90 - HABITUAL PHYSICAL ACTIVITY AND MOTOR COORDINATION IN STUDENTS OF ELEMENTARY SCHOOL II

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INTRODUCTION

Aspects of daily life are changing daily activities of children. The technological advance becomes an ally for some muscle groups especially fine motor (manual tasks) more specifically the case of electronic games. Moreover, a lack of daily physical activity which involves a greater number of muscle groups, is influenced by lack of security, climate issues, contributing to outages and sedentary lifestyle. Rosa et al. (2011) warn of the fact that the monitoring of levels of physical activity in segments of the young population is becoming a major field of study for specialist in the area. According to Krebs, Ferreira Neto (2007), in the current world scenario, there is warning of a decline in the level of habitual physical activity of children, adolescents and adults and is linked to technological advance, leaving people increasingly accommodated, causing a generalized framework of inactivity. Physical activity should be encouraged from the early years of life, in order to maintain an active profile, above all, healthy. Their practice when extended from childhood to adolescence, probably guarantees an active adult life and away from diseases. According to Sanders (2005), when children live into experiences of movements that help in their development, being performed daily, have the potential to make them physically active and healthy for life. This is an important target that the Physical Education teacher is facing before every disease that is emerging among children and all the technology that makes them sedentary.

Lower levels of physical activity are directly related to the high incidence of heart disease, diabetes, hypertension, obesity, osteoporosis and some types of cancer that become more prevalent with advancing age and cause reduced quality of life and longevity. Currently we know that obesity rates added with all other diseases that surround are getting quite present in children's lives, becoming carriers of the risk factors or usually classified as sedentary (MALINA, BOUCHARD 2002).

A study by Mascarenhas (2005), Matias (2008) indicate that boys spent four times longer per day in physical activity of moderate to vigorous intensity than girls pointing out boys as habitually more active than girls.

This fact of the boys being usually more active than girls corroborate the study by Willwock, Valentini (2007), because according to them, in relation to gender, superiority in performance of boys is due to the culture that promotes greater engagement of boys by encouraging parents and teachers, of the contact with motor activities from an early age and of the media. While the society still drives the girls for domestic work, depriving them of developing their skills as fast as the boys and call attention to the promotion and involvement of girls in motor activities becoming motor competent and taking them at risk of being more conducive to chronic diseases in the future.

The need for motor coordination is fundamental to the human being as it is considered a basic quality to perform daily tasks and control your body more efficiently in time and space; not receiving the necessary stimuli, it certainly will present the characteristics of a lack of coordination after six years having as a result a strong relationship of influence on the grip of physical activity (FARIAS; SALVADOR, 2005; SARAIVA; RODRIGUES, 2010).

Due to the complacency of the people mostly in children and adolescents it has been generating great concern to teachers and researchers, thereby aiming to investigate the frequency of their regular physical activities and their motor coordination, knowing that a low rate of HFA causes serious health problems and a major contributor for this and sedentary lifestyle that is now synonymous with concern worldwide, and is something that is growing wildly. Given the scenario above, the present study aims to analyze the level of habitual physical activity and motor coordination of students in elementary school II.

MATERIAL AND METHODS

The research was descriptive with developmental and cross-sectional design. It was composed of students of both sexes enrolled in 8th and 9th grade of elementary school II in the college Mater Christi in Mossoró-RN. The sample consisted of 55 students, 21 boys and 34 girls, selected in a probabilistic manner during Physical Education classes, where it was used a questionnaire aimed at measuring the level of habitual practice of physical activity proposed by Baecke et al., (1982), (Baecke Questionnaire of Habitual Physical Activily - BQHPA) validated by Guedes et al., (2002), and battery test KTK (Körperkoordinationstest für Kinder - KTK), proposed by Kiphard and Schilling (1970 and 1974) apud Gorla, Araújo (2007) to gauge the level of coordination consisting of 4 tests: walking on balance beam (WBB), jumps monopedais (JM), lateral jumps (LJ) and transfers on Platforms (TP). The statistic used to assess the relationship between physical activity and the level of coordination of the subjects, was the Pearson linear correlation with a significance level of $p < 0.05$.

