63 - EVALUATION OF ANAEROBIC POWER WITH ADOLESCENTS FROM 13 TO 16 YEARS PRACTICAL IN SPORTS MODALITIES

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Introduction

Power, coupled with anaerobic energy sources, is one of the most important components of sports performance. However, it should not be seen as an isolated capability. It should be considered as a partial component of the complex requirements needed for sporting performance. In combination with a high standard of technical and coordination movements, with the specificity of sport or discipline, the various manifestations of physical ability, speed is of prime importance for success in individual or collective sports.

According to Castro (2008), fundamental motor skills are constituted and identified based on basic movements and actions, among which we can highlight: walking; jump; run; kick; to receive; rebate; to roll; Fling and bounce. For Neto and Marques (2005), these activities are decisive in the whole process of development and learning of motor skills and physical abilities, on the part of the child, following a progressive quantitative and qualitative improvement, (FARIAS, 2012).

In order for Physical Education to contribute to the teaching-learning process, one must know the characteristics of the students in their potentialities, limitations and needs in their development. "Providing opportunities for learning and developing fundamental motor skills is of utmost importance for child development." (PAYNE, 2007); (SOUZA, BERLEZE and VALENTINI, 2008).

Opportunity and structured practice are crucial aspects for the acquisition and, mainly, for the refinement of the fundamental motor skills with the objective to reach higher levels of performance of the fundamental motor skills. In addition, Physical Education classes in Elementary School I are unique possibilities for achieving such goals, provided they are organized and taught by professionals in the area.

The child / adolescent upon reaching mature stage within a fundamental motor pattern, few changes occur in the form of that specialized motor skill, refinement of the pattern, and variations of style in form occurs as greater skill (accuracy, precision, and control) , But the basic pattern remains unchanged (GALLAHUE; OSMUN, 2005).

The great improvement in performance is based on increasing physical abilities, being observed from year to year, the more the adolescent improves strength, stamina, reaction time, movement speed, coordination and so on, we can expect to observe performance levels every time Best (POWERS; HOWLEY, 2005).

For Dumith; Azevedo Junior; Rombaldi (2008), the teacher has a fundamental role to contribute to the development of the physical aptitude and to create strategies to reach them. Pelegrini et al (2011) see in motor intervention programs the promotion of physical fitness standards, a special need for work aiming at a better motor performance.

Opportunity and structured practice are crucial aspects for the acquisition and, mainly, for the refinement of fundamental motor skills with the aim of achieving higher levels of agility performance. Also, Physical Education classes are unique possibilities for these objectives to be achieved, provided they are organized and taught by professionals in the area.

Despite the coherence and the theoretical indications of these propositions, the empirical evidence and evidence of the professional's role for the development of the students' agility in elementary education still need to be proven (MAIA, 2011).

Motor development can be understood as a process involving emergence, acquisition and improvement of functions and abilities from a biological predetermination present at birth until its adult age (OLIVEIRA, 2016).

Anaerobic Power

Physical fitness is the ability to perform a muscular work in a way Pleasure, encompassing strength, muscular endurance, flexibility, body composition and The cardiorespiratory capacity. (BURGOS, et al, 2012). With the improvement of physical fitness related to health enables children and adolescents to adopt an active life even though it is during or after school years, enabling the maintenance of a physical fitness status from the beginning to the end of life. However,

The human being has become increasingly less dependent on his abilities To survive, since modern times have reduced Of physical predominance. However, Motor performance is the term often used to group the various components of physical fitness related to health (muscle strength, muscular endurance, aerobic endurance, joint flexibility and body composition) and performance (speed of movement, agility, coordination, balance and Together. Motor performance is associated with the ability to perform motor tasks and their study is based on the product, in terms of: "at what distance?", "At what speed?", "How often?" (Gallahue, 2005).

Dantas (2003), defines the preparatory period as the time when the athlete will be raised the competitive condition in the season considered, aiming to increase the level of technical - tactical, physical and psychological proficiency, allowing maximum performances to be performed in the scheduled competitions. This period has the objective of restoring the level of training and improving the basic condition of each player. Information about changes in the components of physical fitness in soccer players during this period may be extremely necessary in building training programs that are more reliable to the physiological requirements of football. The lack of knowledge of such information makes it impossible to verify the efficiency of the methods, structure and planning of the training. With this, the physical capacities and their development were analyzed in a preparatory period of 6 weeks duration.

