. Романчук // Педагогика, психология и медико-биологические проблемы физического воспитания и спорта: науч. монография под ред. С.С. Ермакова. – Вып. № 12. – Х., 2007. – С. 130–133.

#### REFERENCES

1. Matveev L. P. *Obschaya teoriya sporta i ee prikladnyie aspekty : uchebnyk dlya vuzov fiz. kulturyi / L.P. Matveev // 5–e izd., ispr. i dop. – M. : Sovetskiy sport, 2010. – 340 s.*
2. Platonov V. N. *Periodizatsiya sportivnoy trenirovki. Obschaya teoriya i ee prakticheskoe primeneniye / V. N. Platonov. – K. : Olimpiyskaya literatura, 2013. – 624 s.*
3. Yordanskaia F.A. *Monytorynh fyzycheskoi y funktsyonalnoi podhotovlennosti futbolystov v usloviakh uchebno-trenyrovочноho protsessa. – M. : Sovetskiy sport, 2013. – 180 s.*
4. Nykolaenko V. *Postroyeniye mnoholetnei podhotovky v sovremennom futbole / Valeryi Nykolaenko // Nauka v olymпыiskom sporte. – K. : NUFVSU, 2014. – №1. – S. 12–16.*
5. Kokarev B.V. *Pobudova trenuvalnoho protsesu vysokokvalifikovanykh sportsmenok u sportyvniy aerobitsi v richnomu tsykli pidhotovky : avtoref. dys. na zdobuttia stupenia kand. nauk z fiz. vykhovannia i sportu : 24.00.01 – «olimpiyskiy i profesiyniy sport» / B.V. Kokarev // Dnipropetrovsk, DDIFKiS. – Zaporizhzhia : ZNU, 2015. – 21s.*
6. *Metodika ispolzovaniya funktsionalnogo mnogoborya (krossfita) v protsesse fizicheskogo vospitaniya studentov / D.A.Kokorev, V D.V.yiprikov, O.V.Vezenitsin, I.M.Bodrov // – Teoriya i praktika fizicheskoy kulturyi. – M., 2016. – № 9. – S. 16-18.*
7. Kokorev D.A. *Krossfit trenirovki kak innovatsionnyiy komponent v fizicheskom vospitanii studentov / D.A. Kokorev // Prioritetnyie napravleniya razvitiya nauki i obrazovaniya. – 2016. – № 1 (8). – S. 134-137.*
8. Lisenchuk H.A. *Teoretyko-metodychni osnovy upravlinnia pidhotovkoiu futbolistiv: dys. ... doktora nauk z fizychnoho vykhovannia i sportu: spets. 24.00.01 / H. A. Lisenchuk. – K., 2004. – 400 c.*
9. Kostiukeyevych V.M. *Pobudova trenuvalnoho protsesu sportsmeniv vysokoi kvalifikatsii u futbolii i kхокеi na travii v richnomu tsykli pidhotovky // Pedagogika, psykholohiia ta medyko-biologichni problemy fizychnoho vykhovannia i sportu. – 2013. – № 8 – S. 51-55.*
10. Taran V.S. *Sovershenstvovanie professionalno-prikladnoy fizicheskoy podgotovki kursantov vysshih voennyih uchebnyih zavedeniy / V.S. Taran, S.V. Romanchuk // Pedagogika, psihologiya i mediko-biologicheskii problemy fizicheskogo vospitaniya i sporta: nauch. monografiya pod red. S.S. Ermakova. – Vyip. 12. – H., 2007. – S. 130–133.*

УДК 796.6:796.012.6–053.7

## COMPARISON ANALYSIS OF DIFFERENT TRAINING PROGRAMS FOR WOMEN-ATHLETES OF HIGH PERFORMANCE SPECIALIZED IN ROWING DURING THE PREPARATORY PROCESS TO THE COMPETITION SEASON

Malikova A.

69600, Zaporizhzhya national university, Zhukovsky str., 66, Zaporizhzhya, Ukraine

nvmalikov@mail.ru

The effectiveness of different training programs for women-athletes of national rowing team of Ukraine has been made out on the basis of the variables dynamics analysis of their general, special physical and functional readiness in the preparatory period of the circannian cycle. There were shown a high effectiveness of the author training program within the preparatory process for oarswomen of high athletic performance, the main focus of which was to increase the number of training sessions on speed-strength and strength training for women-athletes in conjunction with the

stabilization of the rowing pace at the level of model characteristics (42 paddles per minute). It was found that the use of the given training program contributed to a significantly high level of general readiness of women-athletes of National rowing team of Ukraine in comparison with the training programs which are being traditionally used. As a confirmation of this, our women-athletes have won gold medals at the Olympic Games 2012 in London.

