

## EFFECT OF KETTLEBELL TRAINING WITH YOGIC PRACTICE ON SHOULDER STRENGTH AND MUSCULAR STRENGTH ENDUARNCE OF GYM CONSULTANTS

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### **ABSTRACT**

*The objective of this study was to explore the effect of on shoulder strength and muscular strength endurance of gym men, totally 30 men to participate in this study. Treatment group I underwent kettlebell training with yogic practices, group II acted as control group. All thirty subjects were inducted for pre and posttest on shoulder strength. The circuit training with yogic practices was given to the experimental group for 3 days per week (Monday, Wednesday and Friday) for the period of eight weeks. The control group was not given any sort of training except their routine work. The shoulder strength (medicine ball throw in meters) and muscular strength endurance (sit and reach test) were assessed before and after training period. The result from 't' test and inferred that 8 weeks kettlebell training with yogic practices treatment produced identical changes over shoulder strength of gym men. Further, the findings confirmed the kettlebell training with yogic practices is suitable protocol to bring out the desirable changes over shoulder strength and muscular strength of gym men.*

**Keywords:** Kettlebell Training with Yogic Practices, Shoulder Strength, Muscular Strength Endurance and Gym Men

## INTRODUCTION

Kettlebell exercises often involve several muscle groups at once making them a highly effective way to give your arms, legs and abs a great workout in a short amount of time. They can improve both your strength and your cardiovascular fitness. For kettlebell training to be effective for building muscle you need to choose the right repetition range. Moreover the weight load needs to be appropriate (i.e. challenging) for the hypertrophy rep range. You do not need to be going to failure each set but the last few reps should really burn. Getting a kettlebell is a better choice if you want to target complex muscle groups. It can help you work on the muscle that is hard to reach with a dumbbell and barbell. Besides is the best choice for exercises like kettlebell swings and goblet squats. Kettlebell training when performed correctly will increase muscle tone thus increasing your metabolic rate improve your cardio and mobility and burn a lot of calories with a good diet and sensible kettlebell training program you will start to see cardio, strength and fat loss within 30 days. With kettlebell training you will be burning fat without losing muscle. Kettlebell fat loss workouts are a mix of aerobic and anaerobic training so you get the best of both worlds. Again, the more muscle you have the more calories you burn. No need to purchase a gym membership or spend \$1,000s on expensive equipment. Two kettlebells are all that you need to increase muscular endurance, lose fat and build size and strength. Kettlebells do not take up much space so you can train in your apartment, backyard and garage or go outside and get some fresh air.

## MATERIALS AND METHODS

To achieve the purpose of the study 30 men at the age group of 21-25 years were selected from tiruchirappalli district. The selected subject was randomly assigned into two equal groups consist of fifteen each namely kettlebell training with yogic practices group (n=15) and Control group (n=15). The respective training was given to the experimental group the 5 days per weeks (Monday, Wednesday and Friday) for the training period of eight weeks. The control group was not given any sort of training except their routine. The evaluated shoulder strength (medicine ball throw) the unit of measurement was in meters. The parameters were measured at baseline and after 8 weeks of kettlebell training with yogic practices were examined. The intensity was increased once in two weeks based on the variation of the exercises. The training programme was lasted for 45 minutes for session in a day,

3 days in a week for a period of 8 weeks duration. These 45 minutes included warm up for 10 minutes, 25 minutes specific skill training with pranayama and warm down for 10 minutes. The equivalent in specific skill training with pranayama is the length of the time each action in total 5 days per weeks. (Monday, Wednesday and Friday)

## STATISTICAL ANALYSIS

The collected data on shoulder strength due to the effect of kettlebell training with yogic practices was statically analyzed with “t” test to find out the significant improvement between pre& posttest if any. In all case the criterion for spastically significance was set at 0.05level of confidence ( $P<0.05$ ).

