

ISMA University of Applied Sciences

International scientific conference

THE SIGNIFICANCE OF PHYSICAL CULTURE AND SPORTS FOR HUMAN HEALTH

March 6-7, 2024



ORGANISING COMMITTEE:

Romans Djakons, Dr.sc.ing., Professor, Academician, President of ISMA University of Applied Sciences.

Each author is responsible for content and formation of his/her materials.

The reference is mandatory in case of republishing or citation.

The significance of physical culture and sports for human health (March 6–7, 2024. Riga, the Republic of Latvia) : International scientific conference. Riga, Latvia : Baltija Publishing, 2024. 120 pages.

ISBN 978-9934-26-415-3

 $\ensuremath{\mathbb{C}}$ ISMA University of Applied Sciences, 2024

CONTENTS

SECTION 1. THEORY AND METHODOLOGY OF ATHLETES TRAINING Diagnosis of coordination abilities of athletes (on the example of sports dances)
Vabalich V. A
Features of technical training of basketball players Vasylenko V. V., Gavrych A. L
The current state of development of technical training of young football players in accordance with modern conditions of the training process Karpa I. Ya., Okopnyy A. M., Lobasyuk V. S14
Approaches to differentiating the training process with young football players Kostenko Ye. V., Nikolaienko V. V
Comparative characteristics of the average rate of successful actions and mistakes of teams in international tournaments Nesterenko N. A., Burdaiev A. K
Psychological support of sports activities Osadcha L. A
Analysis of Ukrainian athletes' performances in the women's singles and doubles events at the 2024 Australian Open in Melbourne Petrenko H. V., Diatlova D. D., Yemelianenko B. S.
Ways to improve the activities of children's and youth sports schools for persons with disabilities Sotnyk Z. G., Kravchuk Ya. I., Hariievskyi Yu. V
Stages of motivation in sports activities Khomovskyi O. I
SECTION 2. HUMAN HEALTH, FITNESS AND RECREATION, PHYSICAL EDUCATION OF DIFFERENT GROUPS OF POPULATION, PHYSICAL REHABILITATION
Influence of physical education forms on motor activity of primary school children in a summer school camp
Grabyk N. M., Hulka O. V., Hrubar I. Ya 40

Management of the educational and health environment of an educational institution for the formation of a healthy lifestyle Hryhorenko H. V., Hryhorenko D. P., Otechko Ye. M	5
Key characteristics of motives and interests of pupils of senior classes that influence the motivation to engage in physical culture Diedukh M. O., Brychuk M. S., Holodova O. S.	9
Creation of adapted zones for recreational swimming for persons with disabilities (from the experience of Spain) Kalytka S. V., Zavatska L. A., Romanova V. I	3
Psychological and pedagogical aspects of physical education of younger schoolchildren with autism spectrum disorders Kovtun A. O., Demyanov V. V	7
Problems of the development of physical recreation in Ukraine Moroz Yu. M	Ð
Modern pedagogical technologies in badminton teacher training under the BWF Shuttle Time program Ohnystyi A. V., Ohnysta K. M., Petrytsa P. M.	4
The role of physical culture and sports in the orientation of higher education students towards a healthy lifestyle Topchieva H. O	8
Prognostic model of health risks for boys aged 12–15 years Trachuk S. V., Holub V. A., Dovhal V. I	2
Behavioral orientations of girls aged 12–15 years in maintaining health Trachuk S. V., Savelieva H. V., Syrotiuk S. M.	6
Modern technologies for improving the level of physical condition of women by recreational aerobics exercise Khomenko I. M., Holovatenko O. M.	0
Petanque – a means of physical culture and sports rehabilitation for people with signs of traumatic impact of war events Yudenko O. V., Kolomoyets H. A., Lytvyn L. M.	4
SECTION 3. SPORT MEDICINE, PHYSIOLOGY AND BIOCHEMISTRY OF SPORT Validation of resting energy expenditure prediction equations in highly trained female endurance athletes Loshkarova Ye. O., Pastukhova V. A	8

