# 71 - INDICATORS OF LEVELS OF PHYSICAL FITNESS AND ENGINE PERFORMANCE IN ADOLESCENTS OF MIDDLE SCHOOL

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#### ABSTRACT

The physical fitness of young people has been widely studied. The importance of good motor development for the education of the body as well as the overall development of the person lies in its preventive role in school difficulties. The purpose of this cross - sectional descriptive study was to perform a survey of motor performance indicators of the students of a private school in the neighborhood of the Tabuleiro, located in the city of Maceió - AL. The sample consisted of 14 students, 8 boys and 6 girls. For data collection, the tests of the PROESP-BR manual, composed of tests that estimate the physical fitness and the motor performance of children and adolescents, were used. The results showed that the vast majority are classified as very physically weak. The low results indicate that the students studied are in need of an improvement in motor performance, which demonstrates the need to introduce in Physical Education classes activities that promote the improvement of the physical capacity and agility of the students, resulting in an improvement in the Avoiding the development of diseases related to lack of physical activity.

Key words: Physical Activity, Physical Fitness, Motor Performance

#### Introduction

Physical exercise has always been present in the daily life of man since primitive times, where prehistoric man to ensure his survival used hunting, swimming, fishing, planting and harvesting, that is, he was an extremely physically active being. What we call gymnastics today, school physical activity in the form of games and dances appears in Europe in the early nineteenth century. From there, various methods of physical exercises emerge, and in the contemporary world, the human movement becomes indispensable in the maintenance of good health (RAMOS, 1982; BREGOLATO, 2002; DALLO, 2007).

Recent studies have pointed out that children and adolescents are less physically fit (CUNHA JUNIOR, 2004, GUEDES, 2003). Thus, programs aimed at maintaining and improving the components of physical fitness should be offered, especially, to school-aged adolescents through physical education. Tassitano (2007) is emphatic in his study when stating that the benefits of practicing physical activity for the health and quality of life of people of all ages are well documented in the scientific literature.

Physical activity is understood to mean any bodily movement with energy expenditure above resting levels. Activities of daily living (bathing, dressing), work activities (walking, lifting and carrying objects) and leisure (exercising, playing sports, dancing, etc.) are included (NAHAS, 2001). Nieman (1999) says that the required amount of exercise to decrease the risk of heart disease is 30 minutes of moderate intensity physical activity per day is sufficient, with greater risk reduction when larger amounts of more vigorous exercise are performed. It has already been scientifically proven that physically active people have a better quality of life, have greater longevity and a lower risk of developing degenerative and cardiovascular diseases.

The characteristics and particularities determined by the physical development levels of a child and adolescents are important data to be known, and it becomes essential in the planning of physical education classes, for different objectives can be directed, as well as the contents and processes Of learning and training of these young people (SILVA, 2001).

Gallahue & Ozmun (2005) affirm that motor performance is constantly evolving, is dynamic and progressive, starting from simpler movements and performed in an individualized way, for a series of combinations that will be used in leisure activities, Sports and mainly everyday, concomitant to the processes of school learning and the maturation of the main motor skills.

Thus, the objective of the present study was to investigate the physical fitness indicators related to the health and motor performance of students of a private school located in the Bairro do Tabuleiro in the city of Maceió - AL.

# Methodology

It was taken as study universe, the students of a private school located in the neighborhood of the Tabuleiro in the city of Maceió-AL. The sample consisted of a group of 14 students, enrolled and participating in physical education classes, of both sex, in the age group of 12 to 14 years, of which 8 were male and 6 female, which characterizes A balance of the evaluated for both genders. The data regarding the physical fitness and motor performance levels were chosen and applied through the test guidelines proposed by PROESP-BR (PROJETO ESPORTE BRASIL, 2016). The chosen tests were: of explosive strength of lower limbs and agility (test of the square).

The evaluations, measurements and tests were all carried out in the school premises. It is a descriptive cross-sectional quantitative research. (Thomas and Nelsson, 2002).

