

ARENA-JPA, ISSN 2285-830X
11, pp. 82-89, 2022

The study movement games in physical education class with primary school students

Author: Gabriel Marconi Roberto ¹Liviu Vasile Andrei¹

¹ Aurel Vlaicu University of Arad, Faculty of Education Physics and sport, Str E. Dragoi no 2
Arad, Romania

Abstract

Movement games used both with technical elements from handball in physical education lessons with primary school children will manage to optimize the instructional-educational process and consequently will favor the faster and quality acquisition of skills and motor skills, the development of morpho- functional and basic motor skills of students. The purpose of the research it is the optimization of the physical education teaching process by using movement games with technical handball elements in physical education lessons with primary school students. The objective is to argue and experimentally verify the effectiveness of the methodology regarding the use of movement games with technical handball elements within physical education lessons with primary school students. The basic direction of the research was the learning of some elements and procedures from the game of handball through movement games, adapted to the psychomotor peculiarities of the age of students from the 4th grade (10-11 years). The independent variable, used in the experimental group, was the introduction, within the thematic planning, of handball elements in the form of movement games.

Keywords :Motor activity, physical education, height, weight

Introduction

Within the contemporary theory devoted to the problem of human activity, games, as a primary factor of socialization, is given a special importance. This is a specific action loaded with meanings and tensions, always carried out according to voluntarily accepted rules and outside the sphere of utility or material necessity, accompanied by feelings of elevation and tension, of joy and relaxation (Dragnea A., 2000) .

A major importance in the physical education of students, and especially of primary school students, belongs to movement games with handball elements, which, through their specific content of individual competitive analytical influence, have the potential to train them in socio-psychomotor skills and self-affirmation attitudes, self-evaluation and the value orientation of the personality. (Cârstea,2000)

The insufficient approach to the problem of the game as a pedagogical system of school physical education, in the formation of the student's integrative activities, but also the lack of theoretical-methodical elaborations regarding the practice of movement games with handball elements, which possess the psycho-motor potential appropriate to the particularities of the age of children in primary classes, became the main factor of updating this research.(Mitra,1980)

In the context of the given positions, the hypothesis, the object and the subject, the purpose and the objectives, the methodological and organizational concept of the research were formulated.(Ilica,2007)

The theory and methodology of physical education, as an object of study, aims at the somatic and motor development of man, through the systematic practice of physical exercises, regardless of the socio-economic and political formation in which it is carried out.(Cârstea,2000) The considerations for which the theory and methodology of physical education is a scientific discipline, which has its own field of research are:

- own, adapted, scientific research methods of the field of study;
- fairly well specified and unanimously accepted concepts;
- independently established research hypotheses, intended to continuously prospect and optimize the efficiency of practice in the field;
- a collection of theoretical and practical data that is constantly growing; classified and quantified with its own categories of problems.

Through a correctly applied technology, the objectives of general education can also be achieved, where physical education contributes to the development and improvement of the child in terms of motor skills; stimulation of intellectual activity and affective processes; the development of group relations; dynamization of some mental processes; the formation of skills and qualities in the work process; the improvement of the body's organs, functions, devices; the improvement of some particular notes that appear in the activity of some organs, process devices,

as an effect of practicing physical exercise: the sense of the ball, the sense of rhythm, of sliding, peripheral vision, tactical thinking, motor memory, kinesthetic sensations, etc.:(Epuran,1992)

Gh. Cârstea defines physical exercise as a systematic and conscious repetition of an action for the purpose of training or perfecting some skills or habits(Dragnea,2001). The content of the exercise depends on the intention or purpose in which the respective physical exercise is practiced.(Colibaba,1998)

The elements that represent the essence of the content of the physical exercise are: the physical effort requested by the respective motor act or the respective motor action; the movements of the body or its segments, the physical effort required to perform the respective acts or motor actions, the form of the exercise is the particular way in which the component movements of each exercise follow, as well as the links established between them during the performance of the motor action in question.(Dragnea,1996)

The characteristics of physical exercises are:

- spatial ones that define positions, directions, amplitude, distance, etc.;
- temporal refers to rhythm, tempo, duration;
- spatiotemporal that are determined by the speeds with which they are performed;
- dynamics that are determined by the internal and external forces that influence the execution.