Testosterone concentration and maximum oxygen VO _{2max} test in qualified athletes
Maidaniuk O. V., Vdovenko N. V., Husarova A. M
Changes in anthropometric indexes and some biochemical indicators of young athletes 7–10 years old who are engaged indaito-ryu aiki-jujutsu, during the study
Shavel Kh. E., Kontsovska S. Ya96
SECTION 4. MODERN PROBLEMS OF POPULATION RECOVERY AND WAYS TO SOLVE IT Modern problems of physical training in power structures Kovalchuk R. O., Gnydiuk O. P., Savina A. M
Psychoemotional stress loads as components of adaptation of the organism Kozlovska T. F., Kudriashova T. I., Prokopenko Yu. S
Physical culture as a means of forming a healthy lifestyle of university students Snizhko Yu. A., Tkhoreva I. V
SECTION 5. MODERN INFORMATION TECHNOLOGIES IN PHYSICAL CULTURE AND SPORTS Study of the feasibility of using a pedaling power sensor in the training of cyclists Gladysh R. I
Modern methodological approaches to management in the system of training athletes Karaulova S. I., Shulika B. Yu., Korolov D. I

SECTION 2. HUMAN HEALTH, FITNESS AND RECREATION, PHYSICAL EDUCATION OF DIFFERENT GROUPS OF POPULATION, PHYSICAL REHABILITATION

DOI https://doi.org/10.30525/978-9934-26-415-3-10

INFLUENCE OF PHYSICAL EDUCATION FORMS ON MOTOR ACTIVITY OF PRIMARY SCHOOL CHILDREN IN A SUMMER SCHOOL CAMP

ВПЛИВ ФОРМ ФІЗИЧНОГО ВИХОВАННЯ НА РУХОВУ АКТИВНІСТЬ МОЛОДШИХ ШКОЛЯРІВ У ПРИШКІЛЬНОМУ ЛІТНЬОМУ ТАБОРІ

Grabyk N. M.

PhD in Physical Education and Sports, Associate Professor at the Department of Theoretical Foundations and Methodologies of Physical Education Ternopil Volodymyr Hnatiuk National Pedagogical University Ternopil, Ukraine

Hulka O. V.

Lecturer at the Department of Theoretical Foundations and Methodologies of Physical Education Ternopil Volodymyr Hnatiuk National Pedagogical University Ternopil, Ukraine

Hrubar I. Ya.

PhD in Physical Education and Sports, Associate Professor at the Department of Theoretical Foundations and Methodologies of Physical Education Ternopil Volodymyr Hnatiuk National Pedagogical University Ternopil, Ukraine

Грабик Н. М.

кандидат наук з фізичного виховання і спорту,

доцент кафедри теоретичних основ і методики фізичного виховання Тернопільський національний педагогічний університет імені Володимира Гнатюка м. Тернопіль, Україна

Гулька О. В.

асистент кафедри теоретичних основ і методики фізичного виховання Тернопільський національний педагогічний університет імені Володимира Гнатюка м. Тернопіль, Україна

Грубар I. Я.

кандидат наук з фізичного виховання і спорту, доцент кафедри теоретичних основ і методики фізичного виховання Тернопільський національний педагогічний університет імені Володимира Гнатюка м. Тернопіль, Україна The level of physical activity of young schoolchildren is significantly decreasing in modern conditions. One of the most important areas of implementation of the objectives of the National Strategy for Recreational Physical Activity is the optimisation of physical education in children's summer health centres. This will improve the physical condition of children and help them develop the necessary skills and abilities to use physical education in everyday life [2].

According to the literature, the motor activity of primary school children tends to increase during the summer holidays [1, 4]. This is due to the fact that they have more free time for outdoor activities. However, if children spend a lot of time at home watching TV or using computers during the summer, their physical activity will decrease.

Summer holidays are a significant part of school children's annual free time, but not all parents can offer their children a full, properly organised holiday. Summer health camps, which focus on active recreation through physical exercises, active and sports games, and competitions in various types of physical activity, can at least partially compensate for the lack of motor activity [2].

The **purpose** – to determine the influence of physical education forms on the motor activity of primary school children in a school summer camp.