#### Procedure

The procedure initiated by a request that authorized to use in the study, the dependencies of the school, then the students that are within the inclusion criteria, were informed about the purpose of the study, the research procedures.

The explosive force of the lower limbs was evaluated as follows: the trajectory was fixed to the ground, perpendicular to the line, leaving the zero point on it. The student placed himself immediately behind the line, feet parallel, slightly apart, knees semi-flexed, trunk slightly projected forward. At the signal the student should jump as far as possible.

Already in the agility test (test of the square) the student left the standing position, with an advanced foot ahead immediately behind the starting line. At the evaluator's signal, it should move to the next cone in a diagonal direction. Then run towards the cone to your left and then move to the cone diagonally (crosses the square diagonally). Finally, it runs towards the last cone, which corresponds to the starting point. The student should touch with one of each of the cones that mark the course. The

timer should be triggered by the evaluator as soon as the evaluator performs the first step by tapping the inside of the square. Two attempts were made, and the best execution time was recorded.

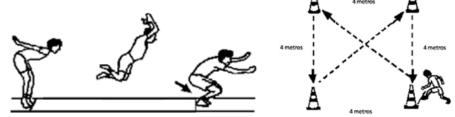


Figura 01 e 02. Fonte: PROESP-BR, 2016.

#### RESULTS

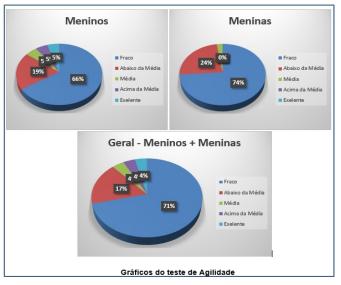
The results were classified as: Excellent, Above Average, Mean, Below Average and Weak, according to the PROESP-BR evaluation protocol.

With regard to the level of explosive strength of lower limbs, it was observed that the great majority are classified as weak and with low performance in physical activities. Below we have the results in graph form, first with the results separated between boys and girls and soon after a general result of boys and girls, with the numbers reached it is possible to infer that there is a need to improve the physical capacity of the students of the private school Used as the basis for this study.



# Gráficos do Teste de força explosiva de MMII

In the agility test (square test), two replications were performed for each student, as suggested by the PROESP-BR (2016) test for both male and female, respectively. The results showed that there is not such a high difference in the performance of the boys in relation to the girls, considering that the number of boys in the class is higher, we can say that it is one of the explanations for the difference in the percentage. In the overall result, we can say that students are below average or weak showing once again the need to improve students' physical activities to improve performance.



#### DISCUSSION

The results showed that most of the adolescents were below the expected level for the series in which they were, mainly when compared with the results obtained in previous researches such as that of Guedes (2002). Most of the children showed motor performance below what was expected for their age. A low score for both tests, related to the classification of young people in the normative tables proposed by PROESP-BR, indicates that there are differences, but not significant, in the values found when comparing male and female students. Overall, these results are worrying the less active these boys and girls are, the greater the likelihood of being sedentary, so the data becomes worrying. Studies such as Martins (2000), Nieman (1999),

Dantas (1998), Matsudo et al (2002) warn that low levels of physical activity increase risks for the development of several diseases.

# CONCLUSION

With this study, we can infer that the tests were important, since the low results among the indicators of physical fitness and motor performance identified in the students of a school in the neighborhood of Tabuleiro, located in the city of Maceió - AL, indicate that most Students are very weak, in relation to physical capacity and agility, according to findings of other researches and in agreement with the data of Proesp, confirming studies done by Júnior (2004) and Guedes (2003).

Considering the results obtained, it can be affirmed that there is a need for intervention programs that stimulate an improvement in the indices of physical fitness and motor performance. Through the study, the students involved seem not to be experiencing effective motor activities to the point of reaching the expectation of motor performance for their age.

