



## EFFECT OF INDIAN TRADITIONAL TRAINING AND MODERN TRAINING METHODS ON MUSCLE ENDURANCE AND POWER OF WRESTLERS

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### ABSTRACT:

The main purpose of the study was to find out effect of Indian traditional training and Modern training methods on Muscle endurance and Power of wrestlers. The allied objectives of the study were: To compare the effect of Indian Traditional training and Modern training methods of wrestling on strength and agility. the study would be highlighting the differences which exist in Muscle endurance and Power among the wrestlers practicing different training program and providing knowledge to the coaches and players regarding the need of development of Muscle endurance and Power of wrestlers, may be helpful for the diagnosis of training program .The effectiveness of training program in developing Muscle endurance and Power.

**Key words:** - *Indian traditional training and Modern training in which effective and developing training program for Muscle endurance and Power.*

### INTRODUCTION:

In today's era for the Sport development in very important need to experimental training program. their information to one good payer of fitness level for they can improvement fitness level and development skill technique. Sports physical and physiological activity, besides physical motor fitness, physiological and technical aspects. Man's interest in sports is found in all societies of the world. Most of the nation's share a common interest in sports competition, especially at certain times during the Olympic Games, where people from all nations some personality traits like extroversion and neurotic-ism of the players during training as well as competitive situations. It is not the were participation or practice that brings out victory to an individual. Therefore, sports life is affected by various factors, like Sports Training, Coaches, and trainers are doing their best to improve the performance of the players of their country. Sportsmen personality is represented by his sport performance. Physical fitness,

physiological, techniques and tactics alone are not enough. The pedagogical aspect of sports training comes into sharp systematic training in almost all the sports. Some examples include physically fitness and physiological fit , An athlete needs to be aware of the various types of physically fitness and physiological to develop an effective training program that focuses on weak or important areas for they .

### PURPOSE OF THE STUDY:

The main purpose of the study was to find out effect of Indian traditional training and modern training methods on Muscle endurance and Power of wrestlers.

### HYPOTHESIS:

1) it was hypothesized that, there will be significant difference in Muscle endurance and Power of Wrestlers practicing Indian Traditional training and Modern Training Methods. 2) It was further hypothesized that, Modern Training Method will be significantly better than Indian Traditional Training Method on Muscle endurance and Power.

**METHODOLOGY:**

For the study one hundred fifty wrestlers were selected on random basis for the present study. Those who have participated in Amravati division competition all the selected subjects were ranged from 16 to 20 years of age. The subjects were converted into composite score and divided into three homogeneous groups respectively. Indian Traditional Training was employed to one group (50); Modern Training was employed to second group (50). The third group was not undergone any training and was treated as the control group (50). The duration of the experimental period was of 3 months. In the pre-test and posttest, was conducted for **Muscle Endurance (sit and bent knee)**

**Equipment:** Stop watch, mat. Procedure: The subjects were asked to lie down on their back on the mat, with bent knees. Their hands were placed on the back of their neck with the fingers interlocked, elbows were retracted. A partner was asked to hold the ankles down, the heels being in contact with mat at all times. The subjects were asked to start to do sit ups, turning the trunk to right and touching the left elbow to the right knee. The exercise was repeated by alternating sides. **Scoring:** The number of completed sit ups to the nearest whole number was recorded as a score for the strength of abdominal muscles. In the pre-test and posttest, was conducted **Power (Standing Broad jump)**

**Purpose:** To measure the explosive power of legs. **Equipment's:** Standard measuring tape. **Procedure:** The subject was asked stand behind a take off line with his feet several inches apart. Preliminary to jumped the subject dipped his knees and swung the arms backward. He then jumps forward by simultaneously extended his knees and swung forward. He took off from both feet simultaneously, jump as far forward as possible and landed on both the feet. Three trials were given to the subject. **Scoring:** The best of the three trials was recorded in inches.

**Analysis of Data:** The data obtained from the Experimental groups before and after the experimental period were statistically carried out with descriptive statistics, paired sample t-test, Analysis of Co-variance (One-Way ANCOVA), and the Least Significant Difference (LSD) Post hoc test employed. The level of confidence was fixed at .05 levels for all the cases. The data were compiled and analyzed using the Statistical Package for the Social Science (SPSS) for windows computer software (Version 16.0).

**Muscle Endurance (Sit Up Bent knee)** - The analysis of descriptive statistics on Muscle Endurance of the subjects in the Post test of Experimental Groups and Control Group have been carried out and presented in Table-1.

Table reveals that the 't' ratio values 8.521 and 12.184 of muscular endurance for Indian Traditional Training Group and Modern Training Group respectively are found to be significant at 0.05 level of significance. The table also shows that there is no significant improvement in case of control group as the calculated 't' ratio value 1.772 is not found to be significant. The mean difference of pre-test and post-test of each group for muscular endurance has been depicted in Graph-5

**POWER (STANDING BROAD JUMP)** The analysis of descriptive statistics on Power of the subjects in the Post test of Experimental Groups and Control Group have been carried out and presented in Table-2.

Table- 14 reveals that the 't' ratio values 20.214 and 4.849 of power for Indian Traditional Training Group and Modern Training Group respectively are found to be significant at 0.05 level of significance. The table also shows that there is no significant improvement in case of control group as the calculated 't' ratio value 1.972 is not found to be significant at 0.05 level of significance.

