127 - BALANCE IN INFANCY: COMPARATIVE STUDY BETWEEN PRACTITIONERS OF SWIMMING, FUTSAL AND GROUP IT HAS CONTROLLED.

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INTRODUCTION

To understand as the human being develops the motor abilities, through the life, is the central question of the scholars of the area of motor development. (GALLARDO and ISAYAMA 1998, p.75). The motor development is the link between the cognitive, psychic and social development, therefore through the movements that occur the expression and linking of the other dominions. The motor behavior is observed by a progression since the birth more to far determined age being not only for the biological maturation, but also for external stimulations as the chance to the practical motor.

Authors as Gallardo and Isayama (1998) display that the phases most excellent of the motor development occurs in infancy, and are called of Phase of the Basic Motor Abilities. This phase is initiated for return of the first year of next life until to the 6 or 7 years, being an inclined stage the changes intervening with the future of the individual. Studious as Gallahue and Ozmun (2005) they defend that during the phase of the basic motor abilities the individual passes for three periods of training: initial, elementary and mature. This last period of training can and must be reached by children of 5 or 6 years. It is characterized by performances mechanically efficient, co-ordinate and controlled. Although some children can basically reach this period of training for the maturation and with a minimum of ambient influences, the majority of them needs chances for the practical one. “Without these chances, an individual becomes virtually impossible to reach the mature period of training of certain abilities in this phase, what it goes to inhibit the application and the development in posterior phase” (GALLAHUE; OZMUM 2005, p.61).

Amongst the basic motor abilities, the balance ability is fit in the category of stabilizing movements consisting of the postural control (dynamic or static) of the individuals through the relation individual/gravity force. The balance ability is the base of any human movement being the same crucial for the development of simple activities of day-by-day as the act to walk or to remain itself motionless, a time that I eat Cook and Woollacott (2003) affirms, all the abilities needs maturates of the postural activity so that the primary movement is supported. Blessed, Bohadama, Lima and Silveira (1998) affirm that the maintenance of the balance occurs for the function of the vision, proprioceptive sensitivity and the device initial and from this interaction of the afferent stimulations in the brain, together with previous experiences.

The balance, as well as the other motor abilities is related with the experiences and lives deeply individual of the child, on this, Paim (2003, p.1) displays that: “How much bigger the number of motor experiences of quality, greater will be the performance in the motor tasks carried through by them”.

Physical activities as half of external stimulations can contribute of excellent form in the balance of children who if find in the basic motor phase. However he is perceivable that many children if limit in entertaining it television, video games computers compromising development of basic motor abilities as the balance. The daily pay-porting activities swimming and futsal can be practical influential motor in the balance for the great number of motor experience that these activities provide. Observing some on aspects infantile swimming, we have from the described one for Corrêa and Massaud (2004, p.87) that swimming can be seen:

[...] act to put into motion them selves and to support themselves in the water for proper impulse, with agreed movements of arms and legs. It is important as exercises of corporal, half development of defense against drowning or in operations of rescue (grief ours).

The futsal is another one practical physics that can be excellent in the development and acquisition of basic motor abilities as the balance. For Mutti (1999): “[...] in the initiation of the futsal is an applied diverse movement and experiences that come to provide to the increase of the quantity motor. Observing then that physical activities swimming and futsal as external stimulations to the motor development of ability, Weiss (1995 apud VALENTINNI 2002, p.61-62) affirm that:” The environment is an important source of information on abilities, with which the children can learn to appreciate experiences of learning of the movement.” The way that a child covers for return of the two years of age, until starting if to transform into adult, the adolescence, is on in such a way to its biological conditions as to those proportionate ones for the social space where it lives. That is, the influence left for the cultural and genetic inheritance of the man in its evolution, determines and improves its development (BORGUES, SOUZA and PEREIRA 2008). In such a way, it is intended through the present study to argue the practical one of swimming and the futsal as being under the influence of physical activities in the performance of the balance of children of 5 years that if find in the phase of the basic motor abilities.

MATERIALS AND METHODS

The research is of descriptive nature, and is also assigned as a research that uses the comparative method, for searching to stand out similarities and differences between groups (STOLEN DUARTE and, 2002).

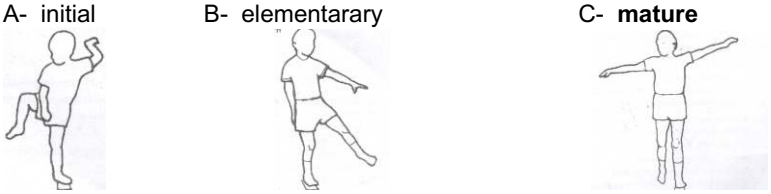
POPULATION AND SHOWS The involved population in the study was composed for children of 5 years of the masculine sex of city Clear the Mount shows has 24 children of 5 years, of the masculine sex chosen of intentional form. This sampling was divided in 3 groups having been the same ones: G1- 8 practitioners of swimming, G2- 8 practitioners of futsal and G3- 8 not practicing children of no regular physical activity beyond those of its daily and pertaining to school life, called of group have controlled.

