

63 - VALUATION OF PHYSICAL ACTIVITY IN STUDENTS FROM FIRST TO FOURTH YEAR OF HIGH SCHOOL IN EDUCATIONAL ESTABLISHMENTS WITH THREE DIFFERENT ADMINISTRATIVE DEPENDENCES IN THE CITY OF CHILLÁN, CHILE

MOACYR PORTES JÚNIOR;
 FELIPE PARRA RIQUELME;
 MARCELO UTRERAS MORA
 Universidad Autónoma de Chile, sede Talca.
mportesj@uautonoma.cl

doi: 10.16887/85.a1.63

INTRODUCTION

In Chile, as part of the restructuring and updating the contents of learning, the educational policies made changes in Curricular bases and in the field of Physical Education, within these bases. From the year 2013, the Physical Education shall be called: Health and Physical Education. The idea for these changes is to increase the emphasis on health, with regard to health care from the practice physical activities. (Chile, 2013) These should be encouraged and made more massive way during Physical Education lessons (Chile, 2013), and seeks to establish an environment and spaces to encourage physical activity, with goals of improving physical condition of students and maximize the scope of formation processes in nutrition and healthy lifestyles. (Salinas C. & Vio del R., 2011)

Despite all the public policies and the whole academic movement and health around the phenomenon of physical activity, and results of, for health and quality of life of the Chilean population, it is believed that it is important to know that the students delivers valuation physical activity, and the relationship with their personal life, not only in statistics and generalized society.

Perhaps the difficulties in deployment and implementation of public policies on health education, do not reach their goals because of the value of the students deliver to this phenomenon.

Therefore, the objective of this study was to measure the level of valuation that deliver physical, educational activity for the first to four grades of High School in three educational establishments of the city of Chillán, VIII Region, Region "del Bio Bio," Chile.

This same study is being conducted in other parts of Chile to future, from the results of the validation process, to conduct a survey that can deliver national outcomes on the subject.

METHODOLOGY

The study is descriptive, exploratory, non-experimental (Hernández Sampieri, Fernandez-Collado, Baptista Lucio, 2010; Tomas & Nelson, 2006). The analysis is descriptive, comparative, cross-range and was made from descriptive statistical analysis using SPSS, version 22.0. For the normalization of the sample Kolmogorov Smirnov test was applied. (Hernández Sampieri, Fernandez-Collado, Baptista Lucio, 2010; Tomas & Nelson, 2006), the Anova test was also applied to compare the measurements; subsequently the statistical test Post Hoc Scheffé was used to see the statistical significance of these measures and to deliver results at $P < 0.05$. The t-Student test was also applied to compare groups. (Hernández Sampieri, Fernandez-Collado, Baptista Lucio, 2010; Tomas & Nelson, 2006)

The sample was not intentional probability, obtained from three educational establishments, one for each administrative dependence of the Chilean education: private pay, private subsidized and municipal (public); of which we obtained a population of 647 students in the fourth year of high school first, which in Chile are identified as: NM1, NM2, NM3 and NM4 (NM Level = High School).

The Educational Establishment A, municipal, full sample, 190 students. Educational Establishment B, particularly subsidized: total sample, 389 students. Educational Establishment C, particular: Total sample 68 students.

From the Kolmogorov-Smirnov test in order to determine the homogeneity of the groups indicated that it was not possible to compare the groups to present sample. (García, González, & Jornet, 2010) Thus an adjustment was made of the sample (systematic random probability) from the establishment with smaller sample, which were equivalent to 68 students per educational establishment. After the adjustment is made, the total sample consisted of 204 students, 68 for each establishment.

The instrument for data collection was Questionnaire Valuation of Physical Activity, established by Campos Gomez, Vilcazán, Arruda, Hespagnol-Cossio and Bolaños (2012), with 11 questions and the main variable is physical activity.

