2 - PSYCHOMOTOR PROFILE: FIFTH GRADE SCHOLARS CHARACTERIZATION IN FUNDAMENTAL TEACHING OF CAXIAS DO SUL CITY

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1. INTRODUCTION

According to the national curricular parameters (BRASIL.MEC, 1998), the physical education general goal in motor development during elementary school is to allow the student to solve body problems in different levels, controlling the effort in a consistent way, considering that the corporal competence improvement and development is caused by perseverance and regularity, and should happen in a healthy and balanced way. Hurtado (1988) says that one of physical education finalities is to develop and improve the psychic and physical abilities, indispensable to the complete human formation and contributing to a personality emotionally balanced, adjusted socially and well developed.

The psychomotor profile represents the quality of the communication between the psycho and the motor in a specific moment of the kids development, then, to analyze it, it wouldn't be enough just the tests application, but it's also necessary to consider many factors' interaction, such as the organism, environment, culture, socioeconomical and socioaffective conditions. So, considering that the psychomotricity is known as the superior integration of motricity, result of an intelligible relation between the kid and the environment, that translates a relation between psycho and motor activity (FONSECA, 1995), the present study questions: which is the fifth grade children psychomotor profile in the city of Caxias do Sul? The specific choice of fifth grade children is due to the fact that in public network teaching, the physical education classes in the previous grades are generally administered by nonspecialized professionals and, based on this principal, the students will have the first contact with the physical education teacher, in this grade.

It's searched, as a general objective of this work, to characterize the scholars' psychomotor profile in public and private network, in fifth grade of the elementary school in the city of Caxias do Sul. As specific objectives, the proposition is: identifying the psychomotor factors proposed by BPM; classifying and comparing the psychomotor development related to the gender feminine and masculine; and analyzing and comparing the psychomotor development between the student from private and public schools, considering the participation in extra class orientated and free physical activities.

2. LITERATURE REVISION

Psychomotricity is the science where many biological, psychological, sociological and linguistic points of view cross and meet each other, promoting the human integration considering the relationship or emotive aspects, cognitive and motor, being understood as a globalized glance that perceives a relation between motricity and the psycho. In synthesis, psychomotricity is the expression of a thought in a precise, economic and harmonic motor activity (AJURIAGUERRA, 1980: COSTE, 1992, STATES: MEUR, 1991).

A limited psychomotor development interferes directly in the human being life, creating problems in daily and common activities. The movement is biologically, psychologically, social and culturally important, because it's through the movement execution that people interact with the environment and relate to each other, learning about themselves and their limits, their capability and problems solution (PAIM, 2005).

Referent to the psychomotor profile, the psychomotor system components characterize kids' powers and difficulties, giving support to identify, diagnose and interfere with the difficulties and learning (FONSECA,1995):

The *tonicity* is the fundamental basis, the guarantee of all human motor activities. It's the degree of tonus in which the muscles are to accomplish determined jobs, not only in repose but also in movement, having fundamental participation on the motor development, and equally on the psychologic development. The tonicity is established from birth to 12 months of life, covering the muscles responsible for biological and psychologic functions, with the minimum energy spending.

The *equilibration* is basic condition of psychomotor organization, because it involves a multiplicity of postural adjustments that give support to any motor answer, being essential to the kid psychoneurologic development and primordial to all coordinated and intentional actions, forming the basis of the learning process.

The *lateralization* emerges in the organization and functional hierarchy of the two brain hemispheres, reflecting the sensorial-motor integration capacity of the two body sides, turning into a kind of endopsycho radar of relation and orientation with the exterior world.

The *notion of body* involves the reception, the analysis and the storage of information that comes from the body. According to Ajuriaguerra (1980), the more the kid evolves, the more he/she improves the body knowledge and it's through it that he/she makes all vital experiences and organizes the personality.

The *space-temporal structure* goes as a functional organization from the lateralization and the body notion, since it's necessary to develop the inside spacial consciousness of the body before the reference in the exterior space.

The *global praxis* helps to unfold the global integration activity, and a series of factors contributes in this activity execution, for example, the tonicity, the equilibrium (gravity control), the lateralization and the body notion, space and time.

