

157 - ANALYSIS OF BODY BALANCE OF GIRLS PRACTITIONERS AND NON-PRACTITIONERS OF DANCE

RONÉDIA MONTEIRO BOSQUE
HILTON MARTINS E SILVA
GILBERTO SANTIAGO FERREIRA
RUY JORNADA KREBS
RICARDO FIGUEIREDO PINTO
UNIVERSIDADE CASTELO BRANCO. RIO DE JANEIRO/RJ - BRASIL
ronediab@yahoo.com.br

INTRODUCTION

In making a historical analysis of the dance we see that at all times it is present, and is included in the culture of most people. Considered by Caminada (1999), Portinari (1989) and Junior (1988), as the oldest man-made arts, dance can be defined as an instinctive manifestation of the human being, it does not need any tools besides himself body of the person who performs, also assumed the role of physical activity. This second role, as important as the first, gave to the many benefits it provides, especially the development of motor skills.

However when we analyze the inclusion of dance in school curricula realize that this is seldom found in the curriculum of school curricula, as stated by Marques (1999) and Betti (1999). Many teachers no longer use it, and valuing the many benefits that dance can bring to the practitioner, as stated by Robison (1992) apud Oliveira et al (2002), citing that it is capable of using all the faculties of the human and has features such as the use of all bodily functions, mental and spiritual, as dancing, muscles, senses and mind come to life, combining harmoniously.

Cavasin (2004) confirms the above statements by saying that by jumping, running and others, the dance develops physical values. By coordinating the arms, legs, head and torso work side psychomotor. The moral and cultural values appear when we use folk dances that require discipline in the execution of techniques. Values appear in the work of mental concentration, reasoning and the setting of choreographic sequences. And finally, still has therapeutic benefits to verify the overcoming of a body with physical limitations when performing movements were previously impossible.

The constant urban growth causes physical activities such as games and street games are changed by computers, television and electronic devices that end up playing for the child (FERREIRA NETO, 1995). For them it is an evil that can bring big losses, since they need experience in diversified activities to work on his motor skills (Gallahue and Ozmun, 2005).

One of the most important for human movement is the ability to control his balance, and this worked well in the dance. This motor skill is defined by Rosa Neto (2002) as the primary basis of all action of different body segments. The author also states that the more defective the motion, more energy is spent, which could be diverted to other neuromuscular work.

Balance is essential in human life, where according to Rodrigues (2000) is the basis of all general dynamic coordination of the body as well as the different actions of its segments. For a baby sit and walk for the first time, must first get your balance and to reach old age, it is also essential to keep up. That is, the movement is this inability to re-skill and to the inability (Santos, and Oliveira Dantas, 2004) requiring, thus the balance.

A child who does not develop effectively balance will have problems in the future in many ways, becoming a teenager "clumsy" and an adult with difficulty performing certain movements. Geuze and Borger (1993), Losse et al (1991) apud Santos, and Oliveira Dantas, (2004) have shown that children diagnosed with motor difficulties after five and ten years still had the same problems. They also warn that parents and guardians do not see this motor disorder as a passing on to children.

Because of this, this study aims to analyze and compare the body balance of girls practicing and non practicing dance in the city of Macapa.

METHODOLOGICAL PROCEDURES

The research is characterized by being kind of descriptive, exploratory and comparative (Thomas and Nelson, 2002), and planning adopted, trough cross.

The study included 180 girls between 8 and 10 years of age, duly enrolled in public schools and private of this council, which were divided equally into two groups. Group A (GA) was composed of 90 girls practicing dance, and 30 girls from 8 years, 30 9 years and 30 of 10 years. Group B (GB) was composed of 90 girls who do not dance, divided the same way as the GA.

The girls of GA and GB were selected at three locations that offer dance in Macapa, a state school and elementary schools and two private elementary and secondary education. All these sites offer small schools of dance styles in classical ballet and modern dance. Both the girls of GB and GA are those of physical education in those schools mentioned above.

