123 - ANALYSIS OF THE PHYSICAL DEVELOPMENT OF MALE STUDENTS OF 7TH AND 8TH GRADE

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INTRODUCTION

According to Miller et al. (2003), the widespread development of science and technology nowadays provided the reduction of physical workload in daily life and as an unwanted side effect contributed to the increasing rate of physical inactivity of the population. In turn, it leads to health problems such as not transmissible chronic diseases (SUNDQUIST; QVIST; JOHANSSON; SUNDQUIST, 2005).

Several surveys conducted in recent decades have shown the beneficial effects of physical exercise for health of human beings (ABU-OMAR; RÜTTEN, 2008). It was also appointed by the US Department of Health and Human Services (2010) that systematic physical activity is an important factor of protection against not transmissible chronic disease and improvement of quality of life. For this reason, the government health institutions draw up guidelines for the development of interventions which aim to promote physical activity.

The physical fitness of children and adolescents have been monitored over the last century, because it is known that there is an important relation between fitness improvement and improvement in functional motor abilities (strength, speed, agility, flexibility and aerobic power) of individuals, thus contributing in the efficiency of performing certain tasks (REIFF et al, 1986, SIMONS et al, 2010). Nevertheless, according to Hallal (2010), the number of actions directed to promote health remains insufficient in the school population in Brazil.

The Law No. 9394 of December 20, 1996, which establish Guidelines and Bases of National Education demands the School the obligation to carry out the process of Health Education, where children and adolescents acquire healthy habits and keep their body in perfect state of operation, which for Hallal, Victora, Azevedo and Wells (2006) promotes benefits of bone and cardiovascular health, as well as being associated with the maintenance of physical activity in adulthood. But we noted that the goal of physical education teachers are not focused on improving students' health and quality of life, through systematic physical activity, because students are not charged for satisfactory physical performance and the test results showed an insufficient development in some questions (BOSIO, C., KALININA, G., KALININE, I.). We think it happens because there are no standards of physical development in the Elementary School, which did not reach the students in each age group and criteria for evaluating such development.

We suggest that these rules follow the criteria established by the Ministry of Education of the Russian Federation (1988) in assessing the physical, where the main objective is to strengthen the health of children and adolescents, through its physical development, where there is strict control of development through physical evidence and standard reference tables (ПРОГРАММЫ..., 1988). Kalinine (2010) suggests a methodology that can be used to control the physical development of students of the Elementary and Secondary School Education, and if adopted by the MEC can be used as a document that requires physical education teachers to develop the physical abilities of all students until at least the minimum development for their age group. This methodology is based on standardized tests and minimum standards of optimal physical development of students from 8 to 18 years old who were taken from the Elementary School Programs and Middle School of the Russian Physical Culture.

The Minimum Development is the physical limit that can be achieved by any healthy student. The minimum values of physical development were elaborated by the Ministry of Education of the USSR and were approved in all schools of the USSR in the period of more than 25 years.

The objective of this research was to investigate the physical development of male students of 7th and 8th grades of elementary schools and perform analysis of the efficiency of this development.

METHODOLOGY

The study group was composed by male students eligible for healthy physical activity of the 7th and 8th grades of Maria Ilha Baisch High School, in the municipality of Dona Francisca, RS, Brazil. In total 28 students.

In the tests performed it was investigated: the level of force development (Pull on the high fixed bar for male sex and Pull on the low horizontal bar for female sex), the level of development of the execution of the actual bending over with knees bent, the level of development of speed (60m Race), the level of development of aerobic endurance (1500m Race) and the level of development of explosive strength and coordination of the lower limbs (Jump extension without race) and the level of development of explosive strength and coordination of the upper limbs (Release a ball of 150g).

Data collection occurred during physical education classes. In the school gymnasium were carried out tests of strength, jump without running, abdominal, weight and height. At the municipal stadium located near the participating school in the study, the tests of running and throwing the 150g ball were collected, having as collectors the academic of Physical Education graduation of UFSM and the Regent Teacher of classes surveyed. The assessment of students' height and weight was performed by measuring tape and anthropometric scale.

RESULTS AND DISCUSSION

Figure 1 – The search results of physical performance in Modified Abdominal test of male students surveyed

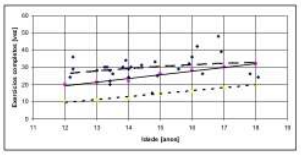
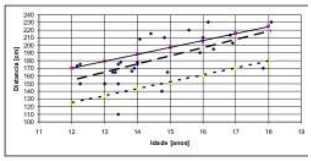


Figure 2 – The search results of physical performance ir the test of Long Jump of male students surveyed



- - Minimum Development, ———— Great development, — — Real development of the students surveyed

The results presented in Figure 1 show that in the Modified Abdominal test, 23 students had optimal development, 5 had good and regular development. It may be noted that in this test there was a predominance of optimal development, students from 12 to 15 years have a tendency to rate higher than the optimum development, after this age the rate is maintained.