The *fine praxis* tries to study, in a kid, the manual constructive capability and the bimanual dexterity, as a psychomotor component relevant for all learning processes, being one of the most important scholar learning factors.

3. MATERIAL AND METHOD

The sample was accomplished in 846 fifth grade children from elementary school, representing 10% of 8,042 scholars, with age from 10 to 14 years old, enrolled in public and private schools of Caxias do Sul city (RS). Three private schools were researched (85 students), five state schools (330 students) and seven municipal schools (431 students).

The instruments used in the data collect were a Consent Term, through which selected school(s) managers authorizes the children participation on the study, a questionnaire to collect kids information related to this research and the Fonseca´s Psychomotor Battery (BPM) protocol (1995).

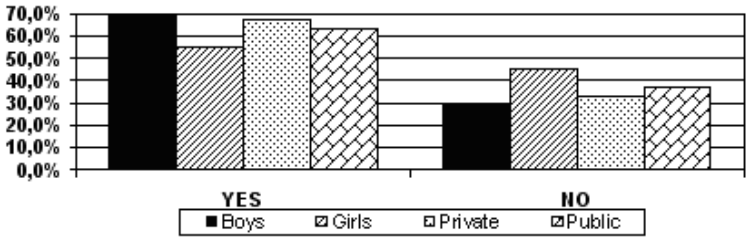
The obtained information referring to the seven psychomotor factors were pointed from 1 to 4, being 1 referent to the apraxic profile (weak), 2 to dispraxic (satisfactory), 3 to eupraxic (good) and 4 to hiperpraxic (excellent). Those information were analyzed according to the gender (masculine or feminine) and to the school type (public or private). According to the literature, the

evaluated age must present a good (profile 3) to excellent (profile 4) level, in average.

4. RESULTS ANALYSIS

Analyzing the results in relation to the practice of voluntary activities (Figure 1), the percentage is balanced in respect to both education systems. In relation to gender, the boys appear more active than the girls, 70% against 55%, respectively. The data agree to Papalia and Olds (1981) where, throughout history, it was expected from women a bigger devotion in relation to the cares with the house and children. The male would have the function to provide and to protect the home. That could be the reason why men are more active.

Figure 1 - Voluntarv Phvsics Activities



Related to the beginning of scholar physical education classes with a specialized professional (Figure 2), it is verified that the difference found on the result is related to the kids social classes, and not necessarily to the public teaching of this subject in the first grades of elementary school. 29% of the students from private schools had the first contact with specialized teachers on child education, and in the public teaching network, the predominance is in fifth and fourth grades (32% and 39%, respectively).

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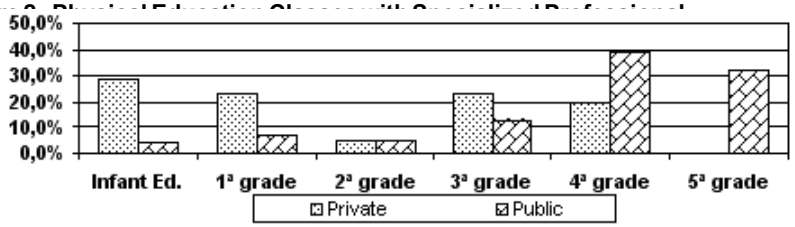


The next analysis is based on the BPM results.

The results to the psychomotor tonicity factor from the inferior and superior members (Figure 3) verified that none student presented the profile 1. In a general way, the tested scholar's tonicity is found in profile 3. It didn't show any difference between the genders. Related to the teaching networks, the difference appeared on the superior member's tonicity (4b), where the private schools predominated in profile 4 (49%), and the public schools in profile 3 (53%).

