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Main Menu Visitors 51,748 VOL 22 Issue 11, November 2022 22,803 HOME 21,605 20,820 MISSION AND SCOPE **9** 18, 781 Comparison between mood states, stress and recovery in CrossFit® competitors ABSTRACTING & 10,185 and non-competitors. 9,772 INDEXING ISABELA AMBRÓSIO D'ALPINO 1: JOÃO PAULO CAMPANHÃ MOTEROSSO2: 9,545 9,317 WELIGTON RODRIGO BOTAROS: ALINI OLIVEIRA CASSIANO DA SILVA4: PAULA EDITORIAL BOARD GRIPPA SANT ANNAS; ADEMIR TESTA JUNIORS; CARLOS EDUARDO LOPES VERARDI7: GABRIEL DE SOUZA ZANINIR. 8,847 1,2,3,4,5,6,8Department of Physical Education, Jahu Integrated Faculties (FU), Jahu, INSTRUCTIONS FOR 8,348 BRAZIL: AUTHORS 7, 579 7,8Department of Physical Education, São Paulo State University (UNESP), Bauru; 7,670 6,316 ARCHIVE BRAZIL 5,835 Published online: November 30, 2022 PUBLISHING POLICY (Accepted for publication November 15, 2022) 5,567 DOI:10.7752/jpes.2022.11331 9,585 4,761 FOR REVIEWERS SUBMIT ARTICLE 4,656 Art # 332 pp. 2618 – 2626 4,506 3,341 A new vision of mindfulness in physical education. Contributing to the social Next issue dimension of sustainable development. ALMUDENA COLÓN-CALVO1, SALVADOR BAENA-MORALES2, ALBERTO FERRIZ-3,506 3,527 3,466 2,867 2,806 VALERO3, OLALLA GARCÍA-TAIBO4 Manuscripts under evaluation 1.2.3 Department of General Didactics and Specific Didactics, University of Alicante, Alicante. SPAIN. EDUCAPHYS research group. Search 2,741 1.2 Faculty of Education, International University of Valencia - VIU 2,138 2,459 4 Department of Physical Education and Sport. Pontifical University of Comilias. CESAG-Maliorca, Palma de Mallorca, SPAIN Search. 1,361 Published online: November 30, 2022 1,330 (Accepted for publication November 15, 2022) 1.862 1.830 DOI:10.7752/jpes.2022.11332 1,812 1,740 Art # 333 pp. 2627 - 2635 Transferable skills from strength to speed of running 1,716 RIGERTA SELENICA1, NAJADA OUKA2 1,539 1,533 1,2,Department of Education and Health, Faculty of Movement Sciences, Sports University of Tirana, ALBANIA 1.516 Published online: November 30, 2022 1,319 (Accepted for publication November 15, 2022) 1.314 Journal of Physical DOI:10.7752/jpes.2022.11333 1.314 1.302 1.198 1.161 1.196 1.091 1.082 1.080 **Education and Sport** Art # 334 op. 2636 - 2641 Sports Therapy and Prevalence of work related musoulockeletal disorders (WRMSD) and the associated Rehabilitation rick faotors among malayclan physiotherapicts: A orose sectional study YAP ZHI YI1, SHARMILA PILLAIZ, VINCOHKUMAR RAMALINGAM3, ONG JUN HUI4 1,3,4 Department of Physiotherapy, Faculty of Health and Life Sciences, INTI International SIR 2021 0.39 1,062 1,038 1,038 University, MALAYSIA 2 Department of Physiotherapy, Faculty of Health Sciences, Universiti Teknologi MARA, powered by scimagojn.com MALAYSIA Published online: November 30, 2022 12 11 Art # 341 pp. 2681 – 2687 Complex pedagogical diagnostics of personal motor activity 10 PAVEL SNEZHITSKY1, ELENA ROMANOVA2, MIKHAIL KOLOKOLTSEV3, ANTON VOROZHEIKIN4, SERGEY SMIRNOV5, ALEXANDER BOLOTIN6, ANDREI TARASOV7, 10 SERGEY AGANOV8, PAVEL SULDIN9 9 **2**8 1 Grodno State Agrarian University, Grodno, Republic of Belarus 2 Altai State University, Barnaul, RUSSIA 3 Irkutsk National Research Technical University, Irkutsk, RUSSIA 4 Kaliningrad Institute of Management, Kaliningrad, RUSSIA 5 Siberian Federal University, Krasnoyarsk, RUSSIA 6 Peter the Great St. Petersburg Polytechnic University, RUSSIA 7 Immanuel Kant Baltic Federal University, Kaliningrad, RUSSIA **X** 7 7 7 8 GPS Emercom of Russia St. Petersburg University, RUSSIA