ETHICAL CARES Before initiating the research the project of the same one was analyzed and approved for the Committee of Ethics of the State Clear Mount University in process 258. All the responsible ones of the participants of the study were be able to of the objective of the research and had assented the accomplishment of the same one, through signatures of the term of free assent and clarification.

PROCEDURES All the children of this study had been submitted to the tests of static balance and dynamic with the objective of evaluation of this motor ability in the qualitative aspects (process) and quantitative (product). For the qualitative study of the static balance and dynamic the matrix of analysis of movement of the basic standards how much to the level of maturity was

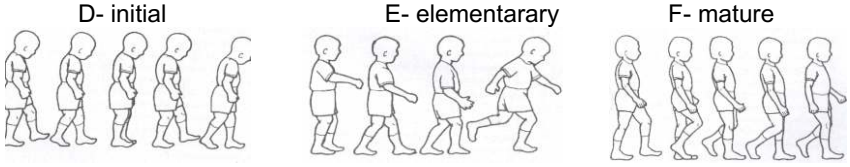
used (initial, elementary or mature) considered by Gallahue and Ozmun (2005) having all the children of this research to be in the mature period of training with regard to ability of static balance and dynamic. For it analyzes qualitative of the static balance the child would have to remain with only one foot of support in contact with the ground, being considered of the mature period of training when it remained in the described position equally figure C soon below:

A- initial B- elementarary C- **mature**



In the analysis of the maturational level how much to the dynamic balance the child would have to walk in only direction, being considered of the mature period of training if it carried through this activity equally the matrix of figure F, then below:

D- initial E- elementarary F- mature



In the quantitative evaluation the test of static balance and dynamic for children of 5 years was used considered by Lefèvre (1972). For this evaluation the children had first made a test of relative static balance to its chronological age (5 years). Executing this test of satisfactory form the same ones passed the test of referring static balance to a superior age (6 years). In case that the relative test its chronological age were not successful, she was applied the test of same static balance being referring the inferior age (4 years). In sequence the tests of the dynamic balance had been applied using the same procedures made in the tests of the static balance.

·Description of the test of the static balance

Test A (5 years) - Of foot. The tip of one of the feet leans in the heel of the other. Open eyes. Duration of the test, 10 seconds. The subject imperfection if is breached the balance position, if the feet if move away from the position where they had been placed, or if the superior members if to open looking for to reestablish the balance.

Test B (4anos - inferior age) - In together foot, feet, support plantar, arms fallen throughout the body. Closed eyes. Duration of 30 seconds. The subject imperfection if the feet to move away and the same to dislocate and/or if the arms to open. Small lateral oscillations or anteroposterior are not considered. Test C (6 years - superior age) - Similar the test, however with the closed eyes. Same criteria of evaluation

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·Description of the test of dynamic balance

Test A (5 years) - To dislocate 5 meters jumping in one alone foot. To leave to choose is preferred it. The subject imperfection if not to obtain to dislocate themselves jumping, if to lose the balance supporting the other foot in the soil or to deviate for is of the band of 1 meter.

Test B (4 years - inferior age) - To walk in the tip of the feet an extension of 5 meters. The subject imperfection if to place the plant of the foot in the soil, if to breach the balance or to turn aside themselves for is of 1 meter.

Test C (6 years - superior age) - The same test made in the test, however with the other foot. Same criteria of evaluation.

STATISTICAL TREATMENT For treatment of the data used it Descriptive Statistics applying as analysis tools the test Qui-square (x2) distribution free and test t of student for independent samples considering as index of significance p = 0,05.

RESULT AND QUARRE

Application of the statistical treatment

Tables 1 and 2 present the comparison of the 0 variable Static balance and Dynamic in the three groups of the analyzed sampling, representing the results gotten for the test Qui-square (x2) distribution free considering p = 0,05. Test t of student for independent samples with the purpose was used to verify the existence of significant difference enters the averages of the modalities swimming and futsal in the changeable dynamic balance.

Table 1

COMPARISONS OF THE STATIC BALANCE BETWEEN THE GROUPS SWIMMING, FUTSAL AND CONTROL

	Swim	Futsal	Controle
Equilÿbrio Estÿtico	7*	5	5

* - Index of significance with p = 0,05 presenting itself in p= 0.01 in the group of Swimming (G1).

