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INTERDEPENDENCE BETWEEN PHYSICAL AND INTELLECTUAL DEVELOPMENT OF STUDENTS IN PRIMARY SCHOOL

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Abstract

Harmonization of the relationship between intellectual development and physics is done in mutual dependence and increasingly interested in multidisciplinary research, especially those with an important impact on health. The practice of physical education from the youngest age favors the development of the particularities of manifestation of the modern man's behavior and improves the quality of life.

Objectives. At the level of the primary cycle a study was carried out on the issue of strengthening the health status of students by harmonizing the motor and intellectual components and informing the decision makers about the motor and somato-functional state of the school population.

Methods. The following methods were used in the study: study of specialized literature, school documents, questionnaire method, survey method, statistical method, graphic method.

Results. Research on primary school pupils confirms the correlation between the physical, intellectual and health development components, so children with better levels of motor-based indicators have greater stability against the adverse environmental factors that are manifested by lower illness.

Conclusion. The determination of physical and intellectual skills of the group is insufficiently developed in the students of the group tested, which recommends practicing physical exercise both in physical education lessons and in extra-curricular activities.

Keywords: physical development, intellectual development, motor education, pupils.

Introduction

Lack of sporting activities leads to weight gain, obesity and chronic illnesses, cardiovascular pathologies and diabetes, which harm the state of well-being and jeopardize the quality of life of individuals, which has the effect of affecting the economy's budget and financing allocated to the health sector. The statistics published by WHO member countries conclude that a $ 1 spend for physical exercise is equivalent to a $ 3.2 reduction in medical expenses.

In this situation, the public authorities responsible for initiating, planning and conducting sports activities and physical education must undertake to fulfill with greater responsibility the task of initiator promoting the strengthening of the health status through the capacities of the specialists in the field: teachers, teachers, methodologists, kinetotherapists and the implementation of prophylactic alternatives, applied according to the age, gender, level of training, in order to accomplish the tasks specific to the specialists' field of competence.

Physical education is a form of education that valorizes moments through the physical development of the body, the development of intellect, the necessary skills of movement throughout a lifetime. Component of general education, school physical education is conducted according to well-established rules, includes various forms of organization and development, in order to optimize the biological and psychomotric potential of the individual, in order to improve the quality of life (Epuran, M., 1992).

Discipline Physical Education is the only one of the school curricula that aims to educate students for a better way of life that will have a positive influence on health and which will meet the social needs and ideals generated by them, represented by self-discipline, fair play, mutual help, tolerance , friendship, values that are precious goods and should be put into practice in the shortest possible time. The current situation proves, however, that the principle of postponement prevails. It remains at the stage of the proposal and there are too few actions of the responsible structures in the field of education, health, physical education and sport, which

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guarantee for a Romania with a healthy population, with a high level of education compared to the European standards, a country with excellent results in sports that make the nation visible to the world through its values.

Due to the fact that a growing number of specialists recommend practicing exercise by all people, starting with the youngest age, for the benefit of strengthening health and for improving motor, intellectual and behavioral indicators, and because many studies have shown that the implementation modeling programs can provide recommendations that favor the physical education lesson, it is necessary to develop and implement a guide for physical education, sports and health. It must begin at an early stage, that is, for primary school pupils (Balint, G., 2001).

Study. The dynamics of health indicators of pupils of low school age according to their level of motor and intellectual training.

An analogous dynamics is observed in the relation of health indicators with those of physical education of pupils in primary classes (Table.1).

Table 1. Health indicators of pupils of low school age according to their level of physical training

Level of physical training	Number of subjects		Health indicators	
	Number	%	Health Index %	Morbidity on 100 children
High	67	33.3	72.6	56.3
Medium	123	61.2	59.6	60.4
Low	11	5.5	55.1	74.2

As we can see in the table, higher levels of intellectual performance indicators are observed in children with higher learning literacy indicators. Thus, in students with a high level of high training 33.3%, we observe an average morbidity of 57.3%, respectively in the children with 61.2%, 61.2%, the morbidity index 80.7%, and the children of the cycle Primary with low level constitutes 5.5% and morbidity 90.0%.

