

140 - PROFILE OF DEVELOPMENT MOTOR SCALE OF THE EXTENSION PROJECT OF THE UNIVERSITY OF SANTA CRUZ DO SUL-RS

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INTRODUCTION

The water activities present therapeutic benefit for people with disabilities, according to the author "The physical benefits of aquatic sports are more vivid and important for children with disabilities than for non-disabled people." Therefore, water has shown benefits because it helps maintain body weight, thus facilitating the execution of movements that in the floor would be very stressful for people with disabilities. The benefits of water activities are not limited to the physical aspect, but also serve the special needs, offering a contribution to the psychosocial and cognitive development, and may even provide an incentive for other aspects of rehabilitation (Lepore, 2004).

Accessibility is the possibility of companionship with differences, being beneficial to society, resulting in better quality of life for citizens with mental disabilities (Alves, 2007).

Mental disability is an intellectual state inferior than average, associated with limitations in at least two aspects of adaptive functioning, which are: Communication, Personal Care, Domestic Responsibility, Social Skills, Use of Resources Communicable, Autonomy, Health and Safety, School Skills, Leisure and Work. For a long time was considered by the WHO (World Health Organization) as mental disability the presentation of the intellectual development of QI below 70 accompanied by limitations in developing perceptual, motor and social development. To check the level of disability are used psychometric tests that can be classified according to the table below (Diehl, 2006).

Table 1 –WHO Classification(World Health Organization)

Coeficiente Intelectual	Denominação	Nível Cognitivo Segundo PIAGET	Idade Mental Correspondente
QI menor que 20	Profundo	Período Sensório-Motriz	0 a 2 anos
QI entre 20 e 35	Severo	Período Sensório-Motriz	0 a 2 anos
QI entre 36 e 51	Moderado	Período Pré-Operativo	2 a 7 anos
QI entre 52 e 67	Leve	Período das Operações Concretas	7 a 12 anos

Ballone, G.J; 2003

Persons with severe disabilities do not have autonomy for basic activities such as food, hygiene and protection. People suffering from Severe Disabilities have autonomy to perform basic activities of daily when stimulated with slow and gradual learning. Persons with Moderate Disabilities able to perform more elaborate tasks with supervision having a basic autonomy. Persons with low disabilities have autonomy to accomplish complex tasks under supervision and may receive activities that require responsibility and skills. The mental disability can have several causes, including genetics, prenatal complications, complications in childbirth, postnatal complications, socio-cultural and unknown (Diehl, 2006).

In the mental deficient the neurological damage is limited to intercellular communication of synapses where the transfer of information by the nervous system becomes inefficient. With the knowledge of specific motor areas of the mentally disabled, such as small and global motricity, balance, body scheme, spatial and temporal organization and symmetry, to identify areas where have motor difficulties, so we can plan the interventionist work and optimize its psychomotor. It is important to realize frequent motor evaluations in order to keep abreast of development and motor learning and cognitive of these subjects. It is important to clarify that the development and learning are being considered similar and inseparable to acquisitions cognitive and motor, where it is necessary to observe specific motor tests, with varying degrees of complexity, especially in cases of low intelligence quotients (MANSUR; MARCON, 2006).

We should take into account the history of each person, the way they live, the way it is treated and the stimuli it receives, these factors interfere significantly, because we can find people with the same level of QI and behavioral responses very different, thus, some can articulate and organize thoughts as proposed tasks and others do not have initiative behavioral response (Diehl, 2006).

This study aims to evaluate the motor profile of people with disabilities enrolled in APAE (Parents and friends of people with special needs association) Santa Cruz do Sul and Piracema's project participants (Swimming for People with Special Needs).

METHOD

We used tests of Motor Development Scale (ROSA NETO, 2002), implemented in April 2009, participants were 6 students with mental disabilities, of both sexes, aged between 15 and 19 years, Piracema's project participants. The aspects evaluated were the following: * Small Motricity, Global Motricity, * Balance, * Schema Corporal / Speed; * Organization / Space * Language and / Temporal Organization. Through the sum of the motor age of each of these aspects (in months), and after dividing them by 6, then we get the General Motor Age is the most comprehensive aspect to be assessed by tests of Motor Development Scale (EDM) Rosa Neto (2002).

