



# **EFFECT OF WEIGHT TRAINING ON MUSCUALR ENDURANCE AND KICKING ABILITY AMONG COLLEGE FOOTBALL PLAYERS**

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*The study was to discover the application of 16-weeks weight training on muscular endurance and kicking ability performance among college football players. Total N=25 (twenty five) men regularly playing football players participated from SR & BGNR Government Degree and PG College and their age period ranged from 18 years to 25 years as per subject's school records. The selected men football treated with weight training for duration of 16-weeks, four sessions in a week and 60-minutes each session. The measurement of muscular endurance and kicking ability scores was collected through bent knee sit up test and Warner Soccer test before and after the completion of specific training. The collected score's were analyzed through paired 't' test and level of significant was restricted at 0.05 levels. The study found that sixteen weeks of weight training found effective for significant improvement in muscular endurance and kicking ability performance of men football players.*

**Keywords:** – weight, training, muscular, endurance, kicking and sit ups

## **Introduction:**

Soccer is the most popular sport in the world. It is known as football in most part of the world except in North America. If the world can be unified into a single entity on the basis of common ground of interest, then soccer has the potential to bring different nations together under the same platform. The history of modern soccer dates back to only 200 years. Now, the sport has grown to a global pastime including men's and women's team and the world cup (which even played every four years. In soccer there are two teams of 11 players. Soccer is played on a grass field with goal at each end. The object of the game is to get the soccer ball into the opposing team's goal.

Weight training is the ability to carry out exercises against a resistance. Strength is the maximal force applied against a load. Weight training to enhanced muscle strength includes lifting weights or otherwise increasing the resistance against sports action done. Strength endurance is the muscular movements done which require relatively long duration exercises under the condition of fatigue, where as muscle tension with minimal decrease in efficiency which is combination of strength and endurance.

## Statement of the Research Problem:

To evaluate the “Influence of 16-weeks weight training on muscular endurance and kicking ability performance among college men football players”.

## Objectives of this research study

1. To evaluate the 16-weeks influence of weight training on muscular endurance among college men football players.
2. To evaluate the 16-weeks influence of weight training on football kicking ability performance among college men football players.

## Research Hypothesis:

- There will be a significant increase in score of muscular endurance performance of college sports students after the sixteen weeks impact of weight training when compared between pre test and post test scores.
- There will be a significant improvement in score of football kicking ability performance of college football players after the sixteen weeks impact of weight training when compared between pre test and post test scores.

## Methodology:

The study was to discover the application of 16-weeks weight training on muscular endurance and kicking ability performance among college football players. Total N=25 (twenty five) men regularly playing football players participated from SR & BGNR Government Degree and PG College and their age period ranged from 18 years to 25 years as per subject's school records. The selected men football treated with weight training for duration of 16-weeks, four sessions in a week and 60-minutes each session. The measurement of muscular endurance and kicking ability scores was collected through bent knee sit up test and Warner Soccer test before and after the completion of specific training. The collected score's were analyzed through paired 't' test and level of significant was restricted at 0.05 levels..

**Table: I**

### Descriptive statistics of mean, standard deviation and calculated paired 't' test values muscular endurance and kicking ability performance among college football players

Training Groups	Pre test		Post test		't' Ratio
	Mean	SD	Mean	SD	
Muscular endurance	35.920	4.786	59.162	6.446	15.388*
Kicking ability	31.186	1.636	40.275	4.076	11.196*

Table 't' book value at 0.05 level (df) 24 = 2.064, \* Significant & NS: Not Significant)

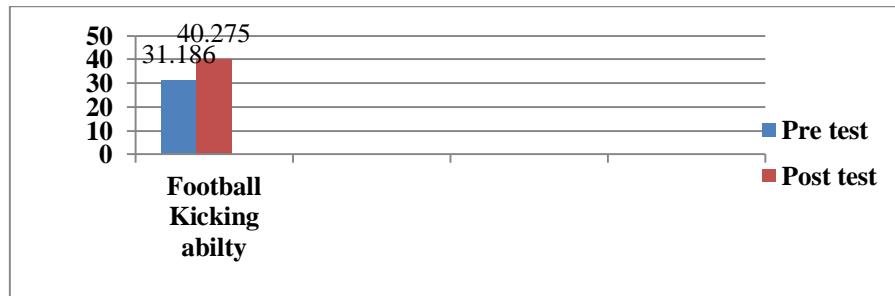
In table-I, shows the pre test mean values on the muscular endurance and football kicking ability performance are 35.920 and 59.162 respectively. Post test mean values on the muscular endurance and football kicking ability performance are 31.186 and 40.275. The calculate 't' ratio values are 15.388 and 11.196 and the corresponding table 't' value at 0.05 confidence level degree of freedom book value at 24 is 2.064. Comparison of pre test and post test scores as for 't' ratio numbers are greater than tabular value Therefore statistical analysis noted significant changes occurred in paired sample t-test.

The muscular endurance and football kicking ability performance of pre test and post test results presented in bar diagram figure: 1 and 2

**Figure: 1 The pre test and post test mean values of muscular endurance presented in bar diagram**



**Figure: 2 The pre test and post test mean values of football kicking ability performance presented in bar diagram**



#### Discussion on Hypothesis:

- The first hypotheses stated that there will be a significant improvement in score of muscular endurance performance of college men football players after the sixteen weeks impact of weight training when compared between pre test and post test scores. The statistical analysis proved that weight training significantly increased the muscular endurance post scores. Hence research first hypothesis accepted.
- The second hypotheses stated that that there will be a significant improvement in score of football kicking ability performance of college sports students after the sixteen weeks impact of weight training when compared between pre test and post test scores. The statistical analysis proved that weight training significantly improved the football kicking ability performance post scores. Hence research second hypothesis accepted.

#### Discussion and Findings:

The impact of 16-weeks weight training enhanced the muscular endurance and football kicking ability performance of college men football players. The referred study results on muscular endurance and football kicking ability performance are Sonam and Jayasheelan (2024) concluded that four weeks of plyometric exercise indicated as potential tool in improving muscle endurance and kicking performance in college football players. Pankaja and Vasanthi (2018) study appeared that plyometric training program resulted in improvement of skill performance namely (Dribbling kicking, juggling and total skill performance) of the football players. Abolghasem et al., (2014) study proved that plyometric training is an effective tool for improving accuracy of shooting skills in football players. Khursheed et al., (2017) revealed that the circuit training and resistance training was made significant improvement in strength endurance of young male college football players. Thangapandi et al., (2018) concluded that the weight training group had shown significantly improved in strength endurance of young male

college football players. Zubair and Showkat (2021) study outcomes proved that Plyometric Training programme brings positive effect on Bent Knee Sit-Ups of the Football Players.

## Conclusions:

The study determined that impact of 16-weeks of weight training enhanced the muscular endurance and kicking ability performance of college men football players. Therefore author recommended physical education professional to install multi gym and open gym equipments in college for enhancing the physical fitness level of college students.

## References

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