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# ABSTRACT

The physical fitness of young people has been widely studied. The importance of good motor development for the education of the body as well as the overall development of the person lies in its preventive role in school difficulties. The purpose of this cross - sectional descriptive study was to perform a survey of motor performance indicators of the students of a private school in the neighborhood of the Tabuleiro, located in the city of Maceió - AL. The sample consisted of 14 students, 8 boys and 6 girls. For data collection, the tests of the PROESP-BR manual, composed of tests that estimate the physical fitness and the motor performance of children and adolescents, were used. The results showed that the vast majority are classified as very physically weak. The low results indicate that the students studied are in need of an improvement in motor performance, which demonstrates the need to introduce in Physical Education classes activities that promote the improvement of the physical capacity and agility of the students, resulting in an improvement in the Avoiding the development of diseases related to lack of physical activity.

Key words: Physical Activity, Physical Fitness, Motor Performance.

# RÉSUMÉ

La condition physique des jeunes a été largement étudiée. L'importance d'un bon développement du moteur pour l'éducation du corps, et le développement global de la personne réside dans son rôle préventif dans les troubles d'apprentissage. Le but de cette étude transversale descriptive étude était d'étudier les indicateurs de performance du moteur d'étudiants au quartier d'un conseil scolaire particulier dans la ville de Maceió - AL. L'échantillon se composait de 14 étudiants, 8 garçons et 6 filles. Pour collecter des données, nous avons utilisé le PROESP les tests BR-manuel, composé de tests qui évaluent la condition physique et la performance motrice des enfants et des adolescents. Les résultats ont montré que la grande majorité sont classés comme très faible physiquement. Faibles résultats indiquent que les étudiants interrogés sont dans le besoin d'amélioration de la performance du moteur, ce qui montre la nécessité d'introduire dans les activités d'éducation physique qui favorisent l'amélioration de la capacité physique et l'agilité des étudiants, ce qui rend par conséquent avoir une amélioration de la la santé

# empêcher le développement de maladies liées au manque d'activité physique.

Mots clés: activité physique, la condition physique, moteur de performance.

# RESUMEN

La aptitud física de los jóvenes ha sido ampliamente estudiada. La importancia de un buen desarrollo de motores para la educación del cuerpo, y el desarrollo integral de la persona reside en su función preventiva en las dificultades de aprendizaje. El objetivo de este estudio estudio descriptivo transversal fue investigar los indicadores de rendimiento del motor de los estudiantes en el distrito de un tablero de escuela en particular en la ciudad de Maceió - AL. La muestra estuvo constituida por 14 estudiantes, 8 niños y 6 niñas. Para recopilar los datos, se utilizó el PROESP las pruebas BR-manual, que consiste en pruebas que estiman la condición física y el rendimiento motor de los niños y adolescentes. Los resultados mostraron que la gran mayoría se clasifican como muy débiles físicamente. bajos resultados indican que los estudiantes encuestados están en necesidad de mejorar el rendimiento del motor, lo que demuestra la necesidad de introducir en las actividades de educación física que promueven la mejora de la capacidad física y la agilidad de los estudiantes, por lo tanto tienen una mejora en salud prevención del desarrollo de enfermedades relacionadas con la falta de actividad física.

Palabras clave: Actividad física, condición física, rendimiento del motor.

### RESUMO

A aptidão física dos jovens vem sendo amplamente estudada. A importância de um bom desenvolvimento motor para a educação do corpo, bem como o desenvolvimento global da pessoa, reside em seu papel preventivo nas dificuldades escolares. O objetivo desse estudo de delineamento descritivo-transversal foi realizar um levantamento de indicadores do desempenho motor dos alunos de uma escola particular do Bairro do Tabuleiro situada na cidade de Maceió - AL. A amostra utilizada foi constituída por 14 alunos, sendo 8 meninos e 6 meninas. Para coleta de dados, utilizou-se os testes do manual PROESP-BR, composto por testes que estimam o condicionamento físico e o desempenho motor de crianças e adolescentes.