It was adopted as a criterion for inclusion in the GA time dancing girls had because there could be less than 6 months and should not engage in any other physical activity, except for physical education. Since the GB and could not attend or have attended any other physical activity beyond physical education.

Was used as an instrument of data collection the balancing test of Motor Development Scale (ROSA NETO, 2002), where girls performed tests according to their chronological age. If they succeeded in their first year, the child would continue with the quiz for chronological age above his, and so on, until you can no longer succeed. If she were successful in their first exercise, she would perform a test related to age below their chronological, and so on, until you can successfully conduct a test. It is noteworthy that were counted as 8 years old girls who had 90 to 101 months, with 9 years girls who possessed 102 to 113 months and 10 years girls who possessed 114 to 125 months.

The material used for the test run was a stopwatch hexadecimal. The data were statistically analyzed where he obtained the mean, standard deviation and coefficient of variation of chronological age, motor and motor quotient of both groups. After comparing the data, we used the statistical one-way ANOVA for the significance of the differences between the data.

RESULTS AND DISCUSSION

The table below shows the mean, standard deviation and coefficient of variation of chronological age and motor and the motor quotient groups A and B.

	Chronological Age			Motor Age			Motor Quotient			General Classification
	Average	Standard Deviation	Coefficient of Variation	Average	Standard Deviation	Coefficient of Variation	Average	Standard Deviation	Coefficient of Variation	
Group A	108,02	9,84	0,09	125,68	12,74	0,10	116,38	12,45	0,11	Normal High
Group B	108,42	10,10	0,09	93,93	17,19	0,18	86,71	13,82	0,16	Normal Low

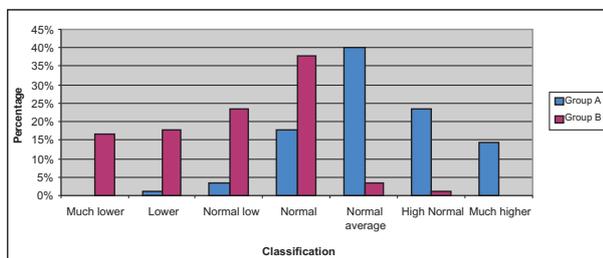
Analyzing the motor ages we can see that they are quite similar, with each group 108 months, however to verify ages and motor relate to the chronological ages, we see a disparity. The GA said that it achieves an average of approximately 126 months in their motor age, ie, they are 18 months ahead of their chronological age. However, in GB have the average motor age of about 94 months, which means that they are 14 months below their chronological age.

This delay engine can still be considered low if compared with the studies of Roberts (2000) that in assessing the physical, psychosocial and motor pre-school in the city of Florianopolis, it delayed motor development, with an emphasis on balance, that presented a motor delay of 59.2 months compared to chronological age. Marra and Braga (2004), obtained similar results when assessing children aged 8 to 10 years in Teresopolis, when checked that also had delayed motor balance.

Scale of Motor Development proposed by Rosa Neto (2002) discusses the relationship between chronological age and motor age, thus obtaining a ratio engine that classifies children into much lower, lower, normal low, normal average, high normal, upper and much higher, according to his movements.

For the analysis of variance one-way ANOVA ($p < 0.5$) with respect to motor quotient was found a significant difference between GA and GB. The group of girls practicing dance obtained, on average, the overall balance in high-normal, while the girls did not practice were classified as low normal. It has been found yet, a more homogeneous compared to the ratios engines in GA, since it has a coefficient of variation less than the GB.

The chart below compares the classification between the two groups according to the result of motor quotient in the Motor Development Scale (ROSANETO, 2002).



It was found that the GB 16.7% of girls were classified on the balance much lower, while in the GA no girl got this classification. In contrast, the other end of the scale we find 14.4% of the GA girls classified as very superior in GB no girls achieved this ranking.

In general we can see that 37.8% of the GB girls have the balance classified as normal medium. However, the percentage of girls classified as balance in normal low, lower and lower is very high, which caused the overall average GB normal low.

