

NEUROMUSCULAR REEDUCATION ON EXPLOSIVE POWER AMONG YOUTH HANDBALL PLAYERS THROUGH SELECTIVE YOGASANAS

¹Mr. James Rathinaraj S, Research Scholar

²Dr. P. Yoga, Assistant Professor

*Alagappa University College of Physical Education,
Alagappa University, Karaikudi, Tamilnadu, India.*

Abstract

The purpose of the present study was to investigate the efficacy of selective yogic package and neuromuscular reeducation on explosive power among youth handball players. To achieve the purpose of the study thirty youth handball players were selected from Sivaganga, Tamilnadu, India during the year 2020. The subject's age ranges from 14 to 18 years. The selected students were divided into two equal groups consists of 15 youth jumpers each namely experimental group and control group. The experimental group underwent a selective yogic package and neuromuscular reeducation programme for six weeks. The control group was not taking part in any training during the course of the study. Explosive power was taken as criterion variable in this study. The selected subjects were tested on explosive power was measured through standing broad jump method. Pre-test was taken before the training period and post- test was measured immediately after the six week training period. Statistical technique 't' ratio was used to analyse the means of the pre-test and post test data of experimental group and control group. The results revealed that there was a significant difference found on the criterion variable. The difference is found due to combined yogic package and neuromuscular reeducation given to the experimental group on explosive power when compared to control group.

Keywords: Selective yogic package and neuromuscular reeducation, Explosive power and 't' ratio.

INTRODUCTION

Today, sports have become a part and parcel of our culture. It is being influenced and does influence all our social institutions including education, economics, arts, politics, law, mass communication and even international diplomacy (Alaguraja, K. et.al, 2019)⁴. Yoga is universally benefiting all people of all ages. The study of Yoga is fascinating to those with a philosophical mind and is defined as the silencing of the mind's activities which lead to complete realization of the intrinsic nature of the Supreme Being (Alaguraja, K. et.al, 2017)¹. In the sports world, physical education is the most

essential aspect due to the fact physical schooling increases the performance and the effectiveness of the sports (Alaguraja, K. et.al., 2018)².

Yoga is a system of exercises which helps the mind and body in order to achieve tranquillity and spiritual insight (Alaguraja, K. et.al, 2019)⁵. Make sure that when you practice yoga asanas, you don't just stretch the body because the mind has to be with the body. (Alaguraja, K. et.al, 2019)⁸. One can start practicing Yoga at any given moment of time and you may start with meditation or directly with pranayama without even doing the asanas (postures). (Alaguraja, K. et.al, 2019)³. Today's there is an escalating emphasis on appearing smarter, feeling better and living longer. In order to achieve these ideals as, scientific evidence tells us that one of the keys is high fitness and exercises (Alaguraja, K. et.al, 2019)⁷. When consciousness is operating with the intellect and with all the senses, by making an individual think that he or she is awake and aware, but the mind is actually less receptive and more critical (Yoga, P. et. al., 2019)⁹.

Neuromuscular reeducation represents a series of therapeutic techniques to restore normal function of nerves and muscles, to include movement, balance, coordination, decreased kinesthetic sense, and impaired proprioception.

RESEARCH METHODOLOGY

Selection of subjects

The purpose of the study was to find out the effect of selective yogic package and neuromuscular reeducation on explosive power among youth handball players. To achieve this purpose of the study, youth handball players students were selected as subjects at random. The age of the subjects were ranged from 14 to 18 years.

Selection of variable

Independent variable

- Selective yogic package

Dependent variable

- Explosive power

EXPERIMENTAL DESIGN AND IMPLEMENTATION

The selected subjects were divided into two equal groups of fifteen subjects each, such as a combined yogic package and neuromuscular reeducation group (Experimental Group) and control group. The experimental group underwent combined yogic package and neuromuscular reeducation for five days per week for six weeks. Control group, which they did not undergo any special training programme apart

from their regular physical activities as per their curriculum. The following physical variable namely explosive power was selected as criterion variable. All the subjects of two groups were tested on selected criterion variable explosive power was measured through standing broad jump method at prior to and immediately after the training programme.

