

## EFFECT OF YOGA ON SELECTED MOTOR ABILITY COMPONENTS OF WOMEN STUDENTS

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### ABSTRACT

*The purpose of the study was to find out the effects of yoga on selected motor ability components of women students, such as agility and cardio vascular endurance. To achieve the purpose of these study sixty college women students were selected from Bharathidasan Government College for women, Puducherry, India Pondicherry. Their age ranged from 18 to 22 years they were divided in to two groups and designed as Experimental group 'A', and Control group 'B' The experimental group 'A' was given Yoga training for a period of twelve weeks, Morning, for six days in a week, whereas control group 'B' is not involved any specific training programme other than their regular physical activities programme. The data were collected before and after the training programme and statistically analyzed by using analysis of covariance (ANCOVA). The results of the study showed that yoga training can be an effective training programme to improve the agility and cardio vascular endurance of college women students.*

Key Words: *Yoga, Motor Abilities and Components.*

### INTRODUCTION:

Sports and physical activity are increasingly becoming a tool for the development of an individual on an international agenda. Sports and physical activity have the purpose of inspiring people to a healthy lifestyle. New sporting devices create new trends to promote fitness and health. A healthy society requires healthy people. Moreover, sport and physical activity are the global communicators. The world is striving for physically fit and active people. The special circumstances of women's lives, in particular their responsibilities for domestic work and child care contribute to a great perspective that tend to be task-oriented rather than time-oriented, qualitative rather than quantitative, and altruistic rather than self-interested. Thus, women may be alienated from physical activities that are rigidly circumscribed by the clock, the rulebook and the win-at-all-costs mentality. Walking is the great transcendent on one's path to health. Walking can be done one's entire life, and can bring immeasurable well-being. They build the key muscles and pave way to living life with ease. Walking is the essential for total living.

**METHODOLOGY:**

Subjects for the present study were taken from sixty subjects were selected from Bharathidasan Government College for women, Puducherry, India, at random and their age ranges from 18 to 22 years. The study was conducted during the year 2010-2011, The selected subjects were divided into two groups namely yoga training group-A and control group-B, with thirty subjects each, the subjects were free to withdraw their consent in case they felt any discomfort during the period of their participation but, there were no drop-outs in this study. A qualified physician examined the subjects medically and declared that they were fit for the study. The duration of the training period was 12 weeks with six days excluding Sundays in a week, during the training period the yoga training group-A underwent the yoga like Pavanamuktasana, Trikonasana, Padahastasana, Bhujangasana, Dhanurasana, Salabhasana, Vipareethakarani, Sarvangasana, Halasana, Matsyasana, Padmasana, Vajrasana, Savasana, Kapalbhathi, Ujjayi, Sitali, Nadi Shodan and Meditation approximately 45 to 60 minutes under the instruction and supervision of the investigator. The control group did not participate in this training programme apart from their day to day regular practice. For assessment of agility was measured by using shuttle run, however cardiovascular endurance was measured by cooper's 12 minute run/walk. Before administration, the initial test subjects were properly oriented to the correct procedure and performing test. After twelve week of yoga training the same tests were again repeated on all the subjects, control group was given no training. The results of pre-test and post-test were compared by using Analysis of Covariance (ANCOVA).

Table-I Analysis of Co-Variance in Agility and Cardio vascular endurance among Yoga training group and the Control group.

Variables	Test		Yoga training group	Control group	S O V	Sum of square	df	Mean square	F ratio
	Pre test	Mean	12.36	12.710	B	1.803	1	1.803	3.46
		S.D	0.85439	0.55977	W	30.257	58	.522	
	Post test	Mean	11.567	12.72	B	19.953	1	19.953	142.262*
		S.D	0.392	0.356	W	8.135	58	.140	

Agility	Adjusted post test	Mean	11.66	11.66	B	13.498	1	13.498	2978.12*
					W	.258	57	.005	
Cardio vascular endurance	Pre test	Mean	2080.33	2086.33	B	540	1	540	0.051
		S.D	123.16	76.41	W	609193.33	58	10503.33	
	Post test	Mean	2339.33	2085.33	B	967740	1	967740	120.93*
		S.D	78.99	98.81	W	464133.33	58	8002.29	
	Adjusted post test	Mean	2341.68	2341.68	B	1002942.19	1	1002942.197	625.23*
					W	91434.09	57	1604.107	

\*Significant at 0.05 level

The table value required for significance at 0.05 level of confidence with degree of freedom 1 and 58; 1 and 57 are 4.01.

#### RESULTS:

The table shows that the pre test means value on agility for the yoga training group and the control group is 12.36 and 12.71 the 'F' ratio is 3.46 respectively. This reveals that there is no statistically difference between the cross training and the control group on agility before the commencement of the yoga training. It is inferred that the random selection of the subjects for the two groups are successful.

The post test means values on agility for the yoga training group and control group is 11.567 and 12.72 the 'F' ratio is 142.26 respectively. The adjusted post test means of yoga training group and control group is 11.66 and 11.66 the 'F' ratio is 2978.12. the result of the study indicate that the calculated values is higher than table value in post test and adjusted post test. There is significant difference between the yoga training group and the control group on agility.

The pre test means values on cardio vascular endurance for the cross training and control group is 2080.33 and 2086.33 the 'F' ratio is 0.051 respectively. This reveals that there is no statistically difference between the yoga training and the control group on cardio vascular endurance before the commencement of the cross training. It is inferred that the random selection of the subjects for the two groups are successful.