The results presented in Figure 2 show that in the test of long jump, 13 students had great development, 12 students obtained good and regular development and three students were below the minimum development. The result shows that there is a parallel increase in the index of optimal development with the index of real development of the students; however, this is below the optimum. If the strength of the lower limbs gets to be required and worked by the students, the results may be improved.

Figure 3 – Results of the research of physical performance test of the fixed bar of the male students surveyed

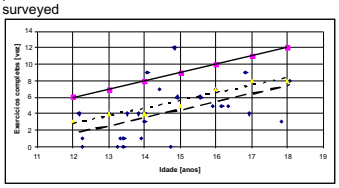
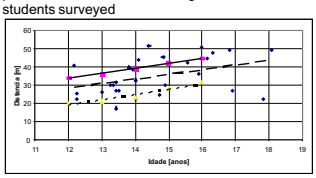


Figure 4 – Results of the research of physical performance of "Throw a 150 g ball" test of the male students surveyed



- - Minimum Development, ———— Great development, — — Real development of the students surveyed

The results presented in Figure 3 show that in the fixed bar test, most of the male students surveyed had insufficient development (22 students), regular development (3 students) and a few have had optimal development (3 students).

It was noted an increase in the rate of development according to an increase of age, but this increase is below the minimum. Probably the strength of the upper limbs is not worked in the classes.

Figura 5 – Resultados da pesquisa do desempenho físico em teste Corrida de 60 metros dos estudantes do sexo masculino pesquisados

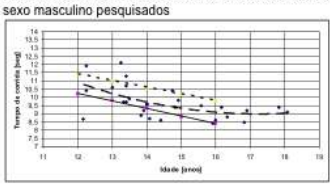
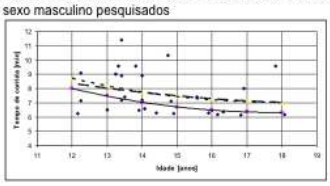


Figura 6 – Resultados da pesquisa do desempenho físico em teste Corrida de 1500 m dos estudantes do sexo masculino pesquisados



- - - - Desenvolvimento Mínimo, ═══ Desenvolvimento Ótimo, ═ ═ Desenvolvimento Real dos estudantes pesquisados

The results presented in Figure 4, the "Throwing the 150g ball" test, of all male students surveyed, 10 had optimal development, 5 have insufficient development and 13 obtained good and regular development.

It can be seen a gradual increase in the rate of real development with the increase of age, however it is below the optimal level. It can be explained by their better prior experience with the natural movement of launch.

The results presented in Figure 5 show that in the Race of 60 meters test, of all male students surveyed, 8 students had optimal development, 16 students obtained regular development and 4 students had insufficient development.

It is noted that there is a gradual increase in the rate of real development, but it is below the optimal level, after the 15 years age range there is maintenance of the index of real development, but it should improve as there are biological condition for this.

The results presented in Figure 6 show that in the Race of 1500 meters test, of all male students surveyed, 14 students had great performance, 3 students obtained regular performance and 10 students with poor performance.

The real development of students is equal to the minimum development, therefore insufficient, there is an improvement in resistance with the increase of age range, and however this index remains low.

Overall, I suppose that the results of the tests rely heavily on the individuality of each student and his previous experiences in school. Because physical education minimally affects in their motor and physical skills, since there are no goals to be achieved in this area, because in general, on physical education there is a predominance of games and ludic activities, that end up favoring in an exaggerated manner the coordinative motor skills (FARINATTI; FERREIRA, 2006). Physical fitness related to health should receive more attention from teachers during the classes and throughout the school year.

CONCLUSION

We conclude that the levels of physical development of the students that participated in the tests are lower than desired and required by the standards of physical development of the Russian school, in general, students showed regular development. This is due to the lack of requirements by the teachers of physical education, that by not having goals to follow, stays without "knowing" what to work, do not give adequate attention to the physical development of the students in order to strengthen the health of children and adolescents.

Considering the limitations of the study, we highlight the importance of encouraging teachers to include tests of physical fitness as a program in the school curriculum, using tables of reference and a system of evaluation of physical development with the annual objective notes, encouraging young people to practice healthy habits.