Anaerobic power is a component present in the stimulus generated by the demands of the modality. Anaerobic power is understood as the greatest effort during a given action due to the smallest unit of time available (HERNANDES JR, 2002). For football, this is a physical capacity of great relevance, and it is extremely important to carry out actions in the shortest time possible with the greatest intensity of effort. For him, this physical capacity is present at the crucial and decisive moments of the game. This can be divided into allematic and lactic anaerobic potency, the latter being analyzed in this study. The anaerobic lactic power is the maximum frequency of energy production during a maximum effort with production of glycolytic energy and the anaerobic power is the maximum frequency (quantity per unit time) with which energy can be produced by the ATP-CP system .

The importance of power for performance varies considerably, depending on the sport, age, gender, discipline and field of application. For example, it is relatively unimportant for physical fitness activities when compared to factors such as aerobic capacity, strength, and movement characteristics. However, leisure sports in general require at least a basic level of some forms of speed, such as speed of reaction. The importance of speed for elite sports can not be generally assessed because speed requirements are determined by specific requirements of the sport or discipline in question.

Methodology

Test Battery: Overall Resistance (9 minutes) Material: Flat location with marking the runway perimeter. Stopwatch and registration form. Numbered material to attach to the back of the students clearly identifying them so that the evaluator can control the number of turns. Measuring tape. Orientation: Students are divided into groups appropriate to the dimensions of the course.

It is observed the numbering of the students in the organization of the groups, thus facilitating the registration of the annotators. For students with long hair, observe the length of hair to ensure that the number on the back is visible. Students are advised of the correct performance of the tests, emphasizing that they should run as long as possible, avoiding spikes of speed interspersed by long walks. It is advised that students should not stop along the course and that this is a running test, although they may walk eventually when they feel tired. During the test, the student is informed of the passage of time at 3, 6 and 8 minutes ("Warning: 1 minute is missing!"). At the end of the test, a signal will sound (whistle) and the students must stop the race, staying in the place where they were (at the time of the whistle) until the distance traveled is noted or signaled.

All data will be recorded in own cards and each student must be identified unequivocally. It is suggested that the evaluator first calculate the perimeter of the track and during the test write down only the number of laps of each student. In this way, after multiplying the perimeter of the lane by the number of laps of each student should be complemented with the addition of the distance traveled between the last lap completed and the location of the student after the test. Note: The results will be scored in meters to the tens.

Result and Discussion

Table 01 - Descriptive statistics of mean, Standard Deviation and p value of the results obtained in the pre-test and post-test of the anaerobic power

	Pré test	Pós test	
N	M±DP	M±DP	**p** value
38	1,84±2,19	2.47±1.27	0,0004

From the data collected, the test results point to a significant difference for p = 0.0004 after 10 months of training, thus showing an improvement in anaerobic power.

The functional evaluation of adolescents in the sports improvement phase points out clear and objective information, which serves to deepen the training process and effectiveness of the work developed.

The anaerobic power is characterized by the short duration and great intensity in which the metabolism of the muscles do not resort to the oxygen in the energy exchange. Also considered as the competence of the neuromuscular system to move objects or the body with a greater speed (STOPPANI, 2008) , Gallahue and Ozmun (2001) define as the capacity to make a maximum effort in the shortest possible time.

Final considerations

Although there is a great need for research in this area, many evidences were pointed out evidencing the importance and effectiveness of the use of sport as a pedagogical intervention tool for the development and improvement of the physical abilities related to motor development.

Despite the advances of globalization, and technological influence both in daily life and in the elaboration of sophisticated training, it is noticed that there are still many effective training methods through sports training, it is believed that subjecting adolescents to the maximum level of training can lead to Young person to accumulate blood lactate.

Given the results obtained, we perceive the necessity and importance of training through sports practice, since these activities work in the motivation and pleasure of the execution.

It is concluded that progressive intervention programs, through sport in schools, regardless of the modality contributes significantly to the development of adolescent aerobic power Caledan (2010) did not find significant difference in studies performed with soccer professional athletes after the competitive period with duration of 20 weeks.

