



P-ISSN: 2394-1685
E-ISSN: 2394-1693
Impact Factor (ISRA): 5.38
IJPESH 2017; 4(2): 160-161
© 2017 IJPESH
www.kheljournal.com
Received: 27-01-2017
Accepted: 28-02-2017

Dr. Sanjeev Yadav
Assistant Professor,
LNPIE, Gwalior (M P), India

Comparison of the motor fitness components between north and east zone Inter-University swimming female players

Dr. Sanjeev Yadav

Abstract

The purpose of the present study was to compare the motor fitness component between the north and east zone inter-university female Swimming players. From 60 female university volleyball players, first 30 female Swimming Players from north zone universities and remaining 30 female Swimming Players from east zone universities were randomly selected as the subjects for the present study. The subject's age ranged from 18 to 25 years. The necessary data was collected by administering motor fitness component test namely muscular strength, muscular endurance, speed, flexibility and co-ordinative abilities.

To compare the motor fitness component between the north and west zone inter-university female Swimming players, mean difference method (t ratio) 't' test was used. The level of significance was set at 0.05 levels. Results showed significant differences in flexibility and No significant differences were found muscular strength, muscular endurance, speed, and co-ordinative abilities

Keywords: Muscular Strength, Muscular Endurance, Speed, Flexibility and Co-Ordinative Abilities.

Introduction

Games and Sports have been part of human life almost since the time immemorial. Be it a necessity for his survival i.e. hunting for food and shelter, safety from wild animals or other enemies or as a pursuit of pleasure, the games and sports have been indispensable to mankind and have been part of his culture. Though the origin of sports is lost in antiquity, it is quite certain that physical activity has been a basic necessity of life, more than fun and diversion, for his survival depended on it. Gradually along with the process of evolution, such activities became more of play and became part of culture of tribes. People used sports and games as a means of transmitting the cultural heritage of their tribes. Game, sports and physical activities persisted despite the rise and fall of ancient civilizations as a cultural heritage, which was passed on from one generation to another. Today games and sports have emerged as universal cultural phenomena (Ajmer Singh, Jagtar, Bains).

Motor fitness is gauged by performance and this performance is based on a composite of many factors. The most commonly mentioned fitness factors are strength, endurance, power, speed, agility, balance, flexibility and stamina. Some of these factors evidently are more dominant than others and thus have a higher relationship with motor fitness. Motor fitness is made up of factors that seem more dynamic such as strength and endurance. Minimum standards of motor fitness may be achieved over a short period of time. By the same token, fitness is lost unless it becomes a product of day to day living. (Barrow and Mchee 1989) [2].

Even the research findings show that high level of technique perfection done cannot produce success in competitive sports. Most of the games demand a higher level of speed, strength, endurance, flexibility, co-ordination and optimum fitness of organism. (Johnson & Buskisk, 1975) [4].

Performance of an athlete in the sports is not only depend upon the motor fitness components but other factors also contribute to the success of an athlete in the sports arena such as scientific good quality equipments, clothing, training schedule competition frequency & psychological preparation and the most important balanced diet. All these factors together make the athletes prepared for the competition and the only the fruitful result can be expected

Correspondence
Dr. Sanjeev Yadav
Assistant Professor,
LNPIE, Gwalior (M P), India.

from the athlete in the competition. An individual to succeed in the competition must develop the motor fitness factors that are speed, agility, flexibility, strength and power.

Motor fitness is the final criterion through which all other elements of physical fitness are seen and measured in man. How continuously and efficiently he performs his daily work in industry, on the farm, in the armed forces, or in athletic performance was at one time the only criterion that man had of physical fitness. He might know little or nothing about scientific facts of body structure, physiology or functioning the organs, strength test on dynamometer, or organic efficiency tests. But he could understand an outstanding performance displaying power, speed and endurance (Brock, Walter Lox, and Erastus 1941) [3]

Materials and Methods

Sixty (60) university female players, who participated in All India Inter-University Swimming Championship for the year 2010-11 held at Kolkota (W.B.). From the sixty subjects, thirty (30) female Swimming players were from north zone universities were considered as north zone swimming players and remaining thirty (30) female Swimming players were

from east zone universities were considered as east zone swimming players.

