

141 - ANALISES OF MOTOR BEHAVIOR OF LOW VISION SCHOLARS FROM 7 TO 10 YEARS OLD FROM STATE PUBLIC SCHOOL IN THE MUNICIPAL DISTRICT OF MACAPÁ / AP: CASE

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INTRODUCTION

Human Motricity has the role to produce knowledge with characteristics of systematized investigations and with intentional possibilities of interpretation of the Human Being and their motor conducts of behavior, through many study areas, in interdisciplinary and transdisciplinary way and, since the subject studied will never end, always having a search for another knowledge (SERGIO,).

Rosa Neto (2002) explains that the motricity is the interaction of several motor (perceptive-motor, neuromotor, psychomotor, and neuropsychomotor) functions, since the relation between the movement and its aim improves more and more, as a result of a progressive differentiation of the human being's complete structures.

In the child's behavior motor functions are really interlinked and they need to be worked at each life stage for best acquisition of experiences that take her to an intellectual and motor development. Physical education classes make child able to learn how to relate time-space, coordination - laterality in the game, also improving inter-classes proposed activities, taking her to progressive cognitive-motor maturation.

In the deficient child that maturation is hindered by the lack of lived experiences, since deficiency is represented by any loss or abnormality of the structure or psychological, physiologic or anatomic function. The visual deficiency is the loss of an organ of the senses and it can be congenital or acquired, turning the other ones so developed to supply this lack. The child with Low Vision (BV) has the possibility as all the others to communicate, according to Cunha (1994) "in each word of the corporal language, it increases the dialogue among the men".

The objective of this study is to verify BV children's Motor Behavior (CM) in school age, who participate in Physical Education classes, where through ludic activities children have better jumping, running, leaping, playing, which are fundamental motor experiences for body control and social integration, behavior that can come to potentiate the development of those scholars, contributing to improve possible deficits in the motor area, as well as, in other areas of the knowledge

MATERIALS E METHODS

This descriptive research, case study type (THOMAS, NELSON & SILVERMAN 2007), is constituted by the participation of five (05) low vision Brazilian scholars, with age from 7 to 10, apprentices of Physical education, enrolled in public schools of the Municipal district of Macapá/AP-Brazil, with the purpose of analyzing these children's motor behavior, verifying if this behavior is appropriate to their chronological age..

The instrument used for data collection was Rosa Neto's (2002) Scale of Motor Development, which evaluates fine motricity, global motricity, balance, corporal outline, space organization, temporal organization and laterality, and from the obtained data it is verified if the motor age of these scholars correspond or not to their chronological age. Trustworthy results depend on how careful instructions are followed as much of application as of correction.

Data collection period happened from March 8 to March 14, 2007, in the morning, from 8 to 12 o'clock, in the sport gym of the schools, since it is a familiar atmosphere for the children, furnished with 4 chairs of 45cm height and 6 tables 70cm height, in which the whole necessary auxiliary material was ordered for application of the tests. Time spent in the application of the tests was one session for each student, with approximately 40 minutes, according to individual differences. The place was very illuminated and ventilated, free from noises and external interruptions. The material was ordered conveniently, avoiding, confusion and delay in the course of the tests.

Microsoft Office Excel was used 2007 for statistical processing. The exploratory data analyses was done by the statistics described used for analyzes: Average, Standard Deviation, Medium, Maximum Value and Minimum Value

RESULTS AND RESULT DISCUSSION

The data demonstrated that the difference between the average age of the general motor (AMG =88) and average chronological age (CA =96) is 8 months (negative of the age), and small the difference between them, practically not existing motor deficit in the group in relation to their chronological age. Table 1 shows statistical values of all variables of motor development

Table 1 – Levels of Motor Development of low Vision Scholars from Macapá/AP.

