81 - THE INFLUENCE OF THE PHYSICAL ACTIVITY LEVEL OF FLEXIBILITY IN MUSCLE CHAIN BACK IN TEENAGERS FROM 14 TO 18 YEARS.

MARCUS VINICIUS NASCIMENTO FERREIRA
SHIRLENE VIEIRA
ERIKA GALVÃO FIGUERÊDO
DIEGO MORAES DE CARVALHO
DAVID MARCOS EMÉRITO DE ARAÚJO
Universidade Federal do Piauí-Teresina-Piauí/Brasil
marcus_nascmento_@hotmail.com

INTRODUCTION

One more active lifestyle through the practice of regular physical activity is associated with higher quality and longevity of life. There is now generally accepted that a good physical condition depends not only on levels of maximal aerobic power satisfying, but also of appropriate patterns of muscle power, flexibility and postural stability (Buchner, 1997; Mazzeo et al., 1998; Pollock et al. 1998).

The necessity the of body movements is remarkable since the dawn of civilization. Actions like swimming, running, climbing, throwing, jumping, pushing, pulling, were improving themselves according to the need. The use of these shares as a result of the struggle for survival of primitive man, the body practices playful, rituals honoring the gods, dances and cultural events etc.., Mark the evolutionary process of man. Therefore, physical activity since ancient societies - within the natural aspects, utility, warrior, ritual and recreational - aim to meet the desires, lifestyle and characteristics of each society in each era. (Ramos, 1982).

Physical activity currently is associated increasingly as a source of health and wellness. To Matsudo and Matsudo (2000) physical activity done regularly brings benefits anthropometric, metabolic effects in cognitive and psychosocial effects, in reducing falls and increasing muscle strength and therapeutic effects.

Regular participation physical activity has numerous benefits are independent of age. During adolescence, specifically, there is evidence that physical activity is associated with health skeletal (bone mineral content and density), the regulation of blood pressure and obesity control, as claimed Hallal, Bertoldi, Gonçalves, Victoria (2006). these benefits are documented in the scientific literature, and a number of authors as: BOUCHARD, SHEPHARD, STEPHNS (1994); Matsudo and Matsudo (1992); MEADOW, MAMEDE, ALMEIDA, Clapis (2004); GUEDES, GUEDES, BARBOSA, OLIVEIRA (2001), describing reports of these capabilities.

Still according Bompa and Lorenzzo, (2000), (cited ROSARY and LIBERALI 2008), exercise muscle overload and systematically conducted, affect the quality of life in a way that significantly interfere in the work as follows: the improved self-esteem through improving the aesthetics and the apparent affirmation of the possibility of performing intense and prolonged efforts, increasing the ability to perform everyday tasks without greater accumulation of fatigue at the end of the day, also contribute to the increased performance capability in sport specific activities.

In accordance with grimston, WILLOWS & HANLEY (1993), the applied force per unit area, stimulates bone growth and shaping. And following BONJOUR, THEINTZ, BUCHS, Slosman& RIZZOLI (1991) stated that the quantity and quality of bone, found in adults, may be features developed during childhood and adolescence.

Physical inactivity in adolescence may be influenced by several factors (Sallis AND OWEN, 1999), including: demographic and biological age, academic qualifications, gender, genetics, socioeconomic status, physical anthropometric / body composition; ethnicity. Psychological, emotional and cognitive: I like the exercises; range of benefits; desire to exercise, mood disorders, perception of health and fitness, personal sense of competence, motivation. Behavioral: History of previous activity, quality of dietary habits, change processes. Sociocultural: Influence of physician; social support from friends / peers, family social support, social support from teachers. Environmental: Access to equipment (perception); climate; program costs; interrupt routine. Characteristics of physical activity intensity, feeling exertion.

The excess passive activities (inactivity), which require minimal effort, leads to decrease in functional ability adolescents. Functional capacity can be defined as the ability of an individual to perform daily activities or even unexpected activities, securely, efficiently and without excessive fatigue (Clark, 1989). That is, do not work out the teenager loses his condition from performing daily activities (functional disability) and even pleasure in recreational physical activities (ROSE et al. , 2003). When dealing with a more active lifestyle, predisposes it soon, better quality of life in the population. The daily activities involve combination of strength/power/endurance and joint flexibility and muscular. These components together have been reported to form muscle (RABBIT and ARAUJO, 2000). Thus, it is inevitable a sedentary lifestyle, without physical activity, not influence the functional capacity of adolescents and consequently decreasing its flexibility.