Table 2

COMPARISONS OF BALANCE DINÂMIICO BETWEEN THE GROUPS SWIMMING, FUTSAL AND CONTROL

	Swim	Futsal	Controle
Equilÿbrio Dinÿmico	8*	7**	5

* - Index of significance with p = 0,05 presented in the group of Swimming (G1) with index of superior significance to the group of the Futsal (G2) being gotten this result through test t of student for independent samples.

** - Index of significance with p = 0,05 presenting itself in p= 0.01 in the group of the Futsal (G2).

QUARREL OF THE RESULT

In the present study, it influences it of ambient experiences in the Balance of children of 5 years is perceived positively, in view of that in accordance with the treatment of the data, the not practicing children of regular physical activities - G3 had not presented resulted satisfactory how much to the Static balance and Dynamic.

This described result above is confirmed by the inquiries Krug (2002) that it aimed at to compare the basic standards of

pertaining to school movement of the city of Curitiba/PR, where in the study of Krug (2002) the children that did not practice regular physical activities had not presented a performance in the balance of satisfactory form. Thus, the results gotten in the present research and the inquiries of Krug (2002) show how much the diverse environments where the child if inserts are influential in the development of motor abilities as the balance.

Analyzing the groups of practicing children of daily pay-porting activities Swimming - G1 and Futsal - G2, is observed that the children that make Swimming had presented given satisfactory and superior in the Static balance and dynamic to the group of the practitioners of Futsal. The story above can be explained by the fact of in the aquatic environment the child is always subjects the search of a corporal stability, therefore according to Palmer (1990), in the water any type of carried through movement cause corporal disequilibria, taking the individual to look a new postural stability.

Therefore it is perceivable that all the moment the aquatic way provides stimulations for the reach of the motor balance. Lopes and Pereira (2004) when carrying through an experimental study on the influence of swimming in the balance of children, also using the protocol of Lefrève (1972), had evidenced that, the group that was submitted the 4 months of practical regular of Swimming, she presented superior indices to the one of the children of the group has controlled (that they did not make regular physical activities) how much to the static balance and dynamic.

Thus being, the data of this experimental study corroborate with the results of the present research. In the aquatic way, it is seen possibility to explore the two types of balance, dynamic static and still in different positions passing of the vertical position, for the inclined one until arriving at the horizontal position that is more favorable for the displacement in this way. It is observed that the stimulation of the balance in this way occurs large-scale, considering the sensorial information and the different properties of the water of the terrestrial way, the experiences in the water become intense taking the corporal segments if to adjust to the new information reestablishing a new balance.

How much to the satisfactory result presented by the group of the practitioners of futsal in the dynamic balance, it can be justified by the fact of in the practical one of the futsal to happen more on activities to the dynamic balance, as guided races and races with object conduction (ball), having then this type of balance a bigger stimulation in this physical activity. It was verified resulted unsatisfactory in the static balance in the G2 group.

The research of Pink Grandson (2002 apud CRIPPA et al 2003) evidences that children of 4 and 5 years inserted in when comparative regular physical activities had not played a satisfactory balance to the group of children who do not make regular physical activities, as she occurred in this work in the changeable static balance in the G2 group. Although this unsatisfactory result in the G2, observing all the data of the present research is had of positive form the influence of the way through the daily pay-porting activities in the balance of children of 5 years, having strengthened this idea authors Corrêa and Massaud (2004, P. 86) when they display:

When believing that intelligence if constructs to front to a constant interaction between the citizen and the way, we see that the child can benefit itself enormously when she has the possibility of living in an educational environment that offers the chance to it to act with freedom and espontaneidade all, stimulating its development of playful and objective form.

Observing, the interference of the professional in the area of the infantile physical education in the development of motor abilities detaching the balance for its importance, the same one becomes interesting from the moment that this professional provides to a significant profit the motor experiences of its education in most diverse environments. If the professionals of the area of the infantile physical education are experts on the importance of a motor intervention of quality, the abilities acquired for the children, could from then on be more consistent.

CONCLUSION

Through the gotten results it is possible to affirm that the daily pay-porting activities swimming and futsal influence positively in the dynamic balance of children of 5 years, therefore in the static balance, swimming only showed resulted satisfactory.

The children who do not practice daily pay-porting activities, the group has controlled, demonstrates inferiority in the static balance and dynamic compared with the swimming practitioners. Relating the group it has controlled to the group of the futsal practitioners we have the equal results how much to the static balance, and in the dynamic balance the group of the children who make futsal presented given superior.

Words keys: balance, experiences, and daily pay-sports.

