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THE IMPLEMENTING OF PSYCHOMOTOR TECHNIQUES DURING PHYSICAL EDUCATION LESSONS IN HIGHER EDUCATION

Lecturer, PhD, MIHAIU Costinel[1*]
[1]*Libertății Street, nr. 62, Bragadiru, Ilfov County, Romania*
* Corresponding author: costinmihaiu@yahoo.com

Abstract

Background. Psychomotricity, being a part of applied psychology, studies motor functions, integrated and coordinated by the psychic functions. Psychomotricity manifests itself as an ability as well as a complex process, which regulates individual behaviour. We can also define it as the art of controlling one's behaviour. The present paper deals with improving elementary motric behaviour: achieving general movement control using sports dance.
Objectives. This paper deals with the way in which applied programs made beneficiaries more aware of their bodies, also improving their cognitive function. The purpose of this paper is also represented by the assessing, using psychomotricity, of the coordination component and changes which appeared after applying the two programs and also by the assessing of the comparative study of these changes.
Methods. To draw up this paper, I have used the following methods: the bibliographical research method, the assessing and data testing one, mathematical statistics methods and also the graphic one.
Results. Both groups improve their initial parameters as a result of the training and learning process. However, the group which has done the exercises improved more than the group which simply watched. This observation leads us to the same conclusion: individualized preparation is superior compared to the face-to-face traditional one.
Conclusion. We can also explain why the results achieved by the experimental group are superior on account of the methodology used for implementing training strategies. During the psychomotor training process, the exercises focused on acquiring certain types of behaviour, allowing students to slowly apprehend the basic moves. This, in turn, led to a more accurate representation concerning the human body moves and its segments.

Keywords: psychomotricity, abilities, assessment, students

Introduction

In the encyclopedic dictionary of psychiatry (Gorgos, C 1991) the term psychomotricity generically defines any motor action, attitude or behavioral model that is under the influence of mental processes, showing that the two sides - mental and motor - cannot be separated.

In our country, M. Epuran (1976, p.114) dealt with this problem and defined psychomotricity as the expression of maturation and integration of motor and mental functions at the level required by the good functional integration of the individual in the environment."

Although in the literature there is a theory that sustains that motor skills are, in fact, a psychomotor skill, R. Singer (quoted by V. Horghidan, 1980) considers that psychomotor skills differ from motor skills in that they are more refined and include a higher degree manifestation of the perceptual and intellectual function."

Psychomotricity, as a component part of applied psychology, approaches the study of motor functions, integrated and coordinated by psychic functions. Psychomotricity appears both as an aptitude and as a complex function of regulating individual behavior. It is also associated with the idea that the art of mastering the body is also the first condition of mastering the behavior. The undertaken research approaches the improvement of basic motor behaviors: general dynamic coordination through aerobic gymnastics.

The coordinative capacity manifests itself as a psycho-motor quality, dependent on the central nervous system and skeletal muscles during a movement and its content is expressed in the precision of movements, respectively muscle contractions and their adaptation to the conditions imposed by the requirements of victory or to the motor response as efficient as possible to the opponent's actions.

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Dancing encourages body awareness, it develops ways of communication - but also ways of liberation, presenting multiple benefits for the mental and motor side. The implementation of movements with a beneficial role on the body, combined with elements of coordination and balance, as well as the acquisition of dancing skills and the mastery of some choreographies, are the basic elements when we want to achieve an improvement of the psychomotor behavior through dance.

As a form of exercise, dancing is beneficial both emotionally and physically - increasing muscle strength, coordination, balance and developing a better mobility.

The purpose of the research is to practice body awareness programs, which generate improvements of the cognitive capacity. Likewise, the evaluation, within psychomotricity, of the coordination component and the changes which appear as a result of the application of the two action programs and the comparative study of these changes.

Research methods

The following methods have been used:

- the bibliographic documentation method;
- the experimental method. The experiment performed is of an ameliorating type, because it aims to increase the efficiency of the instructive-educational process.
- the testing method was necessary to objectify all processes and other variables which are subject to scientific research. Matorin Test has been used.
- the statistical-mathematical method. The data obtained from the tests were analyzed and interpreted using this method.
- the graphical representation method allowed to express the processed data and the resulting acknowledgements.

The research hypotheses - *the use of psychomotor techniques in sports dance lessons will lead to a significant improvement in general coordination and balance***.**

Content of the research

Our research has been carried out at the University of Bucharest, during 8 months, between October 2018 and May 2019. In order to validate or invalidate the research hypotheses, two subject groups have been created, an experimental and a control one, each one with a configuration of 20 individuals.