Figure 3 - Tonicity

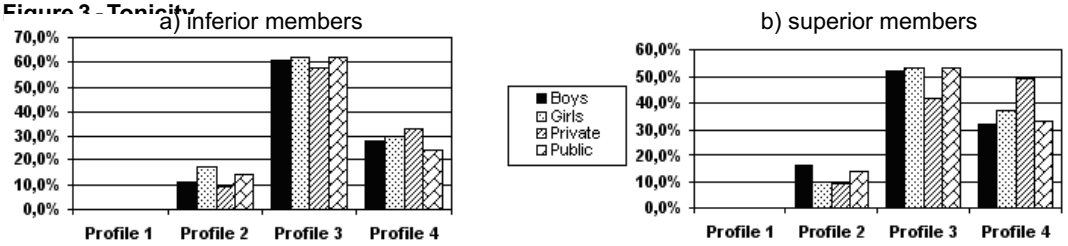
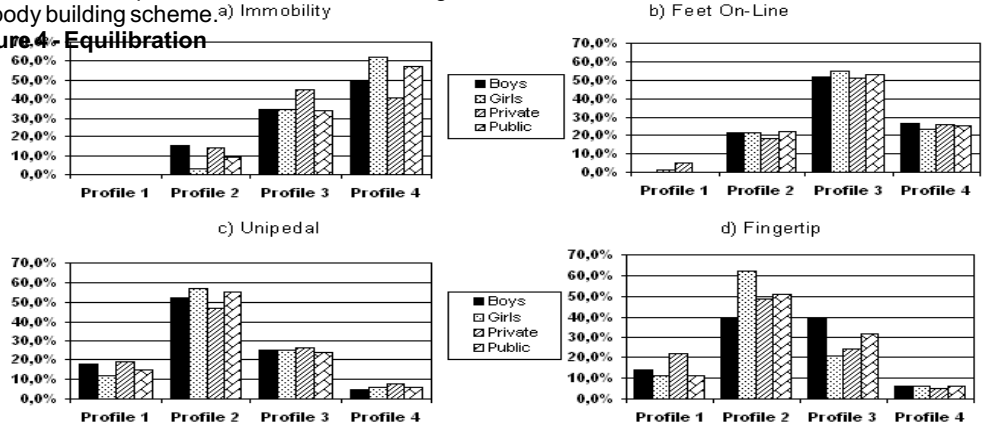
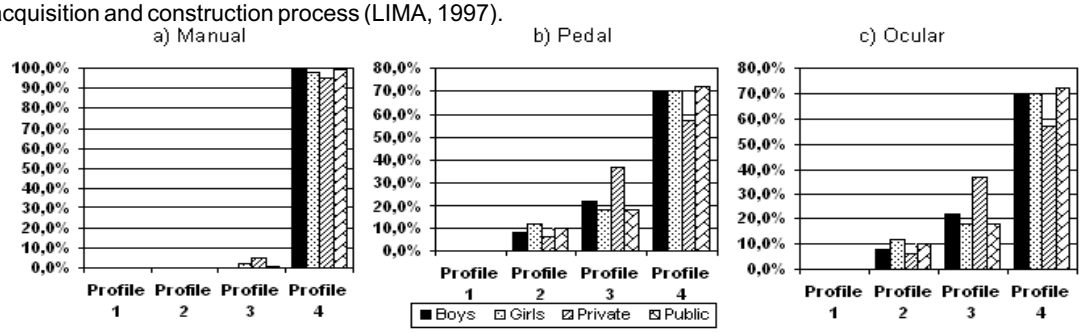


Figure 4 demonstrates the results referring to the equilibration. Gallahue and Ozmun (2005) point to the fact that at 7 years of age, kids are capable of keeping the balance with closed eyes, and that this ability can be improved with time. Related to that, it's possible to observe in immobility (4a), hiperpraxic predominance, where 50% of the boys are found on this profile, and they are exceeded in 12% by the girls. Regarding teaching places, public schools (57%) exceed the private ones (41%). Observing the equilibrium kept with the feet on-line (4b), profile 3 prevailed in the gender and both education systems. Observing the unipedal balance and fingertip (4c and 4d, respectively), the predominance of profile 2 is verified. In figure 4c (unipedal), the results were similar to the variables analyzed, and in figure 4d (fingertips), a bigger difference between the genders was found, because 80% of the boys are equally divided between profile 2 and 3, and 62% of the girls are found on profile 2. Ajuriaguerra (1980) reinforces that the equililibrium is essential to the general motor coordination, in other words, a bad balance interferes directly on the body building scheme.

