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## Impact of pranayama on balance ability of cricketers from JCERC University Jaipur

**Mahendra Kumar Jangir and Abhishek Sanchora**

### Abstract

The objective of present study was to find out the eight weeks training programme of Pranayama on the balance ability of male cricketers of JCERC University. For the purpose of study, 20 male Cricketers from the JCERC University, Jaipur was randomly selected as subjects for this study. The subject age was ranged between 17 to 24 years. 20 subjects were selected for each group i.e. one experimental groups and one control group. All subjects were, randomly divided into one experimental groups and one control group. The groups 'A' was experimental groups and received training program. The group B served as a control group and continued participating in the normal program. Pranayama were considered as independent variable. Balance was selected as dependent variable. Findings revealed that "t" values (.746) of comparison between treatment pre group and treatment post group in relation to balance ability was found to be significant at 0.05 level. On basis of findings it is concluded that significant effect of eight weeks training program of Pranayama on balance ability of cricketers of JECRC University.

**Keywords:** Pranayama, balance ability, cricketers etc.

### Introduction

The word pranayama comes from two separate words: prana and ayama. Prana translates to breath, while ayama has many different meanings including expansion, length, and rising. In yogic beliefs, it is thought that you can control your inner force, also known as prana, through a pranayama practice. In yoga, prana also represents the physical forces of light, heat, magnetism, and energy. These meanings center on the ability that a pranayama practice has to develop breath control and improve mental well-being. A strong pranayama breath is also believed to help detoxify your body.

### Balance is an important component of cricket performance

**Batting:** A balanced base is essential for striking the ball. Poor balance can lead to loss of power and an out. **Fielding:** Hand-eye coordination is required for fielding. **Running:** Cricketers need good dynamic balance to run between wickets. **Movement precision:** Balance and coordination improve movement precision. **Agility:** Balance and coordination help with quick transitions. **Stability:** Balance helps control body movements. **Mobility:** Balance helps with a full range of motion. Some say that balance is the most important component of athletic ability because it's the foundation for all movement. Problems that seem to be related to strength, speed, flexibility, or skill could actually be balance-related.

### Statement of the Problem

Keeping in view the significance of research the purpose of the study was to find out the "Impact of Pranayama on balance ability of Cricketers from JCERC University Jaipur".

### Objective of the Study

The objective of present study was find out the training effects of eight weeks training programme of pranayama on balance ability during their normal daily routine.

**Selection of Subjects:** For the purpose of this study, 20 male Cricketers was randomly selected as subjects for this study. The subject age was ranged between 17 to 24 years

**Selection of Variables**

The students reviewed the available scientific literature pertaining to the effect of six weeks training program of Asana and Pranayam on selected as independent variable and muscular endurance was selected as dependent variable.

**Experimental Design**

For the study pre-test - post-test randomized group design which consists of one control group (N=20) and one experimental groups (N=20) was used. Equal numbers of subjects were assigned randomly to the groups. One groups (asana and Pranayam) served as experimental groups on which treatment was assigned and another group served as the control group.

Pranayam Group	O1	T1	O2
Control Group	O3		O4

O = Observation, T = Treatment

Pranayam practices were conducted for six weeks (5 days in a week).

**Criterion Measures:** Balance ability was measured by long nose balance test and score of the subject recorded in seconds. The score was best of the three attempts.

**Treatment Protocols**

Training was given for 30-45 min. Each pranayama perform for one and half min & 30 sec rest and three rounds of each pranayama. First two week were perform three pranayama given of two rounds one and half min for each pranayam. After two the pranayama were performing same as first two weeks but time intensity was 30 sec increase. In beginning

phase subjects were taught that how to perform the activities, all the precaution, prose and cones and principles of activities. In initiation phase repetitions were less and as subjects were being familiar with activities no of repetition were increase as fix schedule.

**Collection of data**

The data for proposed study was collected from 20 male cricketers from the JECRC University. The data was collected by administration of standard tests for Physical and physiological variables. The tests were administered during morning classes.

**Statistical Technique**

The data was collected from 20 male cricketers from JECRC University, Jaipur. The data was analyzed to see the significant Impact of Pranayama on balance ability of cricketers with the help of Dependent t-test. The level of significance was set at 0.05.

