

THE USE OF OUTDOOR GAMES AND THEIR EFFECTS ON THE BODY OF SCHOOLCHILDREN

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Annotation. Research purpose - to ground and define the role of outdoor games in physical education of children of midchildhood. 20 children of midchildhood, which were up-diffused on two identical groups (control and basic) on age and to physical development for 10 schoolchildren are involved in research. It is set that for the children of basic group the reaction of the respiratory system became better on the physical loading (on results the leadthrough of test of Serkin), the considerable improvement of function of breathing organs took a place. Set necessity of perfection of process of physical education of children. The measures of strengthening of interest are recommended to the lessons of physical culture for children, distributing and selection of games on the years of teaching. It is recommended in the process of teaching expressly to adhere to the following method of education of physical capabilities: complexity, regularity and sequence; duration of implementation of games and volume of loading; intervals of rest and their character.

Keywords: outdoor games, physical development, schoolchildren, breathings.

Introduction.

Mobile game - is educational and health means of socialization that can intensify the educational process, provide a motivational basis for the formation of the dialectical relationship of physical and spiritual qualities and personal fulfillment. With outdoor games children develop not only physical qualities and abilities, but also master the first elements of literacy, learning by heart poems, patters, rhymes, develop mathematical skills and reveal for themselves live history of their people, learn to love folk heroes and hate offenders. Various mobile games are an effective means of recreation after mental work effectively affect the cardiovascular, respiratory, musculoskeletal systems, stimulate appetite and promote sound sleep. Meanwhile, outdoor games play an important role in education both as moral and volitional stability in actions and deeds, as education communication skills and conscious discipline: on the one hand - the ability to subordinate their behavior to the interests of the collective, and the other - to manage their comrades [2, 4, 7, 10, 11].

Analysis of scientific-methodical and professional literature on the issue of research has shown that educational effectiveness depends on playing techniques, organizational abilities leader, his ability to communicate clearly and explain interesting game skillfully manage its process, follow dosage exercise, be objective and careful in evaluating action game children improved tools (mobile and sports games, fun, relay races, the theoretical material sciences, moral dilemmas, moral and ethical situations), methods and forms (game and competitive, personal example of a teacher of physical culture, and self-control, rituals support and encourage of students, group discussions and individual interviews, penalties and incentives, stimulating interest and conscious participation of students in the learning process, the lessons of physical culture, race, hiking) physical education in the context of human qualities of students [5, 6]. First reviewed Ukrainian children's games in the context of ritual transition. Considered initiator role of game in the context of socialization and inculturation in traditional society. Proposed definition of child game as a kind of "daily ritual of transition" [1]. Physical activity levels of modern Ukrainian student according to the latest research, are not more than 5-10% of the number of performed minimum age of physical activity evolving nature, and physical activity of girls is 2-4 times lower than boys. An important reason for the deteriorating health of schoolchildren is also a significant decrease in physical activity with age [3, 8, 9]. To increase physical activity of schoolchildren and increasingly involve them in sports and physical education under the new standards from the first to the eleventh class it is increased the number of lessons of physical culture to three hours. As you know, the new state standards of basic secondary education were updated last year. There are not much researches of effectiveness of mobile games in physical education in primary school at children at today problem situation that take place in the modern school system of Ukraine according to deaths among schoolchildren and attempt to link them with excessive physical activity during physical education lessons. Our research is intended to promote physical education in secondary school.

The work is done according to the research theme "Effectiveness of physical rehabilitation of persons of all ages in violation of the functioning of body systems. Recovery of psychophysical properties of athletes by means of physical rehabilitation" International Economics and Humanities University named after Stephen Demianchuk, № state registration 0109U003032.

Aim, task, material and methods.

Aim of research – to substantiate and define the role of mobile games in physical education of children of primary school age.

Tasks of research:

1. Organize and summarize current scientific and methodological knowledge about the impact and possibilities of mobile games.
2. Determine the impact of mobile games on the body of children of elementary school.

