15 - COMPARATIVE ANALYSIS OF PHYSICAL DEVELOPMENT IN BRAZILIAN AND RUSSIAN STUDENTS BETWEEN 13,5 to 14,5 YEARS OLD

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INTRODUCTION

For a instant, we are not going to discuss about social and economic problems that are facing up, we are going to center our attention at the importance of physical practical activity at children and adolescents lives. In same cases they are prisoners in small backyards or stopped in front of TVs, videogames, surfing the NET, all of that result in hypnotic states, increasing indexes of sedentary life.

This sedentary life reaches many individuals, and can transform itself in a big enemy, taking the people to the obesity way, emotional transformation, arterial hypertension, diabetes, heart attack among others. Some researches point out that there is Brazilian localization where the sedentary life in adults prevails over 70% (BOLCH, 1998 *apud* SILVA, MALINA, 2000).

Consequently, from point of view of public health and preventive medicine, promoting physical education at childhood and adolescence means to established a solid base to reduce the prevail of sedentary at adult life. At this way, it contributes to a better quality of life. But, Brazilian society show that lack of awareness and knowledge about the importance of physical activity to a healthy life. In this context, we consider that the physical activity is any movement with result of scrawny muscular contraction. It increases the energetic consumption above the rest and not necessary to sportive practice. (Official position of SBME, 2002).

Without physical activity the children and the teenagers could be sedentary, obese, and run the risk of getting more dislipidemias, which can complicate much more in their adult life.

According to Allsen; Harrison and Vance (2001, p 9), "the children that enter in the adolescence with obesity problems have only a chance in four to get the normal weight, and who comes out the adolescence in a obesity state have only a chance in 28 (twenty eight) to get the normal weight.

So, it is necessary to create a habit in the active life at the childhood and at the adolescence could reduce the cases of obesity and cardiovascular illness in the adult age. The physical activity cares out others benefits, such as that ones related to the motor equipment, improvement of psychological well-being, increase the scholar performance, improve the social relationship (parents and children) and, also, the life among friends. The intense physical activity, mainly involves impacts, it benefits an increase of bone mass in the adolescence and could reduce the risk of appearing osteoporose (weaken of bones) in the advanced aged (ALLSEN; HARRISON; VANCE, 2001).

Motivated by the quantity of benefits, the children and the adolescents need to move to their psychic and physical be developed and harmonic, (WEINECK, 1999). But, many factors included in our society persuade our children and adolescents to replace the sportive practice, which means the quality of life to bad vicious such as alcoholic drinks, cigarette, television, videogame, NET and others. It can difficult much more the prevailed of health.

At this moment the function of the school is crucial to reinforce the student and the physical activity. In fact, to become it effectively is necessary to use programs of physical activity of quality, "inter and extra syllabus" and include them at Physical Education. (ALLSEN; HARRISON; VANCE, 2001).

Quality of life is well discussed nowadays. Not only the physical activity as well as all the personal formation will have influence about the life style of our student. Over there, it is obviously that the socio-economical conditions allowed by public politics. In the meantime, if we think the schools as a space that can teach performed citizens looking for quality of life, which space have the Physical Education in this scholar context?

According to Medina and Oliveira, (*apud* VAZ L., 2002), Physical Education has direct relation with our health and with the preparation to society life. It can give knowledge to understand all the factors (social, organic, psychological, cultural, etc.). And also, according to McArdle & Katch, (1992) and Sharkey, (1998), the human being health depend a lot of its physical development. The beginning of this evolution of development process happens, according to Weineck, (1999), in its big part, into the school, with Physical Education. It involves an effort of adaptation to a body and a reflection of body behavior, it can not be limited to the muscular development, because the body can not be considered only a group of bones and muscles to be trained, but as a totality of a individual that expresses him/herself by movements, feelings and act in a world, with a systematic learning of sports will be useful, including in a society life where this situation is useful in spending energy in pleasure and funny activities. It allows the relax, the possibility in noticing the body and how to control it.

About the correct function (WEINECK,1999, p 222), says that, " the function of physical activity and the scholar sport is developed in a general basic resistance in do not lead the children the specific physical aptitude".