The flexibility is the ability to perform voluntary movement with maximum angular amplitude by a joint or joints together within the morphological boundaries without the risk of causing injury. (Dantas, 2003; LIMA, 2003). Satisfactory levels of flexibility in adolescence are important, not only because of possible movements with greater security in a complete extension of the movement (ADAMS, O'SHEA, P. and O'SHEA, K., 1999), but by allowing the adolescent to explore functional capacity (and / or maintenance of correct postures) and make development without anatomical and physiological deprivation and the quality of movement amplitude (Jones et al., 2005; Mikkelsson et al., 2006).

Maintaining adequate parameters of flexibility of the muscles of the posterior chain in adolescents appears to be a fundamental condition for the prevention of back pain, postural problems and / or execution of movement (Castro-PIÑERO et al., 2009). This fact is of great importance as lower back pain in adolescence may present incidence rates of 17.2%, and in some cases, lead to the inability to perform normal activities, or even the use of drugs (Feldman et al. , 2001; Chillon et al., 2010).

Although highly trainable, the gradual loss of flexibility can lead to imbalance in the movements and precipitate muscle injuries. This pattern with advancing age, and as the functions of tissues declines, can leave the adult individual susceptible to injury and relieved of his duties for longer periods due to slower recovery due to aging (Buckwalter, 1997);

The clarification and further combat the possible factors that may induce reduced flexibility and a probable decrease in functional ability are essential for maintaining health and quality of postural movements in adolescence. In the literature, there are few studies that address the influence of physical activity on flexibility in adolescents 14-18 years of northeastern region (Imperatriz, Maranhão) of Brazil. The aim of the study was to investigate the relationship between physical activity level and flexibility of teenagers.

METODOLOGY

This study has a cross-sectional descriptive-analytical. The population of the study consists of adolescents of both sexes, aged 14 to 18, students from a public school in the city of Imperatriz (Maranhão), selected by availability. Once clarified the purpose of the study, the school provided consent and support for the identification of eligible students and stakeholders, according to the research objectives. All students received and returned signed by the heads of the two routes Term of Free and Informed Consent Form (ICF).

Data were collected during school hours, on school grounds and with prior appointment, combined with the school board. Selected for the study were 118 students, volunteers. Students underwent an anthropometric assessment of weight and height, to characterize the sample, a questionnaire to identify the physical activity level (PAL), and the Sit and Reach test (SRT), to define the flexibility of muscles posterior chain.

The body mass was measured with rated standing with his back to the scale of the balance, and on the center of the platform, looking straight with a fixed point in front of him (FernandesFilho, 1999; PROESP-BR, 2009; Christófaro et al ., 2009; BUONANI et al., 2011). At the height measurement the individual remained in the upright position (PO): a person standing upright, arms at your sides, feet together, trying to touch the instrument to measure the posterior surface of the heel, pelvic girdle, scapular and occiput.The measurement was made with rated at maximum inspiratory apnea, to minimize possible variations in results and the head oriented according to the Frankfurt plane, parallel to the ground (FernandesFilho, 1999; PROESP-BR, 2009). The measurement was measured using a cursor at a 90 ° angle relative to the scale.

In this study was used to measure weight and height, scale Soehnle Professional 7755, precisely 100 grams, with meter height built Asimed, with a minimum height of 95 centimeters (cm). The equipment has a maximum capacity of 200 kg for body weight and 230 cm for height. For body mass index was calculated: body mass divided by height (kg/m2).

The level of physical activity was measured using the International Physical Activity Questionnaire (International Physical Activity Questionnaire - IPAQ, version 8, short form, last week), developed by WHO with the Portuguese version validated for the Brazilian population (Matsudo et al. , 2001), and Brazilian adolescents (Guedes et al., 2005). The classification of physical activity among adolescents was based on criteria developed by the IPAQ Research Committee (2005). For classification of the level of activity is taken into account the frequency, duration and intensity of activities throughout the week preceding the interview. For this study, the PAL was stratified into two categories: Sedentary (<300 minutes / week) and active (> 300 minutes / week).

