



*International Journal of
Physical Education and
Sports Sciences*

*Vol. IV, No.I, October-2012,
ISSN 2231-3745*

EFFECT OF VINYASA ON STATIC BALANCE SCHOOL GOING CHILDERN

Effect of Vinyasa on Static Balance School Going Children

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Abstract: The Objective of the study was to determine the effects of vinyasa on static balance in school going children. The subjects for this study were selected from the Venus public higher secondary school, Gwalior. A total of 40 male subjects were selected and used as one experimental group (20) and other control group (20). Vinyasa was considered the independent variable and static balance was considered the dependent variable. Static balance was measured in Sec by bass Stick test. The Pretest posttest randomize group design was used for this study. Tests were administered before the training program and after the completion of the treatment again test were administered. ANCOVA was used to locate significance effects of vinyasa on static balance in school going children. At 0.05 levels of significance. In relation to static balance effect of vinyasa was found significant.

Key Words – Vinyasa, Static Balance.

INTRODUCTION

The most crucial part of yoga is gaining both flexibility and balance, and learning how to read the signals in between the mind and body. With the practice of static yoga, you will notice that you are able to feel exactly where the areas of your body are in relation to its space, without ever needing to look at them. Practicing yoga balances the entire nervous system and also energizes and relaxes the body simultaneously. For the true benefits of yoga to take place, both sides of the brain need to be worked out. That is why a lot of the yoga poses concentrate on training and using both sides of the body. Basically it comes down to retaining the mind and yoga is the great leveler. (livestrong.com)

Think of yoga as being the means to realign and rebalance your vehicle on a regular basis. You can become your body mechanic instead of having to pay someone else to do it, because your body is better balanced you will find that your chances for injuries will drop as you are in a much more attuned state. Don't wait for something major to happen to you before you decide to do something about it. That's reactive behavior and that's going to set you back big time, all you have to do is take action now. (www.yoga.org.nz)

Practicing yoga regularly will improve balance and stability, which increases confidence in daily movements such as walking, says TheSecretsOfYoga.com. Many yoga poses challenge your balance with wide stances, lunges or standing on one foot. Practice yoga at least twice times a week to see results in balance issues. (livestrong.com)

Yoga balance poses improve physical stability as well mental and emotional equilibrium. Body awareness, core strength, medical issues and aging all impact overall balance. Holding a balance pose for a longer period in a less extended version is more beneficial than extending too far and falling out of the pose. Begin with the basic pose and challenge yourself further as your balance improves. (livestrong.com)

METHODS

Selection Of Subjects: - Forty boys studying Venus public higher secondary School, Gwalior M.P were selected at random as subject of the study and divided in to two groups of 20 subjects each. All subjects were almost from the same socio economic group and were found to be physically fit for the type of program they were subjected to. The subjects were divided in two groups (experimental group and control group) at random by drawing the lots. The ages of these subjects range between 14 to 18 years. All of them were taking part in routine physical activity program as per the classes of the school.

Selection of Variable: - On the basis of variable literature on physical variables; finding out the related research study and keeping in mind the specific purpose of the study to find out the effect of vinyasa on the static balance. Static balance was measured in sec by bass stick test.

Experimental Design: - Pre-test and post-test randomized group design was employed in the study. The subjects were divided into experimental group and control group. The experimental group was

imparted 45 minutes of training of vinyasa for six weeks under the supervision and guidance of the scholar. While no training was imparted to control group. At the end of six weeks post test was conducted for both the group.

Procedure for Administration of the Test: - After selecting the students, they were estimated for their static balance. Modified bass stick test to the nearest sec. After collecting the initial data, the subjects were administrated for six week training schedule, which was five day per week for duration of 45 min. immediately after the training schedule, the static balance was again estimated by bass stick test the nearest sec.

Test Administration (Static Balance): - All sticks should be taped to the floor. Individuals may be tested in pairs. The test performer places a foot lengthwise on the stick (ball of the foot and heel should be in contact with the stick). On the signal "Go" the performer lifts the opposite foot from the floor, raises the heel of the dominant foot from the stick, and attempts to hold this position for a maximum of 60 seconds. The test administrator counts aloud the seconds while the partner of the performer records the number of seconds the performer is able to maintain balance. Rail is ended when any part of either foot touches the floor. Three trails are ended when any part of either foot touches the floor. Three trails are taken on each foot. If any performers lose their balance within the first 3 seconds of a trail, the trail is not considered an attempt.

