

37 - DEVELOPMENT OF BASIC SKILLS OF MOTOR RUNNING AND JUMPING ON PEOPLE WITH VISUAL IMPAIRMENT AND ITS PRACTITIONERS GUIDES THE TYPE OF ATHLETICS: A CORRELATIONAL STUDY

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INTRODUCTION

At this juncture, the Paralympic sport has been gradually evolving as a sport and increasingly occupying the profile of high yield. The high performance sport became a reality for the Paralympic Athlete, seeking, as in the case of Olympic athletes, maximum yield of their performances (MATURANA, 2008). The training methods already show similar, except that the methods require adaptations to meet the principle of individuality of each condition paratleta deficiency, in this case, there are serious limitations on the level of demand for some types of disabilities (MELLO, 2002). Athletics is part of the Paralympic Games since 1960, held in Rome (OLIVEIRA FILHO, 2003). And already in the first edition, the evidence relied on the participation of men and women with very different types of commitments, but the evidence for the visually impaired were only included in the Paralympic program from Toronto 1976. Since then, there has been a breakthrough in the evolution of the results of the disabled athletes in relation to Olympic sport and the class of the visually impaired have been improving their performance in each edition of the Special Olympics athletes in relation to the Olympic Games. Matura (2008, p. 2), comments that "improving every day more indexes, marks and goals, Paralympians approach the universe of the Olympic Games." Today, the Paralympic Athletes in individual sports program of the Paralympic Games, need the help of a sighted guide, as happens in some cases, in athletics, so every evolution in the direction of assimilation with the Athletes Olympic, we came across an eminent difficulty, these disabled athletes who can guide visually impaired in the future?

In this paper the assumptions and H0a H0B were accepted and H1b, and H1b were refuted. The hypothesis states that H0a athletic performance compared to guide disabled athlete are equal with respect to race 50 meters, already H0B states that an athlete's performance compared to guide disabled athlete are equal with respect to horizontal impulse. Moreover, the research aimed to compare the performance of visually impaired athlete has to do with whether or not their respective athlete guide related to the development of their motor skills.

METHODOLOGY

The research is characterized quantitative, aiming descriptive as technical procedure using survey data, being the type of field research.

Was conducted with a group of 12 athletes ($n = 12$) were divided into two groups (Group A and Group B), both volunteers and practitioners of the sport of athletics, all male and aged between 18 and 29 years. All practice this modality at the Federal Institute of the Espirito Santo - IFES, located in Vitória / ES.

We used a term freely consent to the coach and the athletes so that the tests were applied. Were predefined horizontal jump test - Long Jump and 50m race protocol Johnson & Nelson (1979), with the aim of measuring the speed and power of the lower limbs, respectively.

Note: The horizontal jump test was adapted to be done in the sandbox, it should take into account the visually impaired athletes and how much more comfortable and secure doing in the sand. The result was given by measuring the distance between the line behind the board and the heel that has landed, as near this line. They are given three chances, noting the best of three results.

Rock & Caldas (1978) presented a classification for the horizontal jump test.

See the table below:

Rating	Results
Weak	< 2,30
Regular	2,30 – 2,49
Good	2,49 – 2,69
Very Good	2,70 – 2,89
Excellent	> 2,90

Table 1 - INDIVIDUAL VALUES for EACH ATHLETE TESTED

Source: Rock & Caldas (1978).

Since the test was run 50m in three attempts and the average done to get the best result for each athlete.

Data were collected in both groups, by testing speed (50 m) and horizontal thrust, using descriptive statistics, which according to Fonseca; Martins (1996, p.101) "[...] descriptive statistics is a set of techniques that aim to describe, analyze and interpret numerical data of a population or sample."

We used the Shapiro-Wilk test w to verify the normality test and for use when the set of observations is less than or equal to 50, where the p -value 0.6847 given level where it can be observed that here not reject the hypothesis of equality of variances at a level of significance of 5%, thus being able to use the Student t - test, which is used for sample size $N < 30$, called small samples (Spiegel, 1993). This conclusion can be obtained either looking for the confidence interval for the value " p -value".