RESULTS AND DISCUSSIONS

Below are the results regarding overall levels of physical activity obtained by the students who participated in this study (Table 01) and (Table 02) classification of motor coordination index and physical activity for students of both sexes.

Table 01 - Estimate of practice and level of physical activity for both sexes in different contexts.

Variables	n	Mean	Sd	Maximum	Minimum
IAE					
Male	21	2,40	0,57	3,1	1,1
Female	34	2,39	0,35	3,0	1,3
IAFLA					
Male	21	2,70	1,14	5,1	0,8
Female	34	1,92	0,81	4,4	0,8
IAFTL					
Male	21	2,30	0,69	4,3	1,3
Female	34	2,22	0,70	3,8	1,0
IAFH					
Male	21	2,40	0,51	3,2	1,1
Female	34	2,15	0,39	2,8	1,0

Caption: SAI = School Activity Index; PAIAL = Physical Activity Index of Active Leisure; PAIFT = Physical Activity Index on Free Time; HPAI = Habitual Physical Activity Index.

Table 02 - Classification and percentage of motor coordination index and physical activity for students of both sexes.

Index Ranking Coordination (%)	Good	Normal	Regular	Low
Male			4,77	61,9
Female			--	44,11
Habitual Physical Activity Index Rating (%)	**Active**	**Sedentary**		
Male	19,05	80,95		
Female	0,00	100		

The results show that only 19.05% of boys are classified as actives versus 0% of girls. All female children studied had a low level of physical activity totaling 100% of the participants which is below the normal classification considered sedentary against 80.95% of boys, noting that boys are more active than girls.

Guedes et al (2002), Mascarenhas (2005), Matias (2008) in their study also found that boys were more active in physical activities of moderate to vigorous intensities than girls. Moreover, Lopes (2010) in his comparative study between boys and girls did not find statistically significant differences in physical activity levels or between the sexes and between the two age groups considered.

A study of Portuguese children, undertaken by Lopes (2011) analyzing 25 children, found that the level of habitual physical activity of all subjects presented in the sample values of physical activity among moderate to vigorous, fulfilling international recommendations for daily physical activity children required for maintaining good health.

Other essays by Willwock Valentini (2007); Carminato (2010) revealed that most of the students surveyed, regardless of age and sex is below normal, and the boys showed higher performance levels than the girls, both for physical activity and for coordination.

Lopes (2011) showed that only 47.6% of children in the study showed rates of Motor Coordination normal, and that the majority, 52.4% of students, had insufficient coordinative disturbances and coordination. However, these results come against our study where it was observed that 4.77% of children classified as regular, and 61.90% classified as normal.

These data may point to a life of inactivity in young people and adolescents, being present in their daily life context influencing them both in their development as well as in their levels of coordination, thus being important to encourage children to practice habitual physical activity where they can incorporate healthy habits becoming active beings for their entire life. (SANDERS, 2005; FARIAS; SALVADOR, 2005; SARAIVA; RODRIGUES. 2010).