There are several factors that can influence the balance, and because of this, it was noticed that in general the tests of 10 and 11 years who run with the eyes closed were the biggest failures obtained during its execution. This fact is due to lack of vision, since the second Ozmun and Gallahue (2005), this effect plays an important role in the balance of children, especially small ones. The use of vision provides a focus and point of reference in order to maintain balance.

Another factor observed was the concentration and tranquility that the GA girls performed the test, unlike the GB which remained somewhat anxious for fitness. A fact that can be analyzed, is that many years of tests are similar with dance exercises, which may have facilitated the implementation by the girls of the GA.

It is known that the support base is one of the factors for a good balance. The bigger the base the better the performance of motor skills, however Imbiriba and Barcelos (2002) analyzed the balance of dancers in the first position at end of classical ballet (corresponding to the edge of the feet) found that the average frequency of oscillation and the area displacement showed no significant differences when comparing with the normal position, ie, with all of the foot on the floor. And by comparing the dancers to women without dancers, found that the level of displacement of the center of pressure was lower in the first, concluding in this way, the dancers had better balance than women not dancers. Greek et al (2005), corroborate these findings in assessing the fitness and health for dancers and students, which found that the the former have a higher equilibrium level than the latter.

Physical qualities like strength, flexibility, speed, power, strength and balance are essential to good performance in dance. These attributes are developed in the physical preparation of dancers, however, the balance shall be responsible for technical preparation (LEAL, 1998). This is one of the factors that makes the dance an assist in the acquisition of this skill as essential for an efficient human movement.

CONCLUSION

After testing applications, the study sought to achieve the overall objective of which corresponded to analyze and compare the motor development on the static equilibrium in schoolchildren 8 to 10 years, practicing and non practicing dance in the city of Macapá / AP, in order to help a deeper understanding about research in dance and motor development, which still has a shortage in the literature.

After the observation and analysis of results collected in the tests, found that children dance practitioners have a better motor development in relation to balance, when compared to children who do not dance. The result is further emphasized the need for children to practice physical activities, particularly dance, because it has at its core technical aspects to work the specific motor skills such as the balance.

The study needs further research, since the sample size was small relative to the number of existing schools in the city of Macapa. Besides this limitation, research has ignored the uniformity of the classes implemented in school physical education to children of GA and GB.

It also emphasizes the need for analysis, reflection and development of physical education classes, special schools,

both public schools in the private school because the only practicing physical education, have a deficit in their motor development. Complementary activities such as dance, are rarely found in the annual syllabus, this further complicates the inclusion of children in this activity that helps both the development of motor skills essential to their independence.

We want this research to contribute to knowledge and future studies on dance and motor development, in particular the balance, so that teachers, experts and other stakeholders in the area have a greater depth in this area in order to subsidize their work.

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Ronédia Monteiro Bosque
Rua Quatro, 248. Marabaixo II
CEP: 68909-870
Macapá - AP

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ABSTRACT

One of the most important components of human movement is the ability to control his balance, and this worked well in the dance. The objective of this study was to analyze and compare the body balance of girls practicing and non practicing dance in the city of Macapa. This research is characterized by being kind of descriptive, exploratory and comparative cross-sectional, where 180 girls took part equally divided into two groups: GA (practitioners of dance) and GB (non-practitioners of dance). The instrument of data collection was the Scale of Motor Development (ROSA NETO, 2002), using as material a stopwatch sexagesimal. Our results indicate that the GA has, on average, higher driving age to chronological age, obtaining in this way, the classification of balance as high-normal, while the GB has motor age below their chronological age, classified balance in normal low. It follows therefore, that dance can help in the acquisition of the balance, which has been subsidizing its inclusion in the curriculum of the annual physical education classes, since they monopolize sports activities.