RESULTS AND DISCUSSION

The results of comparison between Group A and Group B are presented graphically.

As can be seen in figure 1 and 2, after statistical analysis (t test), the difference in the visually impaired group and their guides are not significant, since the p-value obtained in the test run (0.4020) and jump test (0.8739), taking into account the level of significance $\alpha = 0.05$. How it obtained from both tests were below the level of significance, hypotheses and H0a H0B were accepted and H1b and H1b were refuted.

Test Results:

50 meters	Athlete Guide	DV Athlete
1° Athlete	6,0 seg.	6,9 seg.
2° Athlete	6,3 seg.	6,2 seg.
3° Athlete	5,8 seg.	6,4 seg.
4° Athlete	6,7 seg.	6,8 seg.
5° Athlete	5,9 seg.	5,8 seg.
6° Athlete	6,1 seg.	5,9 seg.

Horizontal Jumping	Athlete Athlete	DV Athlete
1° Athlete	2,47m	2,78m
2° Athlete	2,56m	2,43m
3° Athlete	2,68m	2,75m
4° Athlete	2,50m	2,67m
5° Athlete	3,02m	2,81m
6° Athlete	2,80m	2,69m

Table 2- individual values for each athlete tested

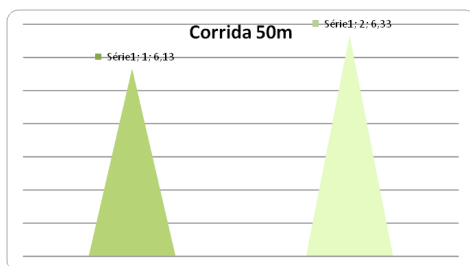


Chart 1 - results of average values of individual test 50m.

1 = athletes and guide visually 2 = impaired athletes.

According to the graph, it is apparent that the average speed of the disabled (2) during the visual test of 50 meters, is superior to its guides (1).

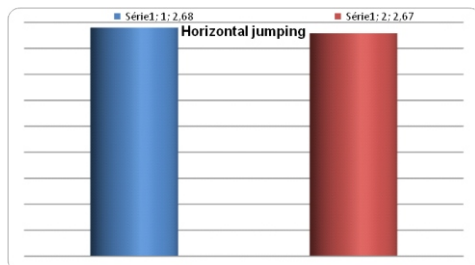


Chart 2 - results of the average values of the individual horizontal jump test.

1 = athletes guide visually and 2 = impaired athletes.

Unlike the previous graph, which shows a subtle difference in the results of running test, this graph shows that the mean distance of the jump test are practically equal.

This study aimed to verify by means of a comparative analysis between the results obtained in two samples the development of motor skills of visually impaired athletes and their guides, practitioners of the sport of athletics, having as a prerequisite to practice sprint and jump, where they performed specific tests related to these tests.

In the speed test (50 meters) guides showed good development in the race as a whole, obeying the rules of positioning and waiting in the correct position by voice commands. By giving the starting signal moved anatomically well, with balance and coordination. As obeyed the rules during the race itself.

In the speed test (50 meters) of the visually impaired, also showed good development in general, presenting a unique way a good body awareness and space, often being mistaken for visionaries, for their independence during mobility. This became clearer when one of the aides in trademark situated 25 meters from the runway realized that the athlete was starting to run out of the center of the track called or stood talking directions and it should take a minimum amount of time the athlete returned to its normal course with the perfect coordination of upper and lower limbs.

By analyzing the horizontal jump test both groups were technically very similar. All followed the test instructions to the letter. Regardless of the individual when, soon after the jump and touched the ground, for some reason if unbalanced fall backward and was given a new chance, already included as a jump of three he was entitled.

By comparing the results of tests and analysis by the t test, it is clear that both groups of visually impaired people and their guides had similar values and technical qualities. Even if the test 50m the visually impaired had a better average t test showed no significance between the two groups.

CONCLUSION

The average results obtained through evaluation through tests, a group subjected to the practice of athletics, was not

statistically significant variables in racing and jumping.