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Comparison between mood states, stress and recovery in CrossFit® competitors and non-competitors.
ISABELA AMBRÓSIO D'ALPINO 1, JOÃO PAULO CAMPANHÃ MOTEROSSO2;

WELIGTON RODRIGO BOTARO3; ALINI OLIVEIRA CASSIANO DA SILVA4; PAULA GRIPPA SANT'ANNA5; ADEMIR TESTA JUNIOR6; CARLOS EDUARDO LOPES VERARDI7; GABRIEL DE SOUZA ZANINI8.

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Complex pedagogical diagnostics of personal motor activity

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Visitors

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Original Article

Complex pedagogical diagnostics of personal motor activity

PAVEL SNEZHITSKY¹, ELENA ROMANOVA², MIKHAIL KOLOKOLTSEV³, ANTON VOROZHEIKIN⁴, SERGEY SMIRNOV⁵, ALEXANDER BOLOTIN⁶, ANDREI TARASOV⁷, SERGEY AGANOV⁸, PAVEL SULDIN⁹

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Abstract

The study of the motor culture of the personality of rural residents seems to be relevant due to the lack of knowledge of this issue. Identification of cause-and-effect relationships between the living environment and the human population is a relevant direction in the field of physical education. The aim of this research is to develop a method of complex pedagogical diagnostics of the motor culture of a person in a rural community based on a personal-activity approach, to evaluate the effectiveness of this approach using publicly available means of pedagogical control. Materials and methods. The study was carried out in the conditions of a natural pedagogical experiment from 2017 to 2020 in rural areas (Republic of Belarus). The project involved 957 rural residents aged 6 to 75 years. The data obtained were subjected to a comparative analysis with the results of other authors, generalized, synthesized and used to develop a comprehensive methodology for assessing the motor culture of a person. Results. An innovative methodology for a comprehensive pedagogical assessment of a person's motor culture based on functional, myofascial and motor-behavioral diagnostics is proposed. Based on the results of pedagogical diagnostics, an assessment is made of the level of motor activity, and recommendations are developed for the motor activity content of a person's day regimen. Conclusions. The results of the study prove that the proposed method is effective. This technique consists of publicly available and quite informative methods of pedagogical diagnostics of motor activity components for most representatives of the rural community: individual daily motor regime, physical development, functional state, physical fitness, taking into account gender and age differentiation.

Key Words: functional state, physical fitness, physical activity, pedagogical assessment

Introduction

It is generally accepted to associate human health with the ability to implement full-fledged motor activity (Chekhovska et al., 2020; Bakiko et al., 2020; Kolpakova, 2018). It is from the motor-behavioral viability of an individual that public opinion is formed regarding the level of his health, as a subject having the ability to manifest his own motor potentials at one level or another (Yang, Dong, 2017; Ushakova, 2017). The variety and quality of the motor sphere are the result of a person's motor-activity experience, which is acquired by him in the process of mastering physical education. There is an acquisition of new, or the preservation or loss of old physical conditions (Martínez-Cervantes et al., 2018). There are literature sources presenting research materials of scientists on the positive impact of physical activity on human health (De la Cαmara et al., 2021) and its motor qualities (Yıldız, 2018).

