205 - ANALYSIS OF THE RELATION BETWEEN PHYSICAL FITNESS INDICATORS RELATED TO STUDENTS' HEALTH IN PRIVATE SCHOOLS IN MARINGÁ-PR

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1 Introduction

The contemporary society has been marked by the advances acquired in science and technology. These advances have been contributing with men in a general way, because they have facilitated his life in several aspects which goes from basic feeding to the reduction of physical effort to the every day services.

Nevertheless, this said advance has as a negative aspect the fact that many of the activities that we realized using our body's movement are been gradually substituted by machines reducing ordinary physical activity in terms of quantity and intensity.

The modern man, as he wishes, may take a life totally exempt of intensive physical efforts, what have been motivating some pessimists studious to suggest a new denomination of the human species: ***Homo Sedentarius*** (GUEDES; GUEDES, 1995).

The "***modus vivendi",*** characterized by a group of behavior adopted every day, represents one of the principal modulators of the health and quality of life levels of the human being. Between the behaviors that affect negatively the health levels we highlight the excessive consumption of alcohol and smoke, inadequate eating habits and insufficient levels of physical activities and, consequently, a low level of physical aptitude.

The contemporary lifestyle, characterized by the reeducation level of ordinary physical activity and physical exercise, is directly associated to the occurrence of a series of organic disturbs, that receive the denomination of chronic-degenerative diseases.

The chronic-degenerative diseases or non-transmissible diseases include the cardiovascular diseases, arterial hypertension, plasma lipid-lipoprotein concentration, cancer, osteoporoses, beside the obesity and mellitus diabetes.

Pate (1988) says that human being's capacity to perform daily tasks with vigor and, demonstrate traces and characteristics that are associated with a low risk in the premature development of *hipocinéticas* diseases, depends on the physical aptitude related to health.

Bouchard et al., (2003), defines physical aptitude as being "a dynamic state of energy and vitality that allows each one not only the performance of quotidian tasks, but the active occupations of pleasure hours and face unpredicted emergencies without excessive fatigue, and also avoid the appearance of HIPOCINÉTICA dysfunctions, while working on the edge of intellectual capacity and feeling a happiness in living".

This model of physical aptitude may be considered over two slopes:

- Physical aptitude related to health;
- Physical aptitude related to athletic performance.

The concept of p physical aptitude related to health was introduced in United Stated in the end of the 70's, by a group of studious from AAHPERD (American Alience for Health, Physical Education, Recreation and Dance), with the aim of defining the components of physical aptitude to be evaluated.

The physical aptitude related to health enlaces those biological attributes that offer some protection to the appearing of organic disturbs provoked by the sedentary lifestyle that become, therefore, extremely sensible to the level of practice of physical activity (CORBIN et al., 1987 apud GUEDES; GUEDES, 1995).

In the health field, the components of physical aptitude aim to enlace the biological attributes that may offer some protection to the appearance to the development of organic disturbs induced by the compromising the functional condition. Operationally, the components of physical aptitude related to health contemplate indicators over the cardio respiratory aptitude, muscle strength/resistance, flexibility and body fat (CORBIN, LINDSEY, 1997).

Inside this perspective, that better indexes in this components would be associated with a higher protection to the development of chronic-degenerative diseases, the AAHPERD (1988) showed a proposition of health criterion for the components of physical aptitude related to health, composed by a battery of tests denominated ***Physical Best.***

According to Guedes (2006, p.13) the patter mentioned as criterion is based on the limit points obtained as wished or ideals. These scores previously established must be considered as the goal to be achieved, which are judged comparatively in limit levels explicitly defined, that are planned with the design off verifying if the evaluated reach specific levels of competence without take in consideration that others have reached the same proficiency level.

a) Cardio respiratory aptitude:

According to ACSM (2000) cardio respiratory aptitude consists in the capacity to perform dynamic exercises involving large muscle groups in moderate to high intensity for prolonged periods.

For Nieman (1999 p. 07), the cardio respiratory aptitude is the capacity to continue or persist in exhausting tasks involving large groups of muscles for prolonged periods of time. Also denominated aerobic aptitude.