Statistical technique

The 't' test was used to analysis the significant differences, if any, difference between the groups respectively.

Level of significance

The 0.05 level of confidence was fixed to test the level of significance which was considered as an appropriate.

ANALYSIS OF THE DATA

The significance of the difference among the means of the experimental group was found out by pre-test. The data were analysed and dependent 't' test was used with 0.05 levels as confidence.

TABLE I
Analysis of t-ratio for the pre and post tests of experimental and control group on Explosive power (Scores in meters)

Variables	Group	Standard Deviation		Sd Error	
		Pre	Post	Pre	Post
Explosive power	Control Group	0.140	0.141	0.0361	0.0365
	Experimental Group	0.128	0.136	0.0331	0.0352

TABLE II

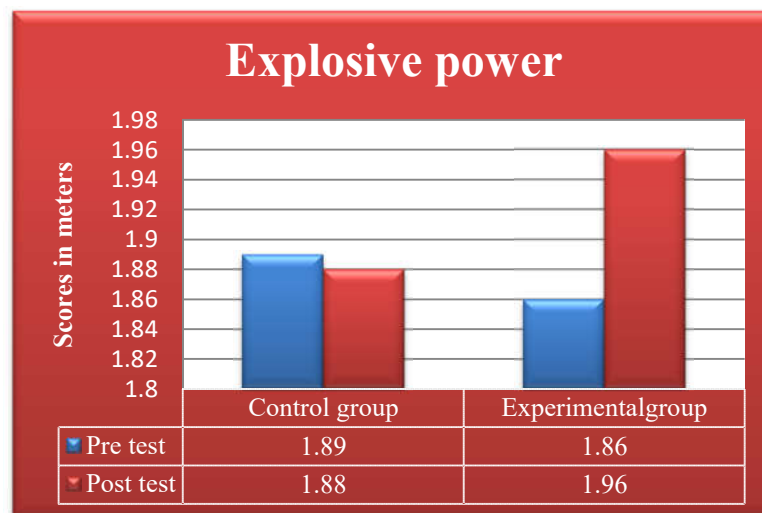
Variables	Group	Mean		Degree of freedom	't' ratio
		Pre	Post		
Explosive power	Control Group	1.89	1.88	14	0.53
	Experimental Group	1.86	1.96	14	7.44*

*Significance at .05 level of confidence.

The Table-I and II shows that the mean values of pre-test and post-test of the control group on explosive power were 1.89 and 1.88 respectively. The obtained 't' ratio was 0.53, since the obtained 't'

ratio was less than the required table value of 2.14 for the significant at 0.05 level with 14 degrees of freedom it was found to be statistically insignificant. The mean values of pre-test and post-test of the experimental group on explosive power were 1.86 and 1.96 respectively. The obtained 't' ratio was 7.44* since the obtained 't' ratio was greater than the required table value of 2.14 for significance at 0.05 level with 14 degrees of freedom it was found to be statistically significant. The result of the study showed that there was a significant difference between control group and experimental group in explosive power. It may be concluded from the result of the study that experimental group improved in explosive power due to six weeks of selective yogic package and neuromuscular reeducation training.

Figure-1
Bar Diagram Showing the Pre and Post Mean Values of
Experimental and Control Group on Explosive power



DISCUSSIONS ON FINDINGS

The result of the study indicates that the experimental group, namely combined yogic package and neuromuscular reeducation group had significantly improved the selected dependent variable, namely explosive power, when compared to the control group. It is also found that the improvement caused by selective yogic package and neuromuscular reeducation when compared to the control group.

CONCLUSION

On the basis of the results obtained the following conclusions are drawn,

1. There was a significant difference between experimental and control group on explosive power after the training period.

2. There was a significant improvement in explosive power. However the improvement was in favor of experimental group due to six weeks of selective yogic package and neuromuscular reeducation training.

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