79 - ANALYSIS OF MOTOR DEVELOPMENT PROJECT PARTICIPANTS COPAME

SANDRA MARA MAYER LIEGE MAIARA KRÜGER UNIVERSIDADE DE SANTA CRUZ DO SUL - UNISC SANTA CRUZ DO SUL, RS, BRASIL. <u>smmayer@unisc.br</u>

INTRODUCTION

Motor development is present from the moment of conception, the human body has a biological sequence, a calendar of maturation, an open door to interaction and stimulation. The human body produces profound changes between birth and adulthood. In pregnancy the baby's already a sign that there is life, by means of a motor activity, we observe the birth of the child maturativas changes that change daily, which occurs during a period of life but this more evident early in live ROSANETO (2012).

Child development is one of the most significant stages in human life, and is the second childhood, characterized by fast progress in learning, the child develops awareness of self and the outer world, winning its independence and also highlights that the schemes and the coordinating body are the infrastructure of learning and that the change in motor coordination and balance, spatio-temporal relationship among other aspects, can interfere with school and learning in general conduct of the child, suggesting a link between motor problems and difficulties learning. Motor skills when developed properly at this stage, according classical authors cited by Silva (2006), contribute significantly on school learning, as the movement allows the child to find a set of relationships necessary for their development.

To check child development Rosa Neto (2002) proposes a Motor Development Scale consists of a battery of tests to evaluate the motor development of children from 2 to 11 years old. On this scale, test motor is understood as a specific test for measuring a particular characteristic of an individual motor and compare their results with other individuals. The results of a test motor for determining the advance or delay motor of a child in that aspect.

The tests are a very diverse set of evidence and graduated difficulty, leading to a thorough exploration of different development sectors in order to evaluate the level of motor development of the child according to chronological age, considering successes and failures. This range includes motor tests in the following components: fine motor, gross motor control, balance, body scheme, spatial and temporal organization. Fine mobility refers to the ability to control a range of movement activities of certain segments of the body with minimum use of force in order to achieve an accurate response to the task. Motricity global involves the ability to control the contractions of large muscles in the body generate large movements. The balance is the body's ability to take and hold any position against the force of gravity, so that all the forces acting on this body are canceled. The body schema refers to the ability to discriminate accurately the body parts, actively support all gestures that the body performs on himself and on external objects and arrange the body parts in performing a task. Spatial organization is knowledge of body size, both the space of the body as the surrounding space, and the ability to accurately assess the relationship between body and environment. Temporal organization refers to the time consciousness that structure on perceived changes and is characterized by order, chronological distribution, and duration of events (ROSANETO, 2002; GALLAUE: OZUM 2001).

The aim of the study was to evaluate the motor development of children housed in the Association for Support Minor - COPAME, Santa Cruz do Sul, taking into account students with social vulnerability. Aims to determine which areas of greatest deficit and the overall development of your engine, to improve them and enable individuals to better condition.

METHOD

Tests were used in Motor Development Scale (ROSA NETO, 2002), applied in June and July 2012. The study included 26 children, 13 boys and 13 girls, aged between 3 and 12 years old, all project participants Copame. The aspects assessed were: Fine Motor; Global Kinetics; Balance; Scheme Body / Quickness; Organization / Space and Language / Temporal Organization. Testing was done with the aid of EDM Kit (Motor Development Scale). For data analysis we used the EPI-INFO version 6.0 (Fernandez Merino 1996).

RESULTS/DISCUSSION

As can be seen in Table 1, the comparative results between chronological age and general motor of 26 students participating in the sample show that most members of the research showed lower levels than expected for their chronological age totaling 85% of individuals, 4% with the motor age is generally ideal for age and 11% of subjects had levels of general motor higher age than expected for chronological age at time of application testing. According to Go Tani (2005) motor development, proposes that the sequence of development has a probabilistic nature, ie, it is a direct function of the interaction between organism and environment. There is evidence that environmental factors and task interfere with the way this sequence of motor development may be present, especially in basic skills. Knowing that changing goals and environmental stability are externalities that interact to characterize the condition of the child's motor development, as well as morphological factors. How is the sample of children aged under one institution, explained these results.



