

A Study Of The Effects On Hand-Reaction Time Of The Students In Calisthenics, Simple Games And Cricket

Chauhan Hunny M.
Ph.D. scholar
Saurashtra University,
Rajkot-360005
Gujarat-India

Guide
Dr. Arjunsinh Rana
Principal
Shri S.R.B.M.H.Sc.
Lt. M.J.K.English Medium
Mahila Commerce College
Rajkot-360006
Gujarat-India

Abstract: This study was to measure the hand-reaction time of the girl students studying in the Rajkot city schools. Total 60 students were selected randomly for this research study and divided into 3 groups, each group contains total 20 students, and applied the test of Nelson's hand-reaction time on all the three groups, and 'F' ratio was applied on the supplements of the three groups. The actual difference of 0.05 was not found to be significant difference.

I. INTRODUCTION:

Exercise is an inherent and important part of the Physical Education. There are different exercises according to different sports. Through these exercises to improves students hand-reaction time, co-ordination, tenderness, strength, balance, cleverness, stamina etc. If future generations are trained at the right time then there is no doubt that your country's tomorrow is auspicious.

Sport has been established as a part of human life. From the emergence of human life it is found that humans mainly act with their hands, legs and back. Legs are used to walk, run, jump, swim, climb and lapse. Hands are used to catch, throw, hurl, draw, and push. Back is useful in right to left and left to right movements and also to turn backwards and forward. All these movements are necessary for the human life. No efforts of acquiring food or saving oneself from the enemy are possible without such movements. The mind works as a charioteer to drive the chariot of muscles. The human body is driven by mind. All these movements are as old as human life and are sustained and so the children and youngsters love to play games. It gives them pleasure. It also helps in the growth of their body, sensory perceptions and the whole vascular system. Games are necessary for the child's physical, mental and social development.

Every country has its own unique culture and lifestyle. Sport is the mirror of these cultures and lifestyle. Such sport mingles and mixes with the local lifestyle of people according to the society, environment and situation. In such games the rules are mild and the movements are simple to be accumulated by children and youngsters. The children and school students plays such games spontaneously and it even gives them entertainment.

II. STUDY OF OBJECTIVES:

The objective of measuring the hand-reaction time of girls students studying in Rajkot city schools.

III. MEASURING STANDARDS:

Nelson's hand-reaction time test was chosen to test hand- reaction time.

IV. STUDY PLAN:

In this study total 60 students were selected randomly and divided in 3 groups. Each group contains total 20 students. Afterwards, Nelson’s hand-reaction time test was taken for measurement and collected the data.

V. STATISTICAL PROCESS:

The "F" ratio for hand reaction time measurement between all the three groups was found in the following 0.05 levels.

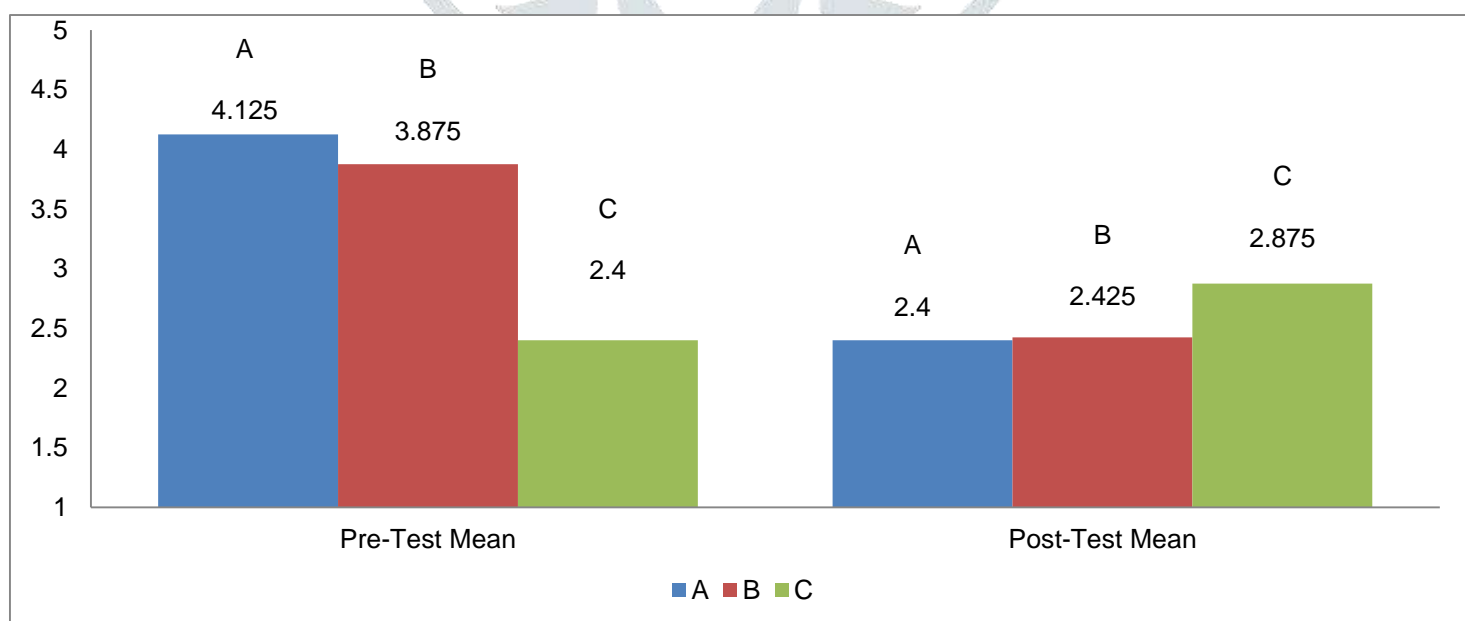
Summary-1: Analysis of two experimental groups and a control group measuring the reaction time of them.

Test	Median			Sum Square(SS)	Value of Freedom (DF)	Median Distortion (MS)	F Ratio
	A	B	C				
Pre Test Median	4.125	3.875	2.40	A-34.758 W-305.175	2 57	17.3792 5.3539	3.2460*
Post Test Median	2.40	2.425	2.875	A-2.858 W-110.875	2 57	1.4291 1.9452	0.7347

* The standard of significance is $F_{0.05}(2,57) = 3.16$ at 0.05 level

See 'F' ratio 3.2460 * of the pre- test median (Group - 'A' 4.125, Group - 'B' 3.875, Group - 'C' 2.40) of hand reaction time, shown in summary-1. Which was seen significance at $0.05(2, 57) = 3.16$ level. The 'F' ratio 0.7347 was found in the post-test median (Group - 'A' 2.04, Group - 'B' 2.42, Group - 'C' 2.87) which was seen not significance at $0.05(2, 57) = 3.16$ level.

Graph-1



VI. CONCLUSION:

At present modern ways are prepared to enhance the physical ability of the player. New techniques of training and newer devices are being developed. Many new laboratories are coming into existence. That is the reason why each player's technique and physical activities can be more focused on development. Hence this is the reason for significant improvement in every kind of skill in the players reaction time in the development of all type of work efficiency are considered as the basic important aspects of game performance. Therefore importance is given for the specific development of this aspect.

So, it is proved that in the hand-reaction time of the girls students of Rajkot city schools, the median of cricket was more significance in compare to calisthenics - simple game group.

VII. REFERENCES:

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