Allocate internal motor activity. Internal motor activity is a functional interaction of body systems and internal organs. This activity ensures the process of basal metabolism due to the expenditure of energy by the body systems necessary to maintain life in a state of complete physical and mental rest (Vybornaya et al., 2017).

In human life, an important role is given to external motor activity, which is considered by scientists (Skead, & Rogers, 2016) as a process of life-supporting myofascial interaction of an individual with the environment by moving his physical body or its parts in space and time (postural, locomotor, manipulation and imitation activities). The share of energy consumption in the daily metabolism depends on the lifestyle of the individual and ranges from 10% to 60% (Snezhickij, 2022).

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An important point in the formation of a person's motor culture, according to a number of authors (Ljubojević, & Bojanić, 2016; Wilczyński, 2018), is coordination abilities. In general, the quality of the individual's motor activity is manifested in the spatio-temporal characteristics of the coordination of the organs of movement of the human body. This means that depending on real or artificially modeled motor challenges (triggers) of biogeosociocenosis, an individual is ready to respond to them adequately by showing his basic conditional physical qualities. The rational manifestation of psychosomatic consistency ensures a high level of motor culture and, as a result, human health (Potop et al., 2017; Zurita-Ortega et al., 2019). Special artificially modeled challenges of biogeosociocenosis are pedagogical motor tests and functional tests, which allow assessing the level of an individual's motor culture.

The determination of the level of motor culture is based on empirical knowledge, which can be obtained mainly by spatio-temporal measurements of the operational physical state of the individual, reflecting his practical motor-activity experience. To analyze the physical condition of a person, objective information is required, presented in digital terms.

The most informative will be motor tests and functional tests, which in the best way can reflect the previously acquired motor-activity experience. Based on the results of pedagogical diagnostics (motor tests, functional tests, questioning), an assessment is made of the level of motor culture, and recommendations are developed for the motor-activity content of a person's day regimen.

The problem of providing pedagogical control of physical condition in modern social and professional communities is seriously aggravated during training (Eksterowicz, & Napierała, 2020) and after graduating from educational institutions of full-time education. After the young people go to work, they are given the choice of any options for the motor-activity use of their own body. As observations show, less than 2% of people use competent pedagogical diagnostics of the physical and functional state of their own body.

Particular attention should be paid to the motor culture of the individual in the rural community (Kuz'min, 2017). This is caused not only by the causes of urbanization and migration, but also by the negative indicators of the balance of mortality and fertility. The situation of increasing mortality in working age due to cardiovascular pathologies and malignant neoplasms is of the greatest concern (Townsend et al., 2016; Shinichiro Morishita et al., 2021; Kolokoltsev et al., 2021). The theology of these processes among the villagers may be hidden in the lack of basic knowledge on the components of a health culture (food culture, body culture and movement culture). In the current situation, a comparative assessment of a person's physical condition can become the starting point on the path to health creation (health saving) of the individual and improving the demography of the rural population.

Taking into account the insufficient development of the problem, we have proposed a universal methodology for a comprehensive pedagogical assessment of the motor culture of the personality of a rural community based on functional, myofascial and motor-behavioral diagnostics, which makes it possible to determine the level of a person's physical condition and the compliance of his regular motor regimen with age and gender norms.

Research aim. On the basis of the personal-activity approach, to develop a method of complex pedagogical diagnostics of the motor activity of the individual in the rural community and evaluate its effectiveness using publicly available means of pedagogical control.

Material & methods

The research project, which was conducted in the Republic of Belarus in 2017-2020, involved 957 rural residents aged 6 to 75 years. The methodology for a comprehensive pedagogical assessment of a person's motor culture included the diagnosis of the following components: individual daily motor mode, physical development, functional state, physical fitness, taking into account gender and age differentiation.