Table 1: Comparison between chronological age and general motor age

Looking at the results in Table 2, we found that when comparing the old motor with fine motor final results classified 73% of the sample below the levels expected for their age, and only 27% of the sample with higher levels. The fine motor coordination is directly related visuomanual that is drawn in a progressive manner according to driving the development of the child and their learning (ROSANETO, 2002).



Table 2: Comparison between chronological age and fine motor

In terms of comparing the chronological age and overall motility in Table 3, we found that only 23% of respondents in the survey sample showed better results than those expected for their chronological age, and the remaining 77% of the sample show lower results. Mastery of fundamental movement skills is basic to the development of each individual motor. The motor experiences, provide information on multiple perception that children have of themselves and the world around you (GALLAHUE, 2003).





Looking at Table 4, which shows the comparative results between chronological age and balance, we find that 19% of respondents in the sample showed better results than those expected for their age, 4% demonstrate ideal outcome for age and 77% are below equilibrium levels with expected for their age motor. When working motor coordination equilibrium has a very important role, because the constant improvement of motor holding the child will only be kept if it is taken to maintain a balance in both body into a state of relaxation or movement (ARAUJO, 1992).



Table 4: Comparison between chronological age and balance

Looking at Table 5, comparison between chronological age and body scheme found that 23% of respondents in the sample showed better results than those expected for their age and 77% of the sample achieved lower than expected results for its idade.Mediante education of different aspects of motor and perceptual skills, we can help children structure their body schema. This means that with this object, we should not limit our action to provide a knowledge of body parts and a perception of the whole, but go much further, helping the child to know and control your body in different situations, both at rest as moving. (ARRIBAS, 2008)



Table 5: Comparison of chronological age and body scheme

When analyzing the results in Table 6, the comparison between chronological age and spatial organization of individuals found that 12% of the sample participants showed higher results than expected for their age and 88% lower than ideal results for age. A Space Organization can be understood by the statement Haywood (2004) with respect to the ability to lie to himself, find other objects in a given space and orient themselves towards the middle. The sensory modalities (vision, hearing, touch and smell.) Participate in some measure to collect information and assess the relationship between our physical body and the environment.



Table 6: Comparison between chronological age and space organization

Checking the results presented in Table 7 regarding the comparison between chronological age and temporal organization, we observed that 85% of respondents in the sample are below the levels expected for their age, 4% had optimal results for age and 11% are with higher levels than expected for their chronological age. According to Ferreira (2007) Temporal organization is understood as the ability we have to distinguish the order and duration of events as: Hours, days, weeks, months, years and the memory of succession of events, it becomes clear when we sing a song.



Table 7: Comparison between chronological age and space organization

In a general analysis of the aspects evaluated did not show satisfactory results, however this is indicative that must be addressed solutions for improving motor performance of these practitioners, taking into account social vulnerability because they are housed in an institution for minors, and his period in this environment is unstable, noting that the results of individuals who are no longer in the project were the best.

CONCLUSION:

Through the analysis of the results obtained from using the Motor Assessment Battery, evaluated aspects show that the majority of individuals are below those expected for their age, and there are few who are with good results, so the results were unsatisfactory. Given this it is important to keep working and developing recreational activities targeted for each of the assessed levels, an improvement in general motor development of children, because since childhood when stimulated, can ameliorate deficits in motor coordination during general motor development. Thus, according to this study, where students were assessed individually, one can trace an individualized treatment. The Motor Development Scale can be very important in contributing positively for the diagnosis of psychomotor child. This measurement should be continuous and progressive, always relating the results with other variables that may influence this process, it is appropriate to remember not developed with linear characteristics. The more information regarding psychomotor aspects, biological and social, we get, the more efficient assessment and intervention in the development of the same engine. Since this research is still allows more conclusive studies in human movement, leaving open a number of windows of opportunities

REFERENCES:

ARAUJO, Vania Carvalho. The game in the context of psychomotor education. Sao Paulo: Cortez,1992. ARRIBAS, Teresa Lleixá. Physical Education 3-8 years. Porto Alegre: Publisher Artmed, 7th edition,2008. FERREIRA, J.R.P. School health: biopsychosocial aspects of children with learning difficulties. Dissertation Master of Science in Human Movement - University of the State of Santa Catarina, Florianópolis,2007,p.102. GALLAHUE, David. Ozum C. John. Understanding Motor Development. Babies, Children and Adults.SaoPaulo:Phorte,2003. GO TANI. Motor behavior: learning and development. Rio de Janeiro: Guanabara Koogan, 2005. ROSE GRANDSON Francisco. Motor assessment. Porto Alegre: Artmed, 2002

SILVA, Cristiane Alves et al. The importance of motor assessment in schoolchildren. Rev. Iberoamericana de psicomotricidad y corporal techniques, Montevideo. v.7, no. 26, p.137-146. 2006.

