Effects of selected yogasanas on a physical component (Flexibility) of school children

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Abstract
Yoga is an ancient health – art developed & perfected over the centuries by the sages & wise men of ancient India – Yoga is not a religion, a metaphysical doctrine or a philosophy. It can make amazing improvement in our health, appearance and Youthfulness. Yoga has many benefits in comparison to many other exercises. It is an exercise that can be done by any age group & even by the most unfit people. Yoga is also the most comprehensive of all exercises as it benefits each part of the body.

The aim of the present study was to analyze the effects of yoga asanas Urdhva-Dhanur-asana, Upavista-Kona-asana, Paschima-Uthana-asana and Ardha-Matsyendra-asana on high school students aged 15-16 years after 10 weeks practice. The data collected was treated with the statistical technique’s test and found there was a significant difference between pre test and post test.

Keywords: yoga, Urdhva-Dhanur-asana, Upavista-Kona-asana, Paschima-Uthana-asana and Ardha-Matsyendra-asana

Introduction
Yoga is an ancient health – art developed & perfected over the centuries by the sages & wise men of ancient India – Yoga is not a religion, a metaphysical doctrine or a philosophy. It can make amazing improvement in our health, appearance and Youthfulness. Yoga has many benefits in comparison to many other exercises. It is an exercise that can be done by any age group & even by the most unfit people. Yoga is also the most comprehensive of all exercises as it benefits each part of the body.

Physical fitness can be characterized by a high level and relatively constant functional state of organ systems arising from effect of regular training and it is a basic pre-requisites for human motor actions.

In the present study yoga is mainly associated with the physical fitness physical fitness is the key to success in General life, partially during educational life as well as in sports. This can be achieved excellently by following the yogic routine.

The present study has been conducted with the aim that Yogic asanas have positive effect on a flexibility physical component of a physical fitness.

People involved in these activities develop various physical abilities. This was the basic motivational factor for the research scholar to take up a search topic to analysis the effects of selected yogasanas on a physical component (flexibility) of a school children and to enlighten the people who are around us and to engage themselves to lead a physically, mentally and socially sound and healthy happy life.

Purpose of the Study
The main purpose of the study was to investigate the effects of selected yogasanas on a flexibility physical component of a school children.

Methodology
To achieve the purpose of the study, A group of 60 students were selected from Government High School. These students went through selected Yogic Exercises (Urdhva-Dhanur-asana, Upavista-Kona-asana, Paschima-Uthana-asan, Ardha-Matsyendra-asana and Surya Namaskar was given as warming up activity before starting the asana) for 10 weeks. Daily 1½ hours training was given in the strict supervision of the researcher.
Before the start of training all the 60 students aged 15-16 years were pre – tested on a flexibility physical component. After due training students were again tested like the pre – test (post test).

**Statistical Technique:** The collected data was analyzed by using ‘z’ statistical technique with the help of 19th version of SPSS.

**Results and Findings**

**Table 1:** showing the pre test and post test value of the students in “Hamstring Flexibility Test” (H.F.T.)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D</th>
<th>z. Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
</tr>
<tr>
<td>H.F.T.</td>
<td>62.767</td>
<td>68.050</td>
<td>10.761</td>
</tr>
</tbody>
</table>

The Z-ratio value significant at 0.01level – 2.33

Table No. 1 shows the mean, Standard Deviation and ‘Z’ ratio of “Hamstring Flexibility Test”. According to the table and graph the pre test mean is 62.767 and post test mean is 68.05. The standard deviation of pre test 10.761 and post test 10.179 was found, the ‘Z’ value was 2.763 which is significant.

**“Hip Mobility Test”**

Table no. 2 showing the pre test and post test value of the students in “Hip Mobility Test” (H.M.T.)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D</th>
<th>z. Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
</tr>
<tr>
<td>H.M.T.</td>
<td>65.733</td>
<td>68.717</td>
<td>9.063</td>
</tr>
</tbody>
</table>

The Z-ratio value significant at 0.05 level – 1.645

Table No. 2 shows the mean, Standard Deviation and ‘Z’ ratio of “Hip Mobility Test”. According to the table and graph the pre test mean is 65.73 and post test mean is 68.717. The standard deviation of pre test 9.063 and post test 9.613 the ‘Z’ value was 1.749 which is significant.

**“Shoulder trunk & hip flexibility Test”**

Table no. 3 showing the pre test and post test value of the students in “Shoulder Trunk & Hip Flexibility Test” (S.T.H.F.T.)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D</th>
<th>z. Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
</tr>
<tr>
<td>S.T.H.F.T</td>
<td>68.367</td>
<td>72.233</td>
<td>7.908</td>
</tr>
</tbody>
</table>

The Z-ratio value significant at 0.01 level – 2.33

Table No. 3 shows the mean, Standard Deviation and ‘Z’ ratio of “Shoulder Trunk and Hip Flexibility Test”. According to the table and graph pre test mean is 68.367 and post test mean is 72.233. The standard deviation of pre test 7.908 and post test is 6.445. The ‘Z’ value was 2.936 which is significant.

**Discussion on Findings**

In the present study 60 students were brought into yoga practice for 10 weeks, when pre test and post test were analyzed found significant difference. Hence there exist difference and significance among the parameters across the pre test and post test may be accepted.

**Conclusion**

Taking into consideration the limitations & de-limitations of this study, the investigator came to the following conclusions based on the results obtained in this research. The selected yogasana helped the subjects in developing the said variables.

**Recommendations**

On the basis of the results of this study the following recommendation were drawn.

a) The study may be conducted on different age group for a period of 10 weeks daily 1½ hour to know the influence of the Yogic practice on different physical, physiological and psychological variables.

b) The Yogasans should be made compulsory for the Boys and the Girls at the school level.

c) The Yogic practice should be made available to all the students to enhance their physical fitness.

d) The yoga training should be provided to all the teachers also to popularize the Yogic practice at school level.

**Reference**