So, the stimulus to the development of power and the organic improvement of the human being is the result of effective programs act in Physical Education (DINOÁ & de ASSIS, 1990 *apud* VALENTE, 2002), which according (WEINECK, 1991), is inefficient in patterns adopted in the most countries around the world.

Considering what was explained above, we decide to compare the permanent subject of Physical Education in the physical development of students at nº 86 School of Kazan city in Russia, with the permanent Physical Education subject in physical developing of students of Educação Básica Padre Izidoro Benjamin Moro School - Brazil. This means that the process of teaching/learning at Physical Education subject in a Russia school is totally different from the teaching/learning at Physical Education subject in a Brazilian school.

The process of teaching/learning at Physical education in a Brazilian school is based on funny and the process of teaching/learning at Physical education subject in Russia school is based on rigid programs of physical and motor development of children.

The purpose of this study was to research the difference of physical development of Elementary students with age from 13,5 to 14,5 of Brazilian and Russia schools.

METHODOLOGY

The sample of the research was compound by 59 Brazilian students (36 male and 23 female) from 8ª grade of elementary school at Educação Básica Padre Izidoro Benjamin Moro School in Lindóia do Sul city, sc - state - Brazil, and 67 Russian students (31 male and 36 female) from 8ª grade of number 86 School in Kazan city - Russia, with ages from 13,5 to 14,5. The individuals of the sample researched passed from the follow tests: a) Male: 60 meters Running, 3,000 meters Running, long

jump, fixed bar; b)Female: 60 meters Running, 2,000 meters Running, long jump, fixed bar (body in a horizontal position).

It was used the follow instruments: a) 60 meters Running test; b) 2,000 and 3,000 meters Running test; c) long jump with running test; d) fixed bar test (MATHEWS, 1980, p 88 - 90); e) tape measure of metal (precision, 0,1c); f) sport stopwatch (precision, 0,1s); g) athletics track; h) fixed bar.

To statistic treatment were used the methods of mathematic statistic parametric (average, pattern deviation, test "t" of student to independent samples).

Level of confidence adopted is = 0,05.

RESULT AND DISCUSSION

Table 1 -Comparative analysis of development of physical capacities (speed, resistance, power and explosive power) from male Brazilian students with age from 13,5 to 14,5, of Educação Básica Padre Izidoro Benjamin Moro School (Brazil) and from male Russian students of number 86 School, in Kazan city (Russia), with the same age.

Factors	Brazil		Russia		$\Delta = \frac{(\overline{X}b - \overline{X}r)}{\overline{X}b} \cdot 100\%$
	$\overline{X}b$	Sb	$\overline{X}r$	Sr	
Male	**n = 36**		**n = 31**		
Running 60 m (sec)	8,57	0,51	9,6	0,39	- 12%*
Running 3000 m (min)	17, 27	2, 38	17, 28	0,52	- 0,1%
Long jump (cm)	349	42,8	375	26	- 7,4%
Fixed Bar (times)	8,0	4,42	7,1	0,96	11,3%

Ps.: The data marked with (*) are significant, p < 0,05.

The results presented in a table 1 show that: a) the level of development of speed, determined through 60 meters Running test is significant better (= 12%, p < 0,05) in Brazilian students with age from 13,5 to 14,5 than in Russian students with the same age; b) the development of resistance, of power and explosive power determined by 3,000 meters Running test, fixed bar and long jump, respectively, have the same level in Brazilian students as in Russian students.

Table 2 - Comparative analysis of development of physical capacities (speed, resistance, power and explosive power) from female Brazilian students with age from 13,5 to 14,5, of Educação Básica Padre Izidoro Benjamin Moro School (Brazil) and from female Russian students of number 86 School, in Kazan city (Russia), with the same age.

Factors	Brazil		Russia		$\Delta = \frac{(\overline{X}b - \overline{X}r)}{\overline{X}b} \cdot 100\%$
	$\overline{X}b$	Sb	$\overline{X}r$	Sr	
Female	**n= 23**		**n= 36**		
Running 60 m (sec)	10,2	0,92	10,15	0,32	0,5%
Running 2000 m (min)	13, 48	0,98	13,30	0,53	1.3%
Long jump (cm)	260	25,22	310	24	- 19%*
Fixed bar (times)	11	4,45	10,4	2,5	5,5%

Ps. The data marked with (*) are significant, p < 0,05.