The cardio respiratory aptitude has been associated with the coronary risk in children and adults. Bell et al (1986, apud MAITINO, 2005), suggest that the lower limit of aerobic potential that, in the absence of other health problems, may represent some risk of 35 ml.kg ^{1}min $^{-1}$ for the boys and of ml.kg ^{1}min $^{-1}$ for the girls.

In the study of cardio respiratory aptitude, obesity and health: Evidences of the Aerobic Center Longitudinal Study ACLS developed in Cooper Clinic, Dallas, Texas US, was verified that in his first publication about physical aptitude and mortality showed a inverse result for the death causes in general in the aptitude categories, being that the individuals less conditioned shoed death indexes at least two times higher than those highly conditioned, in all strata (BRODNEY, BLAIR e LEE, 2003, p.422-424).

b) Body Composition:

For the component of body fat it is suggested that de Body Mass Index (BMI), or Quetelet index, is a relatively good indicator of total body composition in studies based on the population and is related with the health results (ACMS, 2000).

According to Bray (2003, p. 35), individuals with overweight take more risks of developing several physical, social and psychological disturbs, in which a sedentary lifestyle Is the decisive and most important component in the relation between mortality excess and obesity.

Guedes, (2001) taking as reference the body mass index, verified that, in both genders, the subjects physically less active in the quotidian and with lower estimative for the max oxygen consumption, tended to show higher body weight.

c) Muscle strenght/resistence:

For NAHAS, (2001 p.35), muscle resistance is the capacity of a muscle group to perform repeated contractions without significantly diminish the efficiency of the task performed.

Muscle resistance can be understood as being a capacity of the muscles to suppress a sub max strength repeatedly (for example, abdominals, arm push ups).

The benefits for health, associated with muscle strength/resistance exercises include increase in bone density, muscle volume and strength and in strength of the conjunctive tissue, as also a reduction on the risk of LOMBALGIA, osteoporoses and debilitation in oldness. (NIEMAN, 1999 p. 14).

The maintenance of adequate indexes of muscle strength/resistance becomes an important mechanism of functional health (principally in old people), notably in what refers to the prevention and treatment of posture and articulate problems, and muscle-skeletal injuries (CLAUSEN, 1973 apud GUEDES; GUEDES, 1995 p.27).

d) Flexibility:

Allsen et al, (2001 p. 38),define as the amplitude of movements fo the articulations, the level of easiness with which the body manages to bend or contort, contracting or relaxing the muscles.

According to Corbin e Fox (1987 apud GUEDES; GUEDES, 1995 p. 28) the flexibility is taken as the capacity of amplitude of an isolated articulation or from a group of articulations, when requested in the performance of movements.

Many affirms were made over the benefits of the flexibility related do health, among them is included a good articulate mobility, increase in muscle injury and pain resistance, decrease of de risk of law pain and other spine pains, posture improvement, body movements more gracious and an improvement on personal appearance and self-image, better development of abilities for the sport's practice and de diminish of tension and stress (NIEMAN, 1999 p. 15).

The present study is characterized as descriptive diagnostic and had as objective to analyze the physical aptitude components related to health in school students, and analyze them in relation to the criterion referenced established by the ***Physical Best*** (AAHPERD, 1998), an also the proportion (%) of school students with overweight and obesity and that pain attention to the referenced-criterion, in a Public School from the city of Maringá PR.

2 Material and Methods

2.1. Population and Sample

From a total of 1.917 students matriculated and effectively participating in the educational activities, it was obtained the participation of 1.630 students (from 1º grade of Fundamental Teaching to the 3º grade of Mean Teaching), being 780 from female gender and 850 from male gender, with age line between 07 and 17 years old. This sample corresponds to approximately 85% of the matriculated students and was obtained by free option of the participants.

2.2. Data collection

The data collection was performed in de period of august to September of the year of 2003, during the Physical Education classes, by the authors of the study, Scholl's Physical Education teachers and the trainees from the Physical Education course.

The evaluations were realized according to a sequence elaborated in a way that the energetic spent required in one motor test wouldn't interfere in the next.

