



Effect Of Own Body Resistance Training With Yogic Practices On Selected Physical And Physiological Variables Among Adolescent Boys

V.Vijayalakshmi

Ph.D., Scholar ,Karpagam University,Coimbatore

Dr.T.Jayabal

Assistant Professor, Sri Ramakrishna Mission Vidyalaya Maruthi College Of Physical Education, Coimbatore

Abstract:

The purpose of the study was to find out the effects of own body resistance training with yogic practices on selected physical and physiological variables among adolescent boys. To examine the study 30 adolescent boys were selected from Sri Visweswara Vidyalaya Matric Higher Secondary School, Coimbatore. The age group ranges from 13 to 18 years. Subjects were equally divided into two equal groups namely experimental group and control group. Own body resistance training with yogic practices was given to experimental group. Control group did not participate in any special training programme. The own body resistance training with yogic practices programme was scheduled for twelve weeks, prior and after the training for the subjects pre - test and post - test was conducted on cardio respiratory endurance, resting pulse rate were tested. The data collected from the subjects were statistically analyzed with 't' ratio to find out significant difference among experimental group and control group. The analysis of the data indicates that own body resistance training with yogic practices improved cardio respiratory endurance, resting pulse rate.

Key words: Own body resistance training, yogic practices.

1.Introduction

Sports training consist of activities and movements which generally lead to high fatigue. Fatigue is the direct product of load caused by physical activity or exercise. Fatigue is essential for starting the adaptation processes in the organism which ultimately lead to increase in performance capacity. Load, therefore, is of central importance in sports training. Without load through physical exercise the performance cannot be improved, stabilized and maintained. Stagnation of load results in Stagnation of performance. (Hardayal Singh 1989). Own Bodyweight exercises are strength training exercises that do not require free weights; the practitioner's own weight provides the resistance for the movement. Movements such as the push-up, the pull-up, and the sit-up are some of the most common bodyweight exercises. In general, increasing the amount of repetitions will focus on improving endurance, while strength gains are made through increasing the intensity of the exercise through decreasing leverage and working at the ends of range of motion. Low, Steven (2010).

Yoga breathing exercises, also known as Pranayama, are an important part of a developing yoga practice. Pranayama is one of the Eight Limbs of Yoga, as defined by the Yoga Sutras of Patanjali. In addition to deepening your yoga practice, learning ways to calm or invigorate the body through breathing will greatly benefit your life off the mat. Breathing is an involuntary act; it is an essential part of life. Although we cannot control whether or not we breathe, we can control the way that we breathe. A belief that different methods of breath affect the body's health and life force is the core of Pranayama practice. Ann Pizer,(2013).

2.Methodology

To execute the study, the scholar employed random sampling method and thirty adolescent boys were selected as subjects from Sri Visweswara Vidyalaya Higher Secondary School, Coimbatore. The age ranged between 13-18 years. The subjects were divided into two groups namely Experimental group and control group. Experimental group consist of 15 subjects this group under went by Own body resistance training with yogic practices. Control group consist of 15 subjects this group do not participate in any specific training. Cardio respiratory endurance was measured by 1 mile, resting pulse rate was measured by per minutes. All the subjects

were treated with own body resistance training with yogic practices for twelve weeks before and after the training pre test, post test scores were taken for all the subjects and analyzed the data using 't' ratio statistics.

3. Analysis Of Data

The collected data was statistically analyzed by using dependent 't' test. It was found that there was a significant increase in own body resistance training with yogic practices for adolescent boys. In all cases the level of significance was set at 0.05 level.