The flexibility of the muscles of the posterior chain was measured using the sit-and-reach test (SRT) without the Bank Wells (PROESP BR-2007). For this test, a tape measure was extended in soil, 38.1 cm mark this tape was placed a tape of 45 cm perpendicular to the tape. The assessed subject sat with the zero end of the tape measure in between the legs, heels on the tape (perpendicular) in mark of 38.1 cm and about 30 cm apart. With extended knees and hands overlapping, the appraised leaned slowly and held his hands forward as far as possible. The result was measured in centimeters from the farthest position reached on the scale, with the fingertips. The reference values were used for flexibility DESIGN SPORT BRAZIL (2007).

For data analysis we used descriptive statistics of mean, standard deviation and frequency. The statistical inference was performed by Student's t test for independent samples, in order to compare the values of flexible groups: active and inactive. Was adopting a confidence level of p <0.05 and confidence interval of 95%. The results are presented in tables and graphs, the study data were analyzed using SPSS, version 17.0.

RESULTS

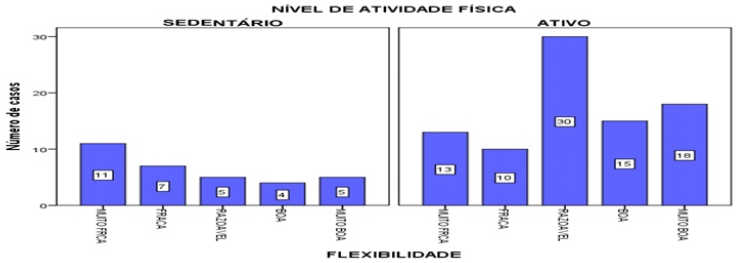
Table 1 shows the characterization of the sample. Are 118 teenagers, aged 14 and 18, of this total, 53 (fifty three) are male and 65 are (sixty five) females, with a mean age of 16.05 (± 1.04 years). Anthropometric data were observed average height of 1.63 (± 0.09) meters and weight average of 55.78 (± 10.68) kg. While the sample mean BMI was 20.84 (± 2.96) kg/m2 and SRT of 33.42 (± 10.48) cm.

Table 1.General characteristics of the sample.

GENERAL			
Characteristics	**Average**		**n**
Age (years)	16,05	1,04	118
Weight (kg)	55,78	10,68	118
Height (m)	1,63	0,09	118
IMC (kg/m^2)	20,84	2,96	118
SRT (cm)	33,42	10,48	118

Figure 1 shows the subjects distributed in accordance with the levels of flexibility (PROESP BR-2007) obtained on SRT, according to the PAL. Overall, the sample is composed of 32 (27.12%) subjects classified as sedentary, while 86 as assets (72.88%). Among the active subjects found in the sample, it was found that 53 (44.92%) subjects were male and 65 (55.08%) females, again agreeing with the study of Melo; Oliveira; Almeida (2009) revealed that girls as more physically active (85% classified as active or very active) than boys (65%).

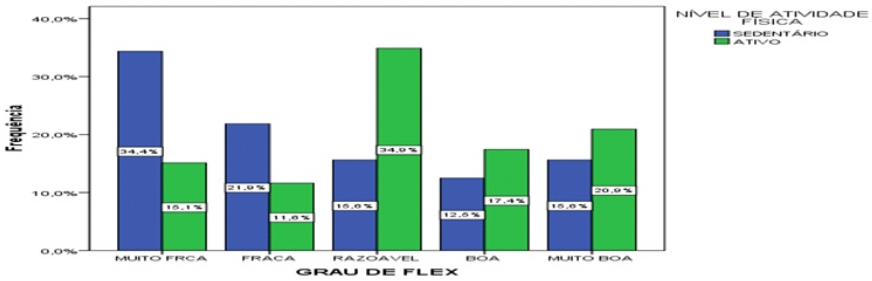
Figure 1. Distribution of subjects according to levels of flexibility and the level of physical activity.