2.3. Evaluation and determination of BMI

For the Body Mass Index (BMI) determination, or Quetelet index, the equation that is used to evaluate the weight relative to the height was used, calculated by dividing the body weight in kilos by the height in meters elevated to the square (wiehgt/height^2). The body weight was determined by using an anthropometric balance of the brand Filizola, with precision of 100g, with the evaluated one using the minimum clothes possible and without shoes, standing, with the back to the measure scale of the balance.

To the stature measure, was used a wooden stadiometer, with the precision scale of 0,1 cm along with a woodened cursor built for the determination of the distance corresponding between the vertex and the plant region.

2.4. Evaluation and motor component determination of physical aptitude related to health.

To the evaluation and determination of the motor components was used the motor battery test proposed by (AAHPERD, 1988), in which to the cardio respiratory aptitude was applied the run/walk test of 9 and/or 12 minutes, for muscle strength/resistance the abdominal teste in 1 minute (sit up's) and, for the flexibility the sit/reach test, followed by Guedes & Guedes (2006) recommendations.

2.7. Statistical procedures

For the statistical analysis the descriptive statistic (mean, standard deviations, proportion (%) and quartil) was used.

03 Results

In table 1 are presented the mean values and standard deviations for the variables body weight (kg) stature (cm) and BMI (weight/height^2).

TABLE 01 – MEAN VALUES AND STANDARD DEVIATIONS FOR THE VARIABLES BODY WEIGHT, STATURE AND BMI..

AGE	Female			Male		
	Weight (kg)	Stature (cm)	BMI (weight/height^2)	Weight (kg)	Stature (cm)	BMI (weight/height^2)
07	28,82 ± 5,22	124,67 ± 5,83	16,94 ± 2,52	26,76 ± 5,99	123,90 ± 5,55	17,32 ± 3,03
08	29,28 ± 5,84	130,31 ± 6,10	17,10 ± 2,22	31,30 ± 8,52	130,61 ± 6,41	18,15 ± 3,77
09	31,11 ± 7,05	134,06 ± 6,20	17,16 ± 2,77	33,15 ± 6,89	136,02 ± 5,35	17,79 ± 2,78
10	35,46 ± 9,28	140,07 ± 6,93	17,87 ± 3,32	38,50 ± 9,17	141,44 ± 6,15	19,06 ± 3,40
11	42,05 ± 9,58	147,70 ± 6,82	19,14 ± 3,64	42,07 ± 11,56	146,65 ± 7,12	19,35 ± 4,07
12	45,97 ± 10,17	154,23 ± 7,51	19,17 ± 3,25	47,03 ± 11,43	152,24 ± 6,86	20,14 ± 4,00
13	50,55 ± 8,85	159,00 ± 8,85	20,00 ± 3,14	51,57 ± 12,72	160,26 ± 9,37	19,89 ± 3,69
14	51,80 ± 7,22	161,77 ± 6,01	19,75 ± 2,17	58,15 ± 11,23	167,62 ± 7,60	20,63 ± 3,39
15	52,95 ± 8,11	162,59 ± 5,19	19,97 ± 2,46	61,86 ± 10,50	172,05 ± 6,35	20,83 ± 2,85
16	53,75 ± 10,05	162,71 ± 5,62	20,20 ± 2,74	65,34 ± 11,85	175,08 ± 6,46	21,21 ± 2,94
17	53,98 ± 4,88	163,12 ± 5,05	20,33 ± 2,13	65,57 ± 7,83	175,41 ± 2,71	21,31 ± 2,45

In table 02 i presented the proportion (%) of students that showed overweight and obesity at the quartil P50-P75 e >P75.