Figure 4 - Equilibration

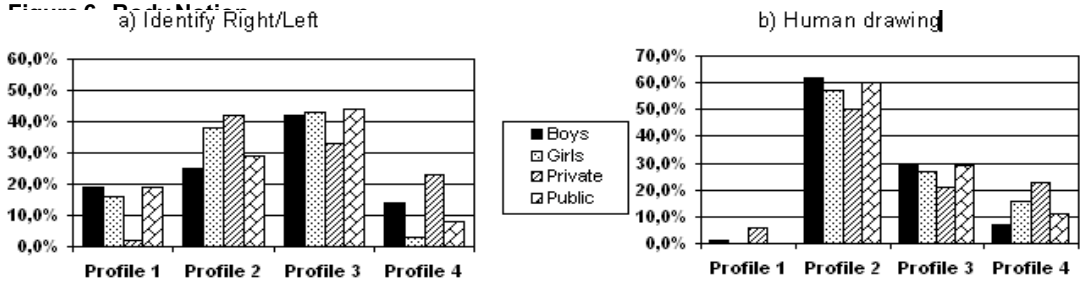


The third psychomotor factor analyzed is the lateralization (Figure 5), where profile 4 predominates. The manual lateralization (5a) is fully developed in boys (100%) and in girls (98%), that according to Fonseca (1995) is the first one to be established. The pedal lateralization (5b) reached 70% for boys and girls, 72% in public schools and 57% in private schools. The ocular lateralization (5c) reached similar results. The laterality conscience allows establishing correlation with the exterior space, being an acquisition and construction process (LIMA, 1997).



Related to body notion aspect (Figure 6), it's possible to observe that the found results, primarily profile 2 and 3, suggest a deficiency on this psychomotor factor development, according to literature, which says that body notion begins around the age of three or four years, and it's established between ten and twelve years of age. It's interesting to compare these results with Pereira's study (2005), where almost 45% of elementary school first grade kids with ages between 6.5 and 8 years fitted in the eupraxic profile, 45.5% in the hiperpraxic profile and only 9.5% stayed on the dispraxic profile, having 0% on apraxic profile.

Figure 6 - Body Notion



In the pictures from human drawing analysis (6b), the results showed a predominance in profile 2 for boys (62%), and for girls (57%). Studies showed that kids with bad corporal development can present difficulties related to time-space configuration, equilibrium, posture and locomotion (LIMA, 1997).

The fifth psychomotor factor analyzed was the time-space structure (Figure 7), where the boys presented a similar division related to profiles 2 (36%), 3 (27%) and 4 (37%). 51% of the girls fitted profile 3. It was also verified that private schools have the biggest quantity of students on profile 3 (56%), while on pubic schools there's a division between the students on dispraxic profile (28%), eupraxic (35%) and hiperpraxic (37%).

Figure 7 - Tir

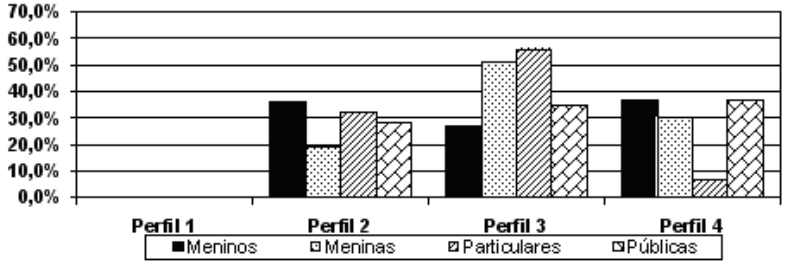
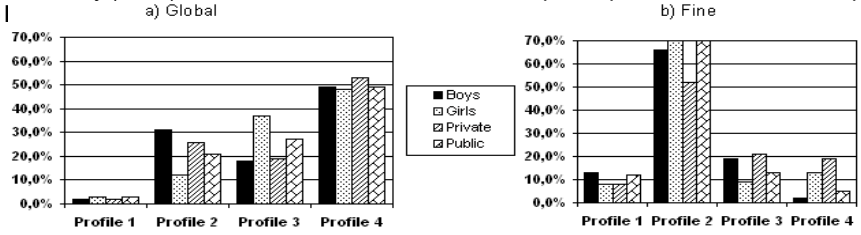


Figure 8 depicts global praxis, and it's possible to observe a similarity of percentages in profile 4 regarding gender as well as different networks (public and private), but the percentage around 50% isn't enough, because according to Fonseca (1995), the global praxis has its improvement between five and six years of age. In the present study, the analyzed kids were between 10 and 14 years old, 31% of the boys were still in profile 2 and 37% of the girls in profile 5.