Variables	Average	Standard Deviation	Maximum	Minimum	Media
Chronological Age (months)	96	15,14	118	79	93
General Motor Age - IMG (months)	88	14,66	110	74	88
Fine Motricity - IM1 (months)	100	13,15	120	84	96
Global Motricity - IM2 (months)	90	16,97	108	72	84
Balance - IM3 (months)	91	25,95	126	60	96
Body Outline - IM4 (months)	84	12,00	96	72	84

Organização Espacial - IM5 (meses)	76	21,47	102	60	60
Space Organization - IM6 (months)	91	27,63	132	72	72
General motor Quocient QMG	92	8,04	102	80	94
Fine Motricity - QM1	105	14,02	121	90	101
Global Motricity - QM2	95	19,84	125	70	91
Balance - QM3	95	18,60	112	65	100
Body Outline - QM4	88	5,36	94	81	90
Space Organization - QM5	78	12,09	94	65	76
Time Organization - QM6	96	32,92	153	70	91

The tests revealed that this group of students is mostly in levels above their age, with drop in the expected average, just in the tests that demanded a more vision, as in corporal outline / speed and space organization. The smallest score obtained was a child that reported no involvement in motor activities beyond those presented in the school atmosphere.

In the other tests, students were average or above. School Physical education has expressive contribution in this result since all practice motor activities as: running, jumping, leaping, playing, catching, trimming, important experiences for a good motor and social development of the child, as well as physical activities practiced out of the school extent

TABLE 2 GENERAL AVERAGE OF MOTOR DEVELOPMENT/ MOTOR QUOTIENT CLASSIFICATION

GROUP	VERY SUPERIOR	SUPERIOR	NORMAL TALL	NORMAL MEDIUM	NORMAL SHORT	INFERIOR	VERY INFERIOR
07 YEARS OLD			1	1			
08 YEARS OLD					1	1	
09 YEARS OLD							
10 YEARS OLD				1			

Evaluating the values found in the table 1, an analysis of the scholars' General Motor Quotient was accomplished in agreement with the classification of the results presented in a scale, according to Rosa Neto (2002), which varies from very superior to very inferior, presented in the table 2, those allow to classify the children of the group between normal high and inferior.

TABLE 3 GENERAL AVERAGE OF MOTOR/LATERALITY DEVELOPMENT.

Low vision scholars between 7 and 10 years old

GROUPS	RIGHT COMPLETE	HANDED	LATERALITY	LEFT COMPLETE	HANDED
07 A 10 YEARS OLD	3		1	1	

The average of the appraised scholars' laterality varies between complete right handed, complete left handed and crossed laterality. We highlight to have found children with laterality complete left handed, because literature rarely presents "normal" children with these characteristics.

During the application of tests related to the motor profile of the group, results found caused the need accomplish demands extolled for smaller ages, due to the vision difficulty may be harmful for the accomplishment of the asked tasks. In some abilities as corporal outline and space organization and chronological age of some students, the tests were applied in the suitable age, presenting a variation of tests from 7 to 10 years old, for tests from 5 to 11 years old, in order to find out motor age.

CONCLUSION

The obtained results indicate the scholars' group analyzed presents good motor development, demonstrating the need and importance of inclusion of people with deficiency in organs of the senses in programs of motor activities, with constant attendance by Physical Education teachers and other professionals, in order to supply their motor lacks through the offer of movement and perception experiences and involvement with their peers, which are essential for development since preschool until adult phase. The practice of motor activities should be extended to everyday practices, where playing assumes fundamental importance for the age group and socialization. We suggest future studies as the application of tests in children that present other deficiency types in the organs of the senses, as well as, in scholars of different age groups

KEY WORDS: Motor behavior, low vision, motor evaluation.

