Research Paper
Impact Factor: 7.358
Peer Reviewed & Indexed Journal
www.ijmsrr.com

IJMSRR
E- ISSN - 2349-6746
ISSN -2349-6738

IMPACT OF YOGIC EXERCISES ON EXPLOSIVE STRENGTH AMONG PHYSICAL EDUCATION STUDENTS

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Abstract
This study was investigated the Impact of Yogic Exercises on Explosive Strength among Physical Education Students. To achieve the purpose of the study 60 Physical Education Students were selected from Department of Studies in Physical Education and Sports Sciences, Karnataka State Akkamahadevi Women University, Vijayapura District of Karnataka State. The subjects was randomly assigned to two equal groups (N=60). Group- I underwent Yogic Exercises (YEG) and group - II was acted as control group (CG). The Yogic Exercises was given to the experimental group for 6 days per week for the period of Six weeks. The control group was not given any sort of training except their routine work. The standing broad jump test was to measure (Explosive Strength) before and after training period. The data collected from the subjects was statistically analyzed with 't' test to find out significant improvement if any at 0.05 level of confidence. The result of the present Yogic Exercises significantly improved Explosive Strength of Physical Education Students.

Keywords: *Yogic Exercises, Explosive Strength, Physical Education Students.*

Introduction

Yoga is one such most enjoyable activity everyone can participate. Yoga the art and science of maintaining physical and mental wellbeing that has its origin in India. The practices of asana bring purity in tabular channels firmness to the body and vitality to the body and the mind. (Sharma, 1984). Yoga has a universal appeal and proposition it can be practiced by every human being irrespective of age and sex, which provides total fitness for every individual. Yoga is one which is concerned with physical and mental well being (Sundar Raj Urs, 2001). Physical fitness is the ability to perform vigorous physical activity. It is not measured in terms of achieving specific motor skills, but rather it is assessed in terms of muscle strength, endurance, and flexibility. The circulatory and respiratory systems are also involved because of their role in supplying muscles with blood and oxygen. Exercises are very helpful to maintain the sound body. Regular practices of asana maintain the physical body in an optimum condition and promote health. Yoga exercises and postures help in stretching and relaxing the muscles and skeletal system thus helps in improving flexibility. There are many research evidences to prove the effect of yoga in improving the health related fitness. Yoga asana boost physical strength, stamina and flexibility, enhance posture and muscle tone and bestow greater powers of concentration and self-control. Balance is also an important aspect of efficient motor response and is one of the basic fitness factors. Good balance is necessary to perform activities of daily living such as rising from a chair or transcending a flight of stairs. It is fundamental to a physically active lifestyle and crucial in sustaining independence in the elderly. Strength is defined as the "capacity of the individual to exert maximum muscular force. This force is revealed by the individual ability to pull push lift, or to hold the body in a hanging position. (Hardayal Singh, 1972). Flexibility is a component of physical fitness developing and major of a fitness program. Flexibility refers to the range of movement of a joint.

Statement of the Problem:

The purpose of the present investigation is to find out the Impact of Yogic Exercises on Explosive Strength among Physical Education Students.

Objective of the Study

To find out the significant difference in Explosive Strength of the subjects by Yogic Exercises among experimental group.

Hypotheses

It was hypothesized that there would be a significant difference in Explosive Strength of the subjects by Yogic Exercises among experimental group.

Review of related literature

Shoba (2011)1 conducted "a study on the effect of yoga and as on motor, physiological and psychological variables". (N=100, 50 Boys and 50girls). She found significant improvement in all the motor variables, physiological and psychological variables selected for the study after six weeks of yoga training.

Deepla (2008)2 conducted a study on developing motor abilities of high school students through yoga. The subjects (N=25) were given 12 weeks of Yoga training. After the training he found significant improvement in cardiovascular endurance, flexibility, freedom from obesity, balance and reaction time.

Methodology

To achieve the purpose of the study 60 Physical Education Students were selected from Department of Studies in Physical Education and Sports Sciences, Karnataka State Akkamahadevi Women University, Vijayapura District of Karnataka State as subjects. Their age ranged from 19 to 23 years. For the present study Randomized Groups Pre-test and Post test Design was used. They were divided into two equal groups of 30 subjects each and assigned to experimental group and control group. 6 weeks training given to the subjects practicing of simple Yogic Exercises. All the subjects underwent two areas of test standing broad jump was to measure Explosive Strength of the subjects before Yogic Exercises and after Yogic Exercises. The analysis of't' test was used to analyze the data.

Results and Discussions

After the six weeks of Yogic Exercises there would be significant improvement in Explosive Strength. The data on Explosive Strength before and after the Yogic Exercises of experimental and control groups are analyzed and presented in Table-1.

Hypothesis: It was hypothesized that there would be a significant difference in Explosive Strength of the subjects by Yogic Exercises among experimental group.