**Table 1:** Descriptive Statistics of within Control Group in relation to balance ability of cricketers.

Group	N	Mean	Std. Deviation	Std. Error Mean
Control pre	20	6.87	1.118	.250
Control post	20	6.86	1.098	.246
Treatment Pre	20	6.89	1.082	.242
Treatment Post	20	6.56	1.683	.376

From the table number -1, it is revealed that mean of control pre group and control post group mean was 6.87 and 6.86 with the standard deviation of 1.118 and 1.098, whereas the mean of treatment pre group and treatment post group was 6.89 and 6.56 with the standard deviation of 1.082 and 1.683.

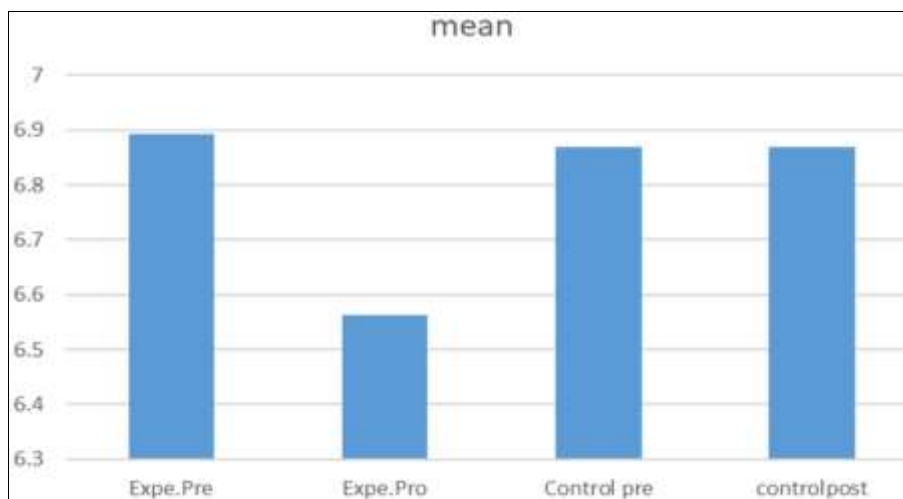
**Table 2:** Pair “t” test for difference of mean of Experimental Group and Control Group in relation to the balance ability of the cricketers.

Group		Paired Samples Test					t	df	Sig. (2-tailed)
		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Control Pre - Control Post	.003	.082	.018	-.035	.041	.164	19	.872
Pair 2	Treatment Pre - Treatment Post	.331	1.980	.443	-.596	1.257	.746	19	.465

\*significant at level 0.05. “t” value required to be significant at 1, 19 df =.746

Table 2 this is show that the paired treatment group and paired control group of calculated “t” values is. 164 and. 746 which is greater than 0.05 at the level of

significant. This result indicate that treatment was given to subjects it is Improved of the balance ability of subjects at significant level.



**Fig 1:** The Graphical representation of mean of control and experimental group in relation to balance ability is presented with the help of figure-

**Discussion of the findings**

The researcher examined the effect of pranayama on balance ability of cricketers. The results show that the balance ability of cricket improved through the pranayama practice. It was found that the experimental group improved significantly. The rate of improvement was higher in the experimental groups compared to control groups. Finally, the results show that participant who continued Kapalbhathi treatment improved their balance ability to a greater extent than participants of control group. A similar study was conducted by Gore study on "The Effect of Kapalbhathi on Some Body Functions", Kapalbhathi involves forced but quick voluntary abdominal respiratory exercises. The effect of Kapalbhathi on some body functions i.e., balance ability was tested using the channel printing system. 30 observations were made on 10 healthy people and trained subjects. During Kapalbhathi heart rate increased by 15 beats/min, eye movement was observed increased by Kapalbhathi even if the eyes were closed. The alpha activity from parieto-occipital showed a marginal decline in 57% of observations indicating mind calming effect on the brain.

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**Conclusions**

From the above findings it is concluded that 8 weeks of pranayama practices having a significant impact on the balance ability of the cricketers.

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