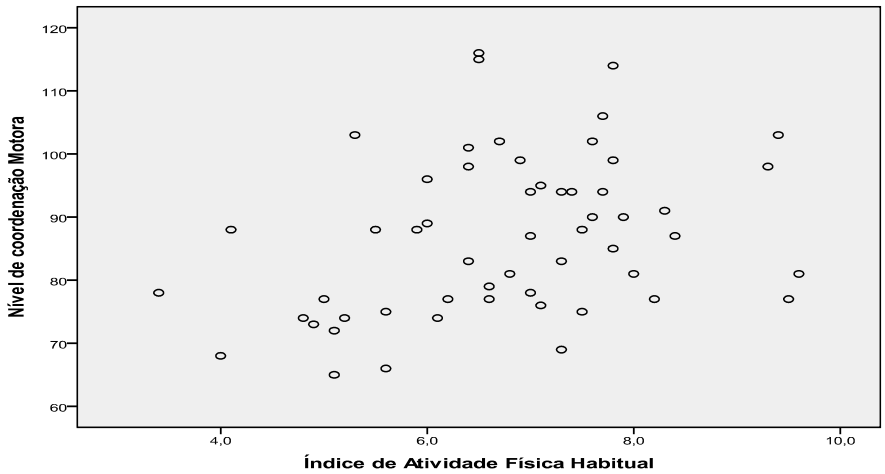


Figure 01 - Correlation between the habitual physical activity index and the levels of motor coordination among schoolchildren of both sexes.

Analyzing the results for the correlation between the physical activity index and the levels of motor coordination among schoolchildren of both sexes, there was a moderate correlation between the indices ($r = 0.33$) to a level of significance ($p = 0.01$). Thus the rates of motor coordination are explained by habitual physical activity index, i.e., the lower the levels of motor coordination the lowest the levels of habitual physical activity will be, a fact evidenced inversely, as it is expected that the most active children are those having a higher motor repertoire, and consequently, a better motor coordination and a higher performance of motor skills.

CONCLUSIONS

Based on the evidence, regardless of gender, the study had a high proportion of sedentary young adults who do not meet the habitual daily physical activity, which may be a factor for the low level of motor coordination, causing injuries to their development and health. Therefore, it is suggested that the children engage in active and pleasurable activities in recreational areas, in school and at home.

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HABITUAL PHYSICAL ACTIVITY AND MOTOR COORDINATION IN STUDENTS OF ELEMENTARY SCHOOL II

ABSTRACT

Monitoring the levels of coordination and physical activity has become a topic widely discussed lately in the school context, since the arrival of new technologies such as video games and computer games, has been occupying the space of interest and physical education classes. This study aims to analyze the level of habitual physical activity and motor coordination of school in junior high school II. The research was descriptive and cross-sectional developmental design. The population was composed of students of both sexes enrolled from 8 th to 9 th year of elementary school II of private schools from Mater Christi Mossoró, State of RN. A sample of 55 students, 21 boys and 34 girls, selected in a probabilistic manner during physical education classes. The measurement instrument used was the questionnaire proposed Baeck et al. (1982) for obtaining the index of habitual physical activity (IAFH) was applied and the battery test motor coordination of KTK (Körperkoordinations test für kinder-KTK). To evaluate the relationship between physical activity and the level of coordination of the subjects was used Pearson linear correlation. The results showed that, regardless of gender, had a high proportion of sedentary young adults who do not meet daily physical activity, which may be a determining factor for the low level of motor coordination and the development of health problems. This suggests that children obtain a greater opportunity for leisure playground at home and at school.

KEYWORDS: Everyday, teenager, habitual physical activity.

RESUMÉ

La surveillance des niveaux de coordination et l'activité physique est devenue un sujet largement discuté ces derniers temps dans le contexte scolaire, depuis l'arrivée de nouvelles technologies comme les jeux vidéo et de jeux informatiques, a été occupant l'espace d'intérêt et de cours d'éducation physique. Cette étude vise à analyser le niveau d'activité physique habituelle et la coordination motrice de l'école au collège lycée II. La recherche est descriptive et transversale conception du développement. La population était composée d'étudiants des deux sexes inscrits du 8 au 9 e année de l'école élémentaire II des écoles privées à partir de Mater Christi Mossoró. Un échantillon de 55 élèves de 21 garçons et 34 filles sélectionnées de manière probabiliste cours d'éducation physique. L'instrument de mesure utilisé est le questionnaire proposé Baeck et al. (1982) pour obtenir l'indice de l'activité physique habituelle (IAFH) a été appliquée et la coordination test de la batterie du moteur de KTK (Körperkoordinationstest für kinder-KTK). Pour évaluer la relation entre l'activité physique et le niveau de coordination entre les sujets a été utilisé corrélation linéaire de Pearson. Les résultats ont montré que, indépendamment de leur sexe, ont une forte proportion de jeunes adultes sédentaires qui ne remplissent pas l'activité physique quotidienne, ce qui peut être un facteur de la faiblesse de la coordination motrice et le développement de problèmes de santé. Ce qui suggère que les enfants acquièrent une plus grande opportunité pour aire de jeux de loisirs, à la maison et à l'école.