*Key words: general and specific physical readiness, functional readiness, women's national rowing team of Ukraine, preparatory phase, different training programs, comparison study, effectiveness.*

### **ПОРІВНЯЛЬНИЙ АНАЛІЗ РІЗНИХ ТРЕНУВАЛЬНИХ ПРОГРАМ ДЛЯ СПОРТСМЕНОК ВИСОКОЇ КВАЛІФІКАЦІЇ, ЩО СПЕЦІАЛІЗУЮТЬСЯ В АКАДЕМІЧНОМУ ВЕСЛУВАННІ В ПРОЦЕСІ ПІДГОТОВКИ ДО ЗМАГАЛЬНОГО СЕЗОНУ**

Малікова А.М.

*69600, Запорізький національний університет, вул. Жуковського, 66,  
м. Запоріжжя, Україна*

nvmalikov@mail.ru

Проведено оцінку ефективності різних тренувальних програм для спортсменок збірної команди України з веслування академічного у підготовчому періоді річного циклу підготовки на основі вивчення динаміки показників їх загальної, спеціальної фізичної та функціональної підготовленості. Показано високу ефективність авторської програми тренувальних занять для спортсменок з високим рівнем підготовленості, головний акцент якої складався у підвищенні обсягу тренувальних навантажень швидкісно-силової та силової спрямованості у поєднанні зі стабілізацією темпу веслування на рівні модельних характеристик (42 гребка за хвилину). Встановлено, що використання цієї тренувальної програми сприяло більш суттєвому підвищенню рівня загальної підготовленості спортсменок збірної команди України з веслування академічного в порівнянні з традиційною програмою тренувальних занять. Підтвердженням цьому були золоті медалі наших спортсменок на Олімпійських Іграх 2012 року в Лондоні.

*Ключові слова: загальна та спеціальна фізична підготовленість, функціональна підготовленість, жіноча збірна команда України з веслування академічного, підготовчий період, різні тренувальні програми, порівняльний аналіз, ефективність*

### **СРАВНИТЕЛЬНЫЙ АНАЛИЗ РАЗЛИЧНЫХ ТРЕНИРОВОЧНЫХ ПРОГРАММ ДЛЯ СПОРТСМЕНОК ВЫСОКОЙ КВАЛИФИКАЦИИ, СПЕЦИАЛИЗИРУЮЩИХСЯ В АКАДЕМИЧЕСКОЙ ГРЕБЛЕ, В ПРОЦЕССЕ ПОДГОТОВКИ К СОРЕВНОВАТЕЛЬНОМУ СЕЗОНУ**

Маликова А.Н.

*69600, Запорожский национальный университет, ул. Жуковского, 66,  
г. Запорожье, Украина*

nvmalikov@mail.ru

Проведена оценка эффективности различных тренировочных программ для спортсменок сборной команды Украины по академической гребле в подготовительном периоде годичного цикла подготовки на основе изучения динамики показателей их общей, специальной физической и функциональной подготовленности. Показана высокая эффективность авторской программы тренировочных занятий для спортсменок с высоким уровнем подготовленности, главный акцент которой состоял в увеличении объема тренировочных нагрузок скоростно-силовой и силовой направленности в сочетании со стабилизацией темпа гребли на уровне модельных характеристики (42 гребка в минуту). Установлено, что использование данной тренировочной программы способствовало более существенному повышению уровня общей подготовленности спортсменок сборной команды Украины по академической гребле в сравнении с традиционной программой тренировочных занятий. Подтверждением этому стали золотые медали наших спортсменок на Олимпийских играх 2012 года в Лондоне.

*Ключевые слова: общая и специальная физическая подготовленность, функциональная подготовленность, женская сборная команда Украины по академической гребле, подготовительный период, различные тренировочные программы, сравнительный анализ, эффективность.*

## **PROBLEM STATEMENT. ANALYSIS OF RECENT RESEARCHES AND PUBLICATIONS**

The modern level of high performance sport requires the highest demands on the different components of general readiness of the athletes in a variety of sports activities, including the rowing [3, 5, 7, 13, 16].

Existing means and methods of optimizing the general, special physical and functional readiness of women- and men-athletes specialized in rowing are no longer able to provide the most optimal form of athlete's training for the most responsible international competitions and achieving there high sport results [2, 6, 8, 9, 15].