3. Justify the features of usage of mobile games during physical education children of school age, analyze and summarize the experimental data on the most rational methods and techniques of interest in the education of students in physical education at classroom and beyond it.

4. Determine the effectiveness of these methods and techniques, and how they are presumably and synergistically interact.

The study was conducted at the school. To organize our research we picked 20 children of primary school age and divided them into two identical groups according to age and physical development. Primary and control groups included 10 students.

Methods of research: analysis of the literature, pedagogical experiment, parameters of respiratory function, observation.

Results.

In the early school age there is the largest rate of growth of parameters that characterize speed-strength abilities. For three years in boys they grow by 44%, in girls - 34%. If these indexes can be seen in the age aspect, we can see that at boys aged 8 to 9 years old growth rate of physical ability is 22%, from 9 to 10 years - 4% and from 10 to 11 years - 18%. At girls, respectively - 11.5% and 18%.

Comparing the data on the growth of speed and power abilities, we concluded that in the early school years mobile games with exercises should take one of the main attractions. Their volume both boys and girls can be the same for all age groups.

On the basis of the results of the rate of development of physical abilities of students found out that the greatest increase of development of speed and agility accounted for primary school age, so at this age should be planned the most effective means of developing of these qualities - mobile games of speed and speed-strength character.

Experimental verification prove that the distribution and selection of games for years of study and their systematic conduction significantly improves the efficiency and quality of impact of mobile games to develop speed, agility, flexibility, increases interest in physical education lessons in primary school children.

To prove the effectiveness of mobile games on the physical development of children of primary school age, we tested them at the beginning and end of the study. With the children of main group during the school year we conducted a variety of mobile games that meet the age physiological characteristics of these children.

Analysis of investigation of primary and control groups who were children of primary school age shown that at the beginning of the study children have a bad reaction to the respiratory system on physical loading according to the results of Serkin's tests. The reaction of respiratory system on physical activity in children of control group at the beginning of investigation was bad, the average score was equal to $1,3 \pm 0,3$; it indicates on insufficient development of respiratory system of children of primary school age. The reaction of respiratory system on physical activity in children the main group before the study was also bad, the average score was equal to $1,2 \pm 0,4$. That means that children of main and control group have insufficient development of the respiratory system. This points that shortcomings of the physical education classes with children of primary school age.

The reaction of respiratory system on physical activity according to the results of Serkin's tests at children of the control group at the end of the study remained unchanged, the average score at the beginning of research was $1,3 \pm 0,3$, and at the end - $1,2 \pm 0,4$.

The reaction of respiratory system on physical activity according to the results of Serkin's tests at children of basic group improved significantly at the end of the study, the average score at the beginning of research was $1,2 \pm 0,4$, and at the end of the study - $2,3 \pm 0,2$, it means that from the poor become average, that indicates the effectiveness of mobile games for children of primary school age. All the kids really like to play, so they do not refuse to play, and mobile games, in turn, promote physical development.

We have identified indicators of respiratory function and compared them with the average healthy children 6-7 and 8-9 years at children of control and basic groups at the beginning and at the end of the study (fig. 1, 2, 3).