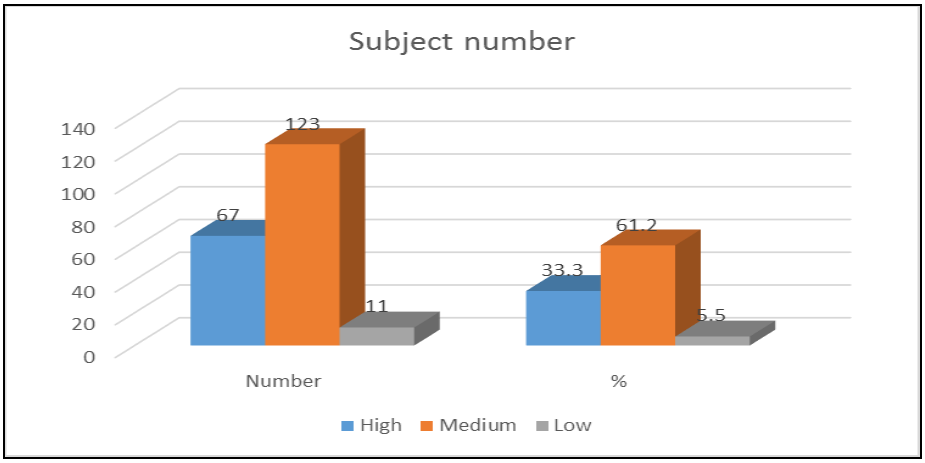

Fig. 1. Level of physical education of pupils in the primary cycle

Figure 1, reflects both physical training and percentage levels (high, medium, low) and the number of subjects included in the research.

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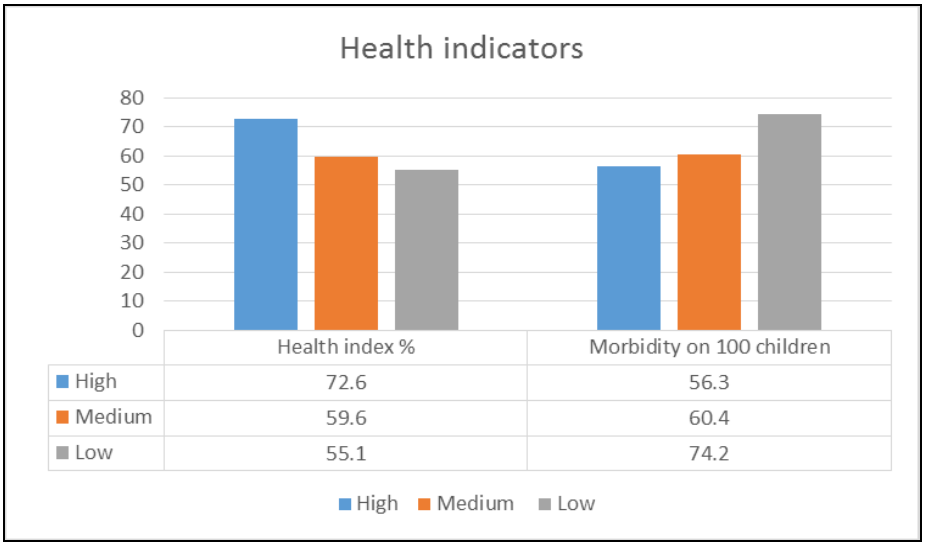

Fig. 2. Health and morbidity index statistics per 100 children

In Figure 2, the percent health and morbidity index is reflected in 100 children. Thus, the percentage of children who did not or were ill during the year accounted for 72.6% of the students corresponding to the level of high physical training, the students who recorded an average level of 59.6% and those with a low level respectively 55.1%.

Morbidity rates were as follows: 56.3% for high, 60.4% for those with medium and 74.2% for those with low levels.