Universidade de Santa Cruz do Sul - RS Rua Ernesto C. Iserhardt, 470 96825-040 Santa Cruz do Sul-RS smmaver@unisc.br

ANALYSIS OF MOTOR DEVELOPMENT PROJECT PARTICIPANTS COPAME ABSTRACT

The aim of the study was to identify the motor ages of children participants COPAME Project. The motor profile of each individual practitioner was drawn according to Motor Development Scale described in the Evaluation Manual motor, the kind of research was qualitative description. The sample consisted of 26 students, of both sexes, aged between 3 and 12 years, participants in Project COPAME - extension project at the University of Santa Cruz do Sul (UNISC). Testing was done with the aid of EDM Kit (Motor Development Scale). For data analysis we used the EPI-INFO version 6.0 (Fernández Merino, 1996). Tests were performed to assess Global Kinetics, Body Scheme and Temporal Organization. The results show that most children in the sample had Motor Age less than its chronological age. In the area of global motor, the entire sample was found within the normal range. In terms of body schema, the sample were classified as Low and Very Low. In a general analysis of the aspects evaluated did not show satisfactory results, however this is indicative that must be addressed solutions for improving motor performance of these practitioners, taking into account social vulnerability because they are housed in an institution for minors, and his period in this environment is unstable, noting that the results of individuals who are no longer in the project were the best. Thus, according to the study results, one can draw an individualized treatment to improve motor performance of these practitioners. Therefore believed to be of paramount importance a program of assessment, monitoring and intervention of motor development, with a view to promoting children's health and the prevention of infectious diseases development.

KEYWORDS: Motor Development - Children - Vulnerability

ANALYSE DE MOTEUR DE PROJET DEVELOPPEMENT DES PARTICIPANTS COPAME RÉSUMÉ

Le but de cette étude était d'identifier les âges motrices des enfants COPAME Projet participants. Le profil de chaque moteur praticien individuel a été établi selon l'échelle de développement moteur décrit dans le Manuel d'évaluation du moteur, le type de recherche était la description qualitative. L'échantillon se composait de 26 étudiants des deux sexes, âgés entre 3 et 12 ans, les participants au projet - COPAME projet d'extension de l'Université de Santa Cruz do Sul (UNISC). Le test a été effectué à l'aide d'EDM kit (échelle de développement moteur). Pour l'analyse des données, nous avons utilisé la version EPI-INFO 6,0 (Fernández Merino, 1996). Des tests ont été effectués pour évaluer la cinétique globale, schéma corporel et de l'organisation temporelle. Les résultats montrent que la plupart des enfants de l'échantillon avaient Âge moteur de moins que son âge chronologique. Dans le domaine de l'automobile mondiale, l'ensemble de l'échantillon a été trouvé dans la plage normale. Pour ce qui est du schéma corporel, l'échantillon ont été classés comme faible et très faible. Dans une analyse générale des aspects évalués n'a pas montré des résultats satisfaisants, mais cela est une indication qui doit être abordé solutions pour améliorer les performances du moteur de ces praticiens, en tenant compte de la vulnérabilité sociale car ils sont logés dans un établissement pour mineurs, et sa période dans cet environnement est instable, notant que les résultats des individus qui ne sont plus dans le projet étaient les meilleurs. Ainsi, selon les résultats de l'étude, on peut tirer un traitement individualisé pour améliorer les performances du moteur de ces praticiens. Par conséquent considérées comme d'une importance primordiale d'un programme d'évaluation, de surveillance et d'intervention de développement moteur, en vue de promouvoir la santé des enfants et la prévention du développement des maladies infectieuses.