For this observation, one should take into account that the training of these athletes in both groups, was done six times a week for four hours per day. With this, we can deduce that the training was equivalent for both groups and physical capacity was very close. Furthermore, these observations were statistically verified in this work.

As the t obtained from both tests were below the level of significance, hypotheses and H_0a H_0b were accepted and H_1b and H_1b were refuted.

When put in this study, the position of critical reader of the elements that constitute the author of this study assumes that while he tried to prove that there is no significant correlation between the DV athletes and their guides, can not be taken as an excuse, from the point of view of the guide, not to follow their respective athlete, since the study showed how close they are in their basic motor skills and are able to accompany them.

This study was only at the state level, may have a greater weight is also analyzed in other states, even the comparative level or just expanding (N) of this research. Here is an indication to those who read and think about writing about the topic.

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This study aimed to compare the performance of visually impaired athlete has to do with her or not relevant guide for the development of their motor skills. The research is characterized quantitative, aiming descriptive as technical procedure using survey data, being the type of field research. A sample of 12 male athletes sex ($n = 12$) divided into two groups (group A and group B). Group A consisted of 6 athletes visually impaired practitioners Athletics. The group B consisted of 6 athletes seers regarded guides. For that evaluated the following skills: agility (shuttle run), with the test of 50m and kinesthetic perception (perception of distance jump), horizontal jump. For comparison of results obtained in both groups, we used the statistic t or t test. Unlike the visually impaired group and their guides are not significant, since the p -value obtained in the test run (0.4020) and in the jumping test (0.8739), taking into account the level of significance $\alpha = 0.05$. How t obtained from both tests were below the level of significance, hypotheses and H_0a H_0b were accepted and H_1b and H_1b were refuted. The hypothesis states that H_0a athletic performance compared to guide disabled athlete are equal with respect to race 50 meters, already H_0b states that an athlete's performance compared to guide disabled athlete are equal with respect to horizontal impulse.

KEYWORDS: motor development, visually impaired, guide, athletics.

DÉVELOPPEMENT DES COMPÉTENCES DE BASE DU MOTEUR DE FONCTIONNEMENT ET SAUTER SUR LES GENS AYANT UNE DÉFICIENCE VISUELLE ET DE SES PRATICIENS GUIDES DE LE TYPE DE ATHLÉTISME: UNE ÉTUDE CORRÉLATIONNELLE RÉSUMÉ

Cette étude visait à comparer la performance des athlètes ayant une déficience visuelle a à faire avec si oui ou non leur guide respectif homme en ce qui concerne le développement de leurs habiletés motrices. La recherche quantitative se caractérise, dans le but descriptif que la procédure technique en utilisant les données d'enquête, soit le type de recherche sur le terrain. Un échantillon de 12 athlètes sexe masculin ($n = 12$) répartis en deux groupes (groupe A et groupe B). Groupe A est composé de 6 athlètes professionnels ayant une déficience visuelle Athlétisme. Le groupe B est composé de 6 athlètes voyants considérés guides. Pour qui a évalué les compétences suivantes: agilité (shuttle run), à l'épreuve du 50m et la perception kinesthésique = (perception de la distance de saut), saut horizontal. Pour la comparaison des résultats obtenus dans les deux groupes a été utilisé pour tester statistique t ou t (Student). Contrairement au groupe ayant une déficience visuelle et leurs guides ne sont pas significatives, car la valeur de p obtenue dans l'essai de fonctionnement (0,4020) et dans le test de saut (0,8739), en tenant compte du niveau de signification $\alpha = 0,05$. Comment t obtenu a partir de deux tests étaient en dessous du niveau de signification, les hypothèses et H_0a H_0b ont été acceptées et H_1b et H_1b ont été réfutées. L'hypothèse stipule que guide de performance homme H_0a l'athlète déficient comparés sont égaux en ce qui concerne course de 50 m, puisque les États H_0b qui guident la performance de l'athlète par rapport à l'athlète déficient sont égaux à l'égard de poussée horizontale.

MOTS-CLÉS: moteur du développement, déficience visuelle, guide, athlétisme.