Assessment of individual physical activity was carried out by a questionnaire survey. The questionnaire reflected simple and easy-to-answer results of everyday life (the number of steps performed per day while walking and running, squats, jumps, hangings, etc.; the duration of daily stay in various positions: standing, sitting, lying down, etc.; the main criteria for the daily routine: getting up, hanging out, the number of meals, etc.). The methodology for the formation of motor and cultural literacy of the individual was implemented on the basis of a reverse educational approach (teachers \leftrightarrow students \leftrightarrow parents \leftrightarrow social partners \leftrightarrow fellow villagers).

Anthropometric generally accepted indicators were used to assess physical development.

The following tests were used to diagnose motor qualities: forward bend from a sitting position, cm; shuttle run 4x9 meters, sec; running at a distance of 30 meters, sec; 1500m run (women) and 3000m run (men), min. sec); hanging pull-ups, number of times; push-ups from the floor, the number of times; lifting the body, the number of times; standing long jump, sec. When carrying out the research project, the implementation of the comparative-analytical approach consisted of three stages. The first stage included a sociological study of the subject on the forthcoming indicators of pedagogical diagnostics of functional, myofascial and motor-behavioral control, to which the respondent gave answers (prognostic motivational factor). During the second stage, the motor tests themselves were performed according to the same indicators of pedagogical control, the results of which the subjects could subsequently compare with the data of their own answers. This allowed the subject the possibility of self-assessment of the differences between the expected and real results of his own physical

condition. The third stage allowed the respondents to compare the test results obtained with the standards of the state sports and recreation complex of the Republic of Belarus, in which the value of the indicator in each test was assessed on a 6-point system (Voron, & Kasach, 2016).

The obtained data were entered into a questionnaire-diagnostic card created in the Microsoft Office Excel program, where statistical processing was automatically carried out. Next, we calculated the values of the indicators and gave a general assessment (in points) of the level of the individual's motor culture. The project was carried out without violating the principles of the 2003 Declaration of Helsinki on biomedical research. The consent of the parents of the children involved in the project was obtained.

Results

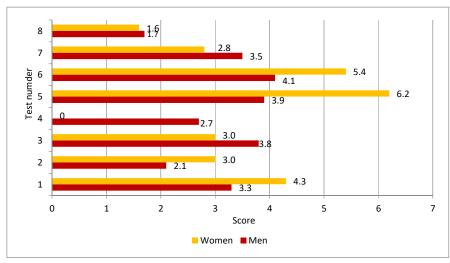
The results of assessing the motor culture of the personality of representatives of social and professional communities in rural areas according to a five-point scoring system are presented in Table 1.

Table 1. The value of the indicators of the components of the motor culture of the rural population.												
Components,	Age, years											
points	6-10	11-15	16-21	22-35	36-60	61-75	6-75					
	(n=158)	(n=206)	(n=143)	(n=244)	(n=134)	(n=72)	(n=957)					

points	6-10	11-15	16-21	22-35	36-60	61-75	6-75		
	(n=158)	(n=206)	(n=143)	(n=244)	(n=134)	(n=72)	(n=957)		
FS ¹	3.9±1.8	3.6±1.2	3.1±1.6	2.8±0.8	2.4±1.2	3.1±1.5	3.1±1.4		
FP ²	3.6±2.1	3.1±1.6	2.9±1.4	2.5±1.4	1.7±1.3	2.4±1.3	2.7±1.2		
MA^3	4.1±0.8	2.4±1.3	1.9±1.1	2.2±1.5	3.2±0.8	3.6±1.2	2.9±1.4		
MCL ⁴	2.4±1.6	2.1±1.2	3.6±0.6	3.8±1.5	1.6±0.7	1.4±0.6	2.4±1.3		
MC ⁵	3.8±0.1	3.4±0.5	2.8±0.9	3.1±0.3	2.6±0.2	2.9±0.9	3.1±0.6		