Table-1: Significance of differences between pre test and post test scores of Explosive Strength among experimental and control groups (N=30 each group)

Tests	Group	Mean	Standard Deviation	t' value	Level of Significance
Pre Test	**Control**	154.233	12.483	1.86	NS
Post Test	**Experimental**	160.300	12.779	3.64	S
	Control	158.700	14.357		
	Experimental	174.333	18.620		

***Significant at 0.05 level**

(Table value required for significance at 0.05 level for't'-test is 1.671)

From the above table, it can be observed that the obtained‘t’ value 1.86 is less than Table value 2.00 at 0.05 level of significance in the pre test scores. Hence it was not significant on explosive strength among control and experimental groups of pre test scores. It was assumed that the two groups started out with equivalent mean scores. It can also observed from the above table that the obtained‘t’ value 3.64 is greater than Table value 2.00 at 0.05 level of significance in the post test scores. Hence the stated hypothesis is accepted that there was a significant the Impact of Yogic Exercises on explosive strength among control and experimental groups. Hence, the hypothesis is statistically proved and stated hypothesis accepted. The study confirms with the findings of Shoba (2011) who found a significant improvement in explosive strength due to Yogic Exercises. The comparison of explosive strength mean scores of pre and post tests among groups is shown in graphical representation in Fig.1

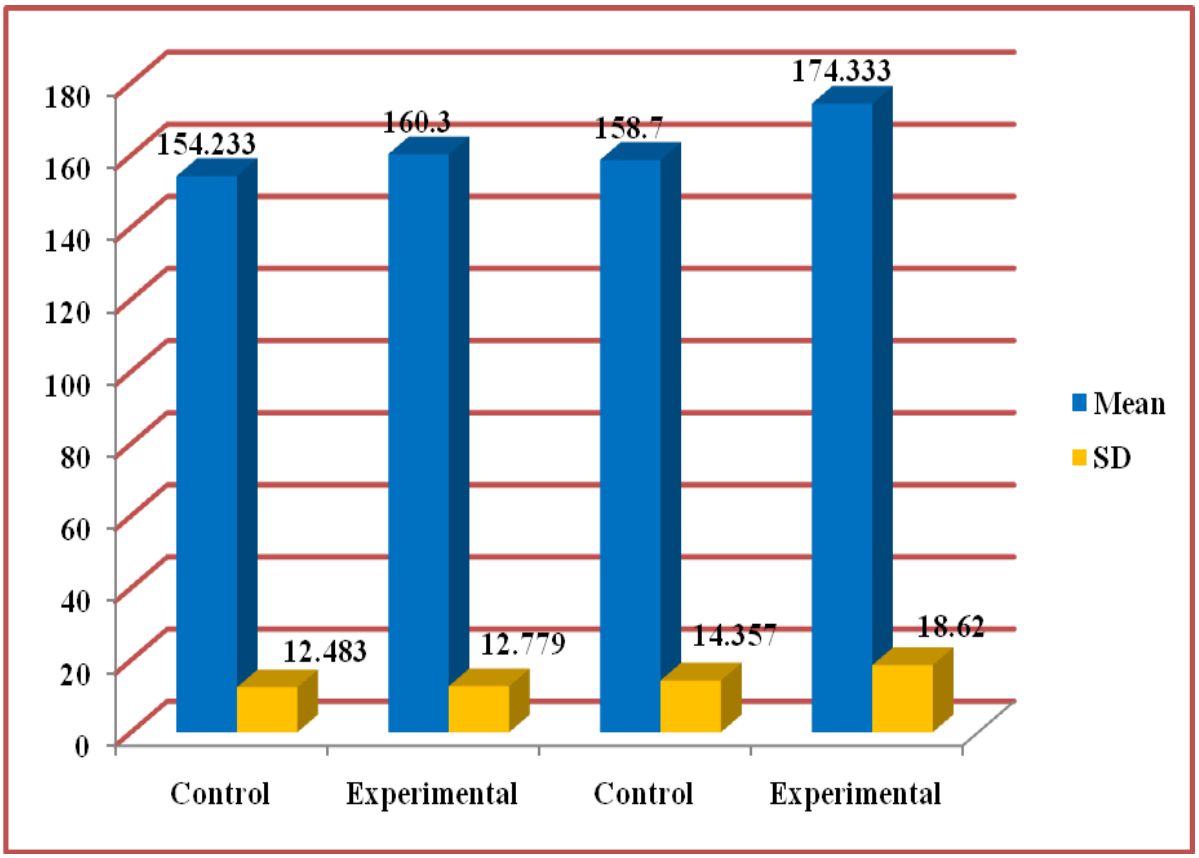

Fig.1. Bar graph showing comparison of explosive strength pre and post test mean scores among experimental and control groups

Conclusion

There was a significant difference between control and experimental group on explosive strength. There was significant improvement were noticed on explosive strength due to six weeks Yogic Exercises among Physical Education Students. The study revealed that the above said explosive strength were significantly improved due to the impact of Yogic Exercises like ardha chakrasana, trikonasana, Paschimothasana, garudasana, tadasana and on physical fitness variable among Physical Education Students. The explosive strength had increased significantly Yogic Exercises group when compared along with the control group.

References

1. Adams, K., O'Shea, J.P., O'Shea, K.L. and Climstein, M. (1992). The effects of six weeks of squat, plyometrics, and squat plyometric training on power production. Journal of applied sports science research; Vol- 6, 36-41.
2. Adams, T.M., Worley, D. and Throgmartin, D. (1984). An investigation of selected plyometric training exercises on muscular leg strength and power. Track field quarterly review; Vol-84:36-40.
3. Brown, L. E., Ferringo V. A., Santana, J. C. (2000). Training for speed, agility and quickness. Published by Human kinetics, USA.
4. Chettiamkudiyil, H. B., Meethal, A. and Najeeb, A. M., (2015). Effect of plyometric training and S.A.Q training on explosive strength and speed of university level soccer players. International research journal; Vol17(1):170-173.
5. Coetzee B. (2007). An overview of plyometrics as an exercise technique. South African journal for research in sport, physical education and recreation; Vol-29(1):61-82.
6. Devaraj, A. B. (2013). Influence of S.A.Q and plyometric training on selected physical fitness components among hockey players. Jiarm; Vol-1(5).
7. Ezhilmaran, N. (2016). Effect of specific drills with plyometric training on selected skill performance variables of school level men handball players. Indian journal of applied research; Vol-6 (7):24-25.