64 - SPEED EVALUATION WITH ADOLESCENTS FROM 13 TO 16 YEARS PRACTICAL IN SPORTS MODALITIES

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Introduction

During the pre-pubertal and pubertal phase the biological maturation may differ considerably for the same chronological age because of the result of the changes caused by growth and development. It is observed in this period that the level of performance reached in several types of sports is more dependent on the skeletal age. Than chronological age (Rowland, 1996).

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.

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).

According to Alano et al. (2011) because learning disabilities are related to motor deficits, as the above studies have shown, and considering that children with motor deficits are less engaged in physical activities, it is possible that these children present levels of And that motor development variables may be related to the components of physical fitness, since motor proficiency is a determinant factor for physical activity.

Motor performance in children and adolescents presents a level of significance regarding physical and cognitive aptitude, however, motor development occurs when experiences are provided that objectify their potentialities with aims aimed at their motor, affective and social aspects, as well as health of the same.

Physical fitness is described as the ability to perform physical activities with energy and vigor without excess of fatigue and also as the demonstration of qualities and physical abilities that lead to the lower risk of development of functional diseases and incapacities.

The importance of the knowledge of this variable is reflected in the fact that values of morphological and functional components of physical fitness above the population mean indicate less exposure to the risks of various chronic-degenerative diseases, such as cancer, dyslipidemia, hypertension, coronary diseases, Diabetes, osteoporosis and obesity. However, levels below those estimated become more severe when associated with high-risk behaviors such as smoking, hypercaloric diets and, above all, sedentary lifestyle.

The evaluation of the physical aptitude of schoolchildren implies knowing their physical qualities and classifying the obtained scores against established criteria and accepted as reference. Considering the short time span of this period of life, variations in physical fitness associated with biological maturation are important and, as a rule, do not depend exclusively on chronological age. The speed with which sexual characters reach the mature adult state (biological maturation) makes the difference between adolescents who have the same chronological age.

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).

The identification of levels of development and functionality is essential for the development of intervention programs that aim to enhance the development of new skills, remedy already established difficulties and / or develop new strategies of movement (Farias, 2012).

The definition of motor development allows practitioners to identify the factors that make movement limited, enabling decision making on what skill and / or motor criteria to emphasize in the program, practice time for each skill, and performance goals Children (FARIAS, 2012).

Speed

Speed development in contexts of tactical-technical interference proves to be very important. In this area the search for the individualization of the load and the differentiation of the content, according to the positional status and the characteristics of the players (MORTH, 1998) are aspects to consider.

In order to respond to this intention, it is very important to resort to "tactical-technical complexes", understood as sets of exercises that, inspired by the matrix of the game model to be pursued, induce a specific motor development of the players' functional system and team.

It is convenient, for example, to adopt rhythmic exercises that lead the player and the team to react, as quickly and as well as possible, to the loss or conquest of the mobile game (ball, ...), in order to create Sudden imbalances in the attack-defense or defense-attack balance and surprise the opponent.

According to GARCIA, MUIÑO and TELEÑA (1977) speed is an innate capacity of the human being. For BOMPA (2002), much of the velocity capacity is determined genetically. The greater the ratio of fast-twitch fibers to slow-twitch fibers, the greater the rapid and explosive contraction capacity of the body. However, despite the relationship between speed and genetics, it is not a limiting factor. Athletes can improve their ability with training.

During the adolescence period one can carry out unlimited speed training, in aspects of physical conditioning and in the coordinating aspects.

The methods and contents are similar to the training of adults, and present differences in the quantitative aspect (WEINECK, 1991). The effectiveness of speed training increases with age (GOLOMAZOV; SHIRVA, 1996).

Speed is a hybrid capacity conditioned by all others. It is classified in cyclical and acyclic speed with three phases for both manifestations: acceleration, maximum speed and speed resistance, being the fundamental acceleration in sports activities such as the 60m, 100m, 200m race, and in the cooperative and opposition games) When associated to the decision-making capacity (MANSO, VALDIVIELSO and CABALLERO, 1996). Moreira and Gomes (1997) consider the velocity of displacement as the fundamental factor of the special conditional preparation of the sportsman, representing the overall result of the training process.

Methodology

Test Battery: Displacement Speed (20 meter run) Material: A chronometer and a 20 meter track marked with three parallel lines on the ground as follows: the first (starting line); The second, 20m away from the first (timing line) and the third line, marked one meter from the second (finish line). The third line serves as the finish reference for the student in an attempt to prevent the student from starting the deceleration before crossing the timeline. Two cones for signaling the first and third lines.Orientation: The student starts from standing position, with an advanced foot ahead immediately behind the first line and will be informed that he should cross the third line as fast as possible.