DESARROLLO DE LAS COMPETENCIAS BÁSICAS DEL MOTOR CORRER Y SALTAR SOBRE LAS PERSONAS CON DISCAPACIDAD VISUAL Y SUS PROFESIONALES GUÍA DEL TIPO DE ATLETISMO: UN ESTUDIO CORRELACIONAL**RESUMEN**

Este estudio tuvo como objetivo comparar el rendimiento de los atletas con discapacidad visual tiene que ver con ella o no guía relevante para el desarrollo de sus habilidades motoras. La investigación se caracteriza cuantitativo, con el objetivo descriptivo como procedimiento técnico utilizando datos de la encuesta, siendo el tipo de investigación de campo. Una muestra de 12 atletas sexo masculino ($n = 12$) dividido en dos grupos (grupo A y grupo B). Grupo A consistió de 6 atletas con discapacidad visual practicantes de atletismo. El grupo B, constituido por 6 atletas videntes consideraban guías. Para que evaluaron las siguientes habilidades: agilidad (shuttle de ejecución), con la prueba de 50 metros y la percepción kinestésica (percepción de salto a distancia), salto horizontal. Para la comparación de los resultados obtenidos en ambos grupos, se utilizó la estadística t o la prueba t . A diferencia del grupo de personas con discapacidad visual y sus guías no son significativos, ya que el valor de p obtenido en la ejecución de la prueba (0,4020) y en la prueba de salto (0,8739), teniendo en cuenta el nivel de significación $\alpha = 0,05$. Como ot obtenida de ambas pruebas fueron inferiores al nivel de significación, hipótesis y $H0B$ $H0a$ fueron aceptadas y $H1b$ y $H1b$ fueron refutadas. La hipótesis de que el rendimiento atlético en comparación $H0a$ para guiar atleta con discapacidad son iguales con respecto a la carrera de 50 metros, ya a los Estados $H0B$ que el rendimiento de un atleta en comparación a guiar atleta con discapacidad son iguales con respecto al impulso horizontal.

PALABRAS CLAVE: desarrollo motor. Con discapacidad visual. Guía. Atletismo.

DESENVOLVIMENTO DAS HABILIDADES MOTORAS BÁSICAS DE CORRER E SALTAR EM PESSOAS COM DEFICIÊNCIA VISUAL E SEUS GUIAS PRATICANTES DA MODALIDADE DE ATLETISMO: UM ESTUDO CORRELACIONAL**RESUMO**

Este estudo teve como objetivo comparar se o desempenho do atleta deficiente visual tem relação ou não com seu respectivo guia em relação ao desenvolvimento de suas habilidades motoras. A pesquisa se caracteriza de natureza quantitativa, com objetivo descriptivo, utilizando como procedimento técnico levantamento de dados, sendo o tipo de pesquisa de campo. A amostra de 12 atletas do sexo masculinos ($n=12$) dividida em dois grupos (grupo A e grupo B). O grupo A foi constituído por 6 atletas deficientes visuais praticantes de Atletismo. Já o grupo B foi constituído por 6 atletas videntes, considerados guias. Para isso avaliaram-se as seguintes aptidões: agilidade (shuttle run), com o teste de 50m e percepção sinestésica= (salto de percepção da distância), salto horizontal. Para comparação dos resultados obtidos em ambos os grupos, utilizou-se a estatística t ou teste t de Student. A diferença do grupo deficiente visual e seus respectivos guias não são significativos, pois o p -valor obtido no teste de corrida (0.4020) e no teste de salto (0.8739), levando em consideração o nível de significância $\alpha=0,05$. Como o t obtido de ambos os testes foram inferiores ao nível de significância, as hipóteses $H0a$ e $H0b$ foram aceitas e $H1b$ e $H1b$ foram refutadas. A hipótese $H0a$ afirma que o desempenho do atleta guia comparado ao atleta deficiente são iguais em relação à corrida de 50 m, já a $H0b$ afirma que o desempenho do atleta guia comparado ao atleta deficiente são iguais em relação ao impulso horizontal.

PALAVRAS-CHAVE: Desenvolvimento motor. Deficiente visual. Guia. Atletismo.