RESULTS-DISCUSSION

As Table 1, it was found that the generally motor age of the individuals was lower than the chronological age, and these vary between 15 and 19 years old and the motor age is between 3.1 and 8.4 years. Children with disabilities have motor delays since the early stages of neuropsychomotor development, including large motor skills, fine and language development, varying the rhythm of each child, being a sequential and orderly process (BEE, 2003)

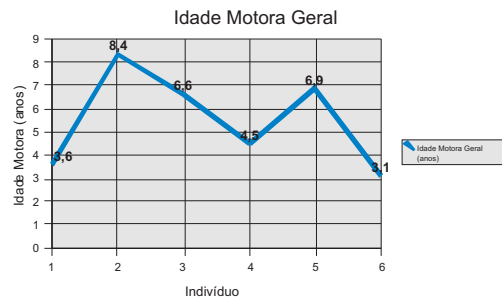
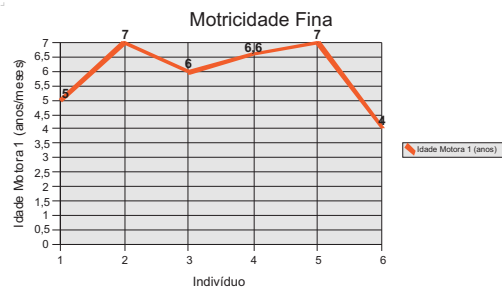
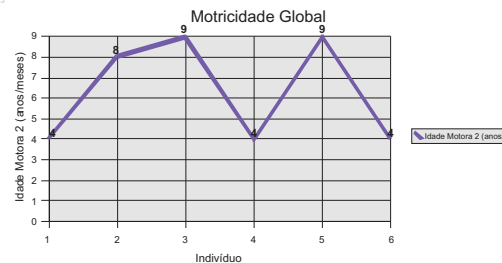


Table 2 shows that the students tested had a deficit in small motor skills. Taking into account that there is a relationship between the motor-eye coordination and training of the mental life of the person (MANSUR, MARCON, 2006).



Graph 2: Small motricity

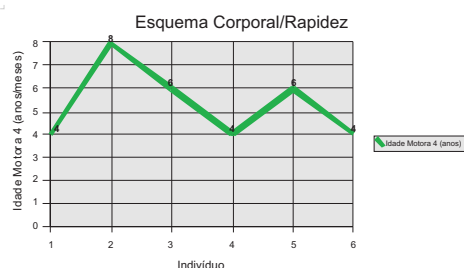
In the aspect of Global Motion, Table 3, it was found that 50% (n = 3) showed satisfactory results and 50% (n = 3) showed much lower results. The Global Motion requires the interaction of tone and balance, and coordination of handedness, a sense of body, space and time, creating a harmony of your body with the external environment (MANSUR; MARCON, 2006). The relationship between the inability of motor coordination and learning difficulties may indicate an increased fragility of the neural systems responsible for the integration of sensorimotor information (WABER; WEILER, BELLINGER, Marcus; FORBES, Wypij, et al, 2000).



The next aspect to be considered will be the balance, Table 4, where the students had a much lower deficit. This deficit may be related to the lack of cerebellar dysfunction, because the cerebellum is essential for motor control and its dysfunction intervenes in the balance, speech, coordination of limbs and eyes, spatial organization, resulting in delayed motor development (Geuze, 2003).



Table 5 present the results of the human body / Speed, and 50% (n = 3) had reasonable results and 50% (n = 3) had a ratio of body scheme / speed unsatisfactory. In mentally disabilities to require a high degree of maturation, several times cervical and trunk control, upper limb mobility are absent or insufficiently present (MANSUR; MARCON, 2006). For this fact this test showed results lower than expected.



In the aspect of the Organization / Space, Table 6, only 33.33% (n = 2) of the students show motor age pretty good, 66.67% (n = 4) of the individuals had motor age lower than expected. The individuals with mental disabilities have a shortage of motor skills that we can't integrate sensitive and perceptive of the environment data and establish physical relations between objects in space and the body (MANSUR; MARCON, 2006).