Based on figure 8b, fine praxis, there is a predominance of profile 2 in all analyzed variables, proving the deficient development of this psychomotor factor, since studies prove that fine praxis is improved around six and seven years of age. The private network accomplished better results related to the public network, presenting 19% of their students in profile 4. Comparing with Pereira´s study (2005), the results corroborate that the fine praxis performance is better in private schools.

Figure 8 - I



For a general view of the psychomotor characterization related to the seven psychomotor factors, figure 9 shows the

percentage taken in each profile. It checks that there's no dominant profile for the seven factors. The dispraxic profile predominates in the body notion (45.5%) and on fine praxis (68%). The eupraxic profile predominates in tonicity (55.5%), in equilibrium (36%) and in time-space structure (39%). The equilibration showed no significant difference to profile 2 (33.5%). The hiperpraxic profile was more relevant on lateralization with 73%. The information differs from Pereira´s study (2005) with first grade elementary school students of a private school, where the profile 3 (eupraxic) was prevailing for the seven factors, except the time-space structure factor, where 40% of the scholars were on profile 4 (hiperpraxic).

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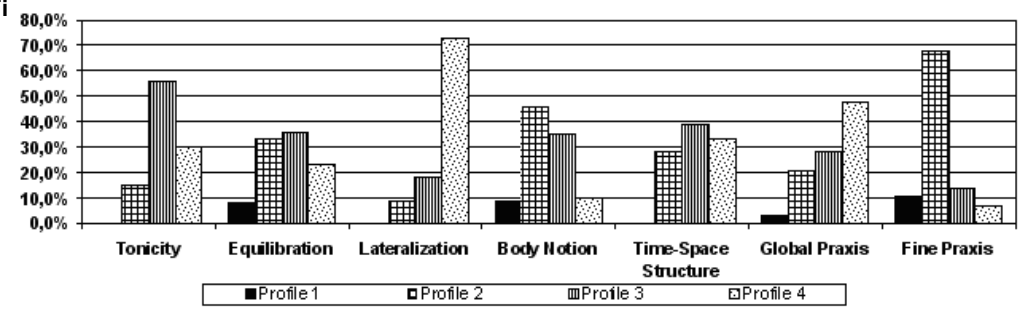

Related to gender, the difference was small between the psychomotor factors tonicity and equilibrium. In lateralization and body notion, the boys presented a better performance. In time-space structure and global and fine praxis, the girls had better performance. Related to school networks (public and private), it's possible to observe that in psychomotor factors tonicity, body notion and fine praxis, the students of private schools had better results. But in equilibrium, lateralization and time-space structure factors, the students of public schools got better performance, having in this last factor (time-space), a significant difference. The global praxis was the only psychomotor factor where the four profile comparation was similar.

5. FINAL CONSIDERATIONS

Based on the presented information, it's possible to conclude that scholar physical education is far from reaching their real objectives, mainly when it concern to the development of the psychomotor factors and the kids motor abilities, in private schools and also in public ones. It was verified that even starting physical education in kindergarten, for example, in private schools, there's no significant difference on kids psychomotor development, regardless if they are boys or girls. It doesn't work to implement physical education classes with specialist teachers if they aren't able to develop a really efficient job when it concerns to their students' psychomotor development.

So, scholar physical education must be studied and rebuilt, because the main objectives that the subject should attain are not reached. For that to happen, the professionals should look for a better formation of their real job inside the school as educators, in order to appreciate the importance of the physical education in kindergarten and fundamental teaching. The contents and objectives of the subject, when treated with responsibility and commitment, can develop the psychomotor dimension, effectively contributing to the human being integral formation.

6. BIBLIOGRAPHICAL REFERENCES

AJURIAGUERRA, Julian de. **Manuel de Psychiatrie De L`Enfant**. Paris: Masson, 1980.

BRASIL, Secretaria de Educação Fundamental. **Parâmetros Curriculares Nacionais**: 5ª a 8ª séries, Educação Física: MEC. 1998.