The subject's age ranged from 18 to 25 years. The necessary data was collected by administering motor fitness component. Motor fitness component and tests are as follows

Motor Fitness Component	Test
Muscular Strength	Leg Lift (kg.)
Muscular Endurance	Bent Knee Sit-ups (No.)
Speed	50 m run (Sec.)
Flexibility	Sit and Reach Test (Inch)
Co-ordinative Abilities	Eye hand Co-ordination Test (Ball transfer) (Sec.)

To compare the motor fitness component between the north and west zone inter-university female Swimming players, mean difference method (t ratio) 't' test was used. The level of significance was set at 0.05 levels.

Results and Discussion

Table 1: Mean Comparison of Motor Fitness Component between North and East Zone University Female Swimming Players

Variable	Group Mean		Std. deviation	df	t
	North zone Swimming players	East zone Swimming players			
Muscular Strength	84.6333	85.1667	17.40538	78	-.168
Muscular Endurance	28.0333	27.9667	9.69868	78	.038
Speed	9.0570	9.0997	.48352	78	-.483
Flexibility	3.4000	3.9200	1.08100	78	-2.365*
Co-ordinative Abilities	60.2533	60.3067	5.44792	78	-.054

*Significant at 0.05 level of confidence

$t_{.05}(78) = 1.98$

The above table reveals that significant difference was found in case of Flexibility, as the calculated value of $t' = -2.365$ was greater than the tabulated $t_{.05}(78) = 1.98$ hence east zone swimming players were more Flexible as compare to north zone swimming players.

No significant differences were found in case of muscular strength, muscular endurance, speed, and co-ordinative abilities, as the calculated value of $t' = -.168, .038, -.483, \& -.054$ were less than the tabulated $t_{.05}(78) = 1.98$ hence both north and east zone university swimming female players were similar in muscular strength, muscular endurance, speed, and co-ordinative abilities.

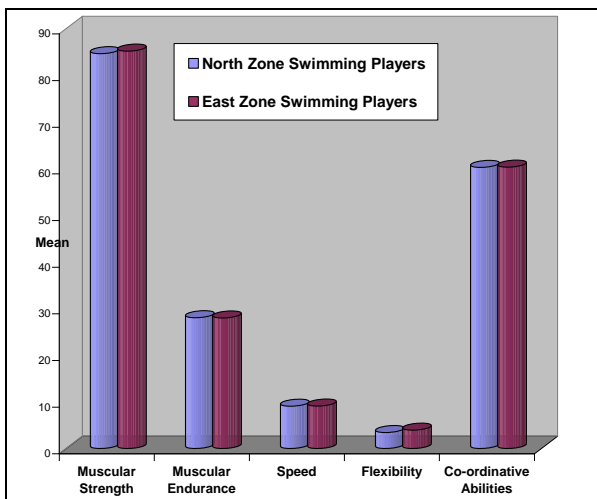


Fig 1: Graphical Representation of Motor Fitness Component between North and East Zone University Female Swimming Players

Conclusion

On the basis of findings of the study, the following conclusions are drawn:

1. East Zone Swimming Players were more Flexible as compare to north zone volleyball players.
2. Both North and East Zone University Swimming Female Players were similar in muscular strength, muscular endurance, speed, and co-ordinative abilities.

Reference

1. Ajmer Singh, Jagtar, Jagdish Bains. Modern Textbook of Physical Education Health & Sports, Kalyani Publishers Ludhiana, 99.
2. Barrow, Mchee. A Practical Approach to Measurement in Physical Education London, 1989, 119-120
3. John D Brock, Walter A Lox, Erastus W Pennock. Motor Fitness (Athletic Performance as Indicators of Fitness), Research Quarterly 1941; 19:407.
4. Johnson R, Buskisk ER. ed., Science and medicines of Exercise and Sports New York: Harper & Bros. Publication, 1975, 26.