THE EFFICIENCY OF AEROBIC GYMNASICS PATTERNS IN THE PHYSICAL EDUCATION ACTIVITIES AT PRESCHOOL CHILDREN

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Abstract: Doing sports at preschool age means to provide children the conditions for freedom of actions and to create opportunities for movement specific to their stage of development. The human body undergoes many changes during its development that are particularly noticeable in the first part of life, when growth and development is more intense. Living conditions, as well as the environment influence the growth and development of the child. Thus, there can be noticed differences between the children from the urban - rural area, mountain - field area, wealthy - poor families etc. At the beginning of the preschool age, the child performs spontaneous physical activity. By attending kindergarten, the child is controlled under all aspects of his development and growth. The physical education activity is the basic form that meets all conditions to stimulate the interest of children in conscious and active participation in general physical development in an atmosphere of good mood. It is unfortunate that only one compulsory activity per week is allocated to physical education in the kindergarten. That's why we, when approaching children in openness and knowing their preferences, are able to awaken their interest and pleasure in practicing physical exercise in all its forms. The effects of practicing aerobic gymnastics are beneficial in many ways and contribute to strengthening health. Many children do not know how to walk, they do not know how to run, they have spine deficiencies, they have obesity trends. Besides the beneficial health effects of those who practice aerobic gymnastics, it is of great importance that children get the knowledge and motor skills that will allow them to practice aerobic gymnastics independently.

Keywords: physical education, aerobic gymnastics, exercise, motricity, health.

1. INTRODUCTION

Physical education in preschool education focuses mainly on its specific objectives, that integrate in the content of educational activities in the kindergarten. Since ancient times, physical education has been practiced by man in order to maintain his health, physical and mental vigor.

If the educational climate in the family is not favorable, the kindergarten is the institution where the child can satisfy his or her desire to move, the place where the compensation is made for the physical development of the child. At the beginning of the preschool age, the child performs spontaneous physical activity. By attending kindergarten, the child is controlled under all aspects of his development and growth. Physical education activity is the basic form that meets all the conditions to stimulate children's interest in conscious and active participation in general physical development in an atmosphere of good mood. It is unfortunate that only one compulsory activity per week is allocated to physical education in the kindergarten.
That is why we educators, approaching children with warmth and knowing their preferences, manage to awaken their interest and pleasure for practicing physical exercise in all its forms.

The purpose of the paper
The present study aims to make a contribution to the expansion of practicing aerobic gymnastics in the kindergarten. The design, organization and conduct of aerobics in the kindergarten should be made in the spirit of the modernization of the didactic approach by using modern methods of teaching - learning - evaluation that have the pre-school child in the center.

Research objectives:
O1. Theoretical information on the topic "The Efficiency of aerobic gymnastics patterns in the physical education activity for preschool children";
O2. Defining and verifying the hypothesis, and finding conclusions;
O3. Bringing a contribution to the theoretical substantiation of the theme (which is vast and complex);
O4. Selection and scheduling of aerobic gymnastics patterns that can be used in physical education activities for preschool children;
O5. Applying experimental examinations;
O6. Processing and interpreting the results;
O7. Drawing conclusions and validating the hypothesis.

The hypothesis of research started from the assumption that if physical education in kindergarten uses aerobic gymnastics patterns, this contributes to shaping body muscles, forming a correct posture, lowering body fat, increasing exercise capacity by educating the qualities, motivation and cultivation of the aesthetic sense of movement in preschools.

2. ORGANIZATION AND DEVELOPMENT OF RESEARCH

The pedagogical research was carried out on 15 subjects (10 girls and 5 boys), preschool children in the combined group from the Kindergarten with extended program, Braşov.
They are aged between 5-7 years.
The sample is as follows:

<table>
<thead>
<tr>
<th>No. of children</th>
<th>Girls</th>
<th>Boys</th>
<th>5 year olds</th>
<th>6 year olds</th>
<th>7 year olds</th>
<th>Good frequency</th>
<th>Reduced frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>10</td>
<td>5</td>
<td>3</td>
<td>7</td>
<td>5</td>
<td>11</td>
<td>4</td>
</tr>
</tbody>
</table>

Presentation of the group and of the working tools
In autumn, 27 children (9 boys and 18 girls), coming from different social backgrounds, joined the group. A number of 15 children, aged 3-6, attended the kindergarten also last year and 12 children came to the kindergarten for the first time.
From September to May, the entire group was subject to tests aimed at observing the level of psychomotor development and, at the same time, at correcting the difficulties in the execution of motor skills. The subjects presented in the case studies are aged 5-7.
The tools used in completing the research are based on four coordinates, aimed at addressing psychomotor education topics from three different angles (parent, teacher, researcher).
The four research tools are:
• Interview - for parents;
• Medical record - for educators;
• The psycho-pedagogical file - for the researcher;
• The physical exercises - for the researcher.

We interview was conducted with all the parents of the children in the group. This interview focused on motricity issues. This document was very useful for us in order to make an analysis of the subjects, considering that they are analyzed from the point of view of psychomotricity. From the discussions with parents we also collected information on how they spend time outside the kindergarten, their existing recreational programs (see Annex4).

The medical record is structured as follows: anamnesis, immunization dates, periodic physical examinations.

The development of psychomotricity is analyzed for this period.

a) The development of motricity: it goes from its incipient phase to its true phase, of expansion. The child develops his capabilities from the hesitant walking to running, and climbing, from imprecise handling to grip, spinning, opening.

b) The psychomotor development: the term is used to express the fact that the development of psychomotricity is related to the other processes in the intellectual and socio-affective development. Walking is a good illustration of this interrelation.

