**Research Artícle** 

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## ANALYSIS ON MUSCULAR STRENGTH OF PHYSICAL EDUCATION STUDENTS

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#### ABSTRACT

The purpose of the comparative study is to find out the muscular strength of physical education students. To conduct the study sixty college level physical education men students selected and they are from two courses that are Bachelors of Physical Education (BPEd) and Master of Physical Education (MPEd). Selected students assessed on muscular strength by 1RM test. The collected data analysed by comparative 't' test were applied to find out the significant different among BPEd and MPEd students. The result of the comparative study showed that there is no significant difference between the BPEd and MPEd physical education men students on muscular strength. BPEd and MPEd physical education students are getting similar kind of training schedule as well as the training timings; these may be factors to influence of equal performance as per the statistics results.

**KEYWORDS:** Muscular Strength, BPEd and MPEd students.

### INTRODUCTION

Muscular strength is called as the amount of force of a muscular or groups of muscle can execute in a single maximal effort. The ability of the nerves to stimulate the size of the muscle fibers are deciding muscle strength. During muscular contraction muscular strength is measured. Muscles strengthening help to get good body alignment, and execute to perform day to day work or task as easier and increase the metabolism actions in normal life.

"According to the American Council on Exercise (ACE), muscular strength is the maximal force a muscle or muscle group be able to apply in a tightening. But the other aspects that change how strong and how much strength has to finish daily tasks or exercises. ACE offer classification for these terms that are related to muscular strength".

Muscular strength is based on the size of the muscle's fibers and the body having the ratio of fast twitch and slow twitch muscle fibers. The nervous system is the key factor to get the coordination in their firing in sequence to give signal and receive the order to contract at simultaneously. Strength is important to good support to the joints for body movements and bones, ligaments and tendons actions.

Muscular strength is measured by the standard test of 1 repetition maximum. A performer during lift of weight in a particular exercise can lift the maximum weight in a single repetition. Resistance training or weight training is the best way to build the muscles strength. In this concept the evaluator planed to conduct a comparative study on muscular strength among the physical education students.

#### METHODOLOGY

The purpose of the comparative study is to find out the muscular strength of physical education students. To conduct the study sixty college level physical education men students selected and they are from two courses that are Bachelors of Physical Education (BPEd) and Master of Physical Education (MPEd). Selected students assessed on muscular strength by 1RM test. The collected data analysed by comparative 't' test were applied to find out the significant different among BPEd and MPEd students. The investigator have analysed the difference of means in the scores with the help of SPSS package. Level of significance fixed at 0.05.

### RESULTS

Analysis of '	T' Test	on Muscular	Strength of	f Physical	<b>Education St</b>	udents
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Group	Ν	Mean	SD	DM	't' - ratio	
BPEd	30	88.73	3.38	0.62	0.00	
MPEd	30	89.36	3.21	0.05	0.88	

\* Required table value for significance at 0.05 level of confidence for df of 29 is 2.05.



It presents the mean and standard deviation values on muscular strength  $88.73 \pm 3.38$  and  $89.36 \pm 3.21$  of BPEd and MPEd physical education students respectively. Since the obtained 't' ratio value is 0.88 on muscular strength was lesser than the required table

value of 2.05 for significant level 0.05 with 29 degrees of freedom. It concluded that, there is no significant difference in the performance on muscular strength between BPEd and MPEd physical education men students.

## Figure





#### **Discussion on Findings**

The result of the comparative study showed that there is no significant difference between the BPEd and MPEd physical education men students on muscular strength. BPEd and MPEd physical education students are getting similar kind of training schedule as well as the training timings; these may be factors to influence of equal performance as per the statistics results. On my results based the following studies are supported with various factors. "There are many factors may influence the strength, such as anthropometric characteristics and heredity (the size of muscle and the proportion of fast and slow muscle fibers), neural control and motor skills (Zhang, 2006)". "Strength is also a very important element in the field of sports. The best athletes pay particulars attention to develop strength in various muscle group (Bucher, 1985)".

## CONCLUSION

The conclusion of the comparative study showed that there is no significant difference between the BPEd and MPEd physical education men students on muscular strength.

### REFERENCES

- 1. Bucher Charles A., and Prenticee William, E., (1985). *Fitness for college and life*. Saint Louis: Times Mirror Mosby College Press, P.7.
- Zhang, Y. B., (2006). Modern training method of physical ability. Beijing: Beijing Sports University Press. p. 3.