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ANALISES OF MOTOR BEHAVIOR OF LOW VISION SCHOLARS FROM 7 TO 10 YEARS OLD FROM STATE PUBLIC SCHOOL IN THE MUNICIPAL DISTRICT OF MACAPÁ / AP: CASE

ABSTRACT

This study aims at to analyze the scholars' Motor Behavior (CM) with Visual Deficiency (DV), Low Vision (BV), aged between 7 to 10. The sample was composed by five scholars, 3 girls and 2 boys, belonging to a State Elementary School, between first and fourth grades, of the municipal district of Macapá / AP that participated in Physical Education classes. A questionnaire of life habits was applied, and in order to assess the CM, Rosa Neto's (2002), Scale of Motor Development (EDM) was used to evaluate the following elements of human motricity: fine motricity, global motricity, balance, corporal outline, space organization, temporal organization and laterality. The tests have progressive degree of difficulty, the student executes until they are not able to accomplish the proposed test or finish all of them. The individual's motor age (IM) corresponds to the test of larger degree than was accomplished. From data regarding Chronological Age (IC) and IM expressed in months, the Motor Quotient (QM) was calculated in order to classify the students tested in an EDM, that varies from very superior to the very inferior. After the analysis, it was verified that for the five scholars, the average of general IM is 88 months, and general QM is 92 months. In EDM the obtained results were: normal medium 02, normal low 01, inferior 01 and normal high 01, demonstrating that the group presents a good motor quotient, with a deficit found in the child that presented minor motor activity everyday habits. That reinforces the data found in the literature that highlights the importance of motor experiences. The inclusion of DV scholars in the physical education classes should be motivated and accomplished effectively for the contribution this participation may bring.

KEY WORDS: Motor behavior, low vision, motor evaluation.

ANALYSE DU COMPORTEMENT MOTEUR D'ÉCOLIERS DE 7 À 10 ANS D'ÂGE AVEC BASSE VISION DE L'ÉTAT DANS LA VILLE DE MACAPÁ/AP: UNE ETUDE DE CAS.

RESUMÉ:

Cette étude objective analyser le comportement moteur (CM) d'écoliers avec Handicap Visuel (DV), avec Basse Vision (BV), âge entre 7 à 10 ans, en étant l'échantillon composé par cinq écoliers, 3 filles et 2 garçons, appartenant au filet public d' l' État, d' enseignement fondamental, premier à quatrième série, de la ville de Macapá/AP qui participe des leçons d' education physique. A été appliqué un questionnaire d' habitudes de vie, pour la vérification du CM, a été utilisé Escala de Développement Moteur (EDM) de Rosa Neto (2002), en évaluant les suivants éléments de motricité humaine: motricité fine, motricité globale, équilibre, projet corporel, organisation spatiale, organisation séculière et latéralité. La batterie d' essai possède degré de difficulté progressif, l' élève suit en exécuter jusqu'ne pas réussir à l'essai proposé ou arriver à la fin de la batterie. L'âge moteur (IM) de la personne correspond à l'essai de plus grand degré que il a mené à bien. Des données afférentes à l' Âge Chronologiques (AC) et de l'IM exprimées dans des mois, a été calculé le coefficient moteur (QM) qui rend possible le classement expérimentés dans EDM, qui varie de très supérieur au très inférieur. Après l'analyse il s'est vérifié que pour cinq écoliers, la moyenne du IM général est de 88 mois, et que QM générale est de 92 mois. Dans EDM les résultats obtenus ont été: normal moyen 02, normal bas 01, inférieur 01 et normal haut 01, en démontrant que le groupe présente en moyenne un bon coefficient moteur, en étant le déficit trouvé dans l'enfant qui dit des habitudes d'activité motrice moindres dans le quotidien, ce qui renforce les données trouvées dans la littérature ils lesquelles détachent l'importance de l' expérience dans

des expériences motrices. L'inclusion d'écopiers avec DV dans les leçons d'éducation physique doit être stimulée réalisée de forme il accomplit par la contribution qui peut arriver de cette participation.