Traduçãoimagem: Physical Activity level; sedentary; active; number of cases; ladosedentário: very weak; weak; average; good; very good(repete no ladoativo)

The flexibility values arranged in accordance with the frequency and level of physical activity may be observed in figure 2. In this figure, it can be observed very low prevalence of flexibility, 34.4% (n = 11) in the sedentary subjects, as is prevalent in reasonable flexibility with 34.9% (n = 30) subjects in the Active group. If they were aggregated categories, "Low" to "Very Weak" (FMF) and "Good" to "Very Good" (BMB), would be found in the Sedentary group, FMF with 56.3% of subjects and 28.1 BMB %, already active in the group, would be FMF with 26.7% of subjects and 38.3% with BMB. With respect to subjects classified with reasonable flexibility was observed frequency for the group Sedentary 15.6% and the Assets of 34.9%. Thus, it is clear that the Active group seems inclined to satisfactory performance in the SRT, while the Sedentary group seems prone to low yield.

Figure 2.Prevalence (%) of flexibility in accordance with the level of physical activity.



Tradução imagem: Frequency, physical activity level; sedentary; active; very weak; weak; average; good; very good;flex level.

Table 2 are the values of flexibility adolescents separated in groups of PAL: General Activity and Sedentary. General group subjects had at SRT, flexibility average 33.42 cm (95% CI 31.51 to 35.33), group subjects Assets 34.70 cm (95% CI 32.62 to 36.78) and group Sedentary 30.00 cm (95% CI 25.74 to 34.26). The analysis of the difference between groups (t = 2.20, p = 0.030) indicates that there is no statistical difference between the Active and Sedentary groups, ie active subjects have higher average flexibility when compared to sedentary.

.Table 2. Stratification of flexibility according to the PAL groups:General Activity and Sedentary. * Means t = 2.20 and p = 0.030 between groups (Student t test).

Groups (PAL)	Flexibility (SRT)		
	Average	±	N
General	33,42	10,48	118
Active*	34,70	9,71	86
Sedentary*	30,00	11,80	32

DISCUSSION

In a study by Melo; Oliveira; Almeida (2009) with Teenagers between 15 and 19 years, high school students in a state school in the city of Belford Roxo, found a mean BMI of 21.6 (± 3, 8) kg/m2 which is similar to the findings in the present study.

The study by Melo; Oliveira; Almeida (2009) identified a high occurrence of satisfactory level of physical activity (69.1% classified as "active" or "very active"), however, values lower than those found in the present study. Smaller values were also found in the study of Matsudo et al (2002) identified that 56.3% of individuals between 15 and 19 years old with active or very active. Another study shows results also lower for active teens, Oehlschlaeger et al (2004) found a level of 39% of sedentary adolescents.

The flexibility specifically until puberty decreases and tends to increase thereafter until reaching a plateau and into adulthood, tends decrease. This component of physical fitness and health may differ by gender, with women have greater flexibility when compared with men. Studies of differences in flexibility between individuals has taken into consideration factors such as anthropometric measurements, body composition, genetic, cultural and pathological therefore characterize the flexibility of an individual is multifactorial and particularly maturational factors and levels of physical activity may interact flexibility. (MINATTO et al, 2010).

The study of Farias et al (2010) conducted tests of physical fitness among schoolchildren in 10 to 15 years divided into study group (subjected to scheduled physical activity) and control group (conventional classes of physical education). Upon testing "sit-and-reach" through which requires the participation of several flexible joints simultaneously, it is found that girls show trends for all ages, to make meaningful average values higher than those boys, however, observing this aspect for both genders, more meaningful comparison for the present study, no significant improvement of flexibility between the pre-and post-test in both groups, thus disagreeing with the data found in the current study.

A study in Maringa with teenagers 16 to 17 years found among surveyed a percentage of 47.83% within the range considered moderately active. In terms of flexibility, 34.78% reached the recommended range health. However, the same study performed the correlation between test components of physical fitness, among them the flexibility and level of physical activity and found no statistically significant relationship between the two variables in question. (BIM; LEMONGRASS JUNIOR, 2005).

Importantly, the study by Melo; Oliveira; Almeida (2009) concludes that there is no significant relationship between the level of physical activity and flexibility, and we can thus speculate that the behavior of the flexibility and joint mobility should be determined the pattern of physical activity, ie what kind of movement is routinely performed in order to adapt to mechanical movements, causing better mechanical efficiency (lower energy) and improving the specific performance.