Note: 1- Functional State (FS); 2 - Physical Fitness (FP); 3- Motor Activity (MA); 4 - Motor-Cultural Literacy (MCL); 5 - Motor Culture (MC)

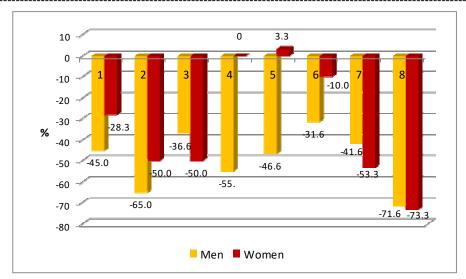
The average value of the assessment of the motor culture of the individual among the representatives of the studied population of rural residents was 3.1 ± 0.6 points. The highest assessment of the motor culture of the individual (3.8 ± 0.1 points) is recorded at the age of 6 to 10 years, the lowest value of the indicator was found at the age of 36-60 years (2.6 ± 0.2 points), p < 0.05. The highest values of all indicators of the components of the motor culture of the individual, with the exception of motor-cultural literacy, were noted at the age of 6-10 years. An important component of the assessment of the motor culture of the rural population of the Republic of Belarus is the characteristic of physical fitness. The results of a comparative analysis of the physical fitness of the rural population with state standards are shown in Figure 1.



Note: Test number: 1 - forward bend from a squat, 2 - shuttle run 4 x 9 m, 3 - run 30 m, 4 - pull-ups in the hang, 5 - push-ups in lying position, 6 - lifting the torso, 7 - long jump from a place, 8 - running 1500 m (w) and 3000 m (m)

Fig. 1. The results of the assessment of physical fitness testing of rural residents (points)

It was established that the results of all motor tests of rural residents (with the exception of test No. 5, "flexibility" in women) were lower than those recommended by the state standard of physical fitness. These data testify to the insufficient level of physical health of rural residents of the Republic of Belarus. The values of the difference between the results of the performed motor tests and the regulatory requirements are shown in Figure 2.

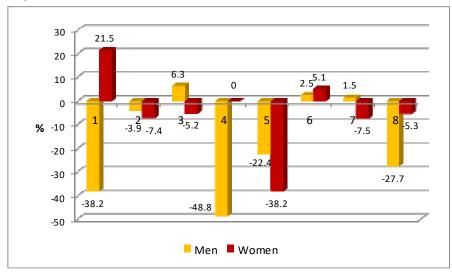


Note: Test number: 1 - forward bend from a squat, 2 - shuttle run $4 \times 9 \text{ m}$, 3 - run 30 m, 4 - pull-ups in the hang, 5 - push-ups in lying position, 6 - lifting the torso, 7 - long jump from a place, 8 - running 1500 m (w) and 3000 m (m)

Fig. 2. The difference between the indicators of testing motor qualities and government regulations (%)

A negative difference was found in the values of indicators in all motor tests of rural residents (with the exception of test No 5 for women). In most tests, the values of indicators in control tests are lower than the standard values, by more than 50%. This is recorded in tests No 2 ("speed endurance and agility"), No 3 ("quickness"), No 4 ("strength"), No 7 (dynamic strength of the muscles of the lower extremitie). The greatest difference between the results of testing rural residents from the normative values is noted in test No. 8, which characterizes the motor quality "general endurance". The difference in differences in this test exceeds 70% in men and women. The obtained results of control tests of physical fitness indicate an insufficiently developed motor culture of the rural population.

We, in order to increase the motivational component of the physical activity of the rural population of the republic, before testing the motor qualities, conducted a survey of respondents about their predicted results of passing control tests. Comparison of the obtained test results with the predicted indicators showed that the expected results indicated by the respondents tend to increase for certain control motor tests, and decrease for others (Figure 3).