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ANALYSIS OF THE PHYSICAL DEVELOPMENT OF MALE STUDENTS OF 7th AND 8th GRADE

ABSTRACT

The objective of this research was to investigate the physical development of male students of 7th and 8th grades. The study group was composed by 28 students aged between 12 and 18 years of Maria Ilha Baisch High School in the municipality of Dona Francisca-RS, Brazil. The following physical tests were used: horizontal jump, throwing the 150g ball, bending over in 1 minute, high fixed bar, 60 and 1500 meters run, based on the standards of assessment of the Russian school of the students physical development. Anthropometric measurements were also collected: weight, height and BMI. The survey results showed that male students have regular physical development. We think this happens because there are no targets for physical education teachers to follow, targets that require the development of these physical abilities of the students, in order to strength their health, through their physical development.

KEYWORDS: Education, Physical Education, Physical Development.

ANALYSE DU DEVELPPEMENT PHYSIQUE DES ELEVES HOMME DE 7 EME ET 8 EME ANEE DES ETUDIANTS

RÉSUMÉ

Le but de cette recherche c'est d'analyser le développement physique des élèves de sexe masculin de l'enseignement primaire (7º et 8º niveaux brésilien). Le group sous observation a compris 28 étudiants, âgés de 12 à 18 ans, à l'Escola Estadual de Ensino Médio Maria Ilha Baisch, Dona Francisca – RS, Brasil. Les tests physiques utilisés étaient : saut en langueur, lancer du poids de 150g, flexion abdominal en 1min, élévation dans un lingot de métal (répétitions maximales), la course de 60 et 1500m, selon les règles de la Courant Russe d'évaluation de dévéloppement physiques des étudiants. Ont été pris aussi les mesures anthropométriques des évalués: poids, taille et IMC. Les résultats de la recherche ont montré que les élèves sous analyse ont presenté un régulier développement physique. On pense que les résultats observés sont dus à l'absence d'objectifs pour que les instituteurs de la discipline d'education physique suivent, des objectifs qui demandent le développement de ces capacités physiques aux élèves, pour que se vérifie un renforcement de la santé, par leurs développements physiques.

MOTS-CLÉS: Éducation, Éducation Physique, Développement Physiquel

ANÁLISIS DEL DESARROLLO FÍSICO DE LOS ESTUDIANTES DE MACHO 7 Y 8 DE LA SERIE DE LA ESCUELA PRIMARIA

RESUMEN

El propósito de este estudio fue analizar el desarrollo físico de los estudiantes varones de los grados de educación básica 7 y 8. El grupo de estudio consistió de 28 estudiantes de edades comprendidas entre 12 y 18 años de la Escuela Secundaria Maria Ilha Baisch el condado de Dona Francisca-RS, Brasil. Utilizando las siguientes pruebas físicas: salto horizontal, lanzando la bola de 150 g, inclinándose en un minuto, la barbilla alta, correr 60 metros y 1.500 m de ejecución, basada en las normas de la escuela rusa de desarrollo físico de los los estudiantes. También se recogieron las mediciones antropométricas: peso, talla e índice de masa corporal. Los resultados del estudio mostraron que los varones tienen un desarrollo físico regular. Creemos que esto se debe a que no hay objetivos para profesores de educación física como consecuencia del desarrollo de estos objetivos que requieren capacidades físicas de los estudiantes, así que hay un fortalecimiento de la salud, a través de su desarrollo físico.

PALABRAS CLAVE: Educación, Educación Física, Desarrollo Físico.

ANÁLISE DO DESENVOLVIMENTO FÍSICO DOS ESTUDANTES SEXO MASCULINO DE 7ª E 8ª SÉRIES DO ENSINO FUNDAMENTAL

RESUMO

O objetivo desta pesquisa foi analisar o desenvolvimento físico de estudantes de sexo masculino do ensino fundamental das 7ª e 8ª séries. O grupo de estudo foi composto por 28 alunos com idade entre 12 e 18 anos da Escola de Ensino Médio Maria Ilha Baisch do município de Dona Francisca-RS, Brasil. Utilizando-se dos seguintes testes físicos: salto horizontal, arremesso de bola de 150 g, flexão abdominal em 1 minuto, barra fixa alta, corrida de 60 metros e corrida de 1500 m, baseados nas normas da Escola Russa de avaliação do desenvolvimento físico de estudantes. Foram coletadas também as medidas antropométricas: peso, altura e IMC. Os resultados da pesquisa mostraram que os alunos do sexo masculino apresentam desenvolvimento físico regular. Achamos que isso acontece porque não há metas para os professores de educação física seguir, metas que exijam desenvolvimento dessas capacidades físicas dos alunos, para que haja um fortalecimento da saúde destes, através do seu desenvolvimento físico.

PALAVRAS CHAVE: Educação, Educação Física, Desenvolvimento Físico.