

## Effect of Vinyasa on dynamic balance in school going children

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### ■ ABSTRACT

The objective of the study was to determine the effects of Vinyasa on dynamic 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 dynamic balance was considered the dependent variable. Dynamic balance was measured in seconds by modified Bass Stick Test. The pre-test, post-test randomized group design was used for this study. Tests were administered before the training programme and after the completion of the treatment again test were administered. ANCOVA was used to locate significance effects of Vinyasa on dynamic balance in school going children. at 0.05 levels of significance. In relation to dynamic balance, effect of vinyasa was found significant.

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Practicing Yoga balances the entire nervous system and also energizes and relaxes the body simultaneously (Gopal *et al.*, 1975). 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 (Bhole *et al.*, 1971). Basically it comes down to retaining the mind and Yoga is the great leveler. You will learn to use both parts of your brain more effectively therefore, tuning and realigning everything to work far better than ever before. It will benefit all aspects in your life especially if you are ambitious sport type that likes to get the most out of it that they can (Gharote and Gangul, 1973).

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 behaviour and that's gonna set you back big time, all you

have to do is take action now.

### ■ METHODOLOGY

#### Selection of subjects :

Forty boys studying in Venus Public Higher Secondary School, Gwalior, M.P. were selected at random as subject of the study and divided into 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 programme they were subjected to. The subjects were divided into two groups (experimental group and control group) at random by drawing the lots. The age of these subjects ranged between 14 to 18 years. All of them were taking part in routine physical activity programme as per the classes of the school.

#### Selection of variables :

On the basis of various 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 dynamic balance. Dynamic balance was

measured in seconds by modified 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 groups.

**Procedure for administration of the test :**

After selecting the students, they were estimated for their dynamic balance. Modified bass stick test to the nearest seconds. After collecting the initial data, the subjects were administered for six week training schedule, which was six day per week for duration of 45 mins. immediately after the training schedule, the dynamic balance was again estimated by modified bass stick test to the nearest secs.

**Test administration (dynamic balance) :**

The purpose of this test was to measure the ability to jump accurately and maintain balance during movement and after movement. The equipment and materials needed were stop watches, ¾-inch marking tape, and yardsticks. Cut eleven 1-by ¾-inch pieces of marking tape then in the proper pattern to the floor. Standing with the right foot on the starting mark, the performer leaps to the first tape mark with the left foot and tries to hold a steady position on the ball of his left foot for as many seconds as possible up to a maximum of 5 seconds, and his foot must completely cover the tape so that it cannot be seen. The score for each mark successfully landed on his five points and in addition, one point is awarded for each second the balance is held up to 5 seconds per mark. Thus, a performer may earn a maximum of ten points per marker or a total of 100 points for the test.

**Selection of Vinyasa :**

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

**Training and practice of Vinyasa :**

The training of experimental was 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 9.00 AM on Monday to Friday for duration of 6 weeks.

**Method applied for training practice of Vinyasa :**

The Vinyasa was 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 and corrections were made, the rest the instruction were given in between succeeding Vinyasa.

**Statistical procedure :**

To find out the significance of difference between different pair means, the 'ANCOVA' was used. The level of significance was set at 0.05 level.

**■ OBSERVATIONS AND DISCUSSION**

In relation to pre-test, Table 1 reveals that the obtained 'F' value of 0.045 was found to be insignificant at 0.05 level, in case of dynamic balance since this value was found lower than the tabulated value 4.10 at 1, 38 df.

**Table 1 : Analysis of variance of comparison of means of experimental group and control group in dynamic balance**

		Sum of squares	df	Mean square	F-value	Sig.
Pre-test	Between groups	6.400	1	6.400	.045	0.833
	Within groups	5420.000	38	142.632		
Post-test	Between groups	1166.400	1	1166.400	21.827	0.000
	Within groups	2030.700	38	53.439		

\* Indicate significance of values at P=0.05.  
F value required to be significant at 1, 38 df = 4.03

In relation to post-test, significant difference was found among experimental group and control group pertaining to dynamic balance since 'F' value of was found significant at 0.05 level.

Table 2 reveals that the obtained 'F' value of 28.441 was found to be significant at 0.05 level in case of dynamic balance, since this value was found higher than the tabulated value 4.08 at 1, 37 df.

**Table 2: Analysis of co-variance of comparison of adjusted post-test means of experimental group and control group in dynamic balance**

	Sum of squares	df	Mean square	F-value	Sig.
Contrast	1108.863	1	1108.863	28.441	0.000
Error	1442.572	37	38.988		

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

**Table 3: Adjusted post-test means of experimental group and control group in relation to dynamic balance**

Groups	N	Adjusted mean	S.D.
Experimental group	20	68.11	1.39
Control group	20	57.58	1.39

An attempt was to present the discussion of findings. After collection of data, appropriate statistical analysis was conducted. examined. The effect of Vinyasa was examined on dynamic balance in school going children. The results, in general, support that Vinyasa improve the dynamic balance among school going children. It was found that the experimental group improved significantly. The rate of improvement was higher for the experimental group in comparison to the control group. Finally, results showed that the participants who followed the treatment of vinyasa improved their dynamic balance higher than participants in control group.

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