Effect of Selected Trampoline Exercises on Selected Psycho Motor Variables among College Students

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ABSTRACT
The purpose of the study was to find out the effect of 8 weeks trampoline exercise on selected psychomotor variables of preadolescence boys. To achieve these purpose 30 male college students were studying in Periyar University College of art and science, Mettur, Salem, Tamilnadu. The subjects were selected on a random basis and were divided into two equal groups. Such as, experimental group and control group. Each group consists of 15 subjects. Group – I underwent Trampoline Exercise (TE) and Group – II acted as control group (CG), they didn’t take part in any specific activities. The ages of subjects were ranged from 18-22 years. The training sessions were conducted five days a week over a period of eight weeks. Selected psycho-motor variables for this study are: balance and explosive power. The data were collected by using standardized tools. Initial reading has been taken for both experimental and control groups and the readings have been carefully recorded. After completion of 8 weeks training period, the post test was conducted for both experimental and control groups and the final readings have been recorded carefully. The collected data were analyzed statistically by using dependent ‘t’ test. In all the cases, 0.05 level of confidence was fixed to test the level of significance. The results of the study show that experimental group shows better improvement on selected psychomotor variables when compared to control groups.

KEYWORDS: Trampoline, Psychomotor, College Men.

Introduction
Gymnastics is a mother of all sports and games. Gymnastics is a very fun & challenging sport. Gymnastics is a sport involving the performance of sequences of movements requiring
physical strength, flexibility, and kinesthetic awareness, such as handsprings and handstands. It developed from fitness exercises used by ancient Greek soldiers, including skills for mounting and dismounting a horse, and circus performance skills. Gymnastics is a sport that involves exercises intended to display strength and balance and agility. Gymnastics as an activity sport, has been around for over 2000 years but as a competitive sport it is a little more than 100 years old. One sided predomination of load on the human body is not characteristic in gymnastics (on the floor predominate bilateral leg take-offs and landings (Marinsek, 2010; Cuk & Karacsony, 2004), the same stands for vault (Karacsony & Cuk, 2005). The modern trampoline was patented by George Nissen in 1936 who championed its use for competition purpose.

**METHODOLOGY**

The purpose of the study was to find out the effect of 8 weeks trampoline exercise on selected psychomotor variables of pre adolescence boys. To achieve these purpose 30 male college students were studying in Periyar University College of art and science, Mettur in the academic year. The subjects were selected on a random basis and were divided into two equal groups. Such as, experimental group and control group. Each group consists of 15 subjects. Group – I underwent Trampoline Exercise (TE) and Group – II acted as control group (CG), they didn’t take part in any specific activities. The ages of subjects were ranged from 18-22 years. The training sessions were conducted five days a week over a period of eight weeks. Selected psychomotor variables for this study are: balance and explosive power. The data were collected by using standardized tools. Initial reading has been taken for both experimental and control groups and the readings have been carefully recorded. After completion of 8 weeks training period, the post test was conducted for both experimental and control groups and the final readings have been recorded carefully. The collected data were analyzed statistically by using dependent ‘t’ test. In all the cases, 0.05 level of confidence was fixed to test the level of significance.

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ANALYSIS OF THE DATA AND RESULT OF THE STUDY

Table-I Computation of ‘T Ratio’ Of Balance and Explosive Power Of Experimental Group

<table>
<thead>
<tr>
<th>Variables</th>
<th>Pre mean ± S.D</th>
<th>Post mean ± S.D</th>
<th>Mean. Diff</th>
<th>Std. Error</th>
<th>‘t’ ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance</td>
<td>0.52 ± 0.04</td>
<td>0.75 ± 0.24</td>
<td>0.23</td>
<td>0.05</td>
<td>4.85*</td>
</tr>
<tr>
<td>Explosive Power</td>
<td>34.85 ± 2.08</td>
<td>38.80 ± 2.33</td>
<td>3.95</td>
<td>0.27</td>
<td>14.83*</td>
</tr>
</tbody>
</table>

*Significant at 0.05 level

Table – 1 indicates that the obtained’t’ ratio of balance were 4.85 and losses made from pre and post-test and explosive power were 14.83. It was greater than the table value of 2.09 for degrees of freedom 1, 19. It was observed that the mean gains were significantly improved the eight weeks of trampoline training.

Figure-I Shows the Mean Values of Balance and Explosive Power of Experimental Group

![Graph showing mean values of balance and explosive power](image)

Table-II.

Computation of ‘t ratio’ of balance and explosive power of control group

<table>
<thead>
<tr>
<th>Variables</th>
<th>Pre mean ± S.D</th>
<th>Post mean ± S.D</th>
<th>Mean. Diff</th>
<th>Std. Error</th>
<th>‘t’ ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance</td>
<td>0.53 ± 0.12</td>
<td>0.54 ± 0.12</td>
<td>0.01</td>
<td>0.01</td>
<td>1.05</td>
</tr>
<tr>
<td>Explosive power</td>
<td>33.45 ± 1.70</td>
<td>33.90 ± 1.80</td>
<td>0.45</td>
<td>0.22</td>
<td>2.02</td>
</tr>
</tbody>
</table>

*Significant at 0.05 level

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Table - II indicates that the obtained 't' ratio of balance were 1.05 and explosive power were 2.02. It was lesser than the table value of 2.09 for degrees of freedom 1, 19. It was observed that the mean gains and losses made from pre and post-test were not significantly improved.

**Figure-II**

**Shows the Mean Values of Balance and Explosive Power of Control Group**

![Bar chart showing mean values comparison between pre-test and post-test for balance and explosive power.]

**DISCUSSION ON FINDINGS**

The result of the study showed that there was significant improvement on Balance and explosive power by the effect of trampoline training. Nagar, et al., (2010) was to find out the effect of Gymnastics training on Balance. It was concluded that Gymnastics training leads to development of dynamic test of positional Balance.

The based on the study supports the results of the present study, when analyzing the effects of Gymnastics on Balance and explosive power. The result of the study showed the Gymnastic training was significantly improved on Balance and explosive power.

**CONCLUSIONS**

1. It was concluded that eight weeks of trampoline exercises has significantly improvement on balance of college students.
2. It was concluded that eight weeks of trampoline exercises has significantly improvement on explosive power of college students.
REFERENCES