Table 2. Health indicators of pupils in primary school depending on the intellectual level (average of grades per year)

Evaluation level	Note Average	Subject number		Health indicator	
		Number	%	Health Index %	Morbidity in 100 children
High	8.3-10.0	65	32.3	72.6	56.3
Medium	6.3-8.2	120	59.7	59.6	60.4
Low	4.6-6.2	16	8.0	55.1	74.2

In Table 2, we analyzed the correlation between the health and the intellectual index, which was the average of the marks recorded during one year of education. The higher the intellectual level is 32.3%, the higher the health index is 72.6% and the morbidity respectively 56.3%, which demonstrates the traditional pattern of correlation of the health and intellectual components.

Thus, we can mention that the research carried out with the pupil population included in the primary cycle confirmed the traditional correlation pattern of the physical development components with health indices, or the children with a high level of motor training have a higher stability against the adverse factors of the environment , which is manifested by a lower illness. These children also see a higher level of the intellectual performance indicator, which you cumulate with the average level is 92%.

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Dynamics of intellectual indicators of pupils of small school age.

At present, basic theories on the structure of the intellect are considered to be the hierarchical model of C. Spirmen, the models of the intellect (Thurstone L., 1938, Guilford J.P., 1975, Stemberg R.J. 2005).

The intellectual group test (TGI), which was translated and adapted by us to students in Romania, is intended to diagnose the intellectual development of pupils in the third and sixth classes.

Intellectual Group Test (TGI) contains 7 subtests:

- Executing instructions;
- Mathematical problems;
- Filling in sentences;
- Determining the similarity and difference of notions;
- Strings of figures;
- Analogies;
- Symbols.

It is important to note that this group of tests is also cognitive tests (Акимова, М.К, 1993)

Table 3. The average TGI scores in the experimental groups

Tests	1	2	3	4	5	6	7	Total
Control group	4,90	3,57	3,95	18,51	6,07	10,62	15,05	62,67 – low level
Experimental group	6,41	3,37	5,85	21,01	6,65	10,17	20,49	73,95- medium level

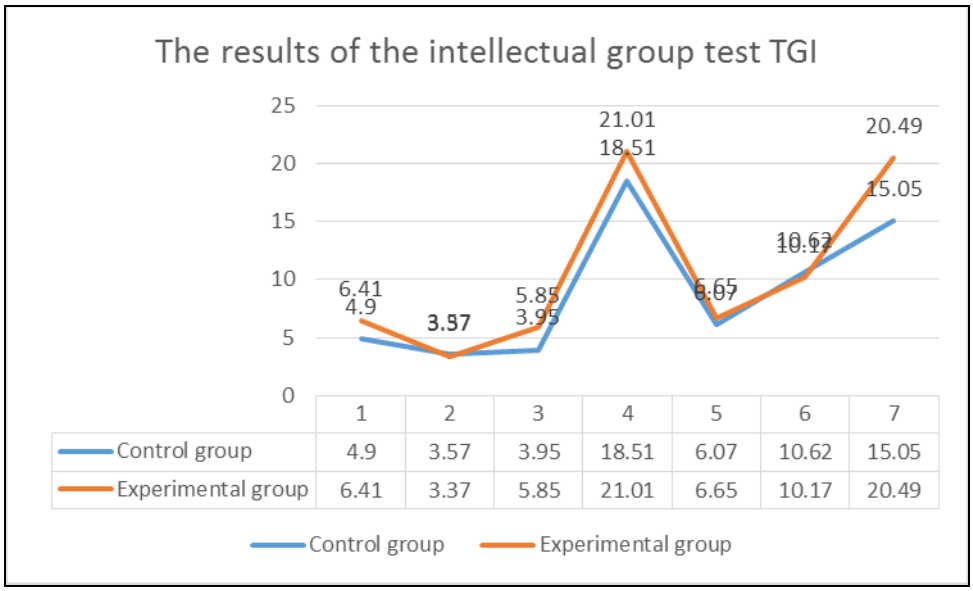

Figure 3. Testing the 2nd, the control group

From the obtained data we can see that the control group in the second test registered more points than the experimental group, which demonstrates that the problems of mathematics in the third class, those in the control group are better solved and this class in the future can be oriented to real profile , and the recorded ball average found 3.57 control group and 3.37 experimental group respectively. Also in the fifth test, the number of balls is quite close although the experimental group recorded an average of 6.65 balls versus those in the control group 6.07. The same is true for the sixth test.

