International Journal of Yoga, Physiotherapy and Physical Education
ISSN: 2456-5067; Impact Factor: RJIF 5.24
Received: 12-04-2020; Accepted: 15-05-2020; Published: 06-06-2020
www.sportsjournal.in
Volume 5; Issue 3; 2020; Page No. 44-45

Influence of yogic practice and aerobic training on selected motor fitness components among school girls

A Linu[1*], K Balasubramanian[2]

[1] Research Assistant, Department of Physical Education and Health Sciences, Alagappa University, Karaikudi, Tamil Nadu
[2] Professor and Head, Department of Physical Education and Health Sciences, Alagappa University, Karaikudi, Tamil Nadu

Abstract
The purpose of the present study was to investigate The Influence of Yogic Practice and Aerobic Training on Selected Motor Fitness Components among School Girls. To achieve the purpose of the study thirty school students were selected from Alagappa Matriculation Higher Secondary School, Karaikudi, during the year 2019. The subject's age ranges from 11 to 13 years. The selected subjects were divided into three equal groups consists of 15 students each namely experimental group and control group. The experimental group I underwent a Yogic Practice and experimental group II underwent a Aerobic Training programme for six weeks. The control group was not taking part in any training during the course of the study. Speed was taken as criterion variable in this study. The selected subjects were tested on Speed was measured through 50 mts dash. Pre-test was taken before the training period and post- test was measured immediately after the six week training period. Statistical technique 'f' ratio was used to analyses the means of the pre-test and post test data of experimental groups and control group. The results revealed that there was a significant difference found on the criterion variable. The difference is found due to Yogic Practice and Aerobic Training given to the experimental groups on Speed when compared to control group.

Keywords: yogic practice, aerobic training, school girls

Introduction: Aerobic Training

The word 'aerobic' means "with oxygen". Researchers consistently recommend that regular physical activity with healthy eating habits is the most efficient way to keep one fit and control one's body weight. Aerobic activity helps to control or reduce weight by using excess calories that otherwise would be stored as fat. It improves the body muscle strength and Speed

Yoga and Aerobics

Aerobics is a form of exercise where you use oxygen to mobilize the body's energy sources (carbohydrate and fat) to fuel your movements, such as by running and jogging. All such exercises are done at a steady, rhythmic, repetitive rate. To find out if your exercise state is 'aerobic', this test works. If you can talk while jogging, then your exercise is aerobic. As soon as it becomes difficult for you to talk while you jog without pausing for breath, you reach your aerobic threshold. This is when you begin to enter the anaerobic phase. Yoga is another form of exercise that helps you preserve a youthful look and a well-toned body. The principle behind yoga, however, is different. Here the exercises consist of slow movements to execute poses that are held for a time before release. There is a great degree of emphasis on breathing, for each exercise requires the co-ordination between the inhalation and exhalation of breath with the movement.

Statement of the Problem

The purpose of the study was to investigate the "Influence of yogic practices and aerobic training on selected motor fitness components among school girls".

In Dependent variables

Group 1: Yogic practice group (YPG)
Group 2: Aerobic training group (ATG)
Group 3: Control condition (CG)

Table 1: the results of analysis of covariance on speed of different groups (scores in seconds)

Test Conditions		Group 1 YP	Group 2 AT	Group 3 CG	SV	SS	Df	MS	'F' Ratio
Pre test	Mean	8.03	8.17	8.00	B	0.17	2	0.08	0.28
	S.D.	0.64	0.52	0.5	w	8.42	27	0.31	
Post test	Mean	7.27	7.26	80.2	B	3.81	2	1.91	6.01*
	S.D.	0.6	0.6	0.43	w	8.55	27	0.32	
Adjusted post test	Mean	7.27	7.26	8.03	B	3.8	2	1.92	5.85*
					w	8.52	26	0.032	

* Significant at .05 level of confidence. The required tables value for test the significance was 3.35 and 3.37with the df of 2 and 27, 2 and 26.

Table 1(a): The Results of scheffe's post hoc test mean differences on Speed among Three Groups (Scores in seconds)

Group 1 YP	Group 2 AT	Group 3 C G	Mean Differences	Confidence Interval Value
7.27	7.26		0.02	0.25
7.27		8.03	0.75*	0.25
	7.26	8.03	0.77*	0.25

* Significant at .05 level of confidence.