COSTE, Jean Claude. **La Psychomotricité**. 5 ed. Paris: Presses Universitaire de France, 1992.

FONSECA, Vitor da. **Manual de Observação Psicomotora:** Significação Psiconeurológica dos Fatores Psicomotores. Porto Alegre: Artmed, 1995.

GALLAHUE, David L.; OZMUN, John C. **Understanding Motor Development:** infantis, children, adolescents, adults**.** 6 ed. Europe: McGraw-Hill Education, 2005.

HURTADO, Joann G.G.M. **Educação Física para o Pré-escolar e Escolar 1ª a 4ª série:** uma abordagem psicomotora. 3ª ed. Curitiba: Fundação da UFRP, 1985.

LIMA, Maria do Socorro Correia. **Motricidade, Escrita e Leitura:** possíveis elos de ligação em crianças com dificuldades de aprendizagem? 1997. 192 f. Dissertação (Mestrado em Educação) - Faculdade de Educação, Universidade Estadual de Campinas, Campinas, 1997.

PAIM, Maria Cristina Chimelo. **Desenvolvimento Motor de Crianças Pré-Escolares entre 05 e 06 Anos.** Revista Virtual EFartigos, Volume 22, mar 2005. Disponível em <http://efartigos.hpg.ig.com.br> Acesso em: agosto de 2006.

PAPALIA, Diane E; OLDS, Sally W. **A Child´s World.** São Paulo: McGraw-Hill, 1981.

PEREIRA, Karina. **Perfil Psicomotor:** caracterização de escolares da primeira série do ensino fundamental de colégio particular. 2005. 200f. Dissertação (Mestrado em Fisioterapia) - Faculdade de Fisioterapia, Universidade Federal de São Carlos, São Carlos, 2005.

STAES, L.; DE MEUR, A. **Psychomotricité**: éducation et rééducation. Paris: Belin, 1991.

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PSYCHOMOTOR PROFILE: FIFTH GRADE SCHOLARS CHARACTERIZATION IN FUNDAMENTAL TEACHING OF CAXIAS DO SUL CITY

ABSTRACT

This field research main objective was to characterize the psychomotor profile of fifth grade scholars in fundamental teaching of Caxias do Sul City (Rio Grande do Sul, Brazil), aiming to analyze similarities and differences in relation to seven

psychomotor performance metrics: tonicity, equilibration, lateralization, body notion, space-time structure, global praxis and fine praxis. Besides, it had the purpose of evaluate the validity of physical education classes with and without specialized teacher, because the initial grades of physical education classes in public schools is not performed by a specialized teacher. The study was accomplished with 846 children between 10 and 14 years old enrolled during 2006, representing about 10% of the county age group. To support the data acquisition we used an agreement term, a questionnaire and the Fonseca´s Psychomotor Battery (FONSECA, 1995). The results concluded that there is not a dominant profile in the seven analyzed metrics, neither significant difference between teaching systems (public or private), children sex (male of female) and beginning year of physical education classes (initial grades or fifth grade). The study also concluded that the psychomotor development level is very low in the researched city, and the scholar physical education needs a reevaluation and reformulated, as the main classes goals are not being reached.

KEYWORDS: Psychomotor Profile, Scholars, Physical Education

PROFIL PSYCHOMOTEUR: DISCIPLES CARACTÉRISATION DE LA CINQUIÈME DEGRÉ DE L´ÉCOLE PRIMAIRE DE LA VILLE DE CAXIAS DO SUL

RÉSUMÉ

Cette recherche de champs a eu comme objectif l´étude des profiles psychomoteurs des élevés de la cinquième de l´école primaire de la ville de Caxias do Sul (RS) pour analyser les apprentissages psychomoteurs semblables et différentes en ce qui concerne les sept points suivants : tonicité, équilibration, latéralité, notion du corps, structuration spatio-temporelle, praxie globale et praxie fine. De plus, a eu le but d´évaluer la validité des classes de l´éducation physique avec les professeurs spécialisés, parce que les premiers disciplines dans l´école primaire possèdent professeurs non spécialisés. Par rapport à l´étude, ont participé 846 élèves de l´age entre 10 et 14 ans, inscrits pour la rentrée 2006 qui représentent 10% des élèves de cette age dans la ville. Les instruments utilisés pour la collette de données a été un contrat de consentement, un questionnaire et une batterie psychomoteur (BMP) de Fonseca (1995). Les résultats ont montré qu´il n´a pas un profile prédominant ni largement différent par rapport aux sept points étudiés en prenant en compte les réseaux d´enseignement, le sexe, les élèves avec e sans professeurs spécialisés. Ainsi, on na pu conclure que le niveau de développement psychomoteur est petit dans la ville et l´éducation physique scolaire doit être re-évaluée et reformulée, une fois que les principaux objectifs de cette discipline ne sont pas réussis.