**TABLE - I**

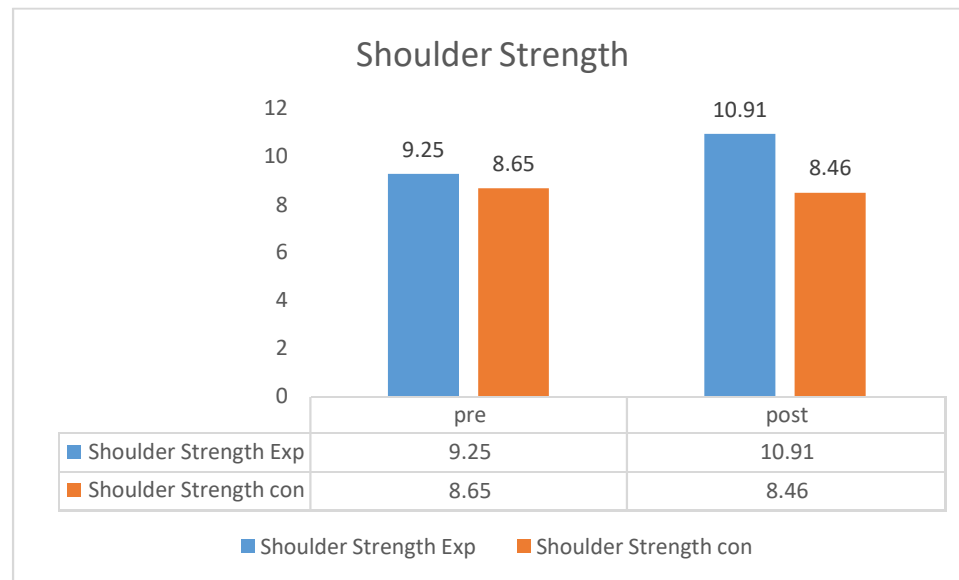
### COMPUTATION OF ‘T’ RATIO ON SHOULDER STRENGTH OF GYM PARTICIPANTS ON EXPERIMENTAL GROUP AND CONTROL GROUP

(Scores in Centimeters)

Group	Test		Mean	Std. Deviation	T ratio
Shoulder Strength	Experimental Group	Pre test	9.25	0.70836	4.56*
		Post test	10.91	0.68415	
	Control Group	Pre test	8.65	0.57491	0.96
		Post test	8.46	0.44673	

\*significant level 0.05 level (degree of freedom 2.14, 1 and 14)

Table II reveals the computation of mean, standard deviation and ‘t’ ratio on shoulder strength of experimental and control group. The obtained ‘t’ ratio on shoulder strength were 4.56 and 0.96 respectively. The required table value was 2.14 for the degrees of freedom 1 and 14 at the 0.05 level of significance. Since the experimental group ‘t’ values were greater than the table value of 2.14, it was found to be statistically significant. The control group ‘t’ value is less then table value of 2.14 it was found to be statistically insignificant.