The mean difference of pre-test and post-test of each group for power has been depicted in Graph-2

**RESULTS :**

In Muscular endurance the 't' ratio values 8.521 and 12.184 for Indian Traditional Training Group and Modern Training Group respectively are found to be significant and there is no significant improvement in case of control group as the calculated 't' ratio value 1.772 is not found to be significant at 0.05 level of significance. There was F-value final adjusted means of Control Group, Modern Training Group and Indian Traditional Training Group in muscular endurance is 23.378, which is found to be significant at .05 level. The mean difference values of Control Group and Modern Training Group (2.916), Control Group and Indian Traditional Training Group (1.729), Modern Training Group and Indian Traditional Training Group (1.187) reveal that there is significant difference in muscular endurance as the obtained mean difference values are found to be significant at .05 level of significance.

In Power the 't' ratio values 20.214 and 4.849 for Indian Traditional Training Group and Modern Training Group respectively are found to be significant and there is no significant improvement in case of control group as the calculated 't' ratio value 1.972 is not found to be significant at 0.05 level of significance. There was F-value final adjusted means of Control Group, Modern Training Group and Indian Traditional Training Group in power is 13.350, which is found to be significant at .05 level. The mean difference values of Control Group and Modern Training Group (0.079), Control Group and Indian Traditional Training Group (0.031), Modern Training Group and Indian Traditional Training Group (0.047) reveals that there is significant difference in power as the obtained mean difference values are found to be significant at .05 level of significance.

**CONCLUSION :**

1. Modern training group was better than Indian Traditional Training Group.

2. Comparison of muscular endurance between pre and posttest of Indian Traditional Training Group and Modern Training Group showed significant difference.

3. It was concluded that Indian Traditional Training Group and Modern Training Group significantly improved muscular endurance of the wrestlers compared to control group and comparison between the experimental groups concluded that modern training group was better than Indian Traditional Training Group.

4. Comparison of power between pre and post test of Indian Traditional Training Group and Modern Training Group showed significant difference.

5. It was concluded that Indian Traditional Training Group and Modern Training Group significantly improved power of the wrestlers compared to control group and comparison between the experimental groups concluded that modern training group was better than Indian Traditional Training Group.

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**Table-1. The summary of mean and paired sample 't' test for the pre and post tests on muscular endurance of indian traditional training group, modern training group and control group**

Group	Test	Mean	SD	SE	MD	't'-ratio
<b>I.T.T.G.</b>	Pre	41.740	9.705	1.945	5.120	8.521*
	Post	44.040	9.746			
<b>M.T.G.</b>	Pre	40.580	9.042	1.806	7.300	12.184*
	Post	44.100	9.022			
<b>C.G.</b>	Pre	40.020	11.483	2.280	0.280	1.772@
	Post	40.640	11.313			

\*Significant at .05 level.

@Not Significant at .05 level.

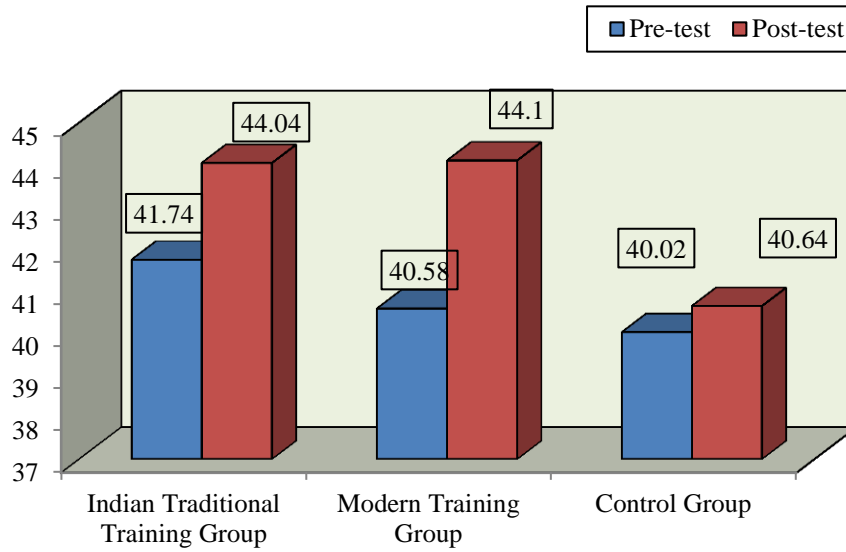
**Table-2. The summary of mean and paired sample 't' test for the pre and post tests on power of indian traditional training group, modern training group and control group**

Group	Test	Mean	SD	SE	MD	't'-ratio
<b>I.T.T.G.</b>	Pre	2.178	0.283	0.056	0.040	20.214*
	Post	2.218	0.281			
<b>M.T.G.</b>	Pre	2.137	0.239	0.050	0.088	4.849*
	Post	2.224	0.260			
<b>C.G.</b>	Pre	2.168	0.396	0.079	0.009	1.972@
	Post	2.177	0.395			

\*Significant at .05 level.

@Not Significant at .05 level.

**Graph no-1 Graphical representation of muscular endurance of mean difference between pre and post test of indian traditional training group, modern training group and control group**



**Graph no-2 Graphical representation of power of mean difference between pre and post test of indian traditional training group, modern training group and control group**