The results presented in a table 2 show that: a) the level of development of explosive power, determined through long jump test is significant worst (= 12%, p < 0,05) in female Brazilian students with age from 13,5 to 14,5 than in Russian students with the same age; b) the development of speed determined by 2,000 meters Running test, 60 meters Running and fixed respectively, have the same level in female Brazilian students as in Russian students.

The data presented in tables 1 and 2 also show that the results of Russian students tests are more homogeneous than the result of the tests in Brazilian students. So, we realized the comparative analysis of scholar development of researched students by evaluation system of the students in the physical education subject in Russia School (PROGRAM, 1989).

The results of the research, presented in the table 3, show that: a) to 1 male Russian student that received great mark, there are 7,7 male Brazilian students that received the same mark, but at the same time 13,2% of male Brazilian students received insufficient mark and none male Russian student received this mark; b) to 1 female Russian student that received great mark, there are 7,4 female Brazilian students that received the same mark, but at the same time 25% of Brazilian students received insufficient marks and none female Russian student received this mark.

Table 3 - The evaluation of results of tests realized by Brazilian and Russian students by evaluation system in the Physical Education subject in a Russian school.

Factors	Brazil (mark in %)				Russia (mark in %)			
	Great	Good	Regular	Insuff.	Great	Good	Regular	Insuff.
Male								
Running 60 m (sec)	64%	30,5%	5,5%	0%	6,2%	48,4%	43,4%	0%
Running 3000 m (min)	44,4%	22,2%	8,3%	25%	6,2%	51,6%	43,2%	0%
Long jump (cm)	16,7%	33,3%	38,9%	11,1%	3,1%	54,8%	42,1%	0%
Fixed bar (times)	41,6%	25%	16,7%	16,7%	6,2%	51,6%	43,2%	0%
Average	41,7%	27,8%	17,4%	13,2%	5,4%	51,6%	43,0%	0%
Female								
Running 60 m (sec)	47,8%	21,8%	13%	17,4%	2,8%	58,3%	38,9%	0%
Running 2000 m (min)	13%	13%	61%	13%	2,8%	47,2%	50,0%	0%
Long jump (cm)	4,3%	4,3%	21,7%	69,6%	2,8%	55,5%	41,7%	0%
Down fixed bar (times)	17,4%	43,5%	39,1%	0%	2,8%	61,6%	35,6%	0%
Average	20,6%	20,7%	33,7%	25,0%	2,8%	55,7%	41,6%	0%

Analyzing the results presented in the table 1 to 3 we can deduce that: a) Brazilian students with age from 13,5 to 14,5, probably, are more gift physically or have more talent by the efficiency of psychomotor system, from those Russian students with the same age, because among them, there are 7,7 times more male students and 7,4 times more female with great marks from Russian students; b) the organization of physical education at Russia school favor the development of all the students and the organization of physical education at Brazilian school favor only the development of those students more gift physically, so, even though, probably more physically gifted or more talent by efficiency of psychomotor system, on average, 13,2% of male and 25% of female from Brazilian students gained insufficient grades by evaluation system of the students at Physical education subject in Russia school and the Russian students there are not any student with that grade.

CONCLUSION

In relation to analysis of the data found, we concluded:

-The physical development of Brazilian students researched, determined by students evaluation system at Physical education subject at Russia School, on average, are superior to male and inferior to female in comparison with the physical development of Russian students researched with the same age.

- Brazilian students researched, probably have more physical gifts or more talents, by efficiency of psychomotor system, from those Russian students with the same age.

-The organization of physical education at Russia school favor the development of students of the school and the physical school organization at Brazilian schools favor only the development of those students more gift physically.