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BALANCE IN INFANCY: COMPARATIVE STUDY BETWEEN PRACTITIONERS OF SWIMMING, FUTSAL AND GROUP IT HAS CONTROLLED

SUMMARY

Amongst the motor abilities, the balance, gift in the category of stabilizing movements, receives a bigger importance for the fact from all the other abilities of locomotive or manipulative character to need its maturates. The daily pay-porting study it comes to argue practical swimming and futsal as stimulations under the influence in the dynamic and static balance in children of 5 years. The research is descriptive comparative having as sample 24 children of 5 years of the masculine sex divided in: G1- 8 practitioners of swimming, G2- 8 practitioners of futsal and G3- 8 children of the group have controlled. It was carried through an evaluation of the maturational level of the balance in accordance with Gallahue and Ozum (2005) and a test of static balance and dynamic considered by Lefèvre (1972). The data handling was made through the descriptive statistics. An excellent result in the performance of the balance, the children of the practicing groups of futsal and swimming was observed (this with an index of bigger significance).

Words keys: balance, experiences, and daily pay-sports

ÉQUILIBRE DANS L'ENFANCE : ÉTUDE COMPARATIVE ENTRE DES PRATICIENS DE DE NATATION, DE FUTSAL ET GRUPO IL CONTRÔLE

RÉSUMÉ

Parmi les habilités motrices, l'équilibre, le cadeau dans la catégorie de mouvements stabilisateurs, reçoit une importance plus grande par le costume des toutes les autres habilités de caractère locomoteur ou manipulateur avoir besoin de son mûrissement. L'étude il vient discuter la pratique pré-desportivas natation et futsal je mange des stimulations influenciadores dans l'équilibre dynamique et statique dans des enfants de 5 ans. La recherche est descriptive comparative en ayant mange échantillon 24 enfants de 5 ans du sexe masculin divisés dans : G1- 8 praticiens de natation, G2- 8 praticiens de futsal et G3- 8 enfants du groupe contrôle. Il a été réalisé une évaluation du niveau maturacional de l'équilibre conformément à Gallahue et à Ozum (2005) et un essai d'équilibre statique et dynamique proposé par Lefèvre (1972). Le traitement de données a été fait à travers la statistique descriptive. S'est observé un résultat important dans la performance de l'équilibre, dans les enfants des groupes pratiquants de futsal et de natation (celui-ci avec un indice d'importance plus grande).

Mots clés : équilibre, expériences, pré-desportos.

BALANCE EN INFANCIA: EL ESTUDIO COMPARATIVO ENTRE LOS MÉDICOS DE LA NATACIÓN, FUTSAL Y LO AGRUPA HA CONTROLADO.

EL RESUMEN

entre las capacidades del motor, el equilibrio, regalo en la categoría de movimientos que se estabilizan, recibe una importancia más grande para el hecho de todas las otras capacidades del carácter locomotor o manipulante de necesitar su matureness. El estudio pagar-que vira hacia el lado de babor del diario viene discutir la natación práctica y futsal como influenciadores de los stimulatons en el equilibrio dinámico y estático en los niños de 5 años. La investigación es el tener comparativo descriptivo como niños de la muestra 24 de 5 años del sexo masculino dividido en: G1- 8 médicos de la natación, de los médicos de G2- 8 de los niños futsal y de G3- 8 del grupo han controlado. Fue llevado con una evaluación del nivel del maturacional del equilibrio de acuerdo con Gallahue y Ozum (2005) y de una prueba del equilibrio estático y de dinámico considerados por Lefèvre (1972). El tratamiento de datos fue hecho con la estadística descriptiva. Un resultado excelente en el funcionamiento del equilibrio, los niños de los grupos practicantes de futsal y de nadar fue observado (esto con un índice de una significación más grande).

Llaves de las palabras: balance, experiências, pagar-deportes diários

EQUILÍBRIO NA INFÂNCIA: ESTUDO COMPARATIVO ENTRE PRATICANTES DE NATAÇÃO, FUTSAL E GRUPO CONTROLE.

RESUMO

Dentre as habilidades motoras, o equilíbrio, presente na categoria de movimentos estabilizadores, recebe uma importância maior pelo fato de todas as outras habilidades de caráter locomotor ou manipulativo necessitarem do seu amadurecimento. O estudo vem discutir as prática pré-desportivas natação e futsal como estímulos influenciadores no equilíbrio dinâmico e estático em crianças de 5 anos.A pesquisa é descritiva comparativa tendo como amostra 24 crianças de 5 anos do sexo masculino divididas em: G1- 8 praticantes de natação,G2- 8 praticantes de futsal e G3- 8 crianças do grupo controle. Foi realizada uma avaliação do nível maturacional do equilíbrio de acordo com Gallahue e Ozum (2005) e um teste de equilíbrio estático e dinâmico proposto por Lefèvre (1972). O tratamento de dados foi feito através da estatística descritiva. Observou-se um resultado relevante no desempenho do equilíbrio, nas crianças dos grupos praticantes de futsal e natação (este com um índice de significância maior).

Palavras chaves: equilíbrio, experiências, pré-desportos.