TABLE02 – PROPORTION (%) OF SCHOOL STUDENTS THAT SHOWED OVERWEIGHT ANS OBESITY AT THE QUARTIL P50 – P75 E > P75 ACCORDING TO THE LIMIT VALUES SUGGESTED BY COLE et al. [1]

AGE	OVERWEIGHT P50 – P75		OVERWEIGHT > P75		OBESITY > P75	
	Female	Male	Female	Male	Female	Male
07	00	22,27	89,50	100	26,31	50,00
08	00	10,00	52,00	100	16,00	80,00
09	00	19,23	80,00	100	08,00	26,92
10	00	1,53	72,00	100	24,00	26,92
11	14,02	04,16	100,00	100	23,80	37,50
12	00	20,83	85,70	100	09,50	33,33
13	00	00	71,40	88,88	09,50	22,22
14	00	12,50	23,07	100	00	18,75
15	00	00	23,07	76,19	00	04,76
16	00	00	33,33	50,00	00	14,28
17	00	00	16,66	50,00	00	00

It is verified that the school students that fit in the superior quartil present in almost every one overweight and/or obesity, being that this proportion (%) decreases in the ages of 15, 16 and 17 years for both genders.

This fact can, in share, be explained by the sample mortality occurred in this line age, in which a share of the school students denied to participate on the evaluations.

In table 02 and 3 are resumed the proportions (%) of students that attended the health criterion for the motor components established by *Physical Best* (AAHPERD, 1988).

BLE 03 –PROPORTION (%) OF FEMALE SCHOOL STUDENTS THAT REACHED THE HEALT CRITERION IN DIFFERENTE QUARTIS FOR THE MOTOR COMPONENTS.

CARDIO RESPIRATORY				STRENGHT/RESISTANCE				FLEXIBILITY			
< P25	P25–P50	P50-P75	> P75	< P25	P25–P50	P50-P75	> P75	< P25	P25–P50	P50-P75	> P75
08,04	10,34	03,44	03,44	04,60	04,60	06,90	04,60	13,79	12,64	17,24	12,64
09,33	12,00	08,00	06,89	05,33	09,33	06,66	04,00	16,00	17,33	13,33	18,66
12,12	09,09	10,10	04,00	09,09	15,15	09,09	05,05	13,13	16,16	14,14	16,16
10,10	09,09	08,08	02,02	05,05	08,08	04,04	01,01	14,14	16,16	11,11	15,15
10,58	08,23	03,52	01,01	01,18	03,53	03,53	00	16,47	12,94	16,47	12,94
04,70	08,23	05,88	05,88	08,23	07,06	02,35	01,17	17,65	17,65	15,29	16,47
09,52	05,95	05,95	00	04,76	02,38	03,57	00	17,86	15,47	17,86	19,05
03,92	09,80	03,92	01,19	05,88	03,92	01,96	01,96	21,57	17,65	19,61	17,65
01,92	05,76	15,38	09,80	01,92	05,77	00	09,61	19,23	21,15	21,15	19,23
10,41	08,33	12,50	09,61	04,16	04,16	02,08	02,08	16,66	18,75	16,66	25,00
00	00	00	00	09,09	04,54	04,54	00	09,09	18,18	18,18	13,64

E 03 – PROPORTION (%) MALE SCHOOL STUDENTS THAT REACHED THE HEALT CRITERION FOR DIFFERENT QUARTIS FOR THE MOTOR COMPONENTS.

CARDIO RESPIRATORY				STRENGHT/RESISTANCE				FLEXIBILITY			
< P25	P25–P50	P50-P75	> P75	< P25	P25–P50	P50-P75	> P75	< P25	P25–P50	P50-P75	> P75
11,36	10,22	09,09	00	04,60	04,60	06,90	04,60	15,90	15,91	12,50	14,77
07,59	08,86	06,32	01,13	05,33	09,33	06,66	04,00	15,90	15,19	08,86	13,92
17,64	13,72	10,78	03,79	09,09	15,15	09,09	05,05	17,47	14,56	11,65	08,74
14,56	14,56	08,73	02,94	05,05	08,08	04,04	01,01	07,92	11,88	11,88	11,88
11,57	03,15	04,21	01,94	01,18	03,53	03,53	00	08,42	14,73	08,42	10,52
09,57	03,19	07,44	01,05	08,23	07,06	02,35	01,17	02,13	10,63	10,64	07,44
04,22	08,45	04,22	01,06	04,76	02,38	03,57	00	08,45	08,45	14,08	12,67
07,81	07,81	03,12	02,81	05,88	03,92	01,96	01,96	07,81	17,19	07,81	07,81
07,05	07,05	07,05	04,68	01,92	05,77	00	09,61	11,76	16,47	20,00	17,65
05,55	05,55	07,40	01,17	04,16	04,16	02,08	02,08	11,11	18,52	16,66	20,37
13,04	08,69	17,39	03,70	09,09	04,54	04,54	00	21,74	17,39	21,74	17,39