Scoring: - The score is the total time in seconds for all six trials, three on each foot.

Selection of Vinyasa: - Vinyasa was selected for their contribution to enhance stretch ability of muscles and for improving mobility of joints. To finalize list of vinyasa the scholar consulted expected and studied the related literature also.

Training and Practice of Vinyasa: -The training of experimental given in the hall of Venus Public Higher Secondary School Gwalior. The students used to report in their sports uniform and practiced vinyasa barefoot. The practice session was conducted for a period of 45 minutes in the morning, i.e.8.00 A.M. to 9.00AM on Monday to Friday for duration of 6 weeks.

Method Applied For the Training Practice of Vinyasa: - The vinyasa were taught and the practice session were conducted and supervised by the researcher himself. For teaching purpose, each step was explained and demonstrated before the student performed the same necessary corrections were made, the rest the instruction were given in between succeeding vinyasa.

Statistical Procedure: - To find out the significant of vinyasa on static balance 'ANCOVA' was used. The level of significance was set at 0.05 level.

RESULTS

Table-I

Analysis of Variance of Comparison of Means of Experimental Group and Control Group in Static balance

		Sum of Squares	df	Mean Square	F- Value	Sig.
Pre Test	Between Groups	1.840	1	1.840	0.001	.970
	Within Groups	48551.078	38	1277.660		
Post Test	Between Groups	8748.877	1	8748.877	3.759	.060
	Within Groups	88445.006	38	2327.500		

*Significant at .05 level

F value required to be significant at 1, 38 df = 4.03

In relation to pretest, table –I revealed that the obtained 'F' value of 0.001 was found to be insignificant at 0.05 level, is case of static balance since this value was found lower than the tabulated value 4.03 at 1, 38 degree of freedom.

In relation to post test, significant difference was found among experimental group and control group pertaining to static balance since 'F' value of was found insignificant at .05 level.

Table –II

Analysis of Co-Variance of Comparison of Adjusted Post Test Means of Experimental group and Control Group in Static Balance

	Sum of Squares	df	Mean Square	F-Value	Sig.
Contrast	8472.004	1	8472.004	10.497	.003
Error	29861.989	37	807.081		

F value required to be significant at 1, 37 df = 4.08

Table – III

Adjusted Post Test Means of Experimental Group and Control Group in Relation to Static Balance

Groups	N	Adjusted Mean	S.E
Experimental Group	20	159.29	6.68
Control Group	20	130.19	7.88

DISCUSSION

The research scholar has made an attempt to present the discussion of findings. After collection of data, appropriate statistical analysis was conducted. The research scholar examined the effect of vinyasa on static balance in school going children. The results, in general, support that vinyasa improve static balance among school going children. It was found that the experimental group improved significantly. The rate of improvement was higher for the experimental groups in comparison to the control groups. Finally, results show, that the participants who followed the treatment of vinyasa improved their static balance higher than participants in control group. In the present study, a significant difference has been evident in relation to static balance that may be due to the dynamic and static stretching movement which is integral part of vinyasa. The result appears may be due to the fact that Hatha yoga demands muscle strength, which in turn increases the efficiency of the muscle fibers. The body muscles toned instead of becoming larger. During the practice of vinyasa asanas, the subjects performed various types of dynamic movements and become static for certain period of time after attaining the final position and then again come to initial position by performing the same movements. Yoga asanas tones up the blood vessels and supplies fresh and continuous blood that supply (oxygen) to every organs, tissue, muscle and joints efficiently. As circulation improves muscle are toned up and strengthened. Thus, vinyasa seems to be beneficial for the subjects towards improvement of static balance. Result of this study also supported by some study like [Gauchard](#) (1999) conducted a study on beneficial effect of proprioceptive physical activities on balance control in elderly human subjects. [Handrigan](#) (2010) conducted a study on Weight loss and muscular strength affect static balance control. International Journal of Obesity advance online publication, 26 January 2010; doi:10.1038/ijo.2009.300.

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