Examining The Static Balance Of Male And Female Student Athletes

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Abstract

The aim of the objective is to determine the differences of balance ability between male and female student athletes. Participation of sports need to greater stability for better performance in sports , and avoiding the injuries. The sample consisted of 15 student athletes and 15 and non student Athletes from of Swami Ramanand Teerth Marathwada University Nanded. Those Students were participating in intercollegiate tournament have considered student athletes and those students were not participating any sporting activities at minimum intercollegiate tournament as considered non student athletes. The static balance measured by using Brass Stick Test. The result of the study reveals that there was significant differences of static balance was found (t = P<.05) between of male and female student Athletes. The findings of the study shows that female student athletes was found to have got better static balance as compare to male students athletes.

Introduction

Participation of sports need to greater stability for better performance in sports , and avoiding the injuries. There are significant relation between balance and injuries , poor balance ability of sports person may greater risk of injuries of sports person. The lack of research on balance ability between male and female athletes may lead to the difficulty to understand the skill related conditions in relation to static balance and sports performance between male and female student athletes . The body control during sporting activities is link with high level performance the sports. Balancing is the most basic function of the neuromuscular system in performing all simple and complex activities that contribute to health-related physical fitness. static balance may influence of athletic performance, movement economy and reducing the risk of injury. Abbasi (2012) defined balance as the ability to maintain a stable posture with body mass center in the domain of base of support while counteracting external or internal conflicts. static Balance may be define as body is rest Human balance depends on co-ordinated integration of somato-sensory, vestibular and visual input.(Kisner and Colby 2007, Winter, Patla and Frank 1990)

Body control during sports participation is a requirement for high level performance

Methods

The sample consisted of 15 student athletes and 15 and non student Athletes from different colleges and departments of Swami Ramanand Teerth Marathwada University Nanded at the end of 2012-2013 academic year in their study. Those Students were participating in intercollegiate tournament have considered student athletes. The static balance measured by using Brass Stick Test. This test is used to measure the static balance on the subject by making the body stable on a narrow surface while standing on the ball of the foot. The test is suitable for both sexes aged 10 years and above. A stopwatch, one inch high and 12 inches long stick and an adhesive tape. The tester gives a practical demonstration either himself or through a trained helper to a group of 10 to 15 subjects by show to stand crosswise on the stick upon a given signal. After the demonstration that subject is asked to place the ball of the right foot crosswise on the stick which is tightly secured to the floor with the help of adhesive tape. The tester then announces ready, Steady, and 'Start'! On the signal 'Start', the performer lifts the left foot the from the floor and

raises the heel of the right foot from the ground so as to balance his/her body on the ball of the foot placed crosswise on the stick for as possible up to a maximum of 60 second, on the signal 'Start' the timer starts the stopwatch which is stopped when one of the following event happens:-

- -The subject touches the floor either with his right heel or toes.
- -The subject looses balance and happens to touch the floor with the free foot (left foot in this trail).
- 60 seconds are over when the test is officially announced as completed.

Each subject is required to perform the above test for six times, three times on right foot and three times on left foot alternating each trial with left after right foot. The score is given by the sum of the times in seconds recorded during all the six trials.

Results

Table – 1
Personal Information Of Male And Female Student Athletes

Sr.No.	Morphological Characteristics	Male Student Athletes		Female Student Athletes	
		Mean	Standard Deviation	Mean	Standard Deviation
1)	Age (Year)	23.43	3.87	22.06	**3.01**
2)	Weight (Kg)	68.89	8.34	55.90	**6.24**
3)	Height (Cm)	175.76	14.87	142.30	**11.22**
4)	**BMI**	**21.09**	**5.11**	**18.09**	**3.96**