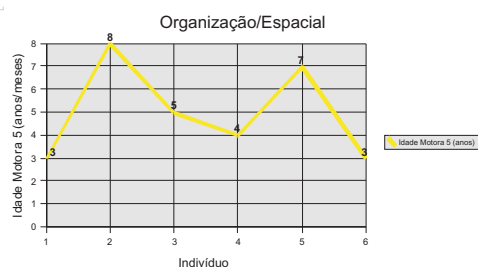


Table 7, Language / Temporal Organization, has only 16% (n = 1) of the tested achieved a high motor age, and 84% (n = 5) of the students assessed had a deficit in language / Temporal Organization. Children with abnormal temporal processing signals assigned to cognitive and perceptual motor and associated with learning disorders have limited capacity to assimilate information and need more time to make them (Smits, WILSON; WESTENBERG; DUYSSENS, 2003). To Lorenzini (2002) speech and movement are directly associated with each other and are reinforced by the environment.



Graph 7 – Language – Temporal organization

CONCLUSION

Through appropriate analysis from the results obtained using the Motor Assessment Battery of the Rosa Neto study we realize that the mentally disabled have changes in motricity. The variables evaluated, small and global motricity, balance, body scheme / speed, organization / spatial and language / temporal organization were classified as motor pattern "very low", and the global motricity variable was the one that has tested positive and the balance variable negative results. The water activities when stimulated since childhood, can ease the mental deficits of children with this disorder. A child with a disability should receive the right stimulation for its motor development, because if you do not receive this stimulus the child may present an even greater deficit. Thus, according to this study, where the practitioners were evaluated individually, so one can trace an individualized approach.

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ABSTRACT

This paper aims at presenting the motor profile of students participating in Piracema's Project - "Swimming For People with special needs", extension project of the University of Santa Cruz do Sul - UNISC / APAE during 25 years, attending students with different pathologies. The project goal is to promote activities in the aquatic environment so that students increase their repertoire of attitudes in the water and when possible outside it. This study aims to evaluate the motor profile of the Piracema's project participants. Participants were 6 students with mental disabilities, of both sexes, aged between 15 and 19 years. Were tested on the Motor Development scale (EDM), which include the following: small and Global Motion, Balance, Body Schema / Speed, Space Organization and language / Temporal Organization. The results obtained revealed that, in small motricity the students showed deficit, in the global motricity were showed satisfactory results and less, but the balance was presented a higher deficit among all aspects. Physical Scheme / Fast showed results between reasonable and unsatisfactory, Spacial Organization has obtained good results and lower and the last one evaluated Language / Temporal Organization results showed ups and downs. Thus, according to this study, where the practitioners were evaluated individually, so one can trace an individualized approach.

KEYWORDS: PPNE, EDM, water activities

PROFIL D'UN TRAVAILLEUR MOTEUR DU PROJET DE DÉVELOPPEMENT DE L'UNIVERSITE DE SANTA CRUZ DO SUL - RS
RÉSUMÉ

Le présent document vise à présenter le profil d'automobiles d'étudiants participant au projet de frai - "natation pour personnes handicapées" ouvrier de l'extension du projet à l'Université de Santa Cruz do Sul - UNISC / APAE agissant là bas 25 année, en prenant des étudiants de plus différentes pathologies. L'objectif du projet est de promouvoir des activités dans le liquide, afin que les étudiants augmentent leur répertoire d'attitudes dans l'eau et, si possible en dehors d'elle. Cette étude vise à évaluer le profil de moteur des participants au projet de frai. Les participants étaient de 6 élèves avec un retard mental, des deux sexes, âgés entre 15 et 19 ans. Ont été testés à l'échelle du développement moteur (EDM), qui comprennent les éléments suivants: Mince et Global Motion, Balance, Body Schema / Speed, Space Organisation Cherchez Temporal Organisation. Les résultats obtenus ont révélé que, en déficit de la motricité fine montré aux élèves les résultats dans la fonction motrice globale évaluée a montré des résultats satisfaisants en moins, puisque le solde a été présenté une prévalence plus élevée parmi tous les aspects. Physical Scheme résultats rapides ont montré la rupture entre raisonnable et satisfaisante Space Organisation a obtenu de bons résultats et la baisse de ce dernier a évalué Langage/ Organisation temporal des résultats a montré des hauts et des bas. Étant, selon cette étude, où les pratiquants ont été évalués individuellement, de sorte qu'on peut tracer une approche individualisée.