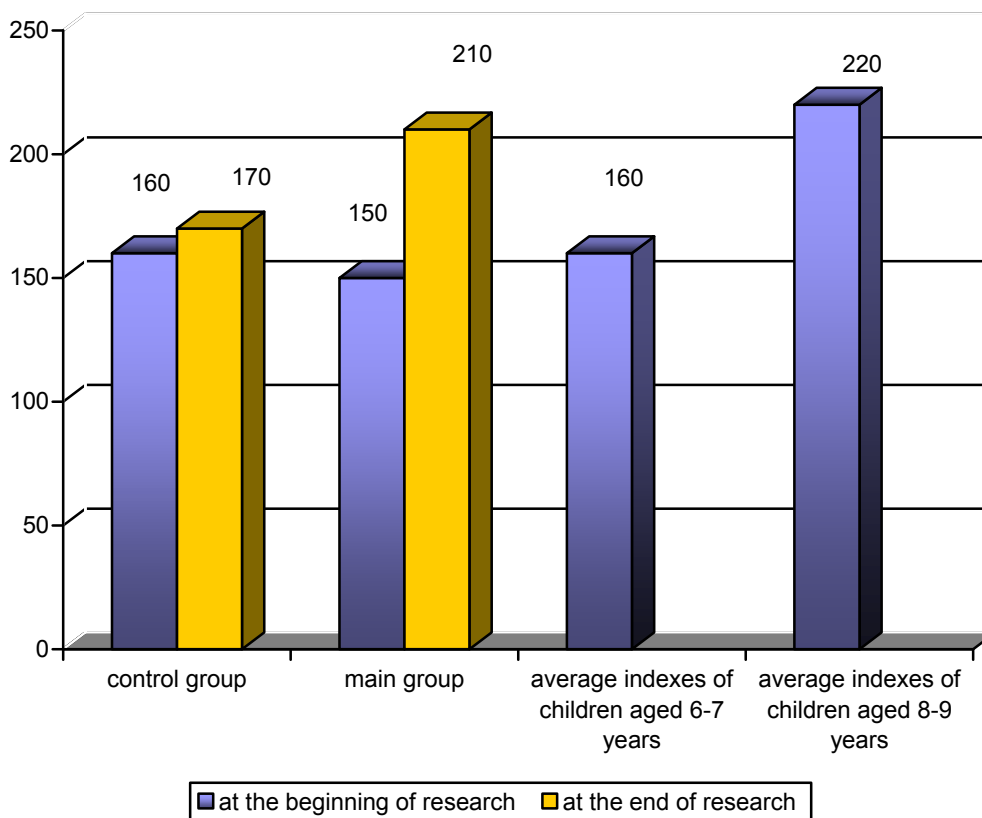


Fig. 1. Indexes of children respiratory volume of control and basic groups at the beginning and at the end of the study and average indexes of 6-7 and 8-9 years old children

Determination of respiratory volume of control and basic groups at the beginning of study showed that in both groups index is lower that the average index of healthy children. This demonstrates the need to improve physical education of children of primary school age. At the end of study indexes of children of control group do not changed, indexes of respiratory volume of schoolchildren of basic group significantly improved, approaching to the average indexes of healthy children. So, it proves the need of usage mobile games during physical education of children of primary school age.

