“EFFECT OF ASANAS ON PHYSICAL FITNESS OF SECONDARY SCHOOL STUDENTS”

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ABSTRACT
The present study was had an attempt to evaluate the degree of Asanas on Physical Fitness of Government Residential School Students has selected. The age limit of the players was ranged between 14 to 17 years. The samples were taken from Vijayapur district, Karnataka. Asanas and Muscular Endurance and Flexibility were used to measure the Physical fitness variables. To assess the significance differences between the means in case of significant t-values test was applied.

KEY WORD: Asanas on Physical Fitness.

INTRODUCTION:
The meaning of the Sanskrit word asana is study and comfortable posture. The postures performed in all yoga practices (Hatha Yoga and Ashtanga Yoga) are called asanas. Although many people believe that they are physical exercises, it does not convey their full significance. Asanas aim at influencing the body, mind and consciousness, molding and yoking them into one harmonious whole’. The practice of asanas requires active involvement of one’s entire being as fully as possible. In other words, try not to think about work or friends or food while performing them. The prime aim of asana is to help us tread the path to higher consciousness so we can begin to understand and know our relationship with existence. We cannot even consider attaining higher awareness if we are ill with disease, aches and pains or mental depression. Therefore, the initial purpose of practicing asana is to eliminate these disturbances and afflictions. A regular practice of asana makes us acquainted with the way our body is, and we then begin to understand the importance of breathing and staying still. The opening up of the body that results after a regular practice gives us a sense of freedom not only in the body, but more importantly in the mind driving us to come to terms with whatever is happening in our mind.

PHYSICAL BENEFITS:
“The relaxation techniques incorporated in yoga can lessen chronic pain, such as lower back pain, arthritis, headaches and carpal tunnel syndrome,” explains Dr. Nevins. “Yoga can also lower blood pressure and reduce insomnia.”

FLEXIBILITY:
If you ask people why they exercise, most will stay to stay healthy, keep fit, or because it makes them feel good. Not a lot will mention flexibility as a goal, but it’s a key part of maintaining your health and avoiding injury, especially as you age. The stretching you do in yoga is a great way to improve your flexibility. It's a commonly held misconception that you have to already be flexible to do yoga. In fact, the opposite is true: doing yoga regularly is a sure way to become more flexible. The ten poses below target the three major muscles groups.
where most people are lacking flexibility: hamstrings, hips, and shoulders. These three areas tend to get even tighter from sitting for long periods or even from other types of exercise, like running.

Don’t be in a rush to get through these poses. Many times you can feel several different phases of opening as you stay in a pose for longer. Don’t expect overnight changes, however. For best results, do your stretches daily. The following poses are intended to give you some options to fit your current level of flexibility.

**MUSCULAR ENDURANCE:**
Muscular endurance is the ability of a muscle or muscle group to exert force to overcome a resistance many times. Often the resistance is the body itself. The measurement of muscular endurance is based on the number of repetitions performed. Muscular endurance is specific to the assessment. The ability to perform upper-body exercises many times is separate from the ability to perform lower-body or abdominal exercises many times. Muscular endurance tests include push-ups, pull-ups and dips for the upper body, and sit-ups for the abdominals. Lower-body endurance can be assessed with squats. Consult a personal trainer to get help assessing your strength, power and muscular endurance. A trainer can also help you set reasonable goals and provide you with a training plan for reaching them. Always consult your healthcare provider before beginning a new exercise program. Your doctor or other medical provider can assess your general health and tell you if the program is right for you.

**STATEMENT OF THE PROBLEM:**
The purpose of the study is to assess the “Effect of Asanas on Physical Fitness of Secondary School Students.”

**HYPOTHESIS:**
- There is significant difference between pre test and post test group of high school students with respect to muscular endurance.
- There is a significant difference between pre test and post test group of High school students with respect to flexibility scores.
- It was hypothesized that training may effect on flexibility and muscular endurance of the Individual.
- It was hypothesized that effect of yogasanas may improve the flexibility and muscular endurance.

**LIMITATIONS**
- Measuring sophisticated equipments will be considered as limitation for this study.
- No motivational techniques applied while testing and training of the subjects.
- The daily routine work of the subjects might influence results, this is considered as limitation.
- Day to day activities, rest period, food habits and life style could not be controlled as it is considered as limitation of the study.
- The study is limited to the measuring the level of flexibility muscular endurance of Secondary school students

**DELIMITATIONS**
- The study is an Experimental.yogasanass conducting pre test and post test.
- This study will be confined to high school students only.
- The study will be delimitied to the age group of 15 to 16 years girls.
- This study is delimitied to selected yogasanas only.
- This studies is delimitied to flexibility, and muscular endurance, of high school students only.
- The study will be delimitied to Vijayapur district only.
- The study was limited to 30 control group and 30 experimental groups.

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METHODOLOGY

The methodology adapted for the present study “Effect of Asanas on Physical Fitness of Secondary School Students.” selection of subjects, experimental design, selection of variables, selection of tests, experimental design, collection of data and statistical procedure have been explained in this chapter.

SELECTION OF SUBJECTS:

The purpose of the study was to find out the “Effect of Asanas on Physical Fitness of Secondary School Students.” Age of the subjects ranged from 14 to 17 years girls. The investigator has been briefed about the purpose, nature, studying in Government School Ngathan /District Vijayapura.

SELECTION OF VARIABLES:

The research scholar reviewed the various scientific literatures pertaining to physical fitness and yoga training on selected physical fitness variables from books, journals, and research papers, taking into consideration the feasibility of criteria, availability of instruments and the relevance of the variables of the present study, the following variables was selected.