Note: Test number: 1 - forward bend from a squat, 2 - shuttle run $4 \times 9 \text{ m}$, 3 - run 30 m, 4 - pull-ups in the hang, 5 - push-ups in lying position, 6 - lifting the torso, 7 - long jump from a place, 8 - running 1500 m (w) and 3000 m (m)

Fig. 3. Correlation between predicted and actual results of motor skills testing among rural residents

It was found that in men the results of motor tests were higher than those predicted in the tests "running 30 meters", "push-ups in lying position" and "long jump from a place". Among women, the test results were higher than predicted in the "forward bend" and "push-ups" tests. In other motor tests, the real results were lower than predicted.

The analysis of the motor-active component of the day regimen of the rural population was carried out on the basis of a comparison of data on the number of steps performed and other locomotions during the day and the physical activity predicted by the respondents. It was found that the number of steps taken (7.35±4.6) during the day was 58.1% more than the predicted locomotion (4.27±4.08 thousand steps). An assessment of the functional state established the discrepancy between the expected and actual data even more significant (more than 280%). This indicates a low level of motor and cultural literacy in the rural community in relation to their own motor regimen and functional tests.

Dicussion

It is known that motor culture can affect human health (Potop et al., 2017; Zurita-Ortega et al., 2019), so the study of this issue seems relevant and significant. Our research project among rural residents of the Republic of Belarus showed that the average value of the assessment of the motor culture of the individual among the representatives of the studied population was 3.1 ± 0.6 points. The highest assessment of the motor culture of the individual (3.8 ± 0.1 points) is recorded at the age of 6 to 10 years. This confirms the assumptions about the ontogenetic basis in the implementation of the motor-cultural program of the younger generation and provides us with the opportunity to use an educational-differentiated approach in the technology of forming the motor culture of the individual, which is based on the use of motivated students as a conducting link between the school and the family. It is known from scientific sources that students are used as conductors of knowledge and skills in the field of physical education for parents (Szaláncz et al., 2020). The lowest value (2.6 ± 0.2 points) of the index of motor culture was found at the age of 36-60 years.

Our project used a comparative analysis of the assessment of the physical condition of rural residents with generally accepted standards in the modern world community (in our case, with the state standards of the Republic of Belarus). In our opinion, the use of a comparative analysis of physical fitness contributes to the formation of motivation for further motor-cultural self-improvement of the rural population.

The results of our study indicate that there are significant differences in respondents' self-assessment of their physical condition (underestimation in some cases and overestimation in others), which indicates their lack of awareness of their own physical capabilities. Nevertheless, the predicted indicators of control tests of the main types of motor activity, which are more common in everyday life (speed-strength abilities), are more objective than the motor qualities that rural residents encounter only in the process of pedagogical control (flexibility, agility, general endurance).

An analysis of the assessments of pedagogical tests that determine the physical fitness of the respondents showed that the average score of all the examinees was 3.35 ± 1.37 points. Among the male population, the average score for the development of motor qualities was 3.14 ± 0.92 points and among the female population - 3.58 ± 1.79 points. The highest score among the representatives of the female half of the rural community was set in the test "push-ups in lying position" (6.29 ± 4.56 points). In the representatives of the male half in the test "raising the body" (5.68 ± 2.55 points). The lowest scores were obtained from the female half of the rural community in the 1500m run (1.6 ± 1.25 points) and from the men in the 3000m run (1.7 ± 1.23 points). Only women managed to exceed the average indicator of the standards of the sports and recreation complex, corresponding to six points, in the test "push-ups in lying position" (10.62 ± 8.28 times). All other values of indicators of physical fitness tests of rural residents were below 6 points, which indicates a low motor culture of rural residents. We agree with the opinion of other scientists (Kuz'min, 2017) on the need to improve the motor culture of the rural population of the Republic of Belarus.