In connection with this the studies, oriented towards the development of new training programs, its validation and practical implementation into the training process for the athletes of high performance on different stages of circannian cycle are indisputably relevant, and they involve all the recent achievements of sport sciences as well as the dynamics of sports results in a particular sport activity.

The analysis of scientific and methodological literature upon the issue of the study allowed to state that there are a limited number of works oriented towards the improvement of the training process for women-athletes specialized in rowing, which involve the development of innovative training programs [1, 4, 12, 14, 17].

Relevance and undoubted practical significance of this problem were the prerequisites for this study.

The work is made in accordance with the Plan of scientific and research activity of the Faculty of Physical Education and the Department of Olympic and Professional Sport of Zaporizhzhia National University "Study of adaptive capacities of the organism of athletes on different stages of training process" (2005-2015 yy.).

Aim, tasks, materials and methods of the research. The aim of the work is to determine the effectiveness of different training programs in preparing the women-athletes of national rowing team of Ukraine for the competition season.

Research tasks:

- To make a critical analysis of specialized literature;
- To study the features of changes in the level of general, special and functional readiness of women-athletes of national rowing team of Ukraine in the preparatory process for competition season upon the traditional training program;
- To develop the author training program for women-athletes of national rowing team of Ukraine, and analyse the features of its impact on the variables dynamics of their general, special and functional readiness in the preparatory period;
- To provide the effectiveness estimation of different training programs for women-athletes of high performance specialized on rowing, basing the comparison analysis of the peculiarities in variables dynamics of general readiness.

There are 10 oarswomen of high athletic performance registered with the National Olympic Rowing Team of Ukraine participated in the research. Women-athletes were trained for the competition season under the traditional program (from October 2010 to June 2011) (first phase of the experiment) and author program (from October 2011 to June 2012) (second phase of the experiment). The main difference in author program was the increase of the number of training sessions and training hours to develop the power and speed-power readiness of women-athletes alongside with the rowing pace stabilizing at the level of model characteristics (42 paddles per minute). Full description of the given program is represented by us in the methodological recommendation for rowing coaches[11].

The level of general physical readiness of women-athletes was determined due to the variables of their general endurance (3000 m running, sec), power endurance (number of barbell lifts lying on the board, for 7 minutes) and critical power upon the results of barbell bentover lying on the board - the coefficient of critical power  $K_{max}$  has been calculated, conditional units, cond.un.). To determine the level of special physical readiness the respective rowing ergometer Concept-2 was used: there were registered the power of loading (N, Tin), heart rate (HR,  $b \cdot \text{min}^{-1}$ ) and level of the lactate in blood (LAC,  $\text{mmol} \cdot \text{l}^{-1}$ ) when passing the distance of 2000 m. The emphasis on the given distance has been made out in accordance with the fact that this is a “working” distance for women-athletes specialized in rowing, i.e. it is relevant to the competition distance, which is being used in the various domestic and international competitions.

The updated computer software of express-estimation “SHVSM” has been used in our research to determine the level of functional readiness and its individual components amongst women-athletes [10]. The functional readiness parameters of women-athletes have been determined as follows: relative variable of general physical work capacity ( $rPWC_{170}$ ,  $\text{kg} \cdot \text{min}^{-1} \cdot \text{kg}^{-1}$ ); relative ( $rVO_{2max}$ ,  $\text{ml} \cdot \text{min}^{-1} \cdot \text{kg}^{-1}$ ) variable of maximal oxygen consumption, anaerobic threshold (AnT as % from  $VO_{2max}$ ), level of general (GE, points), speed (SE, points) and power-speed endurance (SPE, points) as well as the level of general functional readiness (LFR, points).

Results of the research. The testing data analysis of women-athletes of national rowing team of Ukraine within the first stage of the experiment allowed to state the following (table 1).

The significant increase of the level of general endurance (due to the results of the running on 3000 m), power endurance and maximal power were registered by the end of the preparatory period, during which women-athletes of national rowing team of Ukraine had been being trained upon the traditional program of workout sessions.

Testing results of women-athletes on the rowing ergometer “Concept-2” also testified the improvement of their variables of special physical readiness by the end of the preparatory period. Thus, by the end of the first phase of the experiment, there was a significant decrease in HR (up to  $189,10 \pm 0,90 \text{ b} \cdot \text{min}^{-1}$ ) and the level of blood lactate (up to  $15,37 \pm 0,08 \text{ mmol} \cdot \text{l}^{-1}$ ) amongst oarswomen when passing the distance of 2000 m. However, it should be noted, that significant changes in the values of performed work capacity were not observed. The changes in variables of functional readiness of the examined women-athletes also were positive.