ABSTRACT

Power, coupled with anaerobic energy sources, is one of the most important components of sports performance. However, it should not be seen as an isolated capability. In combination with a high standard of technical and coordination movements, with the specificity of sport or discipline, the various manifestations of physical ability, speed is of prime importance for success in individual or collective sports. Anaerobic power is a component present in the stimulus generated by the demands of the modality. Anaerobic power is understood to be the greatest effort made during a given action by the shortest unit of time available. This physical ability is present at the crucial and decisive moments of the game. The anaerobic lactic power is the maximum frequency of energy production during a maximum effort with production of glycolytic energy and the anaerobic power is the maximum frequency (quantity per unit time) with which energy can be produced by the system, the methodology was (9 minutes). From the data collected, the test results point to a significant difference for op = 0.0004 after 10 months of training, thus showing an improvement in anaerobic power. The functional evaluation of adolescents in the sports improvement phase points out clear and objective information, which serves to deepen the training process and effectiveness of the work developed. Despite the advances of globalization, and technological influence both in daily life and in the elaboration of sophisticated training, it is noticed that there are still many effective training methods through sports training, it is believed that subjecting adolescents to the maximum level of training can lead to Young person to accumulate blood lactate. Given the results obtained, we perceive the need and importance of training through sports practice, since these activities work in the motivation and pleasure of the execution. It is concluded that progressive intervention programs, through sports in schools, regardless of modality contributes significantly In the development of adolescent aerobic power.

Key words: Anaerobic Power , evaluation, adolescent.

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ABSTRACT

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Key words: Anaerobic Power , evaluation, adolescent.

PUISSANCE ANAEROBIQUE AVEC ADOSLECENTES DE 13 A 16 ANS PRATICIENS ARRANGEMENTS SPORTS

RÉSUMÉ

La puissance associée à des sources d'énergie anaérobie est l'un des composants les plus importants de la performance sportive. Toutefois, il ne doit pas être considérée comme une capacité isolée. En combinaison avec un haut niveau de mouvements techniques et la coordination avec la spécificité du sport ou de la discipline, les diverses manifestations de la capacité physique, la vitesse est primordiale pour le succès dans les sports individuels ou d'équipe. puissance anaérobique est un composant présent dans le stimulus généré par les exigences du sport. Il est entendu par la puissance anaérobie plus d'effort fait pour une certaine action par la plus petite unité de temps disponible. Cette capacité physique est présente dans les moments cruciaux et décisifs du jeu. la puissance anaérobie lactique est la fréquence maximale de la production d'énergie pour un effort maximal avec la production d'énergie de la glycolyse et de la puissance anaérobie alactique est la fréquence maximale (quantité par unité de temps) avec laquelle l'énergie peut être produite par le système, la méthodologie a été tester la batterie dans la résistance générale (9 minutes) à partir des données recueillies, les résultats des tests montrent une différence significative p = 0,0004 après 10 mois de formation montrant ainsi une amélioration de la puissance anaérobie. L'évaluation fonctionnelle des adolescents dans l'amélioration du sport point de phase d'information claire et objective, qui sert à approfondir la formation du processeur et de l'efficacité de leur travail. Malgré les progrès de la mondialisation et de l'influence technologique dans la vie quotidienne et pour le développement de la formation sophistiquée, il est clair qu'il ya encore de nombreuses méthodes de

formation efficace grâce à la formation sportive, on croit que soumettre l'adolescent à un niveau maximum de formation peut prendre la jeune accumulation de lactate dans le sang. Voir les résultats, nous avons réalisé la nécessité et l'importance de la formation par la pratique du sport, étant donné que ces activités fonctionnent sur la motivation et le plaisir de execução.Conclui que les programmes d'intervention progressive, par le sport dans les petites écoles, quel que soit le sport contribue de manière significative le développement des adolescents de puissance aérobie.

Mots - clés: puissance anaérobique, l'évaluation, l'adolescent.

