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Effect of Mallakhamb exercise on strength and agility variables of college male students

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Abstract

The purpose of the study was to find out the effect of Mallakhamb exercise on strength and agility variables of college male students. The study was formulated as a single group design, consisting of a pre-test and post-test. To achieve the purpose of the study, 15 subjects were randomly selected from A.P.T.T College, Suroth Karauli Rajasthan. Their age ranged from 21 to 26 years. Pre-test was conducted on physical fitness variables namely strength, agility. After pre-test experimental group had under gone six weeks Mallakhamb exercise training for 45 minutes per day and 5 days per week. After six weeks training programe post-test was conducted on physical fitness variables namely strength, agility. To analyse the collected data paired 't' test was used. The experimental group showed significant difference on strength, agility after six weeks Mallakhamb training programme. The study concluded that six weeks Mallakhamb exercise training programme showed significant difference on strength and agility. Therefore the finding suggests that the Mallakhamb exercise is important for the development of strength and agility of college male students.

Keywords: Mallakhamb exercise, strength, agility and college male

Introduction

Today's education not merely deals with mental enhancement of an individual, but also a source of physical activities that leads to all-round development of an individual. The best individual is one who is physically fit, mentally sound and sharp, emotionally balanced and socially well adjusted. It is therefore, 'physical education' said to be an integral part of 'total education'.

Mallakhamb is a traditional Indian sport in which a gymnast performs feats and poses in concert with a vertical wooden pole or rope. The word also refers to the pole used in the sport. Mallakhamb derives from the terms malla which denotes a wrestler and khamba which means a pole. Mallakhamb can therefore be translated to English as "pole gymnastics".

Mallakhamb is combinations of gymnastic, yog and martial arts. It is developed at Maharashtra in India. Mallakhamb is known as the mother sports of ancient India. It is pure Indian game and physical culture in India. Mallakhamb needs strength, agility, speed, concentration, coordination, balance and flexibility.

Mallkhamb is an ancient part of India. Mallakhamb exercise makes body fit and strong. It is beneficial for the whole body and developed the strength, agility and energy of the body. Mallakhamb is an exercise form that emphasizes smooth, balanced movement, controlled and rhythmic breathing.

Methodology

Selection of Subjects

To achieve the purpose of the study, 15 subjects were randomly selected from A.P.T.T College Suroth, Karauli Rajasthan. Their age ranged from 21 to 26 years.

Selection of Variables

Independent Variables

Mallakhamb exercise

Dependent Variable

1. Strength
2. Agility

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Experimental Design

The study was formulated as a single group design, consisting of a pre-test and post-test. The subjects (N=15) were randomly assigned. Pre-test was conducted on strength, agility variables. The readings were carefully recorded in their respective unit as pre-test score. After pre-

test experimental group has under gone six weeks Mallakhamb exercise training programme for 45 minutes per day and 5 days per week. After six weeks of training post test was conducted and the reading were carefully recorded as post test score. Paired “t” test was applied to analyse the collected data.

Table 1: Criterion Measures

S.No	Variables	Name of the Test	Units of Measurement
1	Strength	Pull ups	in number
2	Agility	Semo agility test	in seconds

Mallakhamb Training

Mallakhamb training was assigned to subjects for the period of six weeks. The different techniques of holds and grips on Mallakhamb were taught to the subjects. During the experimentation the subjects were asked to perform for a quiet number of times till they get perfection of exercise under the keen supervision and assistance. This experiment was carried out in the evening time between 5 pm to 6 pm. The holds and grips that they practiced on Mallakhamb were

1. Front leg grips
2. Hand stand leg grips
3. Back leg grips
4. Hanging with leg folding
5. Arm pit grips
6. Repetition of grips
7. Turnings

8. Salutation

After proper and sufficient warm up, the subjects were asked to practice on Mallakhamb pole.

Training Programme

Based on the literature available and the opinion of the experts the following training details were determined.

Duration of the training – 6 weeks

Number of days per week - 5 days

Number of session per day – 1 session (45 minutes)

Statistical Analysis

Paired ‘t’ test was applied to find out the significance difference between the pre-test and post-test means of variables namely strength, agility.

Table 2: Significance of Mean between Pre and Post-Test of Strength, Agility

S.No	Variables	Pre-test Mean	Post-test Mean	Mean Diff	‘t’	Table value
1	Strength	9.31	11.19	1.43	4.85*	2.15
2	Agility	14.76	13.62	1.10	3.96*	

* Significant at 0.05 level (df 1, 14 = 2.14).

Table – 2 indicates that the obtained ‘t’ ratios are 4.85 and 3.96 on strength, agility respectively. The obtained t-ratio of strength, agility are greater than the table value of 2.15, degrees of freedom of 1 and 14. It is observed that the mean gains and mean losses are statistically significant on strength, agility.

Discussion on Findings

The purpose of the present investigation was to find out the effect of six weeks Mallakhamb exercise training programme on strength and agility variables of college male.

In the present study, the results validate that six weeks Mallakhamb exercise training showed significant changes on strength and agility from baseline to post treatment. The present study also confirms that the Mallakhamb exercise is the ideal training model to develop strength and agility of college male students.

Conclusions

Based on the results of the study the following conclusions were drawn.

1. Within the limitations and on the basis of the findings of the study, it is very clear that, six weeks Mallakhamb exercise training produced significant change on strength among college male students.
2. The findings of the study, it is very clear that, six weeks Mallakhamb exercise training produced significant change on agility among college male students.

3. Further, it was inferred that Mallakhamb exercise training programme appears to be a safe and practical intervention tool for improving strength and agility among college male students.

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