Table 1 – Variables of general, special physical and functional readiness of women-athletes of national rowing team of Ukraine (n=10) on different preparatory stages upon the traditional training program,  $\bar{X} \pm m$

Variables	Start of the preparatory period	End of the preparatory period	t	P
Run 3000 m, s	815,57±1,18	806,23±1,16	5,65	<0,001
Power endurance, number of times	189,09±0,47	191,49±0,42	3,82	<0,01
$K_{max}$ , cond.units	1,03±0,001	1,04±0,001	2,67	<0,01
$N_{2000}$ , Wt	336,04±7,20	343,25±7,36	0,70	>0,05
$HR_{2000}$ , $b \cdot \text{min}^{-1}$	192,40±0,88	189,10±0,90	2,62	<0,01
$LAC_{2000}$ , $\text{mmol} \cdot \text{l}^{-1}$	15,94±0,24	15,37±0,08	2,29	<0,05
$rPWC_{170}$ , $\text{kg} \cdot \text{min}^{-1} \cdot \text{kg}^{-1}$	22,30±0,34	25,44±0,38	6,18	<0,001
$rVO_{2max}$ , $\text{ml} \cdot \text{min}^{-1} \cdot \text{kg}^{-1}$	63,71±0,34	71,08±0,38	14,28	<0,001
AnT, %	63,87±0,54	71,47±0,60	9,44	<0,001
GE, points	47,54±0,90	65,21±1,02	12,96	<0,001
PSE, points	61,41±1,35	78,57±1,53	8,42	<0,001
PE, points	66,59±0,80	77,74±0,86	9,44	<0,001
LFR, points	62,52±0,68	79,08±0,76	16,24	<0,001

It is shown, that by the end of the preparatory period for women-athletes of National rowing team of Ukraine there was a significant increase in the level of their general physical work capacity (up to  $25,44 \pm 0,38 \text{ kgm} \cdot \text{mmin}^{-1} \cdot \text{kg}^{-1}$ ), aerobic capacities (up to  $71,08 \pm 0,38 \text{ ml} \cdot \text{min}^{-1} \cdot \text{kg}^{-1}$ ), values of AnT (up to  $71,47 \pm 0,60\%$ ), as well as the increase in the level of their general (up to  $65,21 \pm 1,02$  points), speed (up to  $77,74 \pm 0,86$  points), speed-power (up to  $78,57 \pm 1,53$  points) endurance and general level of their functional readiness (up to  $79,08 \pm 0,76$  points), which were considered as above the average.

In general, the results obtained within the first experimental phase testified a significantly high effectiveness of the traditional training program for oarswomen of high athletic performance during the preparatory period of circannian cycle. However, the absence of significant changes in certain important variables, not the high level of the main components of functional readiness, but above the average, discredited the achievement by them high athletic results in the upcoming in a year the major sport event – Olympic Games in London.

In connection with this, activities for the training program improvement for oarswomen of the National team of Ukraine were developed by us in the preparatory period of Olympic year and the experimental estimation of its effectiveness was conducted (second stage of the experiment).

The results of the final testing showed that a significant increase of all the variables of general, special functional and functional readiness had been being registered with the examined women-athletes by the end of the preparatory period (table 2).

Table 2 – Variables of general, special physical and functional readiness of women-athletes of national rowing team of Ukraine (n=10) on different preparatory stages upon the author training program,  $X \pm m$