The fact that movement games are practiced in the physical education lesson at school, in the child's view, acquires different meanings, although the child lives and is more active within the game than in reality, the environment still exerts one of the strongest influences on children's play . The game is also an exercise that prepares the child for life, it is the mirror of the environment in which the child lives and develops.(Paraschiv1992) Placing games within action-based methods I. Cerghit considers them "simulation methods in which very varied situations are imitated, for example from the life and current activity of adults". Some authors look for its essence in the human tendency to dominate, to surpass others, others consider it a means of counteracting some harmful beginnings or as a necessary filler in an activity that is too unilaterally oriented or as the fulfillment of desires that cannot be satisfied in reality.(Lecea,2007)

Materials and working methods

The pedagogical experiment requires the creation of a new situation, by introducing a change in the development of the educational action with the aim of verifying the hypothesis that triggered these innovations. For this purpose, we formed an experimental group of 4th grade students, equally divided into an experimental group (boys+girls) and a control group (boys+girls). The experiment took place during three school years, 2008-2011, and was divided into a pedagogical observational experiment and a basic pedagogical experiment. Both in the observational pedagogical experiment and in the basic experiment, groups of fourth-grade students from the "Mihai Eminescu" Theoretical High School in Arad, Arad county, were included.

The measurement in standard conditions, of the sample established by us, with the help of some test batteries, had the purpose of ascertaining and then highlighting the evolution of essential anthropometric, motor, physiological parameters in primary school children, under a practical ratio. Anthropometrically, waist, weight and chest elasticity were measured (the difference between the perimeter of the chest during deep inspiration and forced expiration).

Results and discussion

Physical education and school sports are aimed at maintaining an optimal state of health, ensuring harmonious physical development, forming a broad system of basic, utilitarian-applicative motor skills and skills specific to certain branches of sport, developing basic motor qualities, such as and those specific to some sports, the development of intellectual qualities as well as moral-volitional traits.

Handball, practiced since primary school, broadens children's motor skills, contributes to the acquisition and consolidation of various motor skills and harmoniously develops children's physical qualities.

One of the basic objectives of the research was to assess the level of somatic development, motor and functional training of primary school students in comparison with the respective scales in the country. The predictive (initial) evaluation consisted of practical tests applied at the beginning of the pedagogical experiment. The measurement under standard conditions of the researched samples highlights the development of the main somatic and motor parameters in the fourth grade students under a practical ratio.

The samples used are presented in detail in chapter II of the paper. Next, we present the results obtained by the students included in the pedagogical experiment in the practical tests, which we have classified into tests for somatic development, tests regarding physical training.

Waist - In the group of girls, the average waist is 143.98 cm. Comparing the results of the girls' groups with the average for the country (138.8 cm) from the work "Comparative Study of the Biometric Potential of Students from Grades I-IV", we notice that the average of the girls' group is more than 5 cm higher than the average on the country. The same trend is observed in the case of boys, they have an average of 143.67 cm. Comparing the results of the experimental group of boys with the average for the country: 139.0 cm assures us that also in the case of the group of boys the average is superior by 4.67 cm. Thus, a trend of waist growth is observed in both girls and boys, which is in good agreement with the acceleration process of the parameters in question.

Weight - The experimental group of girls has an arithmetic mean of 37.96 kg. Comparing the statistical indices of the experimental group with the statistical indicators from the work "Biometric potential of students from classes I-IV" (1992), we notice that the average weight of the girls is close to the average for the country (30.89 kg) the experimental group has an average higher than the national average by 7 kg. The average of the group of boys is 38.04 kg. Analyzing the group of boys with the average for the country, we notice that the average value is higher than the average for the country (32.0 kg) by 6 kg. This process is growing as well as the previous indicator, being caused by several factors.

Table. 1 The results of testing the indices of somatic development of primary school students aged 10-11 years

Control samples	Guys	Average for the country	girls	Average for the country
Waist (cm)	143.67	139.00	143.98	138.8
Weight (kg)	38.04	32.05	37.96	30.89
Chest circumference in inspiration (cm)	69.38	70.9	67,28	69.3
Exhalation chest circumference (cm)	64.70	65.3	63.43	63.9

Thoracic circumference in inspiration

The average result of the group of girls is 67.28 cm, reporting the result obtained by the group of girls we notice that for this indicator of physical development the average is 2 cm lower than the average for the country (69.3 cm). The homogeneity of the researched community is high, the CV is 9.77%, and the EM is 0.86. The average of the boys' group (69.38cm) is slightly lower than the national average (70.9cm), by 1cm; homogeneity is high, CV is 8.26%. The EM value is 0.73.

