Effect of yoga on attention & concentration and cardio-vascular endurance of secondary school volleyball players

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Abstract

Sports training require a holistic approach the human being is psychosomatic unit. There is no mind and body separation. The mind influences the body and vice versa, a holistic approach is required for top competitive results. Yoga can be used to improve sports performance without any obligations, certainly we can get positive changes and also it is becoming a part of education i.e. yoga need for all professionals. Sport performance is not one-dimensional but it is multidimensional. Several factors contribute to the final sports performance. Like motor ability components and the requirement of psychological variables also differs from game to game. Hence the psychological and physical preparations of athletes are essential for better performance in this study variables are the study was carried out on 60 male Volleyball players with ages ranging from 14 to 16 years. They were divided equally into 2 groups, 30 in each. Group-1 treated as experimental group, underwent yoga training. Group-2 treated as controlled group no training was given. Yogic Training the yoga session was as follows:

1. Warming up activities,
2. Suryanamaskara
3. Asanas, they are Vrikshasana, Garudasana, Bhujangasana, Paschimottanasana, Mastyasana and Halasana
4. Pranayama: they are Kapalabhati, Chandranuloma Viloma Pranayama, Suryanuloma Viloma Pranayama, Chandrabedana Pranayama, Suryabedana Pranayama, Nadisuddi and Shitali
5. Deep Relaxation Technique (DRT) Yoga brings control over breathing and that works effectively in increasing the psychomotor co-ordination yoga is a conscious process of gaining control over the mind and body and thus the attention and concentration span and cardio-vascular endurance have improved, that helps to enhance the sports performance of the players.

Keywords: yoga, cardio-vascular, volleyball players

Introduction

Sport performance is not one-dimensional but it is multidimensional. Several factors contribute to the final sports performance. Like motor ability components and the requirement of psychological variables also differs from game to game. Hence the psychological and physical preparations of Players are essential for better performance. Few important benefits of yoga for players are

a) Helps to learn new skills and techniques more rapidly and easily than before
b) Helps to recover more quickly during practice and competition.
c) Helps to relax more to maintain attention to the task at hand.
d) Helps to eliminate the disturbing internal thoughts and feelings.

Sports training require a holistic approach the human being is psychosomatic unit. There is no mind and body separation. The mind influences the body and vice versa, a holistic approach is required for top competitive results. Yoga can be used to improve sports performance without any obligations, certainly we can get positive changes and also it is becoming a part of education i.e. yoga need for all professionals.
Material and Methods

Subjects
1. The study was carried out on 60 male Volleyball players with ages ranging from 14 to 16 years.
2. They were divided equally into 2 groups, 30 in each.
3. Group-1 treated as experimental group, underwent yoga training.
4. Group-2 treated as controlled group no training was given.

Yogic Training
The yoga session was as follows
1. Warming up activities
2. Suryanamaskara
3. Asanas
   a) Vrikshasana
   b) Garudasana
   c) Bhujangasana
   d) Paschimottanasana
   e) Mastyasana
   f) Halasana
4. Pranayama
   a) Kapalabhati
   b) Chandranuloma Viloma Pranayama
   c) Suryanuloma Viloma Pranayama
   d) Chandrabedana Pranayana
   e) Suryabedana Pranayama
   f) Nadi suddhi
   g) Shitali
5. Deep Relaxation Technique (DRT)

Parameters Assessed
Attention & Concentration and cardio-vascular endurance was assessed at the beginning and at the end of 6 weeks uniformly on all the subjects.

1. Attention and Concentration
The letter cancellation task (Lezak, 1986) was administered.

2. Cardiovascular Endurance
Harward Step Test ((Harison, 1967) was conducted.

Data Analysis
The obtained data before and after 6 weeks. The separate variance model of t-test was used to analyze the data.

Results
The t-test technique was used to find out the significance of the study separately on control group and on experimental group.

Table 1: Table showing Number (N), Mean(M), Standard Deviation(SD), ‘t’ value and level of significance of attention & concentration and cardiovascular endurance between pre-test and post-test of control group Volleyball players.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Test</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>‘t’ value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attention and Concentration</td>
<td>Pre-Test</td>
<td>30</td>
<td>10.66</td>
<td>0.70</td>
<td>3.224</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>Post-Test</td>
<td>30</td>
<td>13.200</td>
<td>1.144</td>
<td>3.144</td>
<td>**</td>
</tr>
<tr>
<td>Cardiovascular Endurance</td>
<td>Pre-Test</td>
<td>30</td>
<td>7.366</td>
<td>1.196</td>
<td>2.694</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Post-Test</td>
<td>30</td>
<td>7.857</td>
<td>1.257</td>
<td>3.611</td>
<td>N.S.</td>
</tr>
</tbody>
</table>

NS = Not Significant

Table 2: Table showing Number (N), Mean (M), Standard Deviation (SD), ‘t’ value and level of significance of attention & concentration and cardiovascular endurance between pre-test and post-test of experimental group Volleyball players.

<table>
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</tbody>
</table>

NS = Not Significant; * Significant at 0.05 level; ** Significant at 0.01 level

The calculated t-value of attention & concentration 3.224 was more than the table value 2.75 at 0.01 level and the t-value of cardio-vascular endurance 2.694 was more than the table value 2.04 at 0.05 level.

Discussion
1. It is known that regular practice of yoga builds up the personality at all levels i.e., physical, mental, intellectual and emotional in normal persons Udupa and Singh, 1972; Udupa et al., 1973).
2. The results from this study clearly shows that the experimental group improves their attention & concentration and cardio-vascular endurance considerably by yogic practices.
3. It has been found especially useful in improving intellectual and physical sports performance.
4. The experimental group is much benefited by yoga practices as compared to control group.
5. The yoga technique loses the joints and relax the musculature and thus help the players in improving their locomotor skills and basic controls.

Conclusion
Yoga brings control over breathing and that works effectively in increasing the psychomotor co-ordination yoga is a conscious process of gaining control over the mind and body and thus the attention and concentration span and cardio-vascular endurance have improved, that helps to enhance the sports performance of the players.

References