52 - ANALYSIS OF THE STAGES OF DEVELOPMENT OF FUNDAMENTAL MOTOR SKILLS: A STUDY OF STUDENTS AGED 9 AND 10 YEARS OLD

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INTRODUCTION

Verifying the stages of development of motor skills in children, allows the proposed actions to be planned according to this level of development, thus contributing more effectively to the development of children in their totality.

According to Gallahue and Ozmun (2005), motor skills can be subdivided into categories, which are: balance, locomotors and manipulative, that classify the function of intentional movement of an individual. Motor skills of balance are the foundation for all other locomotors and manipulative skills because every movement involves an element of balance, they are those in which the body remains in place but moves around its horizontal or vertical axis. The locomotors skills are those in which the body is carried in a vertical or horizontal direction from one point to another and manipulative skills include coarse and fine movements, the gross motor manipulation refers to movements that involve giving force to objects and fine motor manipulation refers to activities holding objects that emphasize motor control, precision and accuracy of movement

The level of development of these skills is classified into initial stages, elementary stages or mature stages. The initial stage is characterized when children make their first attempts observable with the purpose of performing a task, with raw and disorderly movements. The elementary stage seems to depend primarily of maturity, in which they gain greater coordination and control over their movements, yet still seems somewhat awkward and without fluidity. The mature stage is characterized by the integration of all the parts that make up a pattern of movement within a well coordinated act, mechanically correct and efficient.

For the elaboration of a developmental physical education program, we need to know what stage of motor development the children are located and, therefore, it is recommended the application of motor tests. To Guedes and Guedes (2002) the major problems with this type of study is the difficulty in developing an instrument that can objectively evaluate the patterns of habitual physical activity of children. Based on this, we used a tool for evaluating motor observational. This instrument can assist the teacher in making important curricular decisions about fundamental motor skills of children.

This study's main objective is to determine the stage of development of motor skills in children aged 9 and 10 years old, male and female, of a state school in the city of Valle Verde, RS.

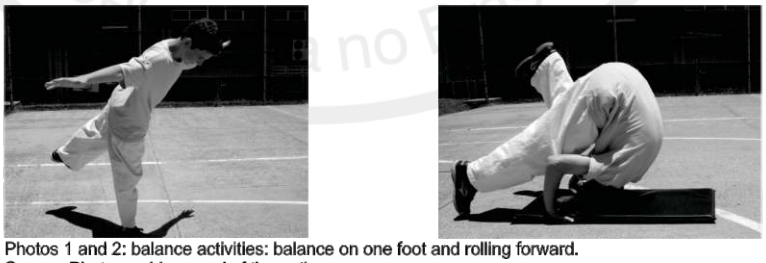
METHODOLOGICAL PROCEDURES

Were subjected of this investigation, 30 students of the 4th year of a state school in the city of Valle Verde, RS, aged 9 and 10 years old, 20 males and 10 females.

This study was characterized as a descriptive exploratory study and followed these steps: selection of subjects for research; observational analysis of motor skills of balance, locomotion and manipulative and their classification into stages (initial, elementary, mature). To evaluate motor abilities it was used the Instrument of Evaluating the Standard Motor Schools (FMPAI) developed by McMlenaghan and Gallahue (1982), which is an informal observational assessment tool that is not intended to compare individuals, but serves to assess the stage in which the child is (intraindividual changes) and also the change versus time in development. After collecting data, it was performed typing, organizing, analyzing and interpreting data.

Were observed the following balance skills: plane with the supporting foot elevated and rolling forward (Photos 1 and 2); locomotion: straight line race and jump with both feet together (Photos 3 and 4) and manipulative: launch and receive a ball (Photos 5 and 6), to check the level of maturity of the movement patterns. The subjects, wearing proper clothing were observed performing the skills. The materials used for data collection were only mats and handball balls.

Photos 1 and 2: activities of balance: balance on one foot and rolling forward.
Source: Photographic record of the authors.



Photos 1 and 2: balance activities: balance on one foot and rolling forward.
Source: Photographic record of the authors.



Photos 3 and 4: locomotion activities: jump with both feet together and running over the line.
Source: Photographic record of the authors.




Photos 5 and 6: manipulative activities: launching and receiving a handball ball.
Source: Photographic record of the authors.