This study's results point to the low levels of school students in both genders that attended the health criterion proposed by *Physical Best* for the cardio respiratory and muscle strength/resistance aptitude components in all ages, being that only on the flexibility component, approximately 50% of the school students attended the criterion.

The fact that most part of the school students evaluated didn't achieve the physical aptitude criterion related to health may be an indicator of future problems in these children and adolescents health as mentioned by Brodney, Blair and Lee (2003) and Bell et al (1986 apud MAITINO, 2005).

These results, probably, reflect the world tendency, or be it, the increase on overweight and obesity prevalence and decrease on the physical aptitude related to health, above all due to the impact of the "*modus vivendi*" of contemporaneous society.

04 Final Considerations

The results obtained on the present study for the cardio respiratory and muscle strength/resistance aptitude components, and the increase of overweight and obesity prevalence indexes among school students may be a reflex of the decrease of occupational physical activity that have been occurring in each decade.

Mellerowicz and Franz (1981 apud GLANER, 2003) described that in 100 years ago the energy required by men for the work was 9% of his muscular strength, and today responds to only 1%.

These facts attract the attention for the series of phenomenon that quietly install in our society, or be it, the increase on overweight and obesity prevalence, increase on the sedentary and a decrease on the motor performance on the physical aptitude components related to health. Fact that may during the years induce to a compromising of the functional and health condition.

Similar results were presented by other studies, what have been mobilizing some entities to promote actions of prevention to the sedentary and obesity.

In this sense, the ACMS (CELAFISCS/2006) relates that physical aptitude for children and adolescents must be developed as primary goal of incentive for the adoption of an appropriate lifestyle with the practice of exercises through all life, with the intent to develop and maintain a sufficient physical condition to improve the functional capacity and also health.

Already the stand of FIMS/WHO (1998) is in the sense that every children and adolescents, including those carriers of physical deficiency, try to bem involved in regular physical activities.

Facing this results, it suggested that actions clinic-educational must be directed to the adoption of behaviors to the practice of physical activity/exercise and adequate diet patterns, aiming the adoption of a healthy lifestyle.

The realization of new studies, as also the continuing of this study, for accompanying the growth behavior and development of the school students until adult life, may provide us understandings and answers over the *"impact"* that low levels of physical aptitude components related do health, overweight and obesity may cause on adult life.

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ANALYSIS OF THE RELATION BETWEEN PHYSICAL FITNESS INDICATORS RELATED TO STUDENTS' HEALTH IN PRIVATE SCHOOLS IN MARINGÁ-PR

ABSTRACT

Life style has been a central worry in studies related to obesity in the past years. Thus, the aim of this research was to perform an analysis among physical fitness indicators related to students' health in private schools in Maringá-PR-Brazil. The sample used was formed with 1630 students, 780 female and 850 male, aged between 7 and 17 years-old, who were attending the classes. The data collection was done between August and September, 2003, during Physical Education classes, by the research authors, Physical Education teachers and trainees of Physical Education university course. In order to analyse the patterns, the *Physical Best* (AAHPERD, 1988) health criteria were used; to determine overweigh and obese people cut values to Corporal Mass Index (CMI) were used, suggested by Dietz e col. (2000). The statistical analysis comprehended the figures calculation in quartiles. The produced results were presented with frequency and percentage of the students who fulfilled the criteria to every quartile. The main results of the present study refer to low number of students who fulfilled the criteria proposed by *Physical Best*, concerning cardiac breathing fitness and muscles strength/resistance in all ages, having only the flexibility aspect reached nearly 50% of the students fulfilling the criteria. As central conclusive aspects, it is possible to verify that cardiac breathing fitness and muscles strength/resistance showed, in every quartile, only a small percentage of students who fulfilled the health criteria, mainly in p75. It is important to observe that quartile p75 represents the cut values to overweigh people suggested

by Cole et al. (2000). The reached results to cardiac breathing fitness and muscles strength/resistance, as well as the figures increase concerning overweigh and obesity maintenance among our students may indicate a decrease in occupational physical activity, so as a lack of physical exercises in our society. **Keywords:** physical fitness, health, obesity.