The literature on this subject is scarce, necessitating further studies involving physical skills related to health and its relation to the level of physical activity.

CONCLUSION

Relate to the level of physical activity and flexibility found a statistical difference between the Active and Sedentary groups, ie active subjects have higher average flexibility when compared to sedentary.

REFERÊNCIAS

BUONANI, C., FERNANDES, R., BUENO, D., BASTOS, K., SEGATTO, A., SILVEIRA, L., FREITAS JUNIOR, I. Desempenho de diferentes equações antropométricas na predição de gordura corporal excessiva em crianças e adolescentes. Rev Nutr. 24(1), 41-50, 2011.

CHRISTOFARO, D., FERNANDES, R., POLITO, M., ROMANZINI, M., RONQUE, E., GOBBO, L., OLIVEIRA, A. A comparision between overweight cutoff points for detection of high blood pressure in adolescentes. J Pediatr. 85(4), 353-358, 2009.

FERNANDES FILHO, J. A prática da avaliação física. Rio de Janeiro: SHAPE. 1999.

PROJETO ESPORTE BRASIL (PROESP-BR). Manual de aplicações de medidas e teste, normas e critérios de avaliação. 2007. http://www.proesp.ufrgs.br/institucional/. Acessado em 20 de fevereiro de 2012.

PROJETO ESPORTE BRASIL (PROESP-BR). Manual de aplicações de medidas e teste, normas e critérios de avaliação. 2009. http://www.proesp.ufrgs.br/institucional/. Acessado em 20 de fevereiro de 2012

MATSUDO, V. Prevalence of physical inactivity and associated factors among high school students from state's public schools.J Pediatr (Rio J), 85(4), 301-306, 2009.

GUEDES, D. P., LOPES, C. C., GUEDES, J. Reprodutibilidade e validade do Questionário Internacional de Atividade Física em adolescentes. RevBrasMed Esporte.11(2), 151-158, 2005.

IPAQ RESEARCH COMMITTEE.Guidelines for Data Processing and Analysis of the International Physical Activity Questionnaire (IPAQ), 2005.Recuperado em 19 de julho, 2012, de http://www.celafiscs.institucional.ws/?c=148

MINATTO, G. et al. Idade, maturação sexual, variáveis antropométricas

e composição corporal: influências na flexibilidade. Revista Brasileira de Cineantropometria e Desempenho. v.12, n.3, p.151-158, 2010.

BIM, R.H.; NARDO JUNIOR, N. Aptidão física relacionada à saúde de adolescentes estagiários da Universidade Estadual de Maringá. Acta Science Health Science, Maringá, v. 27, n. 1, p. 77-85, 2005.

MELO, F.A.P.; OLIVEIRA, F.M.F.; ALMEIDA, M.B. Nível de atividade física não identifica o nível de flexibilidade de adolescentes. Revista Brasileira de Atividade Física & Saúde. v.14, n.1, 2009.

MATSUDO, S.M. et al. Nível de atividade física da população do Estado de São Paulo: análise de acordo com o gênero, idade, nível socioeconômico, distribuição geográfica e de conhecimento. Revista Brasileira de Ciência e Movimento. v.10, p.41-50, 2002.

OEHLSCHLAEGER, M.H.K. et al. Prevalência e fatores associados ao sedentarismo em adolescentes de área urbana. Revista de SaúdePública. v.38,p.157-163, 2004.

BOUCHARD C, SHEPHARD RJ, STEPHNS T. Physical activity, fitness and health: International Proceedings and Consensus Statement. Champaign, Illinois: HumanKinetics, 1994.

MATSUDO,S.M. e MATSUDO, V. K. R. Prescrição e benefícios da atividade física na terceira idade. RevistaBrasileira de Ciência e Movimento, Vol. 06, nº 04, 1992.