MOT CLÉ: comportement moteur, base vision, education motrice

ANÁLISIS DEL COMPORTAMIENTO MOTOR DE ALUMNOS DE 7 A 10 AÑOS CON BAJA VISIÓN DE LA RED PÚBLICA ESTADUAL EN EL MUNICIPIO DE MACAPÁ/AP; UN ESTUDIO DE CASO
RESUMEN

El objetivo de este estudio es analizar el comportamiento motor (CM) de alumnos con deficiencia visual (DV) con baja visión (BV), edades entre 7 a 10 años, siendo que la muestra está compuesta por cinco alumnos 3 niñas y 2 niños, que pertenecen a la red pública estadual, de primaria de primero a cuarto grado del municipio de Macapá /AP que participan de clases de educación física. Fue aplicado un cuestionario de hábitos de vida, y para la verificación del CM fue utilizada la Escala de Desarrollo Motor (EDM) de Rosa Neto (2002), evaluando los siguientes elementos de motricidad humana: motricidad fina, motricidad global, equilibrio, esquema corporal, organización espacial, organización temporal, lateralidad. La batería de estas pruebas posee un grado de dificultad progresivo, el alumno sigue ejecutando hasta no conseguir la prueba propuesta o llegar al final de la batería. La edad motora (EM) del individuo corresponde a la prueba de mayor grado que él consiguió realizar. De estos datos referentes a la edad cronológica (EC) y la EM expresan en meses, fue calculado el coeficiente motor (CM) que posibilita la clasificación de los analizados en una EDM, que varía de muy superior a muy inferior. Después de los análisis se verificó que para los cinco alumnos la media de EM general es de 88 meses, y el CM general es de 92 meses. En la EDM, los resultados obtenidos fueron: normal medio 02, normal bajo 01, y normal alto 01 demostrando que el grupo presenta en media un buen coeficiente motor, siendo el déficit encontrado en el niño que relata hábitos de actividad motora menores en lo cotidiano, y que refuerza los datos encontrados, lo que refuerza los datos encontrados en la literatura que destacan la importancia de lo vivido en experiencias motoras. La inclusión de alumnos con DV en las clases de educación física debe ser incentivada y realizada de forma efectiva por la contribución que puede venir de esa participación.

PALABRAS LLAVE: Comportamiento motor, baja visión, evaluación motora.

ANÁLISE DO COMPORTAMENTO MOTOR DE ESCOLARES DE 7 A 10 ANOS COM BAIXA VISÃO DA REDE PÚBLICA ESTADUAL NO MUNICÍPIO DE MACAPÁ/AP: UM ESTUDO DE CASO
RESUMO

Este estudo objetiva analisar o Comportamento Motor (CM) de escolares com Deficiência Visual (DV), com Baixa Visão (BV), idade entre 7 a 10 anos, sendo a amostra composta por cinco escolares, 3 meninas e 2 meninos, pertencentes à rede pública estadual, de ensino fundamental, primeira a quarta série, do município de Macapá/AP que participam das aulas de educação física. Foi aplicado questionário de hábitos de vida, e para a verificação do CM, foi utilizada a Escala de Desenvolvimento Motor (EDM) de Rosa Neto (2002), avaliando os seguintes elementos de motricidade humana: motricidade fina, motricidade global, equilíbrio, esquema corporal, organização espacial, organização temporal e lateralidade. A bateria de testes possui grau de dificuldade progressivo, o aluno segue executando até não conseguir o teste proposto ou chegar ao final da bateria. A idade motora (IM) do indivíduo corresponde ao teste de maior grau que ele conseguiu realizar. Dos dados referentes à Idade Cronológica (IC) e da IM expressas em meses, foi calculado o Quociente Motor (QM) que possibilita a classificação dos testados em uma EDM, que varia do muito superior ao muito inferior. Após a análise, verificou-se que para os cinco escolares, a média da IM geral é de 88 meses, e o QM geral é de 92 meses. Na EDM os resultados obtidos foram: normal médio 02, normal baixo 01, inferior 01 e normal alto 01, demonstrando que o grupo apresenta em média um bom coeficiente motor, sendo o déficit encontrado na criança que relata hábitos de atividade motora menores no cotidiano, o que reforça os dados encontrados na literatura que destacam a importância da vivência em experiências motoras. A inclusão de escolares com DV nas aulas de educação física deve ser incentivada e realizada de forma efetiva pelo contributo que pode advir dessa participação.

PALAVRAS CHAVE: Comportamento motor, baixa visão, avaliação motora.

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