MOTS-CLÉS: moteur de développement - enfants - la vulnérabilité

ANÁLISIS DEL DESARROLLO MOTOR DE PROYECTOS PARTICIPANTES COPAME RESUMEN

El objetivo de este estudio fue identificar las edades de motor de Proyecto niños COPAME participantes. El perfil de motor de cada médico, se ha elaborado de acuerdo con la Escala de Desarrollo Motor describe en el Manual de Evaluación de motor, el tipo de investigación fue la descripción cualitativa. La muestra estuvo conformada por 26 estudiantes, de ambos sexos, con edades comprendidas entre 3 y 12 años, participantes en COPAME Proyecto - Proyecto de Extensión de la Universidad de Santa Cruz do Sul (UNISC). Las pruebas se realizaron con la ayuda de EDM Kit (Escala de Desarrollo Motor). Para el análisis de los datos se utilizó la versión EPI-INFO 6,0 (Fernández Merino, 1996). Se realizaron pruebas para evaluar la cinética global, esquema corporal y la organización temporal. Los resultados muestran que la mayoría de los niños de la muestra tenía Age Motor menor que su edad cronológica. En el área de motor global, la muestra entera se encontraron dentro del rango normal. En términos de esquema corporal, la muestra se clasifica como bajo y muy bajo. En un análisis general de los aspectos evaluados no mostraron resultados satisfactorios, sin embargo, esto es indicativo de que hay que abordar soluciones para mejorar el rendimiento del motor de estos profesionales, teniendo en cuenta la vulnerabilidad social, ya que están alojados en una institución para menores de edad, y su período en este entorno es inestable, y señaló que los resultados de las personas que ya no están en el provecto eran los mejores. Así, de acuerdo con los resultados del estudio, se puede sacar un tratamiento individualizado para mejorar el rendimiento del motor de estos profesionales. Por lo tanto, cree que es de suma importancia un programa de evaluación, seguimiento e intervención de desarrollo motor, con el fin de promover la salud infantil y la prevención del desarrollo de enfermedades infecciosas.

PALABRAS CLAVE: Desarrollo Motor - niños - de vulnerabilidad

ANÁLISE DO DESENVOLVIMENTO MOTOR DOS PARTICIPANTES DO PROJETO COPAME RESUMO

O objetivo do estudo foi identificar as idades motoras de crianças participantes do Projeto COPAME. O perfil motor de cada praticante foi traçado individualmente de acordo com a Escala de Desenvolvimento Motor descrita no Manual de Avaliação motora, o tipo de pesquisa foi qualitativa de descrição. A amostra constituiu-se de 26 alunos, de ambos os sexos, com idades entre 3 e 12 anos, participantes do Projeto COPAME - projeto extensionista da Universidade de Santa Cruz do Sul (UNISC). Os testes foram aplicados com auxílio do Kit EDM (Escala de Desenvolvimento Motor). Para a análise dos dados foi utilizado o programa EPI-INFO versão 6.0 (Fernádez Merino, 1996). Foram realizados testes para avaliar a Motricidade Global, o Esquema Corporal e a Organização Temporal. Os resultados encontrados demonstram que a maioria das criancas da amostra apresentou Idade Motora inferior à sua Idade cronológica. Na área da motricidade global, a totalidade da amostra encontrou-se dentro dos parâmetros da normalidade. Em se tratando do esquema corporal, da amostra apresentaram classificação Inferior e Muito Inferior. Em uma análise geral os aspectos avaliados não demonstraram resultados satisfatórios, porem este indicativo representa que devem ser abordadas soluções para a melhora do desempenho motor destes praticantes, levando em consideração vulnerabilidade social, pois são abrigados em uma instituição para menores, e seu período neste ambiente é instável, observando que os resultados dos indivíduos que estão há mais tempo no Projeto foram os melhores. Sendo assim, de acordo com os resultados do estudo, pode-se tracar um tratamento individualizado para melhorar o desempenho motor destes praticantes. Portanto acredita-se, ser de suma importância um programa de avaliação, acompanhamento e intervenção do desenvolvimento motor, com vistas à promoção da saúde infantil e à prevenção dos agravos do desenvolvimento.

PALAVRAS-CHAVE: Desenvolvimento Motor - crianças - vulnerabilidade