![Table 1: Showing the Mean, SD and t-value of Muscular Endurance control group collected at Pre-Post condition during the study]

<table>
<thead>
<tr>
<th>SI no</th>
<th>Muscular Endurance</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Df</th>
<th>p-value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group</td>
<td>Pre test</td>
<td>76.7333</td>
<td>7.28216</td>
<td>1.409</td>
<td>29</td>
<td>.169</td>
<td>N S</td>
</tr>
<tr>
<td></td>
<td>Post test</td>
<td>76.5667</td>
<td>7.11813</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean and SD score of control group at pre-and post test is 76.7333 and 76.5667 respectively and calculated value is 1.409, it is lesser than table value i.e.0.005 level of significant, hence as per the formulated hypothesis there would be no significant difference between control group variables of Muscular Endurance at both pre and post test, the hypotheses was rejected, and alternative hypothesis that null hypothesis is accepted.

![Graph 1: The Graph showing the Muscular Endurance means and t value of pre-post impact of control group]
The above table and graph clearly express that the interval session did not influence and not effected on Muscular Endurance variables of the control group, when it was tested at pre-post-test. It is assumed that because the control group was not made to expose to any kind of training at pre and post-test; hence six week training gap given to control group also does not make any significant influence on their Muscular Endurance factors. The constant and similar life style condition and environment and sample nature has maintained previous status in their physical and yogasana qualities.

### Table-2

**Showing the Mean, SD and t-value of Muscular Endurance Experimental group collected at Pre-Post condition during the study**

The level of significant is 0.05

<table>
<thead>
<tr>
<th>SI no</th>
<th>Muscular Endurance</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>df</th>
<th>p-value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>Pre test</td>
<td>84.2000</td>
<td>9.19670</td>
<td>9.160</td>
<td>29</td>
<td>.000</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>Post test</td>
<td>75.9000</td>
<td>8.18893</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean and SD score of Experimental group at pre-and post test is 84.200 and 75.9000 respectively and calculated value is 9.160, it is lesser than table value i.e.0.005 level of significant, hence it indicates that there is a significant development of Muscular Endurance component. Thus the hypothesis is accepted.

### Graph-2

**The Graph showing the Muscular Endurance means and t value of pre-post impact Of Experimental group**

The above figure clearly indicates that six weeks yogasana training and (muscular endurance) for the training performance is statistically improved the of the nature of Harvard step test for flexibility has shown the significant difference in the Muscular Endurance. Hence the hypothesis was accepted.
### Table 3

**Showing the Mean, SD and t-value of Sit and Reach flexibility control group collected at Pre-Post condition during the study**

<table>
<thead>
<tr>
<th>Sl no</th>
<th>flexibility</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>df</th>
<th>p-value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre test</td>
<td>2.2033</td>
<td>.61222</td>
<td>-.542</td>
<td>29</td>
<td>.592</td>
<td>NS</td>
</tr>
<tr>
<td>Control group</td>
<td>Post test</td>
<td>2.2200</td>
<td>.59619</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**The level of significant is 0.05**

The mean and SD score of control group at pre-and post test is 2.2033 and 2.2200 respectively and calculated ‘t’ value is -.542, it is lesser than table value i.e.0.005 level of significant, hence as per the formulated hypothesis there would be no significant difference between control group variables of Flexibility at both pre and post test, the hypotheses was rejected, and alternative hypothesis that null hypothesis is accepted.

### Graph 3

**The Graph showing the flexibility means and t value of pre-post impact Of control group**

The above table and graph clearly express that the interval session did not influence and not effected on flexibility variables of the control group, when it was tested at pre-post-test. It is assumed that because the control group was not made to expose to any kind of training at pre and post-test; hence six week training gap given to control group also does not make any significant influence on their flexibility factors. The constant and similar life style condition and environment and sample nature has maintained previous status in their motor qualities.

### Table 4

**Showing the Mean, SD and t-value of Sit and Reach flexibility Experimental group collected at Pre-Post condition during the study**

<table>
<thead>
<tr>
<th>Sl no</th>
<th>flexibility</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>df</th>
<th>p-value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre test</td>
<td>2.6500</td>
<td>.71955</td>
<td>-3.105</td>
<td>29</td>
<td>.004</td>
<td>S</td>
</tr>
<tr>
<td>Experimental group</td>
<td>Post test</td>
<td>3.0500</td>
<td>.79687</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**The level of significant is 0.05**
The mean and SD score of Experimental group at pre-and post test is 2.6500 and 3.0500 respectively and calculated’ t value is -3.105, it is lesser than table value i.e.0.005 level of significant, Hence it indicates that there is a significant development of flexibility component. Thus the hypothesis is accepted.

Graph-4

The Graph showing the flexibility means and t value of pre-post impact Of Experimental group

The above figure clearly indicates that six weeks physical variable (flexibility) for the game of (yoga), training performance is statistically improved the Flexibility of girls. The nature of sit and reach test for flexibility has shown the significant difference in the flexibility. Hence the hypothesis was accepted.

CONCLUSIONS:

- Based on the findings the following conclusions were drawn from the present study.
- Six weeks yogasanas training has shown significant improvement on physical performance variables of the subject.
- Six weeks of yogasanas training has shown improvement in muscular endurance and flexibility of the subjects

REFERENCE

7. Marco Bonhauser et.al, Improving Physical Fitness and Emotional well-being in adolescents of low socioeconomic status in Chile, Published by Oxford University Press, 2005.
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