MOTS-CLÉS: Quotidien, adolescents,l'activité physique habituelle

RESUMEN

El seguimiento de los niveles de coordinación y la actividad física se ha convertido en un tema ampliamente discutido últimamente en el contexto escolar, desde la llegada de las nuevas tecnologías como los videojuegos y juegos de ordenador, ha estado ocupando el espacio de interés y las clases de educación física. Este estudio tiene como objetivo analizar el nivel de actividad física habitual y la coordinación motora de la escuela en el instituto de secundaria II. La investigación fue de tipo descriptivo y diseño transversal del desarrollo. La población estuvo conformada por estudiantes de ambos sexos matriculados a partir del 8 al 9 º año de primaria II escolar de las escuelas privadas de Mater Christi Mossoró. Una muestra de 55 estudiantes de 21 niños y 34 niñas seleccionadas de forma probabilística durante las clases de educación física. El instrumento de medición utilizado fue el cuestionario propuesto Baeck et al. (1982) para obtener el índice de la actividad física habitual (IAFH) y se aplicó la prueba de la coordinación motora de la batería de KTK (Körperkoordinationstest für Kinder-KTK). Para evaluar la relación entre la actividad física y el nivel de coordinación de los sujetos se utilizó la correlación de Pearson lineal. Los resultados mostraron que, independientemente del sexo, tenían una elevada proporción de sedentarios jóvenes adultos que no cumplen con la actividad física diaria, que puede ser un factor para el bajo nivel de la coordinación motora y el desarrollo de problemas de salud. Lo que sugiere que los niños adquieran una mayor oportunidad para el ocio patio, en casa y en la escuela

PALABRAS CLAVES: Cotidiano, adolescente, actividad física habitual.

ATIVIDADE FÍSICA HABITUAL E COORDENAÇÃO MOTORA EM ESCOLARES DO ENSINO FUNDAMENTAL II

RESUMO

A monitoração dos níveis de coordenação e atividade física vem se tornando um tema bastante discutido ultimamente no contexto escola, pois a chegada das novas tecnologias como vídeo games e jogos eletrônicos, vem ocupando o espaço e interesse das aulas de educação física. O presente estudo tem como objetivo analisar nível de atividade física habitual e coordenação motora de escolares de escolares no ensino fundamental II. A pesquisa foi descritiva, com delineamento desenvolvimental com corte transversal. A população foi composta por escolares de ambos os sexos matriculados do 8° ao 9° ano do ensino fundamental II da rede particular de ensino do Mater Christi de Mossoró. A amostra de 55 escolares 21 meninos e 34 meninas selecionadas de forma probabilística durante as aulas de Educação Física. Como instrumento de medida foi utilizado o questionário proposto Baecket al.(1982) para a obtenção do índice de atividade física habitual (IAFH) e foi aplicado a bateria de teste de coordenação motora do KTK (Körperkoordinationstestfürkinder-KTK). Para avaliar a relação entre atividade física e o nível de coordenação dos sujeitos, foi utilizada a correlação linear de Pearson. Os resultados apontaram que, independentemente do sexo, apresentou alta proporção de jovens sedentários que não cumprem atividades físicas diárias, o que pode ser um fator determinante para o baixo nível de coordenação motora e o desenvolvimento de agravos à saúde. Sugerindo que as crianças obtenham uma maior oportunidade de lazer em áreas recreativas, em casa, e no âmbito escolar.

PALAVRAS-CHAVE: cotidiano, adolescente, atividade física habitual.