Conclusions

The above research project using functional, myofascial and motor-behavioral diagnostics allowed us to study and evaluate the level of motor culture of the personality of the rural population of the Republic of Belarus. It was established that the average value of the assessment of the motor culture of the individual among the representatives of the studied population was 3.1 ± 0.6 points. The highest assessment of a person's motor culture (3.8 ±0.1 points) is recorded at the age of 6 to 10 years, the lowest value (2.6 ±0.2 points) at the age of 36-60 years. Analysis of the results of all motor tests of rural residents (with the exception of the motor quality "strength" in women in the "push-up" test) were lower than those recommended by the national average standard of physical fitness. In most tests, the values of indicators in control tests are below the standard values by more than 50%. These data testify to the insufficient level of physical fitness of rural residents of the Republic of Relarus

It was found that in men the results of testing motor qualities were higher than those predicted in the tests "running 30 meters", "push-ups in lying position" and "long jump from a place". Among women, the test results obtained were higher than those predicted in the control exercises "forward bend" and "push-ups in lying position". In other motor tests, the real results were lower than predicted. We believe that the use of a

comparative analysis of physical fitness contributes to the formation of motivation for the motor-cultural self-improvement of the population.

The results of a comprehensive pedagogical assessment of the motor culture of a person, which are obtained on the basis of functional, myofascial, motor and behavioral diagnostics of data, can be used in the development of individual motor modes for the health and creative improvement of the body of rural residents.

Conflicts of interest. The authors declare no conflict of interest.