MOTS-CLÉS: Profil Psychomoteur, Disciples, Éducation Physique

PERFIL PSICOMOTOR: CARACTERIZACIÓN DE ESCOLARES DE LA QUINTA SERIE DE LA ENSEÑANZA FUNDAMENTAL EN LA CIUDAD DE CAXIAS DO SUL

RESUMO

Esta encuesta tuvo como objetivo caracterizar el perfil psicomotor de alumnos de la quinta serie de la enseñanza fundamental en la ciudad de Caxias do Sul (RS), más específicamente analizar las semejanzas y las diferencias con respecto al desarrollo psicomotor basado en siete factores: tonicidad, equilibración, lateralización, noción del cuerpo, estructuración espacio-corporal, praxia global y praxia fina. Además de eso, tuvo el objetivo de evaluar la validad de las clases de educación física con profesor especialista, pues la asignatura en las series iniciales de la enseñanza fundamental de las escuelas públicas no es impartida por profesional especializado. Participaron del estudio 846 niños con edades entre 10 y 14 años, matriculadas durante el año de 2006, algo que representa 10% de los estudiantes de este rango de edad del ayuntamiento. Los instrumentos utilizados para recolección de datos fueron un termo de consentimiento, un cuestionario y la Bateria Psicomotora (BPM) de Fonseca (1995). Los resultados constataron que no hay un perfil dominante en los siete factores analizados ni diferencia significativa en cuanto a las redes de enseñanza y al sexo, bien como entre los alumnos que tienen hace más tiempo el componente curricular y los excluidos de tal práctica. De esta manera, se concluye que el nivel de desarrollo psicomotor es bajo en la ciudad investigada, y la educación física escolar necesita ser reevaluada y reformulada, una vez que los principales objetivos de la asignatura no están siendo alcanzados.

PALABRAS CLAVE: Perfil Psicomotor; Escolares; Educación Física.

PERFIL PSICOMOTOR: CARACTERIZAÇÃO DE ESCOLARES DA 5ª SÉRIE DO ENSINO FUNDAMENTAL NA CIDADE DE CAXIAS DO SUL

RESUMO

Esta pesquisa de campo objetivou caracterizar o perfil psicomotor de escolares da quinta série do ensino fundamental na cidade de Caxias do Sul (RS), a fim de analisar semelhanças e diferenças quanto ao desempenho psicomotor em relação a sete fatores: tonicidade, equilibração, lateralização, noção do corpo, estruturação espaço-temporal, praxia global e praxia fina. Além disso, teve o propósito de avaliar a validade das aulas de educação física com professor especialista, pois a disciplina nas séries iniciais do ensino fundamental das escolas públicas não é ministrada por profissional especializado. Participaram do estudo 846 crianças com idades entre 10 e 14 anos, matriculadas durante o ano de 2006, montante que representa 10% dos estudantes da faixa etária do município. Os instrumentos utilizados para a coleta de dados foram um termo de consentimento, um questionário e a Bateria Psicomotora (BPM) de Fonseca (1995). Os resultados constataram que não há um perfil dominante nos sete fatores analisados, nem diferença significativa em relação às redes de ensino e ao sexo, bem como entre os alunos que têm a mais tempo o componente curricular e os privados de tal prática. Desta forma, conclui-se que o nível de desenvolvimento psicomotor é baixo na cidade pesquisada, e a educação física escolar precisa ser reavaliada e reformulada, uma vez que os principais objetivos da disciplina não estão sendo alcançados.

PALAVRAS-CHAVE: Perfil Psicomotor, Escolares, Educação Física.