L'ANALYSE DU RAPPORT ENTRE LES INDICATEURS DE L'APTITUDE FISIQUE RAPPORTÉ À LA SANTÉ DANS DES ÉCOLIERS D'UNE ÉCOLE DU RÉSEAU PRIVÉ DE MARINGÁ/PARANÁ.

RÉSUMÉ

Le style de vie vient d'être une préoccupation centrale des études rapportés à l'obésité dans ces dernères années. Dans ce sense, l'objectif de cette étude a été de developper une analyse entre les indicateurs d'aptitude fisique rapporté à la santé dans des écoliers d'une école du réseau privé de Maringá/Paraná/Brésil. L'échantillon employé s'est constitué de 1630 élèves, soyant 780 du sexe féminin et 850 du sexe masculin aux âges entre 07 et 17 ans inscrits à l'École. Le corpus des donnés a été realisé dans la période du aout à septembre de l'année de 2003 pendant les classes de Education Fisique du Collège pour les auteurs del'étude, professeurs d'Education Fisique de l'École et stagiaires du Cours d'Éducation Fisique. Pour l'analyse des paramètres moteurs on a utilisé les critères de santés établis par le Physical Best (AAHPERD, 1988), pour la détermination du sur poids et obésité on a utilisé les valeurs de coupe pour l'Indice de Masse Corporel (IMC), suggéré par Dietz et col.(2000). L'analyse statistique a inclus le calcule des valeurs en « quartis ». Les résultas produits ont été présenté avec la fréquence et valeurs en poucentage d'élèves qui ont atteint les critères pour chaque « quartil ». Les principaux résultats de cette étude se refèrent au bas indice d'écoliers qui ont atteint le critère proposé pour le Physical Best dans les composants d'aptitude cardio respiratoire et force/résistence musculaire dans tous les âges, soyant que seulement dans le composant de fléxibilité à peu près 50% des écoliers ont atteint les critères. Comme aspects conclusifs centrals on peut vérifier que l'aptitude cardio réspiratoire et le composant de force/résistance musculaire ont présenté dans chaque « quartil », seulement un petit pourcentage d'écoliers qui ont atteint les critères de santé, surtout dans p75. C'est important de'observer que le « quartil » p75 réprésente les valeurs de coupe pour le sur poids suggéré par Cole et al.(2000). Les résultats trouvés pour les composants d'aptitude cardio respiratoire et force/résistance musculaire aussi comme l'augmentation des indices de prévalence de sur poids et obésité entre les nôtres écoliers peuvent être un indicatif de la diminution de l'activité fisique et occupational, aussi comme la manque de la pratique de l'esercices fisique dans notre société.

ANÁLISIS DE LA RELACIÓN ENTRE LOS INDICADORES DE LA APTITUD FÍSICA RELACIONADA A LA SALUD EN ESCOLARES DE ESCUELA DE LA RED PRIVADA DE MARINGÁ/PR.