The experiment consisted of systematic interventions, meaning dance programs dedicated to the development of the psychomotric skills, projected and planned for the experimental group, according to the age characteristics and respecting the methodological principles. The individuals of the control group have been part of a frontal instruction process, without having assigned during the class an exclusive sequence for the development of the psychomotric skills.

The intervention plan that has been applied to the experimental group consisted of the implementation of sports dance exercise structures aiming to enhance the coordinative capacity:

- movement pairing and combining capacity;
- differentiating capacity;
- control and direction capacity.

The following have been used:

- exercises lacking visual control;
- exercises that implied executing unusual motor tasks;
- exercises for the training of the rhythmicity capacity.

All the subjects have had initial and final tests, at the beginning and at the end of the experiment, aiming to estimate the influence of sports dance on the development of psychomotric techniques.

The test applied for the estimation of the influence that sports dance has over the psychomotric functions is Matorin Test.

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Research results

The results obtained by the two groups at the Matorin test are presented in tables no. 1 and 2.

The analysis of the general coordination using Matorin test has led to the observation at the experiment group of a 33,4% improvement of the 360° right turn jump, with significant differences at P<0,005, compared to the control group, where insignificant differences have been observed at P>0,005.

Regarding the 360° left turn jump, the experiment group showed a 30,13% improvement at the final test, with P<0,005, as opposed to the control group, that improved with only 6,09% at the final test, with insignificant differences at P>0,005.

Table 1. *Matorin test - turn 360 º to the right*

Group	T1- Initial	T2- Final	Improvement	Value of P
Experimental	249,4	328,8	33,4 %	< 0,005
Control	254,4	308,6	8,93 %	> 0,005

Table 2. *Matorin test - turn 360 º to the left*

Group	T1- Initial	T2- Final	Improvement	Value of P
Experimental	278,6	316,7	30,13 %	< 0,005
Control	263,3	274,3	6,09 %	> 0,005

Both groups show improvements of the initial parameters, as a result of the instruction process.

However, the improvements are greater at the experimental group, in contrast to the control group. The value of t, which is higher at the experimental group, also confirms a higher reliability of the value obtained by this group. This observation leads us to the same conclusion, namely, the personalized instruction is superior to the traditional, face to face instruction.

The graphical representations of the average values of the results in Matorin test are shown in figure no. 1 and figure no. 2.

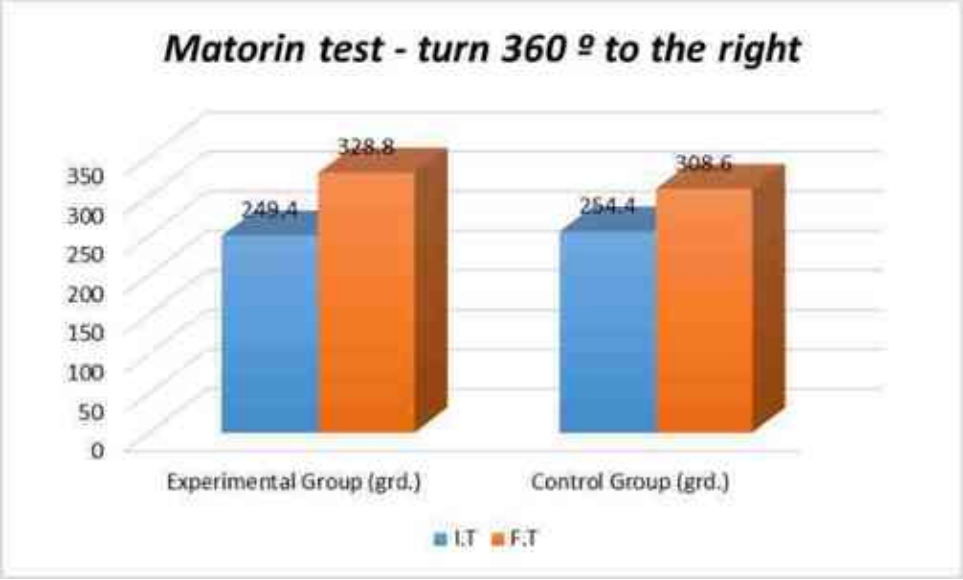

Fig. 1 The average values of the Matorin test (right turn)

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Fig. 2 The average values of the Matorin test (left turn)

Conclusions

The superiority of the results obtained by the experimental group is justified also by the methodological measures that have been implemented in the instruction strategy. In the psychomotric training process, the actions have been primarily oriented towards the achievement of some behaviors that enable the basic components, which contributed to a more correct representation of the body movements and its segments.

Moreover, the prominence of the results obtained by the experimental group is also explained by the methodological input: applying the differentiating and awareness of the activity principles, along with the different approach of each individual, and the awareness of their deficits and their tasks.

Proposals

Implementing psychomotric techniques in the physical education classes in order to improve the physical and psychological aspects.

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