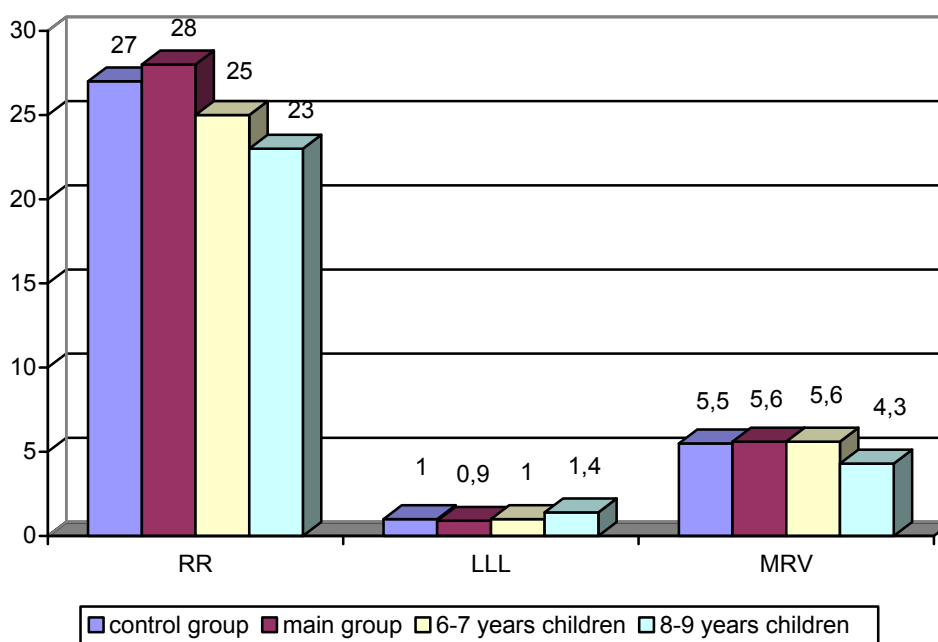


Fig. 2. Results of investigational indexes of respiratory function at the beginning of study
Notes: RR - respiratory rate per minute; LLL - lung vital capacity; MRV - minute respiratory volume

Investigation of respiratory function of children of control and main group at the beginning of study revealed that they did not significantly differ from the average data, but there is a slight deviation to decrease. Thus, LLL and minute respiration volume correspond to the average indexes for 6-7 years old children. Respiratory rate per minute in children of control and main group was lower the average of healthy children.

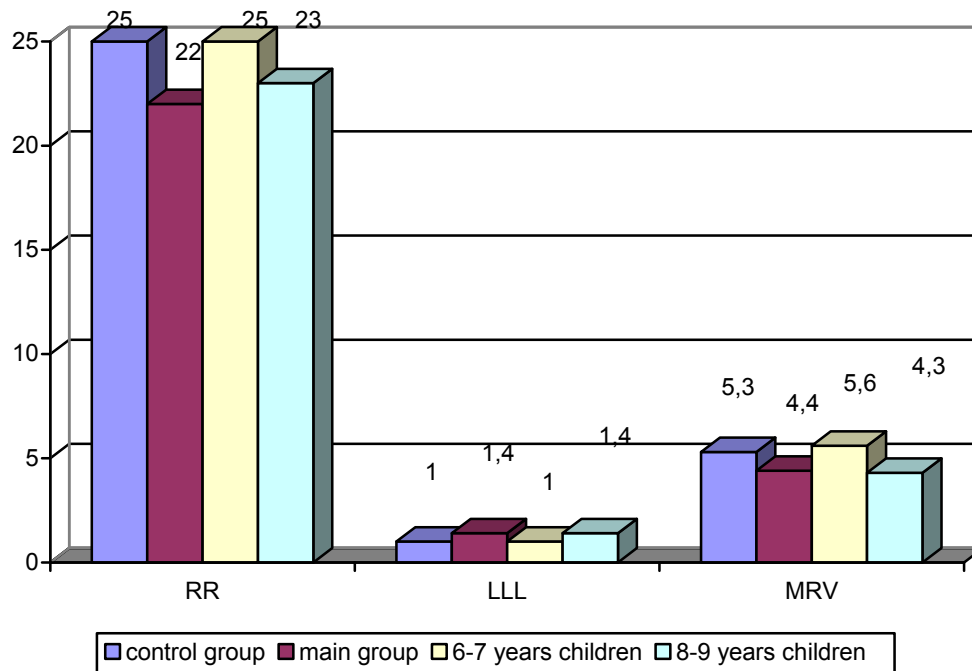


Fig. 3. Results of investigational index of respiratory function at the end of the study

Notes: RR - respiratory rate per minute; LLL - lung vital capacity; MRV - minute respiratory volume

The results of indexes changes respiratory function at the end of the study indicate that through the use of mobile games for children of basic group, there was significant improvement in respiratory function, while the performance of children of the control group remained unchanged.

These findings indicate a need to improve the physical education of children of primary school age and demonstrate the effectiveness of mobile games to improve physical fitness and respiratory function in children of this age.

Conclusion.

Effect of mobile games on the development of physical skills and abilities of younger schoolchildren considerably enhanced if the learning process is clearly adhere to the following methods of physical abilities education: complexity, regularity and consistency, duration of games and the amount of load; rest intervals and its character. Through the use of mobile games, children of basic group were significant improvement in respiratory function.

Prospects for further research. Our studies are aimed at determining the effectiveness of the impact of application mobile games on other body systems of students.

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