RESULTS

The questionnaire has 11 questions, for which values to each alternative were assign, reaching a total of 43 points. To these points corresponds to a valuation indicator, which may be: very good, good, regular, bad, very bad. The following table presents the list of indicators with scores

Table No. 1. Indicators that correspond to the average achieved

Indicators	Score Average
Very Good	34,5 - 43
Good	25,9 - 34,4
Regular	17,3 - 25,8
Bad	8,7 - 17,2
Very Bad	0,0- 8,6

According to the categorization of five criteria indicators, there was a division of the mean maximum score five equal parts (indicators), achieving a numerical equality between them. (Pollock & JH., 1973)

The average points between the three institutions and the overall average shows are presented in the following table:

Table N° 2. Average of the three establishments

To compare and determine if these values are significant, was applied the Post Hoc Scheffe analysis ($P < 0.05$)

Establishment	N	Average	Indicator of the qualification	Standard Deviation
Establishment A	68	23,52	Regular	7,62
Establishment B	68	25,26	Regular	5,47
Establishment C	68	26,64	Good	6,48
Total	204	25,14	Regular	6,67

Table N° 3. Comparison between Establishments

Establishments	Establishment	Significance
Establishment A	Establishment B	,310
	Establishment C	,024*
Establishment B	Establishment A	,310
	Establishment C	,474
Establishment C	Establishment A	,024*
	Establishment B	,474

The difference is significant between the Establishment A and the Establishment C, considering that there are statistically significant differences ($P < 0.05$); that represents a higher level of valuation in Establishing A. Between A and B was not significant; and between B and C, either.

A comparison between ages showed the following results:

Table N° 4 Comparison between ages and indicators

Age	N°	Average	Indicators	Standard Deviation
14,00	63	24,34	Regular	6,21
15,00	76	25,32	Regular	6,73
16,00	31	24,77	Regular	7,49
17,00	17	26,94	Good	5,66
18,00	17	26,17	Good	7,67
Total	204	25,14		6,67

No significant differences were shown in the proof of Post Hoc Scheffé, to analyze the significance between ages ($P < 0.05$).

Table N° 5. Descriptive data of the sample by genre. Using the t-Student test

	Genre	N	Average	Standard Deviation
Physical Activity Level	Men	96	27,22	6,83
	Women	108	23,29	5,98

By analyzing the average men, the score was 27.22 points. This indicates that the evaluation of physical activity is "good", while women gained an average of 23.29 points, which indicates a valuation "Regular" ($P = 0.000$, significant difference).

According to the results delivered, differences were found between the three establishments (significance, $P < 0.05$, Post Hoc Scheffé): A, with 23.52 points; C, with 26.64 points, which indicates a valuation indicator within the "Good". To compare the mean values, was applied the ANOVA test of a factor Post Hoc Scheffé. The difference in averages is significant ($P < 0.05$).

The results, according to the analysis, there was a difference between the Establishment A and C ($P < 0.024$). These differences can be attributed to socioeconomic status of each establishment. The Establishment A, corresponds to a low socioeconomic status; and C, a high level. (Agencia de la Calidad de la Educación, 2012)

For this study, it was demonstrated that at higher socioeconomic levels, carry greater amounts of physical activity, both inside the establishments, as outside them. Students of high socioeconomic status have better infrastructure and better practice; functionality beyond other social levels, which may be embedded in specific spaces for performing physical activity, with appropriate implements and even in schools, during recesses and regular classes. It is also important to consider the quality and expertise of teachers that even that is not part of this study, is confirmed by government studios (Agencia de la Calidad de la Educación, 2012) and sport specialization. (Olivares, 2007)

Unfortunately, educational establishments lower socioeconomic stratum, may have deficiencies in infrastructure and in education policy, in which breaks or regular classes are not a conducive space to play some sports or recreational practice. (Abraldes&Argudo 2008)

Another factor that may relate to the valuation of the Establishment C is greater than in A and B, is related to cultural factors, linked to the years of schooling of parents of students, confirmed by Chilean studies (Agencia de la Calidad de la Educación, 2012). Higher degrees of education could be considered as a better understanding in regard to body care and quality of life, where physical activity is crucial because of the multiple benefits that grant. (Guzmán, 2010).