At the sign of the evaluator, the student should move as quickly as possible towards the finish line. The timekeeper shall trigger the stopwatch at the time the rider takes the first step (touching the ground), beyond the starting line. When the student crosses the second line (20 meters), the stopwatch will be stopped. Note: The timekeeper will record the time of the course in seconds and hundredths of seconds (two houses after the comma).

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 Speed

	Pré test	Pós test	
N	M±DP	M±DP	**p value**
38	4,07±4,95	5,04±3,34	0,711

The data presented here show that the 38 subjects evaluated before and after a periodization through the development of sports modalities, obtained similar results in the pre and post test, and this difference was not significant with p = 0.711.

According to the mean and standard deviation we can consider it satisfactory, but it takes us a reflection regarding the intensity and duration of the activities proposed in the periodization.

Final considerations

At the end of this research it was concluded that diversified sportsmen and women maintained the speed pattern, but the difference between the beginning and the end of periodization was not significant.

We can consider as important determinants of velocity the type of activity proposed, the training time and the specificities of each modality, being able to select and adapt activities appropriate to the objectives of each one.

However, to understand and even relate these data to the modalities practiced, we suggest performing the same periodization, however with specific training groups separated according to the preference to be played.

ABSTRACT

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. Physical fitness is described as the ability to perform physical activities with energy and vigor without excess of fatigue and also as the demonstration of qualities and physical abilities that lead to the lower risk of development of functional diseases and incapacities. Speed is a hybrid capacity conditioned by all others. It is classified in cyclical and acyclic speed with three phases for both manifestations: acceleration, maximum speed and speed resistance, being

the fundamental acceleration in sports activities such as the 60m, 100m, 200m race, and in the cooperative and opposition games) When associated with decision-making capacity. The methodology was a Displacement Speed Test battery (20-meter run). The data presented here show that the 38 subjects evaluated before and after a periodization through the development of sports modalities, obtained similar results in the pre and post test, and this difference was not significant with p = 0.711. According to the mean and standard deviation we can consider it satisfactory, but it takes us a reflection regarding the intensity and duration of the activities proposed in the periodization. At the end of this research it was concluded that diversified sportsmen and women maintained the speed pattern, but the difference between the beginning and the end of periodization was not significant. We can consider as important determinants of velocity the type of activity proposed, the training time and the specificities of each modality, being able to select and adapt activities appropriate to the objectives of each one.
Key words: Speed, evaluation, adolescent.

Bibliographic Reference

ALANO VR, et al Aptidão física e motora em escolares com dificuldades na aprendizagem. R.bras. Ci. e Mov , v19, n3 :p69-75. 2011.

ALMEIDA,J. D. L., et al. aptidão física de escolares do ensino fundamental da cidade de mossoro - RN, FIEP BULLETIN - Volume 84- Special Edition - ARTICLE II - 2014.

ARAUJO, Silvan Silva de; OLIVEIRA, Antônio Cesar Cabral de. Aptidão Física em Escolares de Aracaju. Revista Brasileira de Cineantropometria e Desempenho Humano , v.10 , n. 3, p. 271 – 276, 2008.

BOMPA, T. O. Treinamento Total para Jovens Campeões. Tradução de Cássia Maria Nasser. Revisão Científica de Aylton J. Figueira Jr. Barueri: Manole, 2002.

BURGOS, Miria Suzana, et al. Perfil de Aptidão Física relacionada á saúde de crianças e adolescentes de 7 a 17 anos. J. Health Sci Inst ., v.30, n. 2, p. 171– 175, 2012.

DUMITH, S. C.; AZEVEDO JUNIOR, M. R.; ROMBALDI, A. J. Aptidão Física relacionada à saúde de alunos do ensino fundamental do município de Rio Grande, RS, BRASIL. Rev. Bras. Med. Esporte– Vol. 14,Nº5 - Set/Out, 2008.

FARIAS, A. L. P. nível de desenvolvimento motor em crianças do ensino fundamental i da paraíba. Tese de doutorado em ciências da motricidade, Universidade Estadual Paulista - UNESP, 2012.

FILHO, C. A. S. R. importância do basquetebol no desenvolvimento da agilidade em Crianças/ adolescentes do ensino fundamental, FIEP BULLETIN - Volume 80 -Special Edition - ARTICLE I - 2010.

GALLAHUE, D.L.; OZMUN, J.C. Compreendendo o Desenvolvimento Motor: Bebês, Crianças, Adolescentes e Adultos. São Paulo: Phorte, 2003.

GALLAHUE, D. L; OZMUN, J. C. Compreendendo o desenvolvimento motor : Bebês, crianças, Adolescentes e adultos. Terceira edição. São Paulo – SP. Phorte editora, 2005.

GARCIA, C. M.; MUIÑO, E. T.; TELEÑA, A. P. La Preparación Física en el Fútbol. Madrid: [s.n.], 1977.

