METHODOLOGY

Fifty male fencing players aged 16-20 years (n=50) represented State Championship belonging to Parbhani, were selected. All the 50 subjects were divided randomly into two groups viz; Group –A (Fencing) and Group – B (Fencing plus yoga). The design of the experiment has been planned in three phases.

- Phase – I: Pretest
- Phase – II: Training or Treatment, and
- Phase – III: Post test

As the purpose of the study was to see the efficacy of yoga on health related fitness and fencing skills in state level fencing players, all the subject of different experimental and control groups were exposed to health related fitness and fencing skill test to record the pre test data. After the pre test was over, all the subjects of Group A were exposed to a practice of fencing followed by cooling down exercises and Group B participated in the training in fencing followed by Yoga. The training was imparted for both the groups 1 hr. daily in the morning except Sundays and holidays for eight weeks. However, after completion of 1 hr. training, cooling down exercises was given to Group A for 30 minutes, whereas Group B underwent 30 minutes of yoga practices. Finally, when the treatment or training period of 8 week was over, the posttest on all the selected variables were assessed for all the subject of two groups.

Variables Selected for the Study

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Test Name</th>
<th>Tools used</th>
<th>Measurement Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Flexibility</td>
<td>Sit and reach</td>
<td>Cm.</td>
</tr>
<tr>
<td>2.</td>
<td>Cardiovascular endurance</td>
<td>1 mile run</td>
<td>Min.:Sec.</td>
</tr>
<tr>
<td>3.</td>
<td>Abdominal muscle strength</td>
<td>Sit ups</td>
<td>No./min.</td>
</tr>
<tr>
<td>4.</td>
<td>Body fat</td>
<td>Skin fold caliper</td>
<td>mm.</td>
</tr>
<tr>
<td>5.</td>
<td>Fencing skill</td>
<td>Custom made test</td>
<td>Points</td>
</tr>
</tbody>
</table>
Statistical Analysis

Descriptive statistics was applied to process the data. Further the efficacy of the yoga training was evaluated by employing $2 \times 2 \times 5$ Factorial ANOVA.

The result of all these inferential statistics has been further analyzed by using Scheffe’s post hoc (follow up) test to assess individual group comparison.

MAJOR FINDINGS

The data were recorded systematically. The result of descriptive data analysis, factorial ANOVA and Scheffe’s post hoc test has been presented below.

A) Result on Health Related Physical Fitness

- “Fencing plus yoga” showed better result than the “Fencing” in improving Abdominal Muscles Strength (CD=0.34, p<0.05).
- “Fencing plus yoga” showed significant superiority over “Fencing” in improving flexibility (CD=0.35, p<0.05).
- “Fencing plus yoga” showed better result than the “Fencing” in improving Cardiovascular endurance (CD=0.28, p<0.05).
- “Fencing plus yoga” showed similar scores like “Fencing” in Body fat percentage (CD=0.09, p>0.05).

B) Result on Fencing Skill

- “Fencing plus yoga” showed better result than the “Fencing” in improving Fencing skill (CD=0.34, p<0.05).
CONCLUSION

The result helps to draw following conclusion:

- Inclusion of yoga in the training schedule is an added advantage for improving health related physical fitness of state level fencing players.

- Yoga training contributes to improve fencing skills of the state level fencing players.

RECOMMENDATIONS

On the basis of the conclusion drawn, as above, this study recommends the followings:

- Specified yoga training may be incorporated not only in the training schedule of fencing, but also in other sports.

- In this study yoga programme was included in the cooling down phase of training only. The properly designed yoga training may additionally be experimented to see its overall effects on fencing performance.

- This study was conducted on male subjects. Further research may be conducted on female fencing players.

Contribution to the Knowledge

After strenuous sports training, application of cooling down exercises is found very useful among the athletes for quick recovery. This study advocates a planned and reliable yoga training in the place of conventional cooling down exercises for improving health related physical fitness. Such findings, in fact, could add quantum of knowledge to the Indian physical education and sports.