Considering the analysis of the results by age, it is important to note that this study presents data that may go against some information from other studies. Or maybe they're identifying a Chilean reality. Studies indicate that the first phase of adolescence, close to 10 years, marks a period in which a large number of teenagers fail to engage in physical activity, to prefer another type of activity. (BÜHRING, Oliva& Bravo, 2009) This study showed an opposite result; the older deliver more value to physical activity than smaller ones, at least in this sample.

But confirmed that males had higher levels of physical activity (M. Ponson, 2010; Seron, Muñoz, & Lanas, 2010; Castillo & Balaguer, 1998), with indicator "Good". The results showed that men engage in physical activity during two days in the week and that women, once a week, with indicator "Regular" from this study. Perhaps the preference that men have for sports, relative to women. (IND, 2012)

CONCLUSIONS

According to the results of this study, it can be concluded that educational establishments A and B, showed a level of valuation of physical activity, with indicator "Regular" and the Educational Establishment C, presented indicator of "Good" for same goal. In this case, it may be inferred, as was done during the presentation of the results that may be differences in socioeconomic factors.

But considering the three establishments, the average was 25.14 points, which generates the indicator "Regular". This confirms data presented by the Government of Chile regarding the physical condition of the Chilean students, and also confirm data from the World Health Organization on the same topic. (Chile, 2011; Chile, 2011, B; Chile, 2012 A, B, C; Chile, 2010) Are confirmed data confirm that men have higher levels of physical activities that women and, in relation to age, it was shown that within the ages of 17 and 18 years, the show presents a greater and greater valuing of physical activity.

REFERENCES:

- ABRALDES, J., & ARGUDO, F. Utilización del recreo Escolar por niños de 4º y 6º de Primaria. Retos: nuevas tendencias en educación física, deporte y recreación 88,89-90, 2008.
- AGENCIA NACIONAL DE LA CALIDAD DE LA EDUCACIÓN. Disponible en: www.simce.cl; acceso en 26 de octubre de 2014.
- BUHRING B, Kristian; OLIVA M, Patricio; BRAVO C, Claudio. Determinación no experimental de la conducta sedentaria en escolares. Rev. chil. nutr., Santiago, v. 36, n. 1, marzo 2009. Disponible en <http://www.scielo.cl/scielo.php?script=sci_arttext&pid=S0717-75182009000100003&lng=es&nrm=iso>. accedido en 26 oct. 2014. <http://dx.doi.org/10.4067/S0717-75182009000100003>.
- CASTILLO, I., & BALAGUER, I. Patrones de actividades físicas en niños y adolescentes. Educación Física Y Deporte, 22-27, 1998.
- CHILE. Mineduc implementa cambios curriculares para este 2013 en educación básica. Ministerio de Educación, disponible en: http://www.evaluacioninicia.cl/index2.php?id_contenido=22242&id_portal=34&id_seccion=2263, 2013, B.
- _____. Importancia de la Actividad Física en los Niños, Elige Vivir Sano, 2012, A Disponible en: <http://www.eligevivirsano.cl/2012/08/06/la-importancia-de-la-actividad-fisica-en-los-ninos/>, acceso: 24 de julio de 2013.
- _____. Show Lazy Town y Elige Vivir Sano lanzan campaña para incentivar una vida saludable, 2012 B. Disponible en: <http://www.gob.cl/prensa-cecilia-morel/2012/12/05/show-lazy-town-y-elige-vivir-sano-lanzan-campana-para-incentivar-una-vida-saludable.htm>, acceso: 12/05/2013.
- _____. Riesgos del Sedentarismo, Programa Elige Vivir Sano, 2012 C. Disponible en: <http://www.eligevivirsano.cl/2012/02/08/actividad-fisica-riesgos-del-sedentarismo/>, acceso: 09 de julio de 2013.
- _____. SIMCE Educación Física, Agencia de Calidad de la Educación, Gobierno de Chile, 2011 A, Disponible en: www.simce.cl, acceso: 22 de octubre de 2014.
- _____. Informe de Resultados Educación Física 2011, Ministerio de Educación, 2011 B, Disponible en: www.simce.cl, acceso: 11 de julio de 2013.
- _____. Informe de Resultados Educación Física 2010, Ministerio de Educación, 2010, Disponible en: www.simce.cl, acceso: 11 de julio de 2013.
- GARCÍA-BELLIDO, R.; GONZÁLEZ SUCH, J.; JORNET MELIÁ, J.M. SPSS: Análisis de Fiabilidad. Material elaborado en el marco de la Convocatoria de Innovación de 2010 del Vicerectorat de Convergència Europea i Qualitat de la Universidad de Valencia; Disponible en: http://www.uv.es/innomide/spss/SPSS/SPSS_0801B.pdf, acceso: 11 de julio de 2013.
- GÓMEZ CAMPOS, R.; VILCAZÁN, E.; ARRUDA, M. DE; HESPAÑOL, J.; CÒSSIO-BOLAÑOS, M.A. Validación de un Cuestionario para Validación de la Actividad Física en Escolares Adolescentes. An. Fac. Med. 2012; 73(4):307-13, 2012.
- GUZMAN, R. Valoración Médico Deportiva: Aspectos Biopsicosociales Relacionados con las Actividades Físicas y deportivas en Niños y Adolescentes. Revista Clin Med Fam, 192, 2010.
- HERNÁNDEZ SAMPIERI, R., FERNÁNDEZ COLLADO, C., BAPTISTA LUCIO, M. Metodología de la Investigación. Quinta Edición. McGRAW-HILL/ Interamericana Editores, s.a. de C.V. México D.F, 2010.
- INSTITUTO NACIONAL DE DEPORTES DE CHILE, IND. Encuesta Nacional de Hábitos de Actividad Física y Deporte en la población chilena igual o mayor de 18 años, 2012. Disponible en: http://www.ind.cl/estudios-e-investigacion/investigaciones/Documents/2012/encuesta_nacional_habitos.pdf, acceso: 17 de julio de 2013.
- OLIVARES C, SONIA ET AL. Estado nutricional, consumo de alimentos y actividad física en escolares mujeres de diferente nivel socioeconómico de Santiago de Chile. Rev. méd. Chile, Santiago, v. 135, n. 1, enero 2007. Disponible en <http://www.scielo.cl/scielo.php?script=sci_arttext&pid=S0034-98872007000100010&lng=es&nrm=iso>. accedido en 26 oct. 2014. <http://dx.doi.org/10.4067/S0034-98872007000100010>.
- POLLOCK, M., & JH., W. Exercícios na saúde e na doença: avaliação e prescrição para prevenção e reabilitação. Rio de Janeiro: Medsi, 1973.
- PONSON M., A. DE. Adolescentes chilenos son los más sedentarios de Sudamérica. Diario La Tercera, edición de 31/03/2010, Chile, 2010.
- SALINAS C., J., & VIO DEL R., F. (2011). Programas de Salud y Nutrición sin Política de Estado: el caso de la promoción de salud escolar en Chile. Rev. chil. nutr., vol.38 no.2 Santiago jun. 2011.
- SERÓN, P., MUÑOZ, S., & LANAS, F. Nivel de Actividad Física Medida a través del Cuestionario Internacional de Actividad física c. Rev. Med Chile, 1233- 1237, 2010.
- TOMAS, J.R. Y NELSON, J.K. Métodos de Investigación en Actividad Física. España: Paidotribo, 2006.

5Poniente # 1670, Talca, Chile.