Research methods. Analysis and synthesis of literary sources, regulatory documents; pedagogical experiment; pedagogical testing; methods of mathematical statistics.

Our research continued from May to June 2023. It involved 16 children aged 8–10, including 9 boys and 7 girls.

The pedagogical research involved determining the level of daily motor activity of primary school children using the Framingham method of chronometry. Parents of school children completed a «Physical Activity Registration Card» for that purpose.

The pedagogical experiment included the stages. In May, the motor activity of the primary school children was measured during the educational process: during the school period on the day when physical education was scheduled; during the school period on the day when physical education was not scheduled; during the school period on a weekend.

Motor activity was reassessed: on the day the children stayed at the school camp; at the weekend during the summer holidays.

Physical education and sports activities were one of the main activities of the school summer camp and were directed at solving the following tasks:

- improving health, enhancing physical development and hardening;

- forming the basis of children's motor skills in natural types of movement (running, jumping, gymnastics, ball games);

- instilling interest and habits of regular physical activity;

- promoting the development of sanitary, hygienic and organisational skills in physical education;

- promoting the development of moral and volitional qualities in children, fostering love for the Motherland, a sense of patriotism, and awareness of the need for a healthy lifestyle.

The physical education programme at the summer school camp for primary school children included the following forms.

- compulsory daily physical education activities (morning gymnastics, sun and air baths);

 physical education work in units (physical activities in units and squads, unit meetings on physical education topics, walks, excursions, hiking, outdoor games);

- sports and mass activities (sports events, competitions in various sports, active and sports games, team building).

The results of studying the motor activity of primary school children in different periods are presented in Fig. 1.

At the basic level of physical activity (sleeping, lying down) children spend most of their time. During the school period, it makes up 39.4–40.0% of the daily time budget and 45% on weekends. These figures are almost the same as in summer when children attend school camps (41%) and on holidays (45.4%).

The percentage of time spent on middle level motor activity decreased significantly during the school camp from 22–23% to 14.9%. This is due to the absence of classes and homework.

Low activity (personal hygiene, movement, standing) is a significant part of the daily time budget, especially during the school period (26.3–23.3%). During the school camp, it decreased to 18.3 %.



Fig. 1. The contribution of school childrenis' daily motor activity at different research periods, %

Pupils spend only 7.9–8.3% of their daily time on an middle level of activity (active walking, gymnastics, outdoor games) during the school period. During school camps, this level of activity increases to 19.2%, as children are involved in various forms of physical education. On weekends in summer, this level is 16.7%. This is due to the increase in free time.

The high level of motor activity (specially organised exercise classes, sports groups) increases to 6.6% during school camps compared to weekends during the school period and holidays.

The motor activity index varies over different periods of research. It was the lowest during academic period on days when there was a lesson of physical education $(30.5\pm2.31 \text{ un})$, and highest during the school camp period $(33.0\pm2.67 \text{ un})$. (PMC. 2).

Our research has allowed us to find that primary school children have an insufficiently high motor activity index on weekends and during the day without lesson of physical education. Attendance of children at a school summer camp contributes to an increase in the percentage of middle and high levels of motor activity due to an increase in specially organised physical activity.



Fig. 2. Motor activity index of primary school children during the research, un

He research supports the opinion of scientists that organised physical activity is important for children's physical development and health, especially when are out of school during the summer holidays.

Bibliography:

1. Грабик Н., Грубар І., Бабій С. Я. Мотиваційні пріоритети рухової активності юнаків 16–17 років. *Матеріали IV Всеукраїнської науково-практичної конференції*. Дрогобич, 2022. С. 29–36.

2. Матвійчук О. Організація оздоровлення та відпочинку дітей: міжнародна практика. *Наукові записки НДУ ім. М. Гоголя. Психологопедагогічні науки.* 2018. Т. 3. С. 207–211.

3. Про Національну стратегію з оздоровчої рухової активності в Україні на період до 2025 року «Рухова активність – здоровий спосіб життя – здорова нація». Режим доступу: https://zakon2.rada.gov.ua/laws/ show/42/2016/print1465286153060829

4. Global Recommendations on Physical Activity for Health. Geneva : World Health Organization, 2010. 60 p.