DISCUSSION AND ANALYSIS OF RESULTS

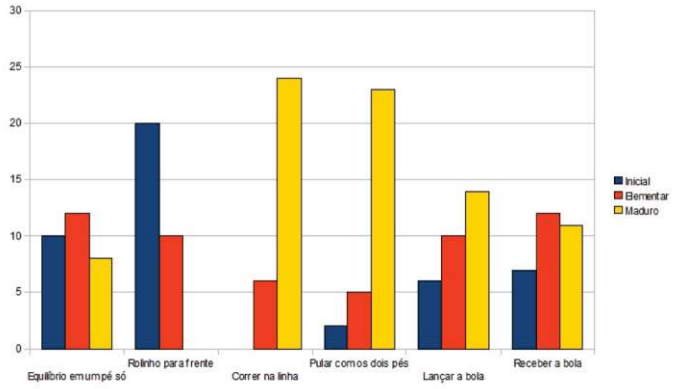
Based on the results, we found that although the subjects are in the same age group, they are at different stages of development, revealing differences in motor performance that should be considered in the planning and preparation of activities and / or exercises.

From the data analysis (Graph 1) it was found that: a) in the elements of balance rolling forward, 66.7 % of the children are at the initial stage and 33.3 % at the elementary stage, indicating that this ability requires a more specific and intensified operation, so that students reach higher levels of development, considering that it was possible to identify a deficiency in relation to the domain of the concept of this skill by children. In the exercise aircraft, which is the balance on one foot, it was found that 43.4% of the children were in the elementary stage, 33.3% children in the initial stage and 23.3% in the mature stage, which shows us that in the ability of static balance, while much of the children need improvement to develop this activity, a good portion already mastered it, which means that there is a strong tendency, even by the influence of environmental factors, that the other children reach the mature stage of this ability.

When we proceed the analysis of the locomotors skills it was possible to verify that the subjects are in good levels of development, since 50% are in the elementary stage and 50% in the mature stage in the racing activity on a line; in the jump activity with both feet, 45% are in the elementary stage, 45% in the mature stage and 10% in the initial stage. It is interesting to recommend a more specific work to specified students who are still at an early stage with psychomotor exercises, since jumping is a fundamental movement that can be seen as an extension of the race and its mature development depends in some effective way of race as recommended by Gallahue (2008).

In the analysis of manipulative skills, there was a good diversity in terms of the developmental stages, having in the activity of throwing the ball 47% in the mature stage, 33% at the elementary stage and 20% in the initial stage. The activity of receiving the ball, 40% are in the elementary stage, 36.7% in the mature stage and 23.3% in the initial stage. Even with the material ball, which is quite popular among children, we realize that they still have much difficulty in specific activities that require dexterity with their hands.

Graph 1- Stages of development of motor skills



Considering that a good percentage of children are found in the elementary and mature stages the development of the ability so that all children leave the initial stage and reach the mature standards, can be linked to the need for differentiated materials when working to develop this skill. Children in the initial stage, for example, experience greater success when receiving objects that do not appear as a risk to their integrity, such as a bean bag. Therefore they are able to grasp with greater ease and safety than to welcome a ball itself (GALAHUE and DONNELLY, 2008). So that they reach the mature standards, can be linked to the need for differentiated materials when working to develop this skill, revealing that the practice to receive or release can be facilitated by the use of objects of sizes, shapes, colors and consistencies variables.

FINAL CONSIDERATIONS

At the end of this study it was established that the results found are the same for which the literature in this specific area suggests. It was found that while learning a new motor skill occurs in levels and predictable stages, each child has an individual time and an extension to the acquisition of motor skills. However even though every child has a particular rhythm, environmental factors play an important role in the development of these skills, since children need encouragement, opportunities to practice and quality instruction to develop and refine their skills movements.

Was possible through the data found, verify that the studied population, is in the process of development. Having the teacher the important role of creating opportunities for all children to reach mature stages, which are the ideal standards necessary for the proper growth of children

According with the evaluation performed in children from 9 to 10 years old of the city of Vale Verde, RS, became evident the need for psychomotor practices and emphasis on gymnastic exercises. It is concluded that this study becomes effective to emphasize the importance of evaluation of motor skills in children, as it allows the teacher to identify the difficulties and needs presented by the child, and create the correct guidelines to enhance their development.