References

- Bakiko, I., Savchuk, S., Dmitruk, V., Radchenko, O., & Nikolaev, S. (2020). Assessment of the physical health of students of middle and upper grades. *Journal of Physical Education and Sport, Vol 20* (Supplement issue 1), Art 39, 286-290. DOI:10.7752/jpes.2020.s1039
- Chekhovska, M., Shevtsiv, L., Zhdanova, O., & Chekhovska, L. (2020). Fitness in school physical education lessons. *Journal of Physical Education and Sport, Vol 20* (Supplement issue 1), Art 60, pp 420 424. DOI:10.7752/jpes.2020.s1060
- De la Cαmara, M.A., Jimenez-Fuente, A., & Pardos-Sevilla, A.I. (2021). Confinement time due to the COVID-19 disease: An opportunity to promote and engage people in regular physical exercise? *Transl Sports Med*, 4(1), 3-5
- Eksterowicz, Jerzy, & Napierała, Marek. (2020). Sexual dimorphism of the selected somatic features of students attending physical education course in Kazimierz Wielki University during the years 2006-2017. *Journal of Physical Education and Sport*, Vol.20 (1), Art 32, pp. 242 248. DOI:10.7752/jpes.2020.01032
- Kolokoltsev, M., Ambartsumyan, R., Romanova, E., Kokhan, S., Sukhbaatar, H., Bayasgalan, K., & Choijil,O. (2021).Perception of academic load in physical education according to the Borg scale by female students with somatic diseases. *Journal of Physical Education and Sport, Vol. 21 (5)*, Art 353, pp. 2650 2656. DOI:10.7752/jpes.2021.05353
- Kolpakova E. M. (2018). Motor activity and its impact on human health. *Health, physical culture and sports*, 8(1), 94-109. Retrieved from http://hpcas.ru/article/view/3818.
- Kuz'mi, YU. A. (2017). System-structural analysis of the dynamics of the rural population of the Republic of Belarus. *Educational Bulletin Consciousness*, 12. Available at: https://cyberleninka.ru/article/n/sistemnostrukturnyy-analiz-dinamiki-chislennosti-selskogo-naseleniya-respubliki-belarus (in Russian)
- Ljubojević, M., Bojanić, D. (2016). Relation of morphological variables and coordination of the 7th grade boys. Journal of Physical Education and Sport, 16, Supplement issue (1), Art 91, pp.579 – 583
- Martínez-Cervantes, T.J., Martínez-Martínez, L.D.J., Martínez-Martínez, T.J., Hernández-Suárez, R.M.G., Gámez, C.E.B., Garza, J.Á., & Salas-Fraire, O. (2018). Relationship between left ventricular hypertrophy and somatotype of high performance athletes using structural equations modeling. *Archivos de Medicina del Deporte*, 35(1), 29-34
- Potop, V., Timnea, O. C., & Stanescu, M. (2017). Improving sports technique of stretched Gienger salto on uneven bars based on biomechanical indicators. *Modern Journal of Language Teaching Methods*, 7(8), 472-480. DOI:10.2991/icmmse-17.2017.64
- Shinichiro Morishita, Atsuhiro Tsubaki, Kazuki Hotta, Sho Kojima, Daichi Sato, Akihito Shirayama, Yuki Ito, Hideaki Onishi (2021). Relationship Between the Borg Scale Rating of Perceived Exertion and Leg-Muscle Deoxygenation During Incremental Exercise in Healthy Adults. *Adv Exp Med Biol.*, 1269, 95-99. DOI:10.1007/978-3-030-48238-1_15
- Skead, N.K., & Rogers, S.L. (2016). Running to well-being: A comparative study on the impact of exercise on the physical and mental health of law and psychology students. *International Journal of Law and Psychiatry*, 49, 66-74
- Snezhickij, P. V. (2022). Motor culture: genesis, state, problems. Monografiya. Grodno: GGAU (in Belarus).
- Szaláncz, Z., Kovács, B., & Bácsnébába, É. (2020). Socializing effect of child soccer players on their parents. Journal of Physical Education and Sport, Vol.20 (6), Art 460, pp. 3400 - 3410
- Townsend, N., Wilson, L., Bhatnagar, P., Wickramasinghe, K., Rayner, M., & Nichols, M. (2016). Cardiovascular disease in Europe: epidemiological update 2016. Eur. Heart J., 37(42), 3232-45. DOI:10.1093/eurheartj/ehw334
- Ushakova, E.V., Nalivaiko, N.V., & Vorontsov, P.G. (2017). On the understanding of health in the medical, pedagogical, social and physical aspects. *Health, Physical Culture and Sports, (1(4),* 18-29. Retrieved from http://hpcas.ru/article/view/1735
- Voron, P.G., & Kasach, V.F. (2016). Organizational and methodological foundations for the introduction of the State sports and recreation complex of the Republic of Belarus into the practice of organizations: guidelines. Minsk: Republican educational and methodological center of physical education of the population (in Russian)
- Vybornaya, K.V. (2017). Basal Metabolism as an Integral Quantitative Indicator of Metabolic Intensity. Nutrition Issues, 5. Available at: https://cyberleninka.ru/article/n/osnovnoy-obmen-kak-integralnyy-kolichestvennyy-pokazatel-intensivnosti-metabolizma (in Russian)

PAVEL SNEZHITSKY, ELENA ROMANOVA, MIKHAIL KOLOKOLTSEV, ANTON VOROZHEIKIN, SERGEY SMIRNOV, ALEXANDER BOLOTIN, ANDREI TARASOV, SERGEY AGANOV, PAVEL SULDIN

- Wilczyński, J. (2018). Postural Stability in Goalkeepers of the Polish National Junior Handball. *J. Hum. Kinet*, 63(1), 161-170
- Yang, C. B., & Dong, M. K. (2017). A Study of the correlation between teachers' teaching styles and students' participation motivation in the physical education. *Journal of Baltic Science Education*, 16(2), 199-206
- Yıldız, M. (2018). The acute effects of repeated static apnea on aerobic power. *Physical Education of Students*, 22(4), 217-220. DOI:10.15561/20755279.2018.0407
- Zurita-Ortega, F., Badicu, G., Chacon-Cuberos, R., & Castro-Sanchez, M. (2019). Motivational Climate and Physical Activity: A Multigroup Analysis in Romanian and Spanish University Students. *International Journal of Environmental Research and Public Health*, 16(11). DOI:10.3390/ijerph16112013