VALUATION OF PHYSICAL ACTIVITY IN STUDENTS FROM FIRST TO FOURTH YEAR OF HIGH SCHOOL IN EDUCATIONAL ESTABLISHMENTS WITH THREE DIFFERENT ADMINISTRATIVE DEPENDENCES IN THE CITY OF CHILLÁN, CHILE

ABSTRACT

Perhaps the difficulties in deployment and implementation of public policies on health education, do not reach their goals because of the value they deliver to school this phenomenon. The objective of this study was to measure the level of valuation that deliver physical, educational activity for the first four years of Teaching Medium in three educational establishments of the city of Chillán, Region VIII, Region, "del Bio Bio," Chile. Method: A descriptive, exploratory, non-experimental study; Descriptive analysis is comparative, cross scope and was taken from statistical analysis (normalization compared, statistically significant, comparisons between groups); probabilistic sample of unintentional kind, obtained from three educational establishments, one for each of the administrative offices of the Chilean education: private pay, private subsidized and municipal (public); sample of 204 high school students (68 per educational establishment); the instrument for data collection was Questionnaire Assessment of Physical Activity, established by Campos Gomez, Vilcazán, Arruda, and Hespagnol Cossio-Bolaños (2012), with 11 questions and the main variable is physical activity. Results: men valued more physical activity than women; paid the higher educational establishment showed valuation of physical activity, followed by private subsidized and public order; students between the ages of 17 and 18 years, delivering more value to physical activity. Conclusions: In this study, the educational establishment with higher socioeconomic level, had higher rates of valuation of physical activity; Older students valued more.

KEY WORDS: physical activity, valuation, teenagers.

APPRECIATION DE L'ACTIVITE PHYSIQUE DANS LES ECOLES DE PREMIERE A QUATRIEME ANNEE DU LYCEE DE TRES ESTABLESSEMENTS SCOLAIRES AVEC DIFFERENTES DEPENDANCES ADMINISTRATIVES DANS LA VILLE DE CHILLAN, CHILI

RÉSUMÉ

Peut-être les difficultés de mise en œuvre et l'exécution des politiques publiques d'éducation pour la santé, n'a pas atteint ses objectifs, en raison de la valeur que les écoles offrent à ce phénomène. L'objectif de cette étude était de mesurer le niveau d'évaluation qui livrent à l'activité physique, élèves de première à quatrième années du secondaire, dans les trois établissements scolaires dans la ville de Chillan, la région VIII, la région del Bio Bio, Chili. Méthode : étude descriptive, exploratoire, non expérimental ; analyse est portée descriptive, comparative, transversale et était issu d'une analyse statistique (normalisation, comparaison, signification statistique, la comparaison entre les groupes) ; spectacles probabiliste de type non intentionnelle, provenant de trois établissements d'enseignement, un de chacune des dépendances administratives de l'éducation chilienne : salaire privé, privé subventionné et municipal (public) ; 204 montre des lycéens (68 par établissement d'enseignement) ; l'instrument de collecte de données a été l'évaluation de l'activité physique Questionnaire, établie par Gomez Campos, Vilcazán, Ahmadi, Hespagnol et Cossio-Bolaños (2012), avec 11 questions et la principale variable est l'activité physique. Résultats : les hommes prennent en considération l'activité plus physique que les femmes ; l'établissement de formation payé d'évaluation plus élevée de l'activité physique, suivie par le privé subventionné et enfin le public ; étudiants âgés de 17 à 18 ans, fournir une plus grande valeur à l'activité physique. Conclusions : pour cette étude, l'établissement d'enseignement avec un niveau socio-économique plus élevé, a présenté les indices principaux d'évaluation de l'activité physique ; élèves plus âgés plus valorisées.

MOTS-CLÉS : activité physique, évaluation, adolescents.