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COMPARATIVE ANALYSIS OF PHYSICAL DEVELOPMENT IN BRAZILIAN AND RUSSIAN STUDENTS BETWEEN 13,5 to 14,5 YEARS OLD

ABSTRACT

The objective of the research was to compare the physic development of Brazilian and Russian with age from 13,5 to 14,5. The sample of the research was composed by 59 Brazilian students (36 male and 23 female) and 67 Russian students (31 male and 36 female), with age from 13,5 to 14,5, by chosen chance. The individuals of the researched sample realized the follow tests: a)Male: 60 meters running, 3,000metres running, long jump, fixed bar; b) Female: 60 meters running, 2,000 meters running, long jump, fixed bar (body in horizontal position). The results of the research showed that: a) male Brazilian students researched, on average, are significant better (= 12%, p < 0,05) in physical capacity speed (60 meters running), and female Brazilian students researched in long jump, on average, are significant worst (= 19%; p < 0,05) than Russian students with the same sex and age. The differences found in the result of other tests do not have confidence (p > 0,05); b) by system of evaluation at physical education subject of Russia School, Brazilian students gained 41,7% (male) and 20,6% (female) great grades and only 5,4% (male) and 2,8% (female) of Russian students gained these grades, but none Russian student gained insufficient grade and 25% of female students and 13,2% of Brazilian students gained these grades. Conclusion: the organization of physic education in Russia school favor to the development all the students of the school and the organization of physic education at Brazilian school favor only the development of those students more gifted physically.

Key words: Physic Development, Students, High School.

ANALYSE COMPARATIF DE DÉVELOPPEMENT PHYSIQUE DE LES ÉTUDIANTS BRÉSILENS ET RUSSES AVEC LA BANDE ÉTAIRE DE 13,5 AU 14,5 ANS

RÉSUMÉ

L'objectif de la recherche a été comparer le developpement phisyque de les étudiants brésiliens et russes avec la bande étaire entre 13,5 (treize et demi) et 14,5 (quatorze et demi) ans. L'échantillon de la recherche a été composé pour 59 (cinquente neuf) étudiants brésiliens (36 de le sexe masculin et 23 de le sexe feminin), avec l'âge entre 13,5 et 14,5 ans, choisis aléatoirement. Les sujets de l'échantillon de la recherche, ont realisé les suivantes testes: a) Masculin: course de 60 (soixante) mètres, course de trois mille mètres, saut en distance, barre fixe; b) Feminin: course de 60 (soixante) mètres, course de deux mille mètres, saut en distance, barre fixe (corps en position horizontal). Les resultats de la recherche ont montré que: a) De les étudiants brésiliens utilisés pour la recherche de le sexe masculin, en moyenne, sont significativement meilheurs (? = 12%; p<0,05) dans la capacité phisique vitesse (course de 60 mètres), et les étudiants brésiliens qui ont été utilisés pour la recherche de le sexe feminin dans le saut en distance, en moyenne, sont significativement plus mauvais (? =19%; p<0,05) que les étudiants russes de le même sexe et même âge. Les diferences qu'on obtenu dans les resultats de autres testes n'ont pas de confiance (p>0,05); b) pour le système de l'avaliation dans la matière de Education Physique dans l'École Russe, les étudiants brésiliens ont gagné 41,7% (masculin) et 20,6% (feminin) notes excellent et seulement 5,4% (masculin) et 2,8% (feminin) de les étudiants russes ont gagné cettes notes, mais aucun étudiant russe a gagné note insuffisant et 25% de les étudiantes et 13,2% de les étudiants brésiliens ont gagné cettes notes.

Conclusion: L'organization de l'education physique dans l'école russe est propice au dévellopement de tous étudiants de l'école et l'organization de l'education physique dans l'école brésilien est propice seulement au dévellopement de les étudiants plus dotés physiquement.

Mots clef: dévellopement physique, étudiants, enseignement moyen.