KEYWORDS: girls, dancing and body balance

ANALYSE DE L'ÉQUILIBRE CORPOREL DE FILLES PRATIQUANTES ET NON PRATIQUANTES DE DANSE

RÉSUMÉ

Un des composantes le plus important pour la motricité humaine est la capacité de contrôler l'équilibre lui-même, en étant celui-ci beaucoup travaillé à l'intérieur de la danse. L'objectif de cette recherche a été analyser et comparer l'équilibre corporel de filles pratiquantes et non pratiquants de danse de la ville de Macapá. La recherche se caractérise être du type descriptive, de l'exploratoire et comparative de coupe transversale, où on fait partie 180 filles divisée également dans deux groups : GA (pratiquants de danse) et GB (non pratiquants de danse). L'instrument de se rassemblé de données a été Escala du Développement Moteur (ROSA NETO, 2002), en utilisant comme matériel un chronomètre. Les résultats rassemblés indiquent que GA possède en moyenne l'âge moteur supérieur à âge chronologique, en obtenant de cette forme le classement de l'équilibre comme normal haut, tant que GB possède âge moteur au-dessous de son âge chronologique, en classant l'équilibre dans normal bas. Il se conclut de cette forme, que la danse peut assister dans l'acquisition de l'équilibre, ce qui vient subventionner son insertion à l'intérieur du contenu programmatique annuel de leçons d'éducation physique une fois que les activités sportives monopolisent ces leçons

MOTS CLÉ: filles, danse, l'équilibre corporel

**ANÁLISIS DEL EQUILIBRIO CORPORAL DE NIÑAS PRACTICANTES Y NO PRACTICANTES DE DANZA
RESUMEN**

Uno de los componentes más importantes para la capacidad motora humana es la capacidad de controlar el equilibrio propio, teniendo que ser muy trabajado dentro de la práctica de danza. El objetivo de esta investigación es comparar y analizar El equilibrio corporal de niñas practicantes y no practicantes de danza del municipio de Macapá. La investigación tiene características de tipo descriptiva, rastreadora y comparativa de metodología transversal, en la que participaron como objeto de estudio 180 niñas igualmente divididas, GA (practicantes de danza) y GB (no practicantes de danza). Como instrumento de apoyo en la recolección de datos se utilizó la Escala de Desarrollo Motriz (Rosa Neto, 2002) Usando como material de apoyo un cronometro sexagesimal. Los resultados recogidos indican que GA posee, en promedio, una edad motriz superior a la edad cronológica, consiguiendo de esta forma, una clasificación del equilibrio como normal alto, mientras GB posee una edad motriz menor a su edad cronológica, clasificándose como equilibrio normal bajo. Concluyéndose de esta manera que, el baile puede ayudar en la adquisición del equilibrio, hecho que apoya la inclusión, de la danza, en el contenido programático anual de clases de Educación Física, ya que las actividades deportivas acaban monopolizando esta disciplina.

PALABRAS CLAVE: niñas, danza, equilibrio corporal.

**ANÁLISE DO EQUILÍBRIO CORPORAL DE MENINAS PRATICANTES E NÃO PRATICANTES DE DANÇA
RESUMO**

Um dos componentes mais importantes para motricidade humana é a capacidade de controlar o próprio equilíbrio, sendo este bastante trabalhado dentro da dança. O objetivo desta pesquisa foi analisar e comparar o equilíbrio corporal de meninas praticantes e não praticantes de dança do município de Macapá. A pesquisa caracteriza-se por ser do tipo descritiva, exploratória e comparativa de corte transversal, onde fizeram parte 180 meninas divididas igualmente em dois grupos, o GA (praticantes de dança) e o GB (não praticantes de dança). O instrumento de coleta de dados foi a Escala de Desenvolvimento Motor (ROSA NETO, 2002), utilizando como material um cronômetro sexagesimal. Os resultados coletados indicam que o GA possui, em média, a idade motora superior à idade cronológica, obtendo, desta forma, a classificação do equilíbrio como normal alto, enquanto o GB possui idade motora abaixo de sua idade cronológica, classificando o equilíbrio em normal baixo. Conclui-se desta forma, que a dança pode auxiliar na aquisição do equilíbrio, o que vem subsidiar sua inserção dentro do conteúdo programático anual das aulas de educação física, uma vez que as atividades esportivas monopolizam estas.

PALAVRAS CHAVE: meninas, dança, equilíbrio.

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