EFFECTS OF YOGIC PRACTICES, PHYSICAL EXERCISES AND COMBINATION OF YOGIC PRACTICES AND PHYSICAL EXERCISES ON SELECTED MOTOR ABILITY COMPONENTS, PHYSIOLOGICAL AND PSYCHOLOGICAL VARIABLES OF UNIVERSITY MEN PLAYERS

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Abstract
The purpose of the study was to find out the effect of yogic practices, physical exercises and combination of yogic practices and physical exercises on selected motor ability components, physiological variables, and psychological variables of Alagappa University men Students. In this experimental study, the performance of yoga group, physical exercises group, combination of yogic practices and physical exercise groups and control group were selected as the another independent categorical variables, and flexibility, cardio respiratory endurance, resting pulse rate, breath holding time, mental concentration and anxiety was selected as dependable variables. In this study ANCOVA statistical technique was used to find out the adjusted mean significant difference. When found significant, the Scheffe’s post hoc test was used to find out the paired mean significant difference.

Keywords: yogic practices, physical exercises, physiological and psychological variables,

Introduction
The practice of Yoga not only develops the body but also enhances the mental faculties. Yogic practices and Physical Exercises lay an important role in the development of the balance created in the nervous and endocrine systems which directly influences all the other systems and organs of the body, Yoga acts both as curative and preventive therapy. The very essence of yoga lies in attaining mental peace, improved concentration powers, a relaxed state of living and harmony in relationships. Swami Vivekananada proclaimed each soul is potentially divine. Yoga by Shri Aurobindo. Physical fitness is based upon a solid foundation of the good health. Healthy living implies free from disease, sufficient strength, endurance, skill, capacity to meet the daily demands and sufficient reserves to meet the daily demands and
sufficient reserves to meet extraordinary stresses without undue fatigue besides mental development and emotional balance according to the maturity level of the individual. Iyengar, B.K.S. (1983)

Methodology

To execute the study, the investigator employed random sampling method. In this study, 160 players were selected as subjects at random from Alagappa University and their age was between 19 to 25 years. They were divided into four groups namely Yoga group, physical exercises group, combination of yogic practices and physical exercises group and Controlee group. The first, second and third groups did yoga asana, Prayanama, Dhayana and physical exercise respectively for six weeks. The pre and posttest were taken for all the subjects before and after the training respectively. The Resting Pulse Rate was measured in beats/per minute by pulse monitor. Getchell, Bud. (1997)

Results and Intrepretation

Table I: Computation of Analysis of Covariance of Pre-Test, Post-Test and Adjusted Post-Test on Resting Pulse Rate of Four Experimental Groups (Scores in Seconds)

<table>
<thead>
<tr>
<th>Test</th>
<th>Ex I</th>
<th>Ex II</th>
<th>Ex III</th>
<th>Ex IV</th>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test Mean</td>
<td>71.92</td>
<td>71.54</td>
<td>72.24</td>
<td>73.59</td>
<td>Between within</td>
<td>24.17</td>
<td>3</td>
<td>8.06</td>
<td>2.56</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>511.75</td>
<td>156</td>
<td>3.28</td>
<td></td>
</tr>
<tr>
<td>Post-test Mean</td>
<td>71.41</td>
<td>71.51</td>
<td>70.91</td>
<td>73.00</td>
<td>Between within</td>
<td>102.04</td>
<td>3</td>
<td>34.03</td>
<td>29.09*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>182.48</td>
<td>156</td>
<td>1.17</td>
<td></td>
</tr>
<tr>
<td>Adjusted</td>
<td>71.44</td>
<td>71.73</td>
<td>70.90</td>
<td>72.98</td>
<td>Between within</td>
<td>192.93</td>
<td>3</td>
<td>30.97</td>
<td>28.67*</td>
</tr>
<tr>
<td>Post-test mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>167.62</td>
<td>155</td>
<td>1.06</td>
<td></td>
</tr>
<tr>
<td>Mean gain</td>
<td>0.41</td>
<td>0.03</td>
<td>1.18</td>
<td>0.59</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F (3, 16) = 2.67 and F (3, 15) =2.67. * Significant