Chest circumference in exhalation

The group of girls has an average of 63.43 cm. Comparing the data obtained with the average for the country, we notice that the group of girls is 0.5 cm less than the average for the country: 63.9 cm, the homogeneity of the groups is average, CV= 10.72%, so a less homogeneous group. The average error is 0.89, which ensures a good representativeness of the average. In the boys' groups, the arithmetic mean is 64.70 cm, which is 0.6 cm lower than the national average: 65.30 cm; in the group of boys we have a good homogeneity, even if the CV value is 9.24%, this proves that this parameter has a good development rate in this age group. EM is worth 0.18.

The weight of the children in the studied group is higher than the national average for girls and boys. The chest circumferences have values close to the national average, but the groups are less homogeneous. The very small differences between the averages allow us to appreciate that the group of children studied shows a good physical development, with a normal development rate, specific to this age period.

The results of predictive testing of the level of motor training

Speed

Speed development was evaluated by the 30 m sprint test with a standing start. The group of girls averages 6'85. Analyzing the data from the 30m speed run test, we notice that in the group of girls the movement speed is 4.37 m/s

Table . 2 The results of predictive testing of the level of motor training of primary school students

Control samples	Guys	Average for the country	girls	Average for the country
Sprint 30 m (s)	6.28	6.1	6.58	6.4
Travel speed (m/s)	4.48	4.92	4.37	4.69
Long jump (cm)	141.05	138.5	128.97	130.7
Throwing the sheep ball (m)	20.53	21.5	12.86	13.7
Trunk Extensions (Rep No.)	27.76	20.70	23.17	18.1
Trunk Raises (Rep No.)	20.79	44.00	15,26	35.2
Throwing at a vertical target (no. of successes)	1.77	1	1.43	1
Running Duration (s)	1741.35	1842.25	960.97	1124.03

Comparing the data with the averages for the country, we notice that the average of the group of girls is lower than the average for the country: 4.69 m/s for travel speed, due to the fact that in the case of the studied sample we have a small number of cases with very good results, and most of the cases are located around the mean. The group of boys has an average of 6"28. We notice that the movement speed of boys is 4.48 m/s, and if we compare the movement speed of boys with the average movement speed in the country: 4.92 m/s, we have a superiority of 0.44 m/s in in favor of the research carried out in 1992 in this age category.

Conclusions

The children of the studied group are taller than the previous generations. Both in the group of girls and in the group of boys, we note the superiority of the arithmetic mean of the experimental group compared to the control group

The analysis of the results from the preliminary experiment confirmed the fact that both the experimental groups and the control groups in terms of the level of motor training, physical and functional development are in the vast majority of cases below the scales of the National Evaluation System.

The selection and elaboration of means of action is a fundamental condition for the teacher to be able to clearly shape the content of the activity of the instructive-educational

process. Thus, the importance of designing and planning the didactic process comes logically from the respective model. Specifying the lesson topics is the next step. Depending on the themes, the basic actions of the lesson will be established (the didactic means, methods and procedures, the forms of organization of the exercise, the dynamics of the effort, the necessary materials and the other didactic measures that are imposed for the organization and carrying out of the didactic process).

Bibliography

1. Gh. Cârstea, *Theory and methodology of school physical education* , Universul Publishing House, Bucharest, 2000, p. 38.-152
2. Gh. Mitra, A. Mogoş, *Methodology of school physical education*, Sport - Tourism Publishing House, Bucharest, 1980, p. 50-82
3. M. Epuran, *Research Methodology of Body Activities*, IEFS Publishing House, Bucharest, 1992, p. 8-124
4. D. Colibaba Evuleţ, I. Bota, *Sports games – theory and methodology*, Aldin Publishing House, Bucharest, 1998, p. 21-76
5. A. Dragnea, *Sports Training*, Didactic and Pedagogical Publishing House, Bucharest, 1996, p. 12-59
6. L. Leucea, *Didactics of physical education for preschool and primary education*, "Aurel Vlaicu" University Publishing House, Arad, 2007, p. 38
7. Gh. Cârstea, *Theory and methodology of physical education and sport*, AN-DA Publishing House, Bucharest, 2001, p. 71
8. V. Paraschiv, Ana – Maria Sintie, *Comparative study of the biomotor potential of students from grades I-IV at the third edition of the evaluation*, CCPPS Publishing House, Bucharest, 1992, p. 142.
9. Ilica , A., Herlo , D., *Aspects METHODOLOGY looking research pedagogy* , Publishing House "Aurel Vlaicu" University , Arad, 2007
10. Leucea , L., *Didactics education body for education pre-school and mayor* , Publishing House "Aurel Vlaicu" University , Arad, 2007.