A Study Of The Effects On Eye-Hand Co-ordination Of The Students In Calisthenics, Simple Games And Cricket

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Abstract: This study was to measure the eye-hand co-ordination of the girls 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 eye-hand co-ordination test on all the three groups, and ‘F’ ratio was applied on the supplements of the three groups. The actual difference of 0.05 was found to be significant difference.

1. INTRODUCTION:

Aayurvedacharya Sushrut has clearly stated that ‘those who are healthy, should maintain their health consciously; exercise is the beneficial activity for body. It brings stability in one’s life. It enhances the force. One should perform the exercise regularly and properly.

रूपलावण्यबलवज्रसंग्रहननवनिकायसंपत्

Mahrshi Patanjali has given the definition of ‘Kaysampat’ in the 46 sutra of Vibhutipad:

According to Sushrut the task which forces body to work is ‘exercise’. Charak has even given the definition of exercise. According to him, ‘the activity which is beneficial to body, which enhances stability and increases strength, is ‘physical exercise’. Such physical exercise should be performed regularly and properly.

The exercise that one performs while playing physically proves to be healthy and power gaining, mentally it seems amusing, from the education’s point of view it proves to be useful in life and
socially it helps in developing the characteristics of a good citizenship. Sport is given prime importance in the primary, secondary and higher secondary education system keeping all these beneficiary qualities of it at its focal. These games are designed in chronological pattern which runs from easier to hard levels according to the physical and mental development of a child.

The prime objective of education is to provide knowledge through physical activities. It is necessary that a child feels pleasure and happiness in such learning process. Thorndike observes that the feeling of learning strengthens or weakens with the experiences of happiness and sorrow related to it. The sport provides the pleasant and amicable experiences to the child on the playground which makes the learning process effective itself.

Rhythmic gymnasts denote the group exercise accompanied by the music. Music is used as an integral part in the group exercises and parade to make them more interesting. Exercises become much more interesting due to the accompaniment of rhythmic music. It provides both: the pleasure and expedience. The parade, dumbbells, vond, wheels, calisthenics, flag march etc. in the accompaniment of band music becomes enthralling as well as the same is applicable to lejim, ras – garba and folkdances in the accompaniment of harmonium, tabla and tumbrel. It is a fact experienced by everyone.

2. STUDY OF OBJECTIVES:

The objective of measuring the eye-hand co-ordination of girls students studying in Rajkot city schools.

3. MEASURING STANDARDS:

Nelson's eye-hand co-ordination test was chosen to test co-ordination.

4. 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 eye-hand co-ordination test was taken for measurement and collected the data.

5. STATISTICAL PROCESS:

The "F" ratio for eye-hand co-ordination 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 co-ordination of them.

<table>
<thead>
<tr>
<th>Test</th>
<th>Median</th>
<th>Sum Of Square(SS)</th>
<th>Value of Freedom (DF)</th>
<th>Median Distortion (MS)</th>
<th>F Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test Median</td>
<td>46.37</td>
<td>A-42.29</td>
<td>2</td>
<td>21.14</td>
<td>0.81</td>
</tr>
<tr>
<td></td>
<td>48.33</td>
<td>W-1488.23</td>
<td>57</td>
<td>26.11</td>
<td></td>
</tr>
<tr>
<td></td>
<td>46.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Test Median</td>
<td>41.72</td>
<td>A-155.26</td>
<td>2</td>
<td>77.63</td>
<td>3.34</td>
</tr>
<tr>
<td></td>
<td>45.67</td>
<td>W-1322.88</td>
<td>57</td>
<td>23.20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>43.81</td>
<td></td>
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</tbody>
</table>

*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' 46.37, Group - 'B' 48.33, Group - 'C' 46.82) The 'F' ratio 0.81 was found of eye-hand co-ordination shown in summary-1. Which was not seen significance at 0.05 (2, 57) = 3.16 level. In the post-test median (Group -'A' 41.72, Group - 'B' 45.67, Group - 'C' 43.81) The ‘F’ ratio 3.34*which was seen  significance at 0.05 (2, 57) = 3.16 level

Graph showing the Analysis of co-ordination of two experimental groups.

6. 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 eye-hand co-ordination 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 eye-hand co-ordination of the girls students of Rajkot city schools, the median of calisthenics - simple game group was more significance in compare to cricket.

7. REFERENCES:

1. Mr. Prdyuman R. Bhatt, Sharir Vigyan: Arogya Shashtra ane Ramat Vigyan, (Ahmedabad:Dhaval Prakashan, Naranpura,1999), page no. 4