VARIABLES		MEAN	S.D	M.D	SE	't' Ratio	SIG
Cardio respiratory endurance	Pre	16.62	1.61	0.910	0.075	12.078	.000
	Post	15.71	1.49				
Resting pulse rate	Pre	87.20	9.31	6.46	0.773	8.357	.000
	Post	80.73	7.94				

*TABLE 1: Computation of 't' – Ratio Between Pre and Post Test Means for Own Body Resistance With Yoga Practice for Experimental Group
Significant at 0.05 level of confidence (2.145)

Table I reveals that computation of 't' ratio between mean of pre and post test on cardio respiratory endurance of adolescent boys. The mean values for pre and post test of experimental group were 16.62 and 15.71 respectively. Since the obtained 't' ratio 12.078 was greater than the required table value 2.145, it was found to be significant for the degrees of freedom 1 and 14 at 0.05 level of confidence. The computation of 't' ratio between mean of pre and post test on resting pulse rate of adolescent boys. The mean values for pre and post test of experimental group were 87.20 and 80.73 respectively. Since the obtained 't' ratio 8.357 was greater than the required table value 2.145, it was found to be significant for the degrees of freedom 1 and 14 at 0.05 level of confidence. The results clearly indicated that the cardio respiratory endurance, resting pulse rate, of adolescent boys significantly improved to the influence of own body resistance training with yogic practices.

VARIABLES		MEAN	S.D	M.D	SE	't' Ratio	SIG
Cardio respiratory endurance	Pre	17.28	1.27	0.026	0.078	0.330	.747
	Post	17.31	1.22				
Resting pulse rate	Pre	86.94	8.75	3.09	2.19	1.409	.181
	Post	90.04	6.32				

Table 2: Computation Of 'T' – Ratio Between Pre And Post Test Means For Own Body Resistance Withyoga Practice For Control Group

**Significant At 0.05 Level Of Confidence (2.145)*

Table II reveals that computation of 't' ratio between mean of pre and post test on cardio respiratory endurance of adolescent boys. The mean values for pre and post test of plyometric group were 17.28 and 17.31 respectively. Since the obtained 't' ratio 0.330 was less than the required table value 2.145, it was found to be not significant for the degrees of freedom 1 and 14 at 0.05 level of confidence. The computation of 't' ratio between mean of pre and post test on resting pulse rate of adolescent boys. The mean values for pre and post test of plyometric group were 86.94 and 90.04 respectively. Since the obtained 't' ratio 1.409 was less than the required table value 2.145, it was found to be not significant for the degrees of freedom 1 and 14 at 0.05 level of confidence. The results clearly indicated that the cardio respiratory endurance, resting pulse rate, of control group adolescent boys of own body resistance training with yogic practices group had not been improved.

4. Discussion And Finding

The hypothesis were tested on the subjects after 12 weeks of combined own body resistance training and yoga practice which lead to the improvement in physiological variables. Moreover it was observed that the subjects practiced the training showed greater different from pretest to posttest for experimental group when compared to control group. Tran MD, Holly RG, (2001), Mody BS (2011), results shows that yoga practice for 8 weeks results in regularly yoga practice can elicit improvements in cardio

respiratory fitness . Upadhyay Dhungl K. Mal Hotra B, Sarkar D (2008) reported regular yogic practices can lead to decrease in pulse rate, blood pressure.

5.Conclusion

In the present study investigation, as a result of own body resistance training with yogic practices programme the following improvements occurred on own body resistance training with yogic practices. Own body resistance training with yogic practices improves the muscular strength endurance, cardio respiratory endurance, resting pulse rate and breath hold time. After twelve weeks of own body resistance training with yogic practices increase muscular strength endurance, cardio respiratory endurance, resting pulse rate and breath hold time increased on performance on own body resistance training with yogic practices for adolescent boys when compared to the control group.

6.Reference

1. Ann Pizer,(2013) “Introduction to pranayama breathing exercises”, Health's Disease and Condition.
2. Hardayal Singh (1989). Sports training p:2
3. Low, Steven (Mar 2010). "The Fundamentals of Bodyweight Strength Training".23(4):15.
4. Mody BS. (2011). Acute effects of Surya Namaskar on the cardiovascular & metabolic system. San Jose State University, Department of Kinesiology, One Washington Square, San José, CA 95192, USA. 15(3):343-7.
5. Tran MD, Holly RG, et.al., (2001). Effects of Hatha Yoga Practice on the Health-Related Aspects of Physical Fitness. Department of Kinesiology and Health Education, University of Texas, Austin, TX, USA. 4(4):165-170.
6. Upadhyay Dhungel, K Malhotra, V et.al., (2008) Effect of alternate nostril breathing exercise on cardiorespiratory functions. Nepal Medical College Journal 10(1): 25-7