PRADO, M. A. S., MAMEDE, M. V., ALMEIDA, A. M.; CLAPIS M. J. Physical training practice in women submitted to breast cancer surgery: perception of barriers and benefits. Rev. Latino-Am. Enfermagem. 12,(3). 2004

GUEDES Dartagnan Pinto, GUEDES Joana Elisabete Ribeiro Pinto, BARBOSA DecioSabbatini, e OLIVEIRA Jair Aparecido de,. Níveis de prática de atividade física habitual em adolescentes RevBrasMed Esporte _ Vol. 7, Nº 6 –Nov/Dez, 2001

HALLAL PC, BERTOLDI AD, GONÇALVES H, VICTORIA CG. Prevalência de sedentarismo e fatores associados em adolescentes de 10-12 anos de idade. Cad Saúde Pública 2006.

BOMPA, T.; LORENZZO, C. Treinamento de Força Consciente: Tradução: DilmarPintoGuedes,São Paulo: Phorte, 2000.

ROSÁRIO, F. R., R. LÍBERALI. Revista Brasileira de Obesidade, Nutrição e Emagrecimento, São Paulo v.2, n. 7, p. 64-78, Jan/Fev. 2008. ISSN 1981-9919.

BONJOUR, J.P.; THEINTZ, G.; BUCHS, B.; SLOSMAN, D.; RIZZOLI, R. Critical years and stages of puberty for spinal and femoral bone mass accumulation during adolescence. The Journal of Clinical Endocrinology and Metabolism, v.73, p.555-563, 1991.

GRIMSTON, S.K.; WILLOWS, N.D.; HANLEY, D.A. Mechanical loading regime and its relationship to bone mineral density in children.Medicine and Science in Sports and Exercise, v.25, p.1203-1210, 1993.

Rua Projetada C nº 60 Nova Imperatriz
Imperatriz / MA
65907-400
marcus_nacsimento_@hotmail.com

THE INFLUENCE OF THE PHYSICAL ACTIVITY LEVEL OF FLEXIBILITY IN MUSCLE CHAIN BACK IN TEENAGERS FROM 14 TO 18 YEARS.

ABSTRACT

The objective of the study was to verify the influence of the level of physical activity in adolescents' flexibility. The sample included 118 adolescents (14-18 years) from a high school in the city of Imperatriz, Maranhão. Students underwent an anthropometric assessment of weight and height, to characterize the sample, a questionnaire to identify the physical activity level (PAL), and the Sit and Reach test (SRT), to define the flexibility of muscles posterior chain. The level of physical activity was measured using the International Physical Activity Questionnaire (IPAQ) and the flexibility of the muscles of the posterior chain was measured using the sit -and-reach test (SRT) without the Bank Wells. Regarding the PAL, 32 (27.12 %) subjects were classified as sedentary, while 86 as assets (72.88 %). For medium flexibility, as groups, teens reached in the group Active 34.70 cm (95% CI 32.62 to 36.78) and 30.00 cm Sedentary group (95% CI 25.74 to 34, 26), the analysis of the difference between group means (student t) indicated statistically significant difference (p = 0.030). In summary, in this population, active teens have higher average flexibility when compared to sedentary.

KEYWORDS: Physical Activity, Flexibility, Teens

L'INFLUENCE DU NIVEAU D'ACTIVITÉ PHYSIQUE DE SOUPLESSE DANS LES MUSCLES DE RETOUR DE LA CHAÎNE AVEC LES ADOLESCENTS DE 14 À 18 ANS.

RÉSUMÉ

L'objectif de l'étude a eu de vérifier l'influence du niveau d'activité physique dans la flexibilité d'adolescents . L'échantillon a compté avec118 adolescents (14-18 ans) d'une école secondaire dans la ville de Imperatriz , Maranhão . Les élèves ont fait l'objet d'une évaluation anthropométrique du poids et de la hauteur , de caractériser l'échantillon, un questionnaire pour déterminer le niveau d'activité physique (NAP) , et le test de s'asseoir et atteidre (TAA) , pour définir la flexibilité des muscles de la chaîne postérieure . Le niveau d'activité physique a été mesurée à traversle questionnaire international sur l' activité physique (IPAQ) et la flexibilité des muscles de la chaîne postérieure a été mesurée en utilisant le test de s'asseoir et atteindre (T AA) sans que la Banque Wells. En ce qui concerne la NAF , 32 (27,12%) des sujets ont été classés comme sédentaires, tandis que 86 comme actifs (72,88 %). Pour une flexibilité moyenne, les groupes , les adolescents atteints dans le groupe actif 34.70 cm (CI 32,62 à 36,78 95%) et 30,00 cm groupe sédentaire (CI 25.74 95% à 34 ans, 26), l'analyse de la différence entre les moyennes de groupe (t de Student) a indiqué différence statistiquement significative (p = 0,030) . En résumé, dans cette population , les adolescents actifs ont une flexibilité élevée en moyenne par rapport aux sédentaires.