Result of scheffes post hoc test on speed

Table I (a) shows the paired mean differences of yogic practices group and aerobic training group and control group on speed. The paired wise comparisons results as follows.

First comparison: Group 1 and Group 2: The pair wise mean difference of group 1 and group 2 values 0.02 was lesser than the confidential value of 0.25. Hence the first comparison was insignificant. The results of this compression clearly proved that both training have produced similar effect on speed.

Second comparison: Group 1 and Group 3: The pair wise mean difference of group 1 and group 3 values 0.75 was higher than the confidential value of 0.25. Hence the second comparison was significant. The results of this compression clearly proved that yogic practices group and aerobic training group have produced greater improvements on speed, than the control group.

Third comparison: Group 2 and Group 3: The pair wise mean difference of group 2 and group 3 values 0.77 was higher than the confidential value of 0.25. Hence the third comparison was significant. The results of this compression clearly proved that yogic practices group and aerobic training group have produced greater improvements on speed, than the control group.

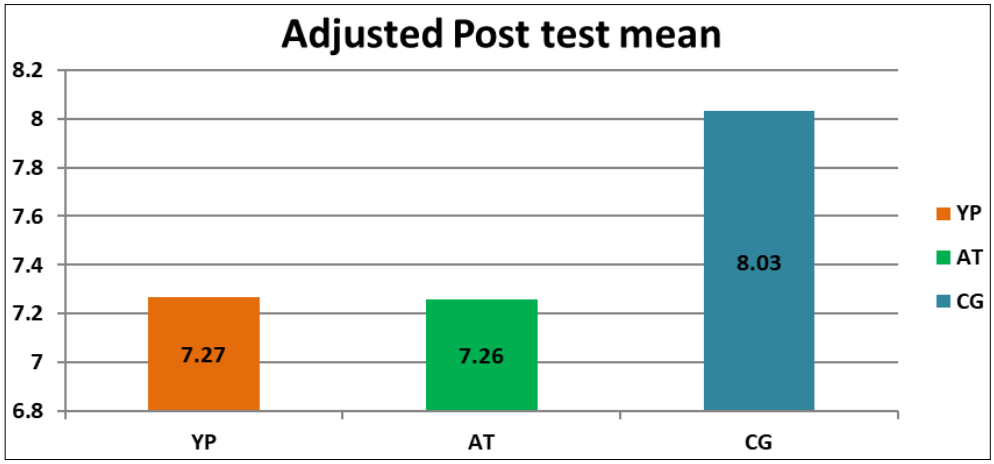

Fig 1: The Adjusted Post Test Mean Values of Experimental and Control Groups on SPEED Scores in seconds

Discussions of Hypotheses

The first hypothesis was stated yogic practice would have significant gains in selected motor fitness components on speed greater than control group of school girls. The result of the study showed that yogic practice produced significant gain on selected motor qualities namely motor fitness on speed of school girls. Hence, the researcher's first hypothesis was accepted.

The second hypothesis was stated aerobic training would have significant gains in selected motor fitness components on speed greater than control group of school girls. The result of the study showed that aerobic training produced significant gain on selected motor qualities namely motor fitness on speed of school girls. Hence, the researcher's second hypothesis was accepted.

Conclusion

From the analysis of the data, the following conclusions were drawn.

1. The performance of speed similar improvement in both the training groups namely yogic practice group and aerobic training group.

Reference

1. Preetha O. Effect of Selected Yoganasas and Aerobic Exercises on Selected Physical, Physiological and Psychological Variables in University Women Students, (Unpublished M. Phil Thesis, Pondicherry University, Pondicherry, 2006.
2. LiCL *et al*., The Effectiveness of An Aerobic Exercise Intervention on Worksite Health- Related Physical Fitness-A Case in A High-Tech Company, Chang Gung Medical Journal, 2006, 1:6.
3. Manimakali KM, Chitra S. Effect of Yoganasas Practice on Speed among University Women, Recent Treads in Yoga and Physical Education, 2011, 1:53.
4. Ravikumar H. Effect of Select Yogic Practices and Aerobic Exercises on Somatotype Components and Its Relationship with Health-Related Physical Fitness and Biochemical Variables, (Unpublished Doctoral Thesis, Pondicherry University, Pondicherry, 2009.