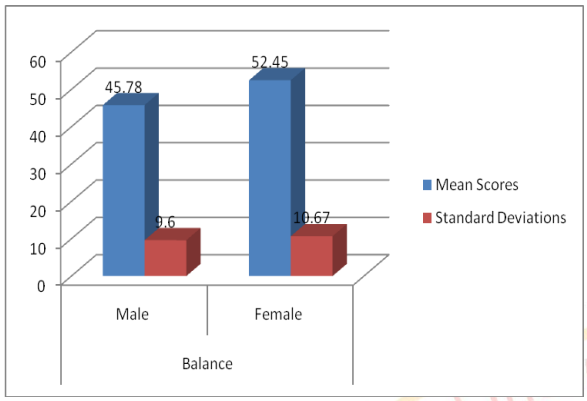
Table-1 illustrates the Morphological Characteristics of Student Athletes and Non Student Athletes. The mean age of male student athletes was 23.43 , the mean weight of male student athletes 68.89 Kg. The mean height male student athletes 175.76 cm and the mean of Body mass index of male student athletes was 21.09.In addition, The mean age of female student athletes was 22.06 , the mean weight of female student athletes 55.90 Kg. The mean height female student athletes 142.30 cm and the mean Body mass index of female was 18.09. The standard deviation age of male student athletes was 3.87, the standard deviation weight of male student athletes 8.34Kg. The standard deviation height male student athletes 14.87 cm and the standard deviation of Body mass index of male student athletes was 5.11. In addition, The standard deviation age of female student athletes was 3.01, the standard deviation weight of female student athletes 6.24 Kg. The standard deviation height female student athletes 11.22 cm and the standard deviation Body mass index of female student athletes was 3.96.

Table 2
Mean Scores and Standard Deviations and t-ratio of male and female student Athletes .

components	Sample	Number	Mean Scores	Standard Deviations	T test
Balance	**Male**	15	45.78	9.60	**P<.05**
	Female	**15**	**52.45**	**10.67**	

Table-2 Illustrate that the mean scores, standard deviations and t-test of Balance of male and female student Athletes. The mean scores obtained from Table 02 , the mean score of male student Athletes was 45.78 and the male student Athletes was 52.45 respectively of Static Balance between male and female student Athletes. In addition , the standard deviation of Pre test was 9.60 and the post test was 10.67 respectively static Balance ability between male and female student Athletes . The result of the study reveals that there was significant differences of static balance was found (t = P<.05) between of male and female student Athletes. The findings of the study shows that female student athlests was found to have got better static balance as campare to male students athletes.

Figure -1 shows the mean scores and standard deviations of Balance of male and female student Athletes



Discussion

Men and women differ substantially in regard to degrees of strenghth height , body composition, and energy balance . Balance is directly related to kinaesthetic séance. Balance is a ability to maintain the stability during both static and dynamic stages. Maintaining balance involves a complex interaction between intrinsic factors that include peripheral, visual, and vestibular sensation and muscle factors, as well as the interplay between the neural network and motor output, that are processed and mediated centrally (Dodd, Taylor, & Bradley, 2004). All of these factors are affected by normal aging processes. Patterns of muscle use change as an individual ages The mean age of male student athletes was 23.43 , the mean weight of male student athletes 68.89 Kg. The mean height male student athletes 175.76 cm and the mean of Body mass index of male student athletes was 21.09.In addition, The mean age of female student athletes was 22.06 , the mean weight of female student athletes 55.90 Kg. The mean height female student athletes 142.30 cm and the mean Body mass index of female was 18.09. The standard deviation age of male student athletes was 3.87, the standard deviation weight of male student athletes 8.34Kg. The standard deviation height male student athletes 14.87 cm and the standard deviation of Body mass index of male student athletes was 5.11. In addition, The standard deviation age of female student athletes was 3.01, the standard deviation weight of female student athletes 6.24 Kg. The standard deviation height female student athletes 11.22 cm and the standard deviation Body mass index of female student athletes was 3.96. The mean scores obtained from Table 02 , the mean score of male student Athletes was 45.78 and the male student Athletes was 52.45 respectively of Static Balance between male and female student Athletes. In addition , the standard deviation of Pre test was 9.60 and the post test was 10.67 respectively static Balance ability between male and female student Athletes . The result of the study reveals that there was significant differences of static balance was found (t = P<.05) between of male and female student Athletes. The findings of the study shows that female student athletes was found to have got better static balance as compare to male students athletes. This may be due to the female student athlets lower center of gavitity as campare to men .

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