MOTS-CLÉS : Activité Physique, Flexibilité, Adolescents

LA INFLUENCIA DEL NIVEL DE LA ACTIVIDADES FÍSICAS EN LA FLEXIBILIDAD DE LOS MÚSCULOS DE LA CADENA POSTERIOR EN ADOLESCENTES ENTRE 14 Y 18 AÑOS.

RESUMEN

El objetivo delestudiofue verificar la influencia del nível de actividad física enla flexibilidade de adolescentes. La muestracontó com 118 adolescentes (14 – 18 años) de uma escuela de enseñanza media, de laciudad de Emperatris, Maranhão. Los alunos fueron sometidos a una evaluación antropométrica de masa muscular y estatura para lacaracterización de lamuestra. Uncuestionario, para laidentificacióndelnivel de actividad física (NAF), y eltest de Sentarse y alcanzar (TSA), para ladefinición de laflexibilidad de los músculos de lacadena posterior. El nível de actividad física fue mensurado a travezdelCuestionario Internacional de Actividad Física (IPAQ), y la flexibilidade de los músculos de lacadena posterior fue mensurada a travezdeltest de Sentarse y alcanzar (TSA), sinel Banco de Wells. Enrelaciónal NAF, 32 sujetos (27,12 %) fueronclasificados como sedentários, mientras 86 sujetos (72,88 %) como activos. Enlospromedios de flexibilidade de los grupos, los adolescente alcanzaronenel grupo activo 34,70 cm (IC 95% 32,62-36,78), mientras que el grupo sedentário 30,00 cm (IC 95% 25,74-34,26).El análisis de la diferencia entre elpromedio de los grupos (t de student) indicó diferencia estadísticamente significativa (p= 0,030). Resumiendo, em esta población, los adolescentes activos, poseenmayorespromedios de flexibilidade si los comparamos com los sedentários.

PALABRAS-CLAVE: Actividad Física, Flexibilidad, Adolescentes.

A INFLUÊNCIA DO NÍVEL DE ATIVIDADE FÍSICA NA FLEXIBILIDADE DOS MÚSCULOS DA CADEIA POSTERIOR EM ADOLESCENTES DE 14 A 18 ANOS.

RESUMO

O objetivo do estudo foi verificar a influência do nível de atividade física na flexibilidade de adolescentes. A amostra contou com 118 adolescentes (14-18 anos) de uma escola de ensino médio da cidade de Imperatriz, Maranhão. Os alunos foram submetidos a uma avaliação antropométrica de massa e estatura, para a caracterização da amostra, um questionário, para identificação do nível de atividade física (NAF), e ao teste de Sentar e Alcançar (TSA), para definição da flexibilidade dos músculos da cadeia posterior.O nível de atividade física foi mensurado através do Questionário Internacional de Atividade Física (IPAQ) e a flexibilidade dos músculos da cadeia posterior foi mensurada através do teste de Sentar e Alcançar (TSA) sem o Banco de Wells. Em relação ao NAF, 32 (27,12%) sujeitos foram classificados como sedentários, enquanto 86 como ativos (72,88%). Para as médias de flexibilidade, quanto aos grupos, os adolescentes alcançaram no grupo Ativo 34,70 cm (IC 95% 32,62-36,78) e no grupo Sedentário 30,00 cm (IC 95% 25,74-34,26), a análise da diferença entre as médias dos grupos (t de student) indicou diferença estatisticamente significativa (p=0,030). Em suma, nesta população, os adolescentes ativos possuem maior média de flexibilidade quando comparado aos sedentários.

PALAVRAS-CHAVE: Atividade Fisica, Flexibilidade, Adolescentes