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ANALYSIS OF THE STAGES OF DEVELOPMENT OF FUNDAMENTAL MOTOR SKILLS: A STUDY OF STUDENTS AGED 9 AND 10 YEARS OLD

ABSTRACT

This study's main objective is to determine the stage of development of motor skills in children aged 9 and 10 years old, male and female. Were subjected of this investigation, 30 students of the 4th year of a state school in the city of Valle Verde, RS. This study was characterized as a descriptive exploratory study and followed these steps: selection of subjects for research; observational analysis of motor skills of balance, locomotion and manipulative and their classification into stages (initial, elementary, mature). To evaluate motor abilities it was used the Instrument of Evaluating the Standard Motor Schools (FMPAI) developed by McMlenaghan and Gallahue (1982). Were observed the following balance skills: plane with the supporting foot elevated and rolling forward; locomotion skills: straight line race and jump with both feet together, and manipulative skills: launch and receive a ball, to verify the level of maturity of movement patterns. The main results were: In the motor skills of balance: rolling forward 66.7% of the subjects are in the initial stage and in the plane 43.4% are in the elementary stage. In locomotors skills: 50% are in the elementary stage and 50% in the mature stage in the racing activity on a line and in the activity jump with both feet 45% are in elementary stage and 45% in the mature stage. In the manipulative skills, 47% are in the mature stage of the throwing the ball activity and in the receiving the ball activity, 40% are in the elementary stage. It is concluded that this study becomes effective to emphasize the importance of evaluation of motor skills in children, as it allows the teacher to identify the difficulties and needs presented by the child, and create the correct guidelines to enhance their development.

KEY WORDS: Skills; development; school; analysis.

L' ANALYSE DES ÉTAPES DE DÉVELOPPEMENT DES HABILITÉS FONDAMENTAUX DE LA MOTRICITÉ HUMAINE: UNE ÉTUDE CHEZ LES ENFANTS À L'ÂGE DE NEUF ET DIX ANS

RÉSUMÉ

Le but principal de cette étude est de déterminer le point de développement de la motricité humaine chez les enfants à l'âge de 9 et 10 ans. Trente élèves de la 4ème année de l'école publique à la ville de Vale Verde, province du Rio Grande do Sul, Brésil, ont été sujets à cette enquête. Cette étude a été caractérisée comme une étude exploratoire descriptive et a suivi les étapes: sélection des enfants à être observés, l'analyse d'observation des fonctions motrices de l'équilibre, de la locomotion et manipulation, et ses 76 classifications aux stades (initial , élémentaire, mature) . Pour évaluer la motricité humaine on a utilisé l'Instrument d'Évaluation Fondamental (FMPAI) selon McClenagham et D.L. Gallahue (1982). Les habilités de l'équilibre on été montrées: l'exercice sur l'avion au pied d'appui élevé et rouler vers l'avant. Pour la locomotion: course em ligne droite en sautant au pieds joints; des exercices de manipulation: lancer et prendre un ballon, pour vérifier le niveau de maturité des paramètres de déplacement. Les aboutissements principaux: Dans la motricité humaine de l'équilibre: rouler en avant, 66,7 % des sujets sont dans un stade initial, et dans l'exercice sur l'avion 43,4 % sont au niveau élémentaire. Dans les habiletés locomotrices: 50% sont dans le stade elementaire, et 50% sont dans la phase de maturité sur les courses de l'activité sur une ligne droite; dans l'activité sauter à pieds joints, 45% sont à un stade elementaire et 45% dans la phase mature. Sur les compétences de manipulation, 47 % sont dans le stade de maturité sur l'exercice de lancer et prendre un ballon dont 40% sont dans le stade elementaire. Face à cette étude, on souligne l' importance d'évaluation de la motricité humaine chez les enfants car elle permet à l'enseignant d'identifier les difficultés et les besoins montrées par chaque enfant et de créer des lignes directrices appropriées à son développement.

MOTS-CLEFS: compétences; développement; école; analyse.