Variables	Start of the preparatory period	End of the preparatory period	t	P
Run 3000 m, s	$818,30 \pm 1,25$	$757,75 \pm 1,15$	35,68	<0,001
Power endurance, number of times	$188,08 \pm 1,14$	$204,44 \pm 1,24$	9,75	<0,001
Kmax, cond.units	$1,04 \pm 0,01$	$1,12 \pm 0,03$	3,19	<0,01
N <sub>2000</sub> , Wt	$328,90 \pm 6,85$	$361,40 \pm 7,92$	3,10	<0,01
HR <sub>2000</sub> , b•min <sup>-1</sup>	$194,30 \pm 0,67$	$185,10 \pm 0,78$	8,95	<0,001
LAC <sub>2000</sub> , mmoll•l <sup>-1</sup>	$16,00 \pm 0,25$	$14,10 \pm 0,22$	5,66	<0,001
rPWC <sub>170</sub> , kg•min <sup>-1</sup> •kg <sup>-1</sup>	$22,80 \pm 0,21$	$27,86 \pm 0,38$	11,68	<0,001
rVO <sub>2</sub> max, ml•min <sup>-1</sup> •kg <sup>-1</sup>	$64,19 \pm 0,28$	$74,97 \pm 0,66$	15,07	<0,001
AnT, %	$64,44 \pm 0,68$	$75,40 \pm 0,62$	11,91	<0,001
GE, points	$49,38 \pm 0,56$	$81,24 \pm 1,18$	24,43	<0,001
PSE, points	$64,94 \pm 2,23$	$81,87 \pm 1,62$	6,14	<0,001
PE, points	$68,67 \pm 0,67$	$83,30 \pm 1,50$	8,90	<0,001
LFR, points	$64,71 \pm 0,95$	$86,60 \pm 0,74$	18,22	<0,001

It is important to note, that all the variables being used in the research corresponded to the high level, which testified to the higher effectiveness of the training program developed by us in comparison with the traditional one.

The results of the comparison analysis of the variables of general, special and functional readiness amongst women-athletes of national rowing team of Ukraine, registered by the end of the first and second stage of the experiment, have become the convincing evidence of this. (table 3).

It is shown that the use of the author program in the training process of women-athletes within the preparatory period for the season contributed to significantly higher values for almost all the

parameters of general, special physical and functional readiness of women-athletes of National rowing team of Ukraine.

Completely confirmed this conclusion the results of the performance of our women-athletes at the Olympic Games 2012 in London, where our oarswomen obtained gold medals with the result 6.34.1 in the final stage.

Table 3 – Comparison analysis of variables of general, special physical and functional readiness of women-athletes of national rowing team of Ukraine (n=10) at the end of preparatory stage, being trained upon the different programs of the athletic performance,  $X \pm m$

Variables	Traditional training program	Training program proposed by the author	t	P
Run 3000 m, s	806,23±1,16	757,75±1,15	29,65	<0,001
Power endurance, number of times	191,49±0,42	204,44±1,24	9,90	<0,001
Kmax, cond.units	1,04±0,001	1,12±0,03	2,66	<0,01
N <sub>2000</sub> , Wt	343,25±7,36	361,40±7,92	1,68	>0,05
HR <sub>2000</sub> , b•min <sup>-1</sup>	189,10±0,90	185,10±0,78	3,36	<0,01
LAC <sub>2000</sub> , mmoll•l <sup>-1</sup>	15,37±0,08	14,10±0,22	5,43	<0,001
rPWC <sub>170</sub> , kg•min <sup>-1</sup> •kg <sup>-1</sup>	25,44±0,38	27,86±0,38	4,49	<0,001
rVO <sub>2</sub> max, ml•min <sup>-1</sup> •kg <sup>-1</sup>	71,08±0,38	74,97±0,66	5,09	<0,001
AnT, %	71,47±0,60	69,40±0,62	4,56	<0,001
GE, points	65,21±1,02	81,24±1,18	10,26	<0,001
PSE, points	78,57±1,53	81,87±1,62	1,48	>0,05
PE, points	77,74±0,86	83,30±1,50	3,21	<0,01
LFR, points	79,08±0,76	86,60±0,74	7,10	<0,001

### CONCLUSIONS

The results of the given study showed that women-athletes of national rowing team of Ukraine had more substantial positive changes of their variables of general, special physical and functional readiness under the influence of training sessions in preparatory period upon the author program than under the influence of the traditional training program.

Obtained results certified the high effectiveness of training program developed by us for oarswomen of high qualification at the preparatory period of circannian cycle.

### PROSPECTS FOR FURTHER RESEARCH IN THE GIVEN FIELD

The specified training programs for women-athletes of high performance specialized in rowing are to be developed for competition period of circannian cycle of training.

### LITERATURE

1. Ageyev Sh. K. Main aspects of the contemporary training system for athletes specialized in rowing / Sh.K. Ageyev. - Kazan, 2012. – 93p.
2. Caudwell J. “Easy, Oar!”: rowing reflections. Qualitative Research in Sport, Exercise and Health. 2011, vol.3(2), pp. 117–129.
3. Davydov V. Yu. Theoretical framework of sport selection and specialization in the Olympic water sports of a distant character: published summary of a thesis for doctoral degree in pedagogy science / V. Yu. Davydov. – M.: MSU, 2002. – 40 p.
4. Diyachenko A.Yu. Enhancement of special endurance amongst qualified athletes in rowing / A.Yu. Diyachenko - K.: SPC “Slavutich-Dolphin”, 2004. - 338 p.
5. Gorbanyeva E.P. Qualitative characteristics of a functional readiness of athletes / E.P. Gorbanyeva. – Saratov: Nauchnaya kniga. – 2008. – 145 p.

