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## Efficacy of trampoline training on elastic power of hand ball players

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### Abstract

The purpose of the study was to find out the relative effects of trampoline training on elastic power of men hand ballplayers. For this purpose, forty men handball Players who had participated in inter collegiate handball tournaments from Annamalai University were randomly selected as subjects. The selected subjects were divided at random into two groups of twenty each (n=20). Group I underwent trampoline training, and Group II acted as Control. The subjects carried out their respective training programmes for three days per week for a period of twelve weeks. Control group did not under go any specific training. The data obtained from the experimental group before and after the experimental period were statistically analyzed with dependent 't'-test and the level of confidence was fixed at .05 level for all the cases.

The results of the study indicate that there were significant differences among the adjusted posttest means of trampoline training group, and Control group on elastic power.

**Keywords:** Elastic power, trampoline training

### Introduction

The trampoline is a rehabilitation method that can stimulate proprioception and enhance a person's ability to balance. Training on a trampoline was shown to improve the ability of elderly patients to recover their balance after falling forward, and trampoline training is an effective intervention for promoting balance and other movements in children with intellectual disabilities). In particular, predefined mini-trampoline training stroke patients produced a significant increase in their balance. Although the improvements were not statistically significant, trampoline use also improved their mobility and activities of daily living. The stroke patients in that study performed the trampoline training, without holding onto anything while they jumped or, hit a balloon. It would be difficult to use this method for stroke patients with low physical abilities. In addition, the effectiveness of trampoline training in preventing falls and improving the walking ability and balance of stroke patients has not been reported. Therefore, this study used a modified trampoline training program for stroke patients and analysed its effects on balance, gait, and falls efficacy.

### Methodology

The purpose of the study was to find out the relative effects of trampoline training on elastic power of men hand ballplayers. For this purpose, forty men handball Players who had participated in inter collegiate handball tournaments from Annamalai University were randomly selected as subjects. The selected subjects were divided at random into two groups of twenty each (n=20). Group I underwent trampoline training, and Group II acted as Control. The subjects carried out their respective training programmes for three days per week for a period of twelve weeks. Control group did not under go any specific training. The data obtained from the experimental group before and after the experimental period were statistically analyzed with dependent 't'-test and the level of confidence was fixed at .05 level for all the cases.

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## Results

The results of the dependent 't'-test on the data obtained for Elastic power of the subjects in the pre-test and post-test of the experimental groups and control group have been analyzed and presented in Table I.

**Table 1:** The summary of mean and dependent 'T' test for the pre and post tests on elastic power of experimental groups and control group

	Trampoline training Group-(I)	Control Group-(II)
Pre- test mean	9.70	9.74
Post-test mean	9.92	9.73
't'-test	4.49*	0.09

\* Significant at .05 level.

(Table value required for significance at .05 level for 't'-test with DF 19 is 2.09)

Table I shows the dependent 't' test values between the pre and post-test means of Trampoline training group and Control group were, 4.49, and 0.09 respectively. Since the obtained 't'-test values of experimental group is greater than the required table value of 2.09 with df 19 at .05 level of confidence it is concluded that, Trampoline training group had registered significant improvement in performance of Elastic power.

## Conclusion

Trampoline training group had registered significant improvement in performance of Elastic power.

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