GOLOMAZOV, S.; SHIRVA, B. Futebol: treino da qualidade do movimento para atletas jovens. Adaptação Técnica e Científica de Antonio Carlos Gomes e Marcelo Mantovani. São Paulo: FMU, 1996.

MAIA, D. F., Educação Física Escolar: Desenvolvimento Motor Grosso Com Crianças de 6 E 7 Anos da Rede Pública e Privada da Cidade de Campina Grande-PB. Dissertação (Mestrado em Ciências da Educação) – UNIVERSIDADE LUSÓFONA DE HUMANIDADES E TECNOLOGIAS 2011.

MANSO, J. M. G. et al. Bases teóricas del entrenamianto desportivo: principios y aplicaciones.

Madrid: Gymnos, 1996.

MOREIRA, A.; GOMES, A. C. Controle da evolução do nível de performance dos basquetebolistas de alto nível. In: CONGRESSO INTERNACIONAL DO DESPORTO E ATIVIDADE FÍSICA, SÃO PAULO, 1997. Anais... São Paulo, 1997.

MORTH, S. (1998): Relation théorie-pratique. Illustration en vitesse. E.P.S. , 274: 80-82.

PELEGRINI, A; SILVA, D. A. S; PETROSKI, E. L; GLANER, M. F. Aptidão Física Relacionada à

Saúde de Escolares Brasileiros: Dados do Projeto Esporte Brasil. Rev. Bras. Med. Esporte, Vol. 17, Nº 2, Mar/Abr, 2011.

POWERS, S. K.; HOWLEY, E. T. Fisiologia do exercicio: Teoria e aplicação ao condicionamento e ao desempenho. 5. Ed.Barueri. Manole, 2005.

Rowland, T. W.. Developmental Exercise Physiology . Champaign: uman Kinetics. 1996.

OLIVEIRA, M. A. T., avaliação do desenvolvimento motor entre crianças do programa sesi atleta do futuro e da comunidade Dissertação (Mestrado em Ciências da Educação) – Universidad Internacional tres fronteiras - UNINTER, 2016.

WEINECK, J. Biologia do Esporte. Tradução de Anita Viviani. Verificação Científica de Valdir Barbanti. São Paulo: Manole, 1991.

EVALUATION OF THE SPEED WITH ADOSLECTIVES FROM 13 TO 16 YEARS PRACTICING IN SPORTS MODALITIES

SUMMARY

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. Physical fitness is described as the ability to perform physical activities with energy and vigor without excess of fatigue and also as the demonstration of qualities and physical abilities that lead to the lower risk of development of functional diseases and incapacities. Speed is a hybrid capacity conditioned by all others. It is classified in cyclical and acyclic speed with three phases for both manifestations: acceleration, maximum speed and speed resistance, being the fundamental acceleration in sports activities such as the 60m, 100m, 200m race, and in the cooperative and opposition games) When associated with decision-making capacity. The methodology was a Displacement Speed Test battery (20-meter run). The data presented here show that the 38 subjects evaluated before and after a periodization through the development of sports modalities, obtained similar results in the pre and post test, and this difference was not significant with p = 0.711. According to the mean and standard deviation we can consider it satisfactory, but it takes us a reflection regarding the intensity and duration of the activities proposed in the periodization. At the end of this research it was concluded that diversified sportsmen and women maintained the speed pattern, but the difference between the beginning and the end of periodization was not significant. We can consider as important determinants of velocity the type of activity proposed, the training time and the specificities of each modality, being able to select and adapt activities appropriate to the objectives of each one.

Key words: Speed, evaluation, adolescent.

RATING DE VITESSE AVEC ADOSLECENTES de 13 à 16 ANS D'ARRANGEMENTS PRATICIENS SPORTS

RÉSUMÉ

La grande amélioration de la performance est basée sur l'augmentation des capacités physiques, être observé d'année en année, plus l'adolescent améliore la force, l'endurance, le temps de réaction, la vitesse du mouvement, la coordination et ainsi de suite, nous pouvons nous attendre à voir les niveaux de performance jamais meilleur. La forme physique est décrit comme la capacité à effectuer des activités physiques avec l'énergie et la vigueur sans fatigue excessive et aussi comme une démonstration de qualités physiques et les capacités qui conduisent à réduire le risque de développer des maladies et des incapacités fonctionnelles. La vitesse est la capacité hybride à charge pour tous les autres. Il est classé en vitesse cyclique et acyclique triphasé pour les deux événements: accélération, vitesse de pointe et l'endurance de vitesse, étant l'accélération fondamentale des activités sportives telles que le 60m de marche, 100m, 200m, et les jeux de coopération et de l'opposition (collective) lorsqu'elle est associée à la capacité de prise de décision. la méthodologie était une batterie Maj Test de vitesse (course de 20 mètres). Les données présentées ici montrent que 38 sujets évalués avant et après une périodisation par le sport en développement, ont obtenu des résultats similaires dans le prétest et post-test, et cette différence non significative avec p = 0,711. Selon le défi de moyenne et l'on considère satisfaisante, mais nous amène à réfléchir sur l'intensité et la durée des activités proposées dans la périodisation. A la fin de cette recherche, il est conclu que les praticiens de divers sports ont maintenu le taux standard, mais il n'y avait pas de différence significative du début à la fin de la périodisation. Peut être considéré comme un important facteurs déterminants de la vitesse, le type d'activité proposée, le temps de formation et les particularités de chaque mode et peut ainsi sélectionner et adapter les activités adaptées aux objectifs de chacun.