ANÁLISIS DE ETAPAS DE DESARROLLO DE HABILIDADES FUNDAMENTALES DE MOTOR: UN ESTUDIO DE LA ESCUELA A LAS 9 Y 10 AÑOS

RESUME

Este estudio principal objetivo : determinar el grado de desarrollo de las habilidades motrices en niños de 9 años y 10 años , de ambos sexos . Los sujetos de esta investigación , 30 estudiantes del cuarto año de una escuela pública en la ciudad de Valle Verde , RS . Este estudio se caracteriza como un estudio exploratorio, descriptivo y seguido los siguientes pasos: selección de los sujetos de la investigación , el análisis observacional de habilidades motoras, el equilibrio y la locomoción de manipulación y clasificación en etapas (inicial, primaria, maduro) . Evaluar motor utilizó el Instrumento Rating Standard Motor Escuelas (FMPAI) desarrollado por McMlenaghan y Gallahue (1982) . Mostró las siguientes habilidades de equilibrio : Plano con el pie de apoyo de alto y rodando hacia delante , la locomoción : tramo recto y saltar con los pies juntos y manipulador : lanzar y recibir una pelota, para verificar el nivel de madurez de los patrones de movimiento . Los principales resultados fueron los siguientes: En las habilidades motoras de equilibrio : rodando hacia adelante 66,7 % de los sujetos se encuentran en la fase inicial y el 43,4 % en la etapa de primaria avión. En habilidades locomotoras : 50 % se encuentra en la etapa de primaria y 50% en la etapa de madurez en las carreras de la actividad en una línea y la actividad de salto con los dos pies 45 % se encuentra en fase primaria y el 45% en la etapa de madurez . En las técnicas de manipulación , el 47% se encuentran en la etapa de madurez de la pelota y tirar la actividad que reciba la pelota , el 40 % se encuentra en la etapa de primaria. Se concluye que este estudio se haga efectiva para enfatizar la importancia de la evaluación de las habilidades motoras en los niños, ya que permite al profesor identificar las dificultades y necesidades que presenta el niño , y crear las pautas correctas para mejorar su desarrollo

PALABRAS CLAVE: competencias; desarrollo; escuela; análisis.

ANÁLISE DOS ESTÁGIOS DE DESENVOLVIMENTO DAS HABILIDADES MOTORAS FUNDAMENTAIS: UM ESTUDO COM ESCOLARES COM 9 E 10 ANOS

RESUMO

Esse estudo tem como objetivo principal: verificar o estágio do desenvolvimento de habilidades motoras em crianças com idade entre 9 e 10 anos, de ambos os sexos. Foram sujeitos dessa investigação, 30 estudantes do 4º ano de uma escola estadual do município de Vale Verde, RS. Esse estudo se caracterizou como um estudo descritivo-exploratório e seguiu as seguintes etapas: seleção dos sujeitos para a pesquisa; análise observacional de habilidades motoras de equilíbrio, manipulativa e de locomoção e sua classificação em estágios (inicial, elementar, maduro). Para a avaliação motora utilizou-se o Instrumento de Avaliação de Padrão Motor Fundamental (FMPAI) desenvolvido por McMlenaghan e Gallahue (1982). Foram observadas as seguintes habilidades de equilíbrio: avião com o pé de apoio elevado e rolamento para frente; de locomoção: corrida em linha reta e saltar com os dois pés unidos e manipulativas: lançar e receber uma bola, para verificar o nível de maturidade dos padrões de movimento. Os principais resultados foram: Nas habilidades motoras de equilíbrio: rolamento para frente 66,7% dos sujeitos se encontram no estágio inicial e no avião 43,4% no estágio elementar. Nas habilidades locomotoras: 50% se encontram no estágio elementar e 50% no estágio maduro na atividade de corrida sobre uma linha e na atividade pular com os dois pés 45% se encontram no estágio elementar e 45% no estágio maduro. Nas habilidades manipulativas, 47% estão no estágio maduro do lançar bola e na atividade de receber a bola, 40% se encontram no estágio elementar. Conclui-se assim que este estudo se torna eficaz para enfatizar a importância da avaliação de habilidades motoras em crianças, pois permite ao professor identificar as dificuldades e necessidades apresentadas pela criança, e criar as diretrizes corretas para aprimorar o seu desenvolvimento.

PALAVRAS-CHAVE: habilidades; desenvolvimento; escolares; análise.