Effect of yogic practices on selected physiological variable of pre-adolescents

Neeta Deshi and Dr. KP Martin

Abstract
The purpose of the study was to find out the effect of Yogic Practices on selected Physiological variable of school children. It was hypothesized that there would be significant differences on selected Physiological variable due to the effect of Yogic Practices of pre-adolescents. For the present study the 60 secondary girls from AdarshVidyalaya School pandavapura, Mandya district, Karnataka were selected at random and their age ranged from 14 to 16 years. The present study pre-test post-test random group design which consists of control group and experimental group was used. The subjects were randomly assigned to two equal groups of thirty each and named as Group ‘A’ and Group ‘B’. Group ‘A’ underwent Yogic Practices and Group ‘B’ has not undergone any training. The level of significance was set at 0.05. Breath Holding Time was assessed by Flexed Arm Hang test. The data was collected before and after sixteen weeks of training. The Yogic Practices had positive impact on Breath Holding Time among school children.

Keywords: Yogic practices, school (girls) children, breath holding time

Introduction
The system “Yoga in Daily Life” is designed in such a way that the body is gradually and systematically prepared, leading from simple preparatory exercises towards the more advanced and difficult Asana. Periods of relaxation are included at the beginning and end of each Yoga class, as well as between the individual exercises. By developing the ability to relax, the feeling for one’s own body is deepened. Physical and mental relaxation is prerequisites for the correct performance of all Yoga exercises and it is only in this way that the effects of the Asana completely unfold.

Physiological benefits of yoga
Yogic exercises improve circulation vital to proper functioning of the body. Yoga nourishes, stimulates and maintains the balance of the endocrine glands which govern growth and development. Regular practice of yoga improves functions such as digestion and respiration so that there is more energy available for the growing child. It increases the supply of fresh blood to the brain thus enhances mental capacity. Yogic exercises practiced properly strengthen the muscle fibres and nerves and there by improves physiological functioning of all the systems. It also promotes proper structural developments by working on the joints, regulates respiration and blood pressure. The works of Shell, et al. (1994), Shenbagavalli and Raj Kumar (2007), Sakthignanavel and Bhuvaneswari (2006) have shown evidence about the effect of yoga on physiological factors.

Methodology
The purpose of the study was to find out the effect of yogic practices on physical variable of school children. It was hypothesized that there would be significant differences on Physiological variable due to the effect of yogic practices on Physiological variable of school children. For the present study the 60 school girls form Adharsha Vidyalaya School Pandavapura, Karnataka were selected at random and their age ranged from 14 to 16 years. For the present study pre-test–post-test random group design which consists of control group and experimental group was used.

Correspondence
Neeta Deshi
Research Scholar,
Akkamahadevi Women’s University, Vijayapura,
Karnataka, India
The subjects were randomly assigned to two equal groups of thirty each and named as group ‘A’ and Group ‘B’. Group ‘A’ underwent yogic practices and Group ‘B’ has not undergone any training. The data was collected before and after sixteen week of training. The data was analysed by applying dependent t test. The level of significance was set at 0.05.

Table 1: Variables and test

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Variables</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Breath Holding Time</td>
<td>Seconds</td>
</tr>
</tbody>
</table>

Table 2: Results of Mean value between Pre-test and Muscular strength Score of pre-adolescents in control group and Yogic Practices.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Time</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Mean Diff.</th>
<th>SD Diff.</th>
<th>Paired t</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group</td>
<td>Pretest</td>
<td>24.57</td>
<td>5.52</td>
<td>-0.37</td>
<td>1.28</td>
<td>-1.5871</td>
<td>0.1233</td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>24.94</td>
<td>5.36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yogic Practices Group</td>
<td>Pretest</td>
<td>23.82</td>
<td>6.76</td>
<td>-11.52</td>
<td>3.01</td>
<td>-20.9610</td>
<td>0.0001*</td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>35.34</td>
<td>6.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level

Figure 1: Comparison of two groups with pretest and posttest mean Breath Holding Time scores

Discussion and findings

Breathe Holding Time result between pre and post test has been found significantly higher in experimental group in comparison to control group. This is possible because of due to Yogic Practices which may also bring spurt in Psychological variable in school children. The finding of the present study have strongly indicates that Yogic Practices of sixteen weeks have significant effect on Breathe Holding Time of pre-adolescent. Hence the hypothesis earlier set that Yogic Practices programme would have been significant effect Breathe Holding Time in light of the same the hypothesis was accepted.

Conclusion

On the basis of finding and within the limitation of the study the following conclusion was draws:
1. The Yogic Practices had positive impact on selected Breathe Holding Time among pre-adolescent.
2. The experimental group showed improvement on selected Psychological fitness variables of pre-adolescents than the control group.

Reference

2. Padmadevi. Investigated the effects of yogic practices, physical exercises and combination of both the trainings on selected physiological and psychological variables of college girls, 2007.
3. Sekarbabu, Kulothugan. Studied the effect of yogic practices on selected physiological variables of men hockey players.