The psycho-pedagogical sheet was completed for each of the subjects of the case study. Some information is taken from the parents' data sheets on general data related to the child and his / her family, the others being noted following discussions with them or following careful observation in various directed or spontaneous activities.

The physical tests are selected from the annual planning that I made with my colleague at the beginning of the school year. The psychomotor education activities carried out at the kindergarten and in my group were done with much interest by children.

Anthropometric measurements:
1. Height. Children in sportswear and bare feet were measured with the help of the anthropometer, and the results were recorded on the sheets.
2. Weight. The weight was measured with the weighing scale and expressed in kilograms.

Motricity/Movement tests:
1- 20 meter sprint
2- Standing long jump:
3- Shuttle run:
4- Abdominal muscle force:
5- Trunk mobility:

Research methods
The research methods used were determined according to the research objectives as follows:

The method of direct and indirect observation
We used the observation method in order to obtain information about the psychomotric potential of preschool children.
The interview method
This method was the basis for collecting the information necessary for drafting the evaluation sheets. The interview with the parents gave me the opportunity to outline a general picture of children's motor behavior, existing recreational-instructional programs, as well as of the methodological norms in force on which I was supposed to design the activities specific to the research.

The method of measurement and evaluation
In order to establish specific peculiarities of age and gender, the biomotorical potential characteristic to the middle preschool period, as well as the orientation of the future intervention through the improvement of the existing educational - educational programs, we used the following methods of measurement and evaluation:
  a) The Anthropometric method - for evaluation and measurement of functional parameters (waist, weight)
  b) The Motricity Test Method - to target the biomotorical potential in terms of speed, strength, strength and skill ratios.

The experiment method
This method consisted of a complex system of knowledge of reality, characterized by the use of "experimental reasoning" that allowed processing of data from both observations and application of tests. Through the experiment, we tried to verify the assumed relationship (given as a hypothesis) by testing and controlling it.

The graphic method
I also used the recording of some aspects during the evaluation activity in order to provide an intuitive support for presenting the measurements made.

3. STEPS OF THE RESEARCH

The initial stage (pretest)
Setting and application of motor capacity tests for preschoolers on the sample of selected subjects (15 subjects).
The following items have been established for the psychomotor field:
To perform general physical exercises with time counting and spatial landmarks;
To make the correct positions at the commands: "Stand straight", "Stand at ease", "To the Left", "To the Right";
To do walking and running exercises maintaining a correct position.

The formative stage (quasi-experimental)
Development and application of training programs according to the results of the initial testing. We have applied the activities included in the annual planning.
The training programs aimed at:
- operational objectives / benchmarks;
- evaluation (summative) - test;
- resources used: content of programs and learning capacity;
- didactic scenario: methods, materials, means used;
- the teaching skills used.
By careful selection of exercises and games, we had in mind the improvement of movement skills and abilities, the formation of a correct postures - the permanent control of the position, the education of group relations - the coordination of the personal movements with those of the other children, the development of personality traits as perseverance - in doing exercises as correct as possible, self-control - when being less successful in doing the exercises, fairness - observance of the execution process.

Final stage (posttest)
- Testing the psychomotric level reached by children;
- Doing motricity measurements;
- Recording the data in tables and comparing them with the initial ones, the comparison allowing me an objective interpretation of the results of the two tests.

The final evaluation demonstrated that preschool children acted consciously stimulated by the diversity of the exercises and ways of organizing the activity.

4. PROCESSING AND INTERPRETATION OF RESEARCH RESULTS

The information needed for the research was collected from the very first months, when we came into contact with the children, the parents of the children and the kindergarten teacher.

Following the proposed experiment, the results were recorded and presented in tables and annexes. These results were statistically processed, arranged in a hierarchical order at the same time with highlighting the progress made by children during the experiment. The following statistical and mathematical indices were calculated: arithmetic mean, height progression, weight progression, long-distance jump, hip joint mobility, speed sprint, shuttle run.

In order to highlight the progress made by the children during the experiment, we have compiled centralized tables showing the following:
- The results of each child in both tests and the average progress of the children from the first to the second test.

Following statistical calculations of the parameters, a natural increase in somatic parameters and an improvement in motor parameters were observed. This was due to the design and approach of the learning units of the specific training content within the didactic process.

The exercises of aerobic gymnastics are easily done and enjoyed by children, the appropriate musical background creates an atmosphere that favors rhythm and dance. Combinations of elements and aerobic patterns require rigorous consolidation, so that they can then be easily linked in the form of a dance. Playing the whole dance at a celebration in a festive framework, creates an additional motivation for children to learn the dance.

5. CONCLUSIONS

The paper includes the results of a study on the effectiveness of aerobic gymnastics in the physical education activity of preschool children. We underlined the opinions of specialists working in preschool institutions on the importance of physical education of children in the context of the other subjects taught. Plato, said that the two sides of the human being must be educated the same, because they serve us to the same extent.
Modern science also demonstrates, through countless arguments, that there is a close correlation, between the physical development of the preschool children and the capacity to assimilate and capitalize on knowledge.

Practicing aerobic gymnastics, enhancing body vigor, health, preschool children create the essential conditions required by a fruitful and intense intellectual activity.

The content of the information studied reflects the low level of organization of physical education in preschool institutions and the acute need to improve its forms, methods and means.

Analysis of the data, of the results show that preschool children have reached a higher level, with obvious progress.

REFERENCES