VALORACIÓN DE LA ACTIVIDAD FÍSICA EN ESCOLARES DE PRIMER A CUARTO AÑOS DE LA ENSEÑANZA MEDIA EN TRES ESTABLECIMIENTOS EDUCACIONALES CON DIFERENTES DEPENDENCIAS ADMINISTRATIVAS, EN LA CIUDAD DE CHILLÁN, CHILE

RESUMEN

Tal vez las dificultades de implantación y realización de políticas públicas de educación para la salud, no alcancen sus objetivos, por cuenta del valor que los escolares otorgan a este fenómeno. El objetivo de este estudio fue medir el nivel de valoración que entregan hacia la actividad física, escolares de primero a cuarto años de la Enseñanza Media, en tres Establecimientos Educativos de la ciudad de Chillán, VIII Región, Región del Bio Bio, Chile. Método: estudio descriptivo, exploratorio, no experimental; análisis es descriptiva, comparativa, de alcance transversal y fue hecha a partir de análisis estadística (normalización, comparación, significancia estadística, comparación entre grupos); muestra probabilística de tipo no intencional, obtenida a partir de tres Establecimientos Educativos, uno en cada una de las dependencias administrativas de la educación chilena: particular pagado, particular subvencionado y municipal (público); muestra de 204 estudiantes de la Enseñanza media (68 por Establecimiento Educativo); el instrumento para recolección de datos fue el Cuestionario de Valoración de la Actividad Física, establecido por Gomez Campos, Vilcazán, Arruda, Hespagnol e Cossio-Bolaños (2012), con 11 preguntas y la variable principal es la actividad física. Resultados: los hombres valoran más la actividad física que las mujeres; el Establecimiento Educativo pagado presentó mayor valoración de la actividad física, seguido por el particular subvencionado y por fin el público; estudiantes entre las edades de 17 y 18 años, entregan mayor valor hacia la actividad física. Conclusiones: para este estudio, el establecimiento educacional con nivel socioeconómico superior, presentó mayores índices de valoración de la actividad física; estudiantes con más edad valoran más.

PALAVRAS CLAVES: actividad física, valoración, adolescentes.

VALORAÇÃO DA ATIVIDADE FÍSICA EM ESCOLARES DE PRIMEIRO A QUARTO ANO DO ENSINO MEDIO EM TRÊS ESTABELECIMENTOS EDUCACIONAIS COM DIFERENTES DEPENDÊNCIAS ADMINISTRATIVAS, NA CIDADE DE CHILLÁN, CHILE

RESUMO

Talvez as dificuldades de implantação e realização de políticas públicas de educação para a saúde, não alcancem seus objetivos, por causa do valor que os escolares entregam a este fenômeno. O objetivo deste estudo foi medir o nível de valorção que entregam à atividade física, escolares de primeiro a quarto anos do Ensino Medio, em tres estabelecimentos educacionais da cidade de Chillán, VIII Região, Região "del Bio Bio", Chile. Método: estudo descritivo, exploratório, não experimental; análise é descritiva, comparativa, de alcance transversal e foi feita a partir de análise estatística (normalização, comparação, significância estatística, comparação entre grupos); mostra probabilística de tipo não intencional, obtida a partir de três estabelecimentos educacionais, um de cada uma das dependências administrativas da educação chilena: particular pago, particular subvencionado e municipal (público); mostra de 204 estudantes do ensino médio (68 por estabelecimento educacional); o instrumento para coleta de dados foi o Questionário de Valorção da Atividade Física, estabelecido por Gomez Campos, Vilcazán, Arruda, Hespagnol e Cossio-Bolaños (2012), com 11 perguntas e a variável principal é a atividade física. Resultados: os homens valoram mais a atividade física que as mulheres; o estabelecimento educacional pago apresentou maior valorção da atividade física, seguido pelo particular subvencionado e por fim o público; estudantes entre as idades de 17 e 18 anos, entregam maior valor à atividade física. Conclusões: para este estudo, o estabelecimento educacional com nível sócioeconômico superior, apresentou maiores índices de valorção da atividade física; estudantes com mais idade valoram mais.

PALAVRAS-CHAVE: atividade física, valorção, adolescentes.