RESUMEN

El estilo de vida ha sido una preocupación central de estudios relacionados a la obesidad en los últimos años. En ese sentido, el propósito de ese estudio fue el de desarrollar un análisis entre los indicadores de aptitud física relacionada a la salud en escolares de una escuela de la red privada de Maringá/PR/Brasil. La muestra utilizada se constituyó de 1630 alumnos, siendo 780 del sexo femenino y 850 del sexo masculino, con edades entre 7 y 17 años matriculados en la Escuela. La colecta de datos fue realizada en el período de agosto a septiembre del año de 2003, durante las clases de Educación Física del Colegio, por los autores del estudio, profesores de Educación Física de la Escuela y practicantes del Curso de Educación Física. Para análisis de los parámetros motores se utilizó los criterios de salud establecidos por el *Physical Best* (AAHPERD, 1988), para determinación del sobrepeso y obesidad se utilizó los valores de corte para Índice de Masa Corporal (IMC), sugeridos por Dietz y col.(2000). El análisis estadístico incluyó el cálculo de los valores en cuartiles Los resultados producidos fueron presentados con la frecuencia y valores porcentuales de alumnos que atendieron los criterios para cada cuartil. Los principales resultados del presente estudio se refieren al bajo índice de escolares que atendieron el criterio propuesto para el *Physical Best* en los componentes de aptitud cardiorrespiratoria y fuerza/resistencia muscular en todas las edades, siendo que apenas en el componente de flexibilidad aproximadamente 50% de los escolares atendieron los criterios. Como aspectos conclusivos centrales se puede averiguar que la aptitud cardiorrespiratoria y el componente de fuerza/resistencia muscular, presentaron en cada cuartil, apenas un pequeño porcentual de escolares que atendieron los criterios de salud, principalmente en el p75. Es importante observar que el cuartil p75 representa los valores de corte para sobrepeso sugerido por Cole et al. (2000). Los resultados encontrados para los componentes de aptitud cardiorrespiratoria y fuerza/resistencia muscular, bien como aumento de los índices de predominio de sobrepeso y obesidad, entre nuestros escolares pueden ser un indicativo de la disminución de la actividad física ocupacional, bien como de la falta de la práctica de ejercicios físicos en nuestra sociedad. **Palabras-clave:** aptitud física, salud y obesidad.

ANÁLISE DA RELAÇÃO ENTRE OS INDICADORES DA APTIDÃO FÍSICA RELACIONADA À SAÚDE EM ESCOLARES DE ESCOLA DA REDE PRIVADA DE MARINGÁ/PR.

RESUMO

O estilo de vida tem sido uma preocupação central de estudos relacionados a obesidade nos últimos anos. Nesse sentido, o propósito desse estudo foi o de desenvolver uma analise entre os indicadores de aptidão física relacionada à saúde em escolares de uma escola da rede privada de Maringá/PR/Brasil. A amostra utilizada constituiu-se de 1630 alunos, sendo 780 do sexo feminino e 850 do sexo masculino, com idades entre 7 e 17 anos matriculados na Escola. A coleta de dados foi realizada no período de agosto a setembro do ano de 2003, durante as aulas de Educação Física do Colégio, pelos autores do estudo, professores de Educação Física da Escola e estagiários de do Curso de Educação Física. Para analise dos parâmetros motores utilizou-se os critérios de saúde estabelecidos pelo *Physical Best* (AAHPERD, 1988), para determinação do sobrepeso e obesidade utilizou-se os valores de corte para Índice de Massa Corporal (IMC), sugeridos por Dietz e col.(2000). A análise estatística incluiu o cálculo dos valores em quartis. Os resultados produzidos foram apresentados com a freqüência e valores percentuais de alunos que atenderam os critérios para cada quartil. Os principais resultados do presente estudo referem-se ao baixo índice de escolares que atenderam o critério proposto para o *Physical Best* nos componentes de aptidão cardiorrespiratória e força/resistência muscular em todas as idades, sendo que apenas no componente de flexibilidade aproximadamente 50% dos escolares atenderam os critérios. Como aspectos conclusivos centrais pode-se verificar que a aptidão cardiorrespiratoria e o componente de força/resistência muscular, apresentaram em cada quartil, apenas um pequeno percentual de escolares que atenderam os critérios de saúde, principalmente no p75. É importante observar que o quartil p75 representa os valores de corte para sobrepeso sugerido por Cole et al. (2000). Os resultados encontrados para os componentes de aptidão cardiorrespiratória e força/resistência muscular, bem como aumento dos índices de prevalência de sobrepeso e obesidade, entre os nossos escolares podem ser um indicativo da diminuição da atividade física ocupacional, bem como da falta da pratica de exercícios físicos em nossa sociedade.

Palavras-chave: aptidão física, saúde e obesidade.