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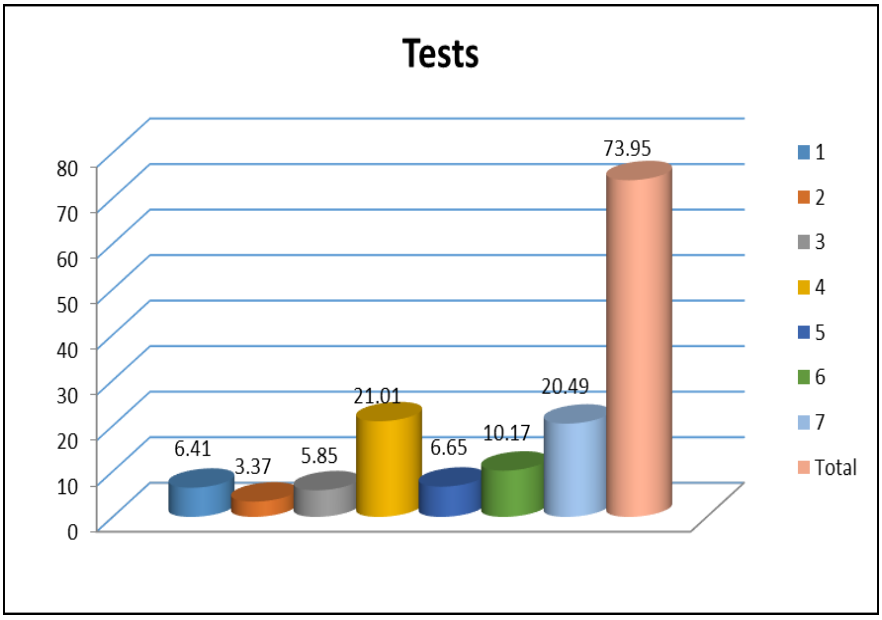

Figure 4. Results of testing the experimental group

Third-grade children in the experimental group have superior environments in tests 1, 3, 4, 5 and 7, indicating that those in the experimental group are willing to be assigned to the human profile in the future because the piloted guide components are focused on those indicators. Figure 5. Testarea grupei experimentale si a grupei de control

Results

Significant differences between the control and experimental groups are noted in Figure 3. Thus, at an average of 18.51 points recorded by the control group and 21.01 recorded by the experimental group, also at indicator 7, the control group recorded an average of 15.05 points, and the experimental group recorded 20.49 points.

Thus, the control group recorded an average of 62.67 points for all indicators, corresponding to the low intellectual group test level (TGI). The experimental group recorded a general average of 73.95 points, which corresponds to the average intellectual test level (TGI).

Conclusions

After analyzing the current situation of the school curricula for the physical education discipline, it was highlighted in our study the optimization and the improvement of the degree of assimilation of the theoretical and practical knowledge, the students succeeding in meeting the new requirements of the the physical training required by the framework programs.

Harmonization of the motor and intellectual components of pupils in the primary cycle was directed to the health effect within the study process. Differentiating the study material in the field of physical culture, regarding the harmonization of the intellectual and physical components of the health and the strengthening of the state of health regarding the development of primary school pupils, is open to efficiency and dynamics through the contents always adapted to the new requirements of the framework plans.

The study of pupils in the primary cycle confirmed the traditional correlation pattern of physical development components with health indices, or children with high levels of motor skills have greater stability against the adverse environmental factors, which is manifested by a lower illness. These children also see a higher level of the intellectual performance indicator, which you cumulate with the average level is 92%.

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We recommend continuing (at the beginning and / or year-end) evaluation, which aims at simultaneously cultivating self-assessment and assessment capacity at student level and considerably shortens the interval between the evaluation of the results and the improvement of the activity.

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