ANÁLICE COMPARATIVA DEL DESARROLLO FÍSICO DE LOS ESTUDIANTES BRASILEÑOS Y RUSOS CON EDAD DE 13,5 HASTA 14,5 ANOS

RESUMEN

El objetivo de la investigación fue comparar el desarrollo físico de los estudiantes brasileños y rusos con edad de 13,5 hasta 14,5 años. La muestra de la investigación fue compuesta por 59 estudiantes brasileños (36 del sexo masculino y 23 del sexo femenino) y 67 estudiantes rusos (31 del sexo masculino y 36 del sexo femenino, con edad de 13,5 hasta 14,5 años, elegidos casualmente. Los sujetos de la muestra realizaron los siguientes testes: a) Masculino: Corrida 60 metros, Corrida 3000 metros, Salto en distancia, Barra fija; b) Femenino: Corrida 60 metros, Corrida 2000 metros, Salto en distancia, Barra fija (cuerpo en posición horizontal). Los resultados de la investigación muestran que: a) Los estudiantes brasileños pesquisados del sexo

masculino, en media, son significativamente mejores (= 12%; p < 0,05) en capacidad física velocidad (corrida de 60 metros), y los estudiantes brasileños pesquisados del sexo femenino en salto en distancia, en media, son significativamente peores (= 19%; p < 0,05) de los estudiantes rusos del mismo sexo y edad. Las diferencias encontradas en los resultados de los otros testes no tiene confianza (p > 0,05); b) pelo sistema de avaluación en la asignatura de Educación Física en la escuela Rusa, los estudiantes brasileños ganaran 41,7% (masculino) y 20,6% (femenino) notas óptimas y solamente 5,4% (masculino) y 2,8% (femenino) de los estudiantes rusos ganaran estas notas, mas ni uno estudiante ruso ganó nota insuficiente y 25% de las alumnas y 13,2% de los alumnos brasileños ganaran estas notas. Conclusión: la organización de la educación física en la escuela rusa favorece al desarrollo todos los estudiantes de la escuela y la organización de la a educación física en la escuela brasileña favorece solamente al desarrollo de los estudiantes más dotados físicamente.

Palabras llaves: Desarrollo Físico, Estudiantes, Enseñanza mediana.

ANÁLISE COMPARATIVA DO DESENVOLVIMENTO FÍSICO DOS ESTUDANTES BRASILEIROS E RUSSOS COM FAIXA ETÁRIA DE 13,5 A 14,5 ANOS

RESUMO

O objetivo da pesquisa foi comparar o desenvolvimento físico dos estudantes brasileiros e russos com faixa etária entre 13,5 a 14,5 anos. A amostra da pesquisa foi composta por 59 estudantes brasileiros (36 de sexo masculino e 23 de sexo feminino) e 67 estudantes russos (31 de sexo masculino e 36 de sexo feminino), com idade entre 13,5 a 14,5 anos, escolhidos aleatoriamente. Os sujeitos da amostra pesquisada, realizaram os seguintes testes: a) Masculino: Corrida 60 metros, Corrida 3000 metros, Salto na distância, Barra fixa; b) Feminino: Corrida 60 metros, Corrida 2000 metros, Salto na distância, Barra fixa (corpo em posição horizontal). Os resultados da pesquisa mostraram que: a) os estudantes brasileiros pesquisados do sexo masculino, em média, são significativamente melhores (= 12%; p < 0,05) na capacidade física velocidade (corrida de 60 metros), e os estudantes brasileiros pesquisados do sexo feminino no salto em distância, em média, são significativamente piores (= 19%; p < 0,05) do que os estudantes russos de mesmo sexo e idade. As diferenças encontradas nos resultados de outros testes não têm confiança (p > 0,05); b) pelo sistema de avaliação na matéria Educação Física da Escola Russa, os estudantes brasileiros ganharam 41,7% (masculino) e 20,6% (feminino) notas ótimas e somente 5,4% (masculino) e 2,8% (feminino) dos estudantes russos ganharam estas notas, mas nem um estudante russo ganhou nota insuficiente e 25% das alunas e 13,2% dos alunos brasileiros ganharam estas notas. Conclusão: A organização da educação física na escola russa favorece ao desenvolvimento todos os estudantes da escola e a organização da educação física na escola brasileira favorece somente ao desenvolvimento dos estudantes mais dotados fisicamente.

Palavras chaves: Desenvolvimento Físico, Estudantes, Ensino Médio.