6. Ieremenko (Spychak) N.P. Features of the features and functional training key factors of qualified rowers, canoeists // *Physical Education of Students*. 2012, vol.2, pp. 24 – 28.
7. Issouryn V.B. Block periodization of a sport training / V.B. Issouryn. - M.: Sovetskiy sport, 2010. - 288 p.
8. Kleshnev V. Boat acceleration, temporal structure of the stroke cycle, and effectiveness in rowing. // *Journal of Sports Engineering and Technology*. – 2010. – vol.6. – pp.45-52.
9. Kropta R.V. Functional readiness modelling of the rowers in the phase of their maximal individual performance: / R.V. Kropta: published summary of a thesis for doctoral degree in physical education and sport (24.00.01) / НУФВСУ. – Kiev, 2004. – 188 p.
10. Malikov M.V. Functional diagnostics in physical education and sport / M.V. Malikov, A.V. Svatiyev. – Study guide (marked as Ministry of Education and Science of Ukraine). – Zaporizhzhia: ZNU, 2006. – 199 p.
11. Miftakhutdinova D.A. Complex training program for women’s national rowing team of Ukraine to participate in London Olympic Games 2012 / D.A. Miftakhutdinova, M.V. Malikov, A.V. Svatiyev. – Methodological recommendations. – Zaporizhzhia: ZNU. – 2015. – 73p.
12. Nolte V. Rowing Faster / Volker Nolte // *Human Kinetics*. – 2011. – vol.1. – 366 p.
13. Platonov V.N. Training system for athletes in Olympic sport. General system and its practical recommendations / V.N. Platonov. – K.: Olympic literature, 2004. – 808 p.
14. Schinkaruk O. A. Enhancement of scientific and methodological support for Ukrainian athlete in training for Olympic Games at the modern stage of sport development / O. A. Schinkaruk // XIV International scientific congress. «Olympic sport and sport for everyone» [collection of abstracts]. – K. : Olymp. lit., 2010. – P.143.
15. Syrets A.L. Age dynamics of world’s top achievements on rowing ergometers “Concept” / A.L. Syrets // *Scientific rationale of physical education, sport, training and personnel training in physical education and sport*. - Minsk, 2004 - P. 122-125.
16. Verkhoshanskiy Yu.V. Theory and methodology of sport performance: block training system for athletes of high performance / Yu.V. Verkhoshanskiy // *Theory and practice of physical education*. – 2005. – № 4. – P. 2-13.
17. Zhukov S. E. Technology of focused training of athletes for competitions on the ergometer “Concept” / S.E. Zhukov // *Sport na vode*. – 2001. – No.4. – P. 26.

УДК 796. 03-053

## **АНАЛІЗ СУЧАСНОГО СТАНУ РОЗВИТКУ ВЕТЕРАНСЬКОГО НАЦІОНАЛЬНИЙ СПОРТУ**

Сердюк Д.Г.<sup>1</sup>, Черненко А.Є.<sup>1</sup>, Жержерунов А.О.<sup>2</sup>, Шартон М.<sup>2</sup>

*69600, Запорізький національний університет, вул. Жуковського, 66, м. Запоріжжя, Україна<sup>1</sup>*

*69600, Запорізький національний технічний університет, вул. Жуковського, 64,  
м. Запоріжжя, Україна<sup>2</sup>*

chernenko.e7@gmail.com

На основі теоретичного аналізу розглянуто проблему сучасного стану розвитку ветеранського руху. Встановлено, що ветеранський спорт є не тільки засобом боротьби з негативними явищами сучасного суспільства але і здатен формувати в суспільній свідомості гідні ціннісні установи на здоровий спосіб життя, етичні, естетичні та морально-психологічні фактори. Визначено, які асоціації проводять змагання різного рівня серед ветеранів. Виділено основні види змагань серед ветеранів, які проводяться у світі, Європі та Україні. Упродовж дослідження було проаналізовано етапи розвитку ветеранського спорту в світі (Всесвітні ігри