Results of Resting Pulse Rate

Table I shows the analyzed data on Resting pulse rate. The pre-test means of Resting pulse rate were 71.93 for Yogic practices group, 71.55 for Physical exercises group, 72.25 for combined (Yogic practices and Physical exercises) group and 72.60 for Control group. As the obtained F-ratio 2.56 was lesser than the table F-ratio 2.66, the pre test was significant at 0.05 level of confidence for the degrees of freedom 3 and 156. The post-test means were 71.40 for Yogic practices group, 71.72 for Physical exercises group, 70.87 for combined (Yogic practices and Physical exercises) group and 72.96 for control group. As the obtained F-ratio 29.07 was greater than the table F-ratio 2.66, the post-test was significant at 0.05 level of confidence for the degrees of freedom 3 and156.

The adjusted post-test means were 71.43 for Yogic practices group, 71.72 for Physical exercises group, 70.87 for combined (Yogic practices and Physical exercises) group and 72.96 for control group. As the obtained F-ratio 28.63 was greater than the
table F-ratio 2.66, the post-test was significant at 0.05 level of confidence for the
degrees of freedom 3 and 155.

The mean gain of yogic practices, physical exercises, combined (yogic practices &
physical exercises) group and control group were 0.53, 0.08, 1.35, and 0.45 respectively.

Scheffe’s post hoc test was therefore resorted – to find out the significance of
ordered adjusted final mean differences among the groups Table I (A). The Table I (A)
shows the Scheffe’s post-hoc test results. The ordered adjusted final mean differences
for pulse rate of experimental groups I, II, III and IV were tested for significance against
Schart’s post – hoc F-ratio.

Table – I (A): Adjusted Final Mean Difference
On Resting Pulse Rate of Four Experimental
Groups in Analysis of Covariance and
Scheffe’s Post – Hoc Test

<table>
<thead>
<tr>
<th>Ex – I</th>
<th>Ex – II</th>
<th>Ex – III</th>
<th>Ex – IV</th>
<th>M.D.</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>71.92</td>
<td>71.54</td>
<td>-</td>
<td>-</td>
<td>0.38</td>
<td>0.66</td>
</tr>
<tr>
<td>71.43</td>
<td>-</td>
<td>70.87</td>
<td>-</td>
<td>0.56</td>
<td>0.66</td>
</tr>
<tr>
<td>71.43</td>
<td>-</td>
<td>-</td>
<td>72.96</td>
<td>1.54</td>
<td>0.66*</td>
</tr>
<tr>
<td>-</td>
<td>71.73</td>
<td>70.87</td>
<td>-</td>
<td>0.85</td>
<td>0.66*</td>
</tr>
<tr>
<td>-</td>
<td>71.74</td>
<td>70.96</td>
<td>1.25</td>
<td>0.66*</td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>70.87</td>
<td>72.96</td>
<td>2.09</td>
<td>0.66*</td>
</tr>
</tbody>
</table>

The mean difference between
experimental group I and II, I and III, I and
IV, II and III, II and IV, III and IV were 0.38,
0.56, 1.54, 0.85, 1.25 and 2.09
respectively. The mean difference 0.29,
0.56, was seen to be less than the
confidant interval value of 0.66 in the
following comparisons I and II, I and III. Hence the above comparisons were not
significant. The mean difference 0.67, 0.68 1.18 and 0.69 were seen to be higher than
the confident interval value of 0.66 in the following comparison I and III, II and III, II and
IV, III and IV. Hence the above comparisons were significant. Hence the paired mean
difference was not significant at 0.05 level of confidence with degrees of freedom
3 and 155.

Conclusion

It is concluded from the results that the level of Resting pulse rate was increased
significantly due to six weeks training of yogic practices, physical exercises and
combination of both (yogic practices and physical exercises). It is concluded from the
results that the level of Resting pulse rate is decreased by yogic practices and physical
exercises activities which is greater than the yogic practices. It is concluded from the
results that the level of Resting pulse rate was decreased by combined activities which
was greater than the both yogic practices and physical exercises. The results were a
clear indication that the level of Resting pulse rate was decreased by combined
activities which was greater than both yogic practices and physical exercises. The
finding was however in conformity with previous studies reported by Gibbon (1976) and
Udupa and others (1974) on effects of training on Resting pulse rate.
References