METHODOLOGY

Sample

Sixty male (n=60) aged 14 to 18 years fencing players will be pooled for this controlled experiment, by employing fishers random table sampling technique. Making the use of table random numbers all the 60 subject will be divided randomly into two matched groups viz., group –A (Experimental group) and group-B (Control group). Thus, each group will consist of 30 subjects.

Research Design

- Group-A i.e. experimental group will undergo a training program on selected yoga practices plus fencing training and will participate in regular activity as per the school time schedule. The training in selected yoga practices and fencing will be imparted by qualified experts.

- Group-B i.e. control group has to undergo the fencing training and participate in regular activities as per school routine.

The experiment will be conducted in three phases:

- Pre Test;
- Treatment / Training, and
- Post Test.

Pre Test

All the subjects of both the experimental and control groups will be pre-tested with the following variables:
Variables Selected for the Experiment

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Component</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Performance related physical fitness components</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Agility</td>
<td>Shuttle run</td>
</tr>
<tr>
<td>2.</td>
<td>Balance</td>
<td>Standing Stork Test Blind</td>
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<tr>
<td>3.</td>
<td>Hand eye coordination</td>
<td>Eye Hand Coordination Test (Ball Transfer)</td>
</tr>
<tr>
<td>4.</td>
<td>Flexibility</td>
<td>Sit &amp; reach</td>
</tr>
<tr>
<td>5.</td>
<td>Strength</td>
<td>Vertical jump</td>
</tr>
<tr>
<td>6.</td>
<td>Speed</td>
<td>50 M dash</td>
</tr>
<tr>
<td></td>
<td>PSYCHOLOGICAL COMPONENTS</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Concentration</td>
<td>Bera’s concentration test (2008)</td>
</tr>
<tr>
<td>2.</td>
<td>Reaction time</td>
<td>Nelson Hand Reaction Time Test</td>
</tr>
<tr>
<td></td>
<td>FENCING SKILL</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Direct thrust</td>
<td>Custom made foil skill test of Fencing</td>
</tr>
</tbody>
</table>

Treatment / Training

After pretest is over, the subjects of experiment and control group will undergo different training schedules as follows:

Group-A (Selected Yoga Practices plus Fencing training);
Group-B (only Fencing training);

The training will be imparted daily 1 hour in the evening, except Sundays and holidays. However, total duration of the experiment will be for a minimum period of 6 weeks.
Post Test

After completion of the training / treatment period of 6 weeks, the subjects of both the groups will be again tested (like pre-test) with the selected variables and data will be preserved and processed for statistical analysis.

Ethical Consideration

Informed consent of all the participants prior to the experiment will be taken with standard format (as per the Declaration of Helsinki). Further, permission from the Principal of the school will be taken before commencement of the experiment.

Statistical Techniques to be used

Primarily the data will be analyzed using descriptive statistics. Further, they will be processed through inferential statistics as follows:

- For Physical Fitness Components: 2 x 2 x 6 Factorial ANOVA followed by Scheffe’s post hoc test.
  - (Justification: Group:2, Pre-post-: 2, & Variables: 6)

- For Psychological Variables: 2 x 2 x 2 Factorial ANOVA followed by Scheffe’s post hoc test.
  - (Justification: Group:2, Pre-post-: 2, & Variables:2)

- For Fencing Skill Variables: 2 x 2 x 1 Factorial ANOVA followed by Scheffe’s post hoc test.
  - (Justification: Group:2, Pre-post-: 2, & Variables: 1)

FACILITIES REQUIRED
- **Instruments:** Available.
- **Man Power:** The experts required for training in yoga and fencing will be made available. Further, the man power for data collection will be involved as required.