The post test means values on cardio vascular endurance for the yoga training group and control group is 2339.33 and 2085.33 the 'F' ratio is 120.93 respectively. The adjusted post test means of yoga training group and control group is 2341.68 and 2341.68 the 'F' ratio is 625.23. the result of the study indicate that the calculated values is higher than table value in post test and adjusted post test. So there is significant difference between the yoga training group and the control group on cardio vascular endurance.

Diagram-I showing the pre and post test of cross training group and control group on Agility

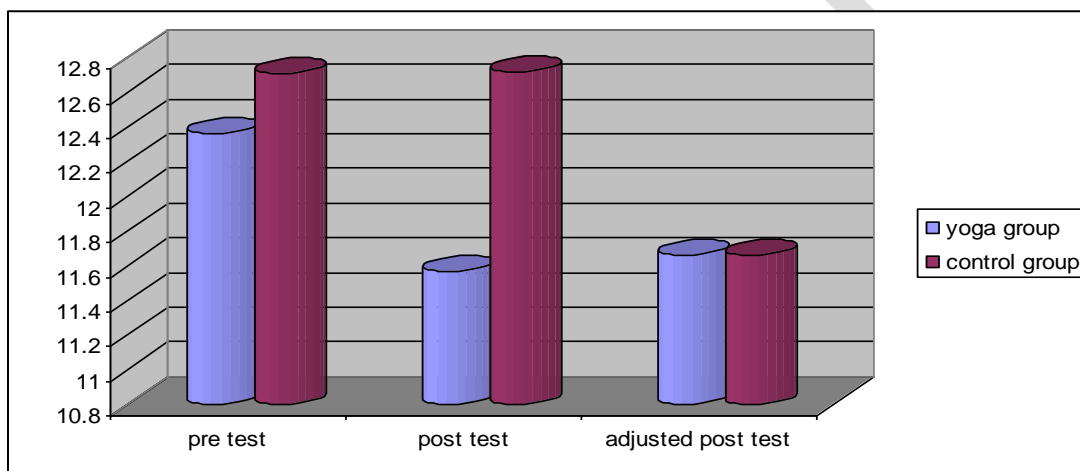
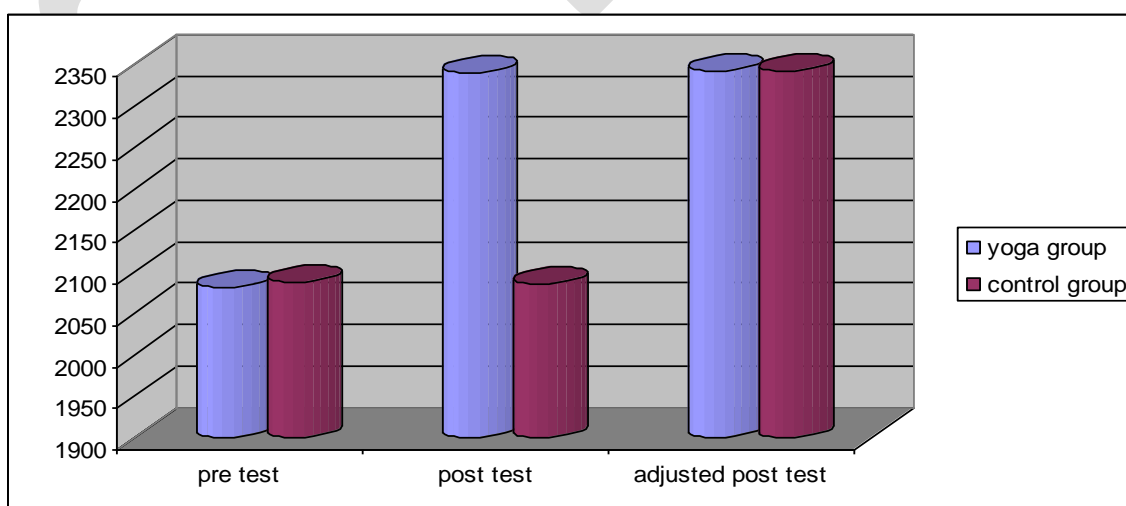


Diagram-II showing the pre and post test of cross training group and control group on cardio vascular endurance



## DISCUSSION:

The study is framed to analyzed and compare the effects of yoga training on selected motor ability components of women students. The yoga training group underwent the yoga practice for 12 weeks. The selected physical variables are agility and cardio vascular endurance.

It was observed that the pre test results, it is noticed that there is no significant difference between the yoga training group and control group on agility and cardio vascular endurance. It is inferred that the random selection of the subjects for the two groups are successful. While the post test results of the yoga training and control group had been analyzed statistically and it has revealed that there is a significant mean difference in favaour of the yoga training group.

In the analysis of co-variance the physical performance between the yoga training group and control group, a significant difference was seen and which shows light on the applicable effect of yoga practice. From the statistical analysis it is clear that practice had its own effects. The yoga practice showed more effect in the variable such as agility and cardio vascular endurance than the control group. Hence the research accepted and the results of the studies are supported by the studies of Powell (2009), Elavsky,S (2007)., DiBenedetto (2005).

## CONCLUSION:

The result of the study indicates that the variables agility and cardio vascular endurance has significantly improved after twelve weeks of yoga training.

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