MOST-CLÉS: PPNE, EDM, activités nautiques

PERFIL DE UN MOTOR DE DESARROLLO DEL PROYECTO TRABAJADOR DE LA UNIVERSIDAD DE SANTA CRUZ DO SUL - RS
RESUMEN

Este documento tiene como objetivo presentar el perfil de motor de estudiantes que participan en el Proyecto de desove - "Piscina para Personas con Discapacidad" obrero de la extensión del proyecto en la Universidad de Santa Cruz do Sul - UNISC / APAE. atuando 25 años, teniendo alumnos de más de diferentes patologías. El objetivo del proyecto es promover actividades en el líquido de modo que los estudiantes aumenten su repertorio de actitudes en el agua y cuando sea posible fuera de ella. Este estudio pretende evaluar el perfil de motor de las participantes en el proyecto de desove. Los participantes fueron 6 estudiantes con retraso mental, de ambos sexos, con edades comprendidas entre 15 y 19 años. Fueron probados en la escala de desarrollo motor (EDM), que incluyen los siguientes: Delgado y Global movimiento, equilibrio, esquema corporal / Velocidad, la Organización Espacial Busca temporal Organización. Los resultados obtenidos revelaron que, en el déficit de motricidad fina mostró a los estudiantes los resultados en la función motora global evaluados presentaron resultados satisfactorios y menos, ya que el saldo se presentó una mayor prevalencia entre todos los aspectos. Esquema físico y resultados rápidos mostró la división entre razonable y satisfactoria la Organización Espacial ha obtenido buenos resultados y bajar el último evaluado Idioma / Organización Temporal resultados mostraron altibajos. Así, según este estudio, donde los practicantes fueron evaluados individualmente, por lo que se puede trazar un enfoque individualizado.

PALABRAS CLAVE: PPNE, EDM, actividades el agua

PERFIL DE ESCALA DE DESENVOLVIMENTO MOTOR DO PROJETO EXTENSIONISTA DA UNIVERSIDADE DE SANTA CRUZ DO SUL - RS
RESUMO

O presente trabalho tem por objetivo a apresentação do perfil motor dos alunos participantes do Projeto Piracema - "Natação Para Portadores de Necessidades Especiais", projeto extensionista da Universidade de Santa Cruz do Sul - UNISC/APAE. Atuando há 25 anos, atendendo alunos das mais diferentes patologias. O objetivo do projeto é promover atividades no meio líquido de forma que os alunos aumentem seu repertório de atitudes na água e quando possível fora dela também. Este trabalho tem por objetivo avaliar o perfil motor dos participantes do Projeto Piracema. Participaram desta pesquisa 6 alunos portadores de Deficiência Mental, de ambos os sexos, com idades entre 15 e 19 anos. Foram aplicados os testes de Escala de Desenvolvimento Motor (EDM), que compreendem os seguintes aspectos: Motricidade Fina e Global, Equilíbrio, Esquema Corporal/Rapidez, Organização Espacial e Linguagem/Organização Temporal. Com os resultados obtidos contou-se que na motricidade fina os alunos apresentaram déficit nos resultados, na motricidade global os avaliados apresentaram resultados satisfatórios e inferior, já no equilíbrio foi apresentado maior déficit dentre todos os aspectos. Esquema Corporal/Rapidez nos mostrou resultados divididos entre razoável e insatisfatório, Organização Espacial obteve resultados bons e inferior e o último aspecto avaliado Linguagem/Organização Temporal mostrou resultados altos e baixos. Sendo assim, de acordo com esse estudo, onde os praticantes foram avaliados individualmente, assim pode-se traçar um tratamento individualizado.

PALAVRAS-CHAVE: PPNE, EDM, atividades aquáticas

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