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POTENCIA CON ANAERÓBICA ADOSLECENTES DE 13 A 16 AÑOS LOS PRACTICANTES DE DEPORTES ARREGLOS

RESUMEN

La potencia asociada con las fuentes de energía anaeróbica es uno de los componentes más importantes de rendimiento deportivo. Sin embargo, no debe ser visto como una capacidad aislado. En combinación con un alto nivel de movimientos técnicos y la coordinación con la especificidad del deporte o disciplina, las diversas manifestaciones de la capacidad física, la velocidad es fundamental para el éxito en los deportes individuales o de equipo. potencia anaeróbica es un componente presente en el estímulo generado por las exigencias de este deporte. Se entiende por potencia anaeróbica el mayor esfuerzo realizado una acción específica por la unidad mínima de tiempo disponible. Esta capacidad física está presente en los momentos cruciales y decisivos del juego. la potencia anaeróbica láctica es la frecuencia máxima de producción de energía para un volumen máximo de producción de energía glicolítica y la potencia anaeróbica Aláctica es la frecuencia máxima (precio por unidad de tiempo) con la que la energía puede ser producida por el sistema, la metodología fue probar la batería en la resistencia general (9 minutos) a partir de los datos recogidos, los resultados de las pruebas muestran una diferencia significativa p = 0,0004 después de 10 meses de entrenamiento, mostrando así una mejora en la potencia anaeróbica. La valoración funcional de los adolescentes en el punto de fase de mejora deportes información clara y objetiva, que sirve para profundizar en la formación del procesador y la eficacia de su trabajo. A pesar de los avances de la globalización y la influencia tecnológica en la vida diaria y para el desarrollo de la formación sofisticado, está claro que todavía hay muchos métodos de entrenamiento eficaz a través de la formación deportiva, se cree que someter al adolescente a nivel de entrenamiento máxima puede tomar los jóvenes acumulación de lactato en la sangre. Ver los resultados, nos dimos cuenta de la necesidad y la importancia de la formación a través de la práctica deportiva, ya que estas actividades de trabajo en la motivación y el placer de execução.Conclui que los programas de intervención progresiva, a través del deporte en las escuelas pequeñas, sin importar el deporte contribuye de manera significativa el desarrollo de los adolescentes de potencia aeróbica.

Palabras - clave: potencia anaeróbica, la evaluación, el adolescente.

AVALIAÇÃO DA POTÊNCIA ANAEROBICA COM ADOSLECENTES DE 13 A 16 ANOS PRATICANTES DE MODALIDADES ESPORTIVAS

RESUMO

A potência, associada às fontes energéticas anaeróbias, é um dos componentes mais importantes do desempenho esportivo. No entanto, ela não deve ser vista como uma capacidade isolada. Em combinação com um alto padrão de movimentos técnicos e de coordenação, com a especificidade do esporte ou da disciplina, as diversas manifestações da capacidade física, a velocidade é de importância primordial para o sucesso em esportes individuais ou coletivos. A potência anaeróbica é um componente presente no estímulo gerado pelas demandas da modalidade. Entende-se por potência anaeróbia o maior esforço realizado durante determinada ação pela menor unidade de tempo disponível. Esta capacidade física esta presente nos momentos cruciais e decisivos do jogo. A potência anaeróbica lática é a freqüência máxima de produção de energia durante um esforço máximo com produção de energia glicolítica e a potência anaeróbia alática é a freqüência máxima (quantidade por unidade de tempo) com que a energia pode ser produzida pelo sistema, a metodologia foi a bateria de Teste em Resistência Geral (9 minutos), A partir dos dados coletados, os resultados do teste apontam para uma diferença significativa para o p=0,0004 após 10 meses de treinamento mostrando assim uma melhora na potência anaeróbica. A avaliação funcional de adolescentes em fase de aperfeiçoamento desportivo apontam informações claras e objetivas, que serve para aprofundar o processor de treinamento e eficácia do trabalho desenvolvido. Apesar dos avanços da globalização, e influência tecnológica tanto no cotidiano como para elaboração de treinamentos sofisticados, percebe-se que ainda existe muitos métodos de treinamento eficaz através do treinamento esportivo, acredita-se que submeter o adolescente a nível máximo de treinamento podem levar o jovem a acumulo lactato sanguíneo. Vistas aos resultados obtidos, percebemos a necessidade e importância de treinamento através da prática esportiva, uma vez que estas atividades funcionam na motivação e prazer da execução.Conclui-se que programas de intervenção progressivo, através do desporto em escolinhas, independente da modalidade contribui significativamente no desenvolvimento da potência aeróbica de adolescentes.

Palavra – chave: Potência Anaeróbica, avaliação, adolescente.

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