**FIGURE- I**

**BAR DIAGRAM SHOWING THE MEAN VALUE ON SHOULDER STRENGTH OF GYM PARTICIPANTS ON EXPERIMENTAL GROUP AND CONTROL GROUP**

**TABLE - IV**

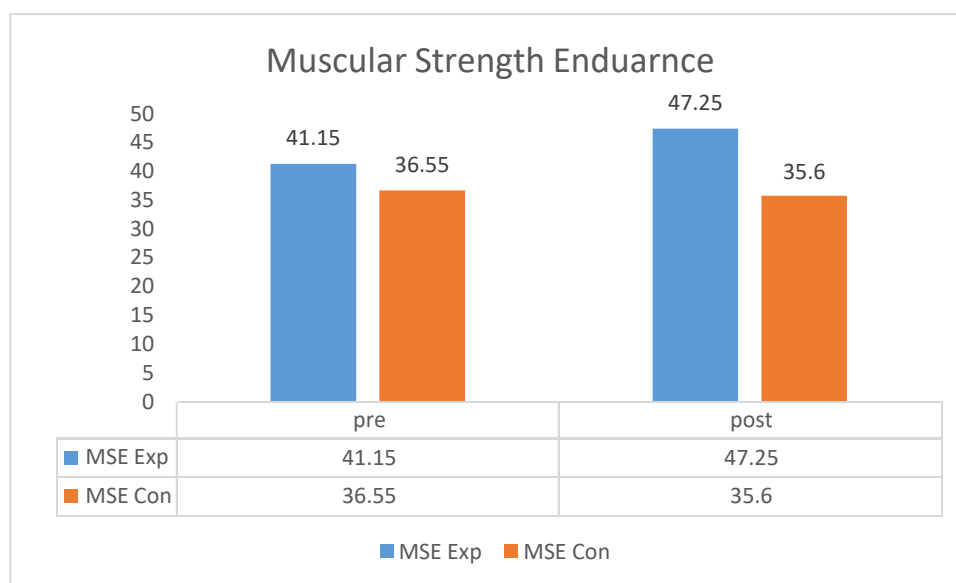
**COMPUTATION OF ‘T’ RATIO ON MUSCULAR STRENGTH ENDURANCE OF GYM PARTICIPANTS ON EXPERIMENTAL GROUP AND CONTROL GROUP**

(Scores in Percentage)

Group	Test		Mean	Std. Deviation	T ratio
Muscular Strength Enduarncce	Experimental Group	Pre test	41.15	6.36	24.64*
		Post test	47.25	8.20	
	Control Group	Pre test	36.55	5.52	1.82
		Post test	35.60	4.56	

\*significant level 0.05 level (degree of freedom 2.14, 1 and 14)

Table I reveals the computation of mean, standard deviation and 't' ratio on muscular strength endurance of experimental and control group. The obtained 't' ratio on muscular strength endurance were 24.64 and 1.82 respectively. The required table value was 2.14 for the degrees of freedom 1 and 14 at the 0.05 level of significance. Since the experimental group 't' values were greater than the table value of 2.14, it was found to be statistically significant. The control group 't' value is less than table value of 2.14 it was found to be statistically insignificant.



**FIGURE- II**

**BAR DIAGRAM SHOWING THE MEAN VALUE ON MUSCULAR STRENGTH ENDURANCE OF GYM PARTICIPANTS ON EXPERIMENTAL GROUP AND CONTROL GROUP**

#### **4. DISCUSSION ON FINDINGS**

The present study investigated the effect of combination of kettlebell training with yogic practices on the selected variables are shoulder strength and muscular strength endurance of the gym participants. The results of this study indicated that combination of kettlebell training with yogic practices is more efficient to bring out needed changes over the shoulder strength and muscular strength endurance of the gym participants.

**Suresh *et al.*, (2021)** found due to combined kettlebell training and yogic practices given to the experimental group on strength endurance when compared to control group

**Priya *et al.*, (2018)** facilitates the women to perform a skill with perfect technique and less expenditure of energy which leads to enhanced performance and reduced risk of injury.

**Kumaravelu *et al.*, (2018)** revealed that the kettlebell training and circuit training had significantly improved the speed, muscular endurance, flexibility, agility, explosive strength, vital capacity and anaerobic capacity.

**Debas *et al.*, (2010)** results indicate that WBV warm-up may be used in place of DS to achieve similar bat speeds. Future research should investigate different combinations of WBV warm-up using various frequencies, durations, amplitudes, and rest times.

The result from this study are very encouraging and it demonstrates the benefits of kettlebell training with yogic practices. The gym participants are not only using dance exercises to improve their mobility but also to improve the enactment. Also, the results support that improvement in mobility can occur 8 weeks of kettlebell training with yogic practices.

## CONCLUSIONS

1. Based on the result of the study it was concluded that the combination of kettlebell training with yogic practices have been significantly changes in shoulder strength of gym participants.
2. It was concluded that the combination of kettlebell training with yogic practices have been significantly changes in muscular strength endurance of gym participants.

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