

## Effect of Mallakhamb Exercise on Selected Physical Fitness Variables among College Students

**Dr. Shyamsundar Kela**

Physical Director,  
Bhagwan Baba Mahavidyalay, Lonar, Buldana

### Abstract

*The purpose of the study was to find out the effect of mallakhamb exercise on selected physical fitness variables among college students. To achieve the purpose of the study, 15 subjects were randomly selected from Bhagwan Baba college Buldana. Pre-test was conducted on selected physical fitness variables namely strength, agility, flexibility, and balance. After six weeks training programme post-test was conducted on selected physical fitness variables namely strength, agility, flexibility, and balance. To analyse the collected data paired 't' test was used. The experimental group showed significant difference on strength, agility, flexibility, and balance after six weeks mallakhamb training programme. The study concluded that eight weeks mallakhamb exercise training programme showed significant difference on selected variables. Therefore the finding suggests that the mallakhamb exercise is important for the development of strength, agility, flexibility, and balance among college men.*

**Keywords:** Mallakhamb Exercise, Strength, Agility, Flexibility, Balance and College student.

### Introduction

Today, with an astounding number of reports about **increasing obesity rates, diseases and conditions related to being overweight** and out-of-shape, it is impossible to ignore the importance of fitness and well-being in our lives. Health professionals attribute cancer, diabetes and mental issues such as depression to deficiencies in fitness and well-being. While concentrating on exercise and diet can help people suffering from these diseases, you shouldn't wait until you develop an illness to begin a health and fitness routine. Recent studies have identified as many as **75% of adults as overweight or obese**. Only about 26% of American adults participate in vigorous physical and/or leisure activities three or more times a week. Obese people have a 10–50% increase in premature deaths from all causes compared to individuals with a healthy body weight. The majority of these premature deaths are attributed to **cardiovascular causes**.

However, diabetes rates are climbing in parallel with these obesity statistics. The five years between 1997 and 2002 saw a 27% increase in the number of diabetes cases. In addition, while diabetes is affecting more and more individuals,

it is also affecting individuals at a younger age as well. With the constant threat of numerous health issues caused by obesity, it is obvious that everyone should be conscious of their personal fitness and mental well-being. The only way to achieve a healthy and fit lifestyle is to make the necessary changes to your everyday life. These changes **do not have to be drastic** to begin with, and should be things you enjoy and look forward to doing. The most important thing is to make an effort at improving all areas of your personal fitness and well-being, even if changes are gradual. As introduced at the beginning of this section of our website, there are seven key components associated with the physical and mental aspects of health, fitness and mental well-being. Each contributes to overall health and fitness in its own way. To achieve total physical health and fitness, you must be aware of and work at achieving each of the seven key components. **The seven key physical components to overall good health, fitness and mental well-being are:**

1. Cardiovascular/Aerobic Conditioning
2. Strength Training and Muscular Development
3. Stretching - Muscles, Ligaments and Tendons

4. Core Stability
5. Nutrition and Supplementation
6. Mental Rest and Relaxation
7. Sleep

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".

**Experimental Design**

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.

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 selected variables such as strength, agility, flexibility, and balance. 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 one hour per day 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.

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. Abdominal balance
9. Salutation

**Table I.** 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
3	Flexibility	Sit and reach	in centimeters
4	Balance	Stork balance test	in seconds

**Table II.** Significance of mean gains / losses between pre and post-test of strength, agility flexibility, and balance

S.NO	VARIABLES	Pre Test Mean	Post Test Mean	Mean Diff	t	Table Value
1	Strength	9.30	10.12	1.40	4.85*	
2	Agility	12.80	12.60	1.10	3.90*	2.15
3	Flexibility	13.70	15.30	1.50	20.50*	
4	Balance	0.76	1.09	0.37	3.10*	

Significant at 0.05 level (df,14=2.14)

It is observed that the mean gains and mean losses are statistically significant on strength, agility, flexibility and balance.

**Results**

The present study also confirms that the mallakhamb exercise is the superior training model to develop strength, agility, flexibility and balance of college men.

**Conclusions**

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 changes on strength and agility among college men.

2. It was also concluded that six weeks mallakhamb exercise produced significant changes on flexibility and balance among college men.
3. Further, it was inferred that mallakhamb exercisettraining programme appears to be a safe and practical intervention tool for improving strength, agility, flexibility, and balanceamong college men.

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