Word - clé: Vitesse, évaluation, adolescent.

ÍNDICE DE VELOCIDAD CON ADOSLECENTES DE 13 A 16 AÑOS DE ACUERDOS DE LA PRÁCTICA DEPORTIVA

RESUMEN

La gran mejora en el rendimiento se basa en el aumento de las capacidades físicas, observándose de año en año, más que el adolescente aumenta la fuerza, resistencia, tiempo de reacción, velocidad de movimiento, coordinación y así sucesivamente, podemos esperar ver los niveles de rendimiento cada vez mejor. La aptitud física es descrita como la capacidad de realizar actividades físicas con la energía y el vigor y sin fatiga excesiva y también como una demostración de las cualidades físicas y las capacidades que conducen a reducir el riesgo de desarrollar enfermedades y discapacidades funcionales. La velocidad es la capacidad híbrido dependiente para todos los demás. Se clasifica en tres fases velocidad cíclica y acíclica para los dos eventos: la aceleración, la velocidad máxima y la resistencia a la velocidad, la aceleración siendo fundamental en las actividades deportivas como correr 60m, 100m, 200m, y juegos de cooperación y oposición (colectivo) cuando se asocia con la capacidad de toma de decisiones. la metodología era una batería Shift prueba de velocidad (carrera de 20 metros). Los datos presentados en este documento muestran que 38 sujetos evaluados antes y después de una periodización de los deportes en desarrollo, obtuvieron resultados similares en el pre-test y post-test, y esta diferencia no es significativa con p = 0,711. De acuerdo con la media y estándar de desafío consideramos satisfactorio, pero nos lleva a reflexionar acerca de la intensidad y duración de las actividades propuestas en la periodización. Al final de esta investigación se concluye que los profesionales de diversos deportes han mantenido la tasa estándar, pero no hubo una diferencia significativa de principio a fin de la periodización. Puede ser considerado como un importante factores determinantes de la velocidad, el tipo de actividad propuesta, el tiempo de entrenamiento y las particularidades de cada forma y por lo tanto puede seleccionar y adaptar las actividades adecuadas a los objetivos de cada uno.

Palabra - clave: Velocidad, evaluación, adolescente.

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

RESUMO

A grande melhoria no desempenho é baseada em crescentes habilidades físicas, sendo observadas de ano em ano, quanto mais o adolescente aprimora força, resistência, tempo de reação, velocidade de movimento, coordenação e assim por diante, podemos esperar observar níveis de desempenho cada vez melhores. A aptidão física é descrita como a capacidade de executar atividades físicas com energia e vigor sem excesso de fadiga e, também, como a demonstração de qualidades e capacidades físicas que conduzam ao menor risco de desenvolvimento de doenças e incapacidades funcionais. A velocidade é uma capacidade híbrida condicionada por todas as outras. É classificada em velocidade cíclica e acíclica com três fases para ambas as manifestações: aceleração, velocidade máxima e resistência de velocidade, sendo a aceleração fundamental em atividades desportivas como a corrida de 60m, 100m,200m, e nos jogos de cooperação e oposição (coletivos) quando associada à capacidade de tomada de decisão. a metodologia foi uma bateria de Teste de Velocidade de Deslocamento (corrida de 20 metros). Os dados aqui apresentados mostram que os 38 sujeitos avaliados antes e após uma periodização através do desenvolvimento de modalidades esportivas, obtiveram resultados semelhantes no pré teste e no pós teste, não sendo significativa esta diferença com o p=0,711. De acordo com a média e desfio padrão podemos considera satisfatório, porém nos leva uma reflexão com relação a intensidade e duração das atividades proposta na periodização. Ao término desta pesquisa conclui-se que os praticantes de modalidades esportivas diversificada mantiveram o padrão de velocidade, porém não foi significativa a diferença do início ao término da periodização. Podemos considerar como fatores importantes determinantes da velocidade o tipo de atividade proposta, o tempo de treino e as especificidades de cada modalidade, podendo assim selecionar e adequar atividades apropriada aos objetivos de cada uma.

Palavra – chave: Velocidade, avaliação, adolescente.