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**Dr. Anurodh Singh Sisodia**

Associate Professor, UGC-  
HRDCS, Lakshmibai National  
Institute of Physical Education,  
Gwalior, India

## Effect of transcendental meditation on differentiation ability

**Dr. Anurodh Singh Sisodia**

### Abstract

The Objective of the study was to determine the effects of transcendental meditation on Differentiation Ability in Judokas. The subjects for this study were selected from the Judokas studying at various standards at Lakshmibai National Institute of Physical Education and Jiwaji University, Gwalior. A total of 60 subjects were selected and used as one experimental group (30) and other control group (30). Transcendental Meditation was considered the independent variable and Differentiation Ability was considered the dependent variable. Differentiation Ability was measured in point by Backward Medicine Ball Throw Test. The Pre Test Post Test 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 Transcendental Meditation on Differentiation Ability in Judokas. at 0.05 levels of significance. In relation to Differentiation Ability, effect of Transcendental Meditation was found significant.

**Keywords:** Transcendental Meditation, Differentiation Ability

### 1. Introduction

Sports is a multidimensional activity. It is mainly physiological dimension as well as physical, psychological, social and technical aspects, which plays a significant role to acquire zenith performance. In today's competitive world of sports, the physiological fitness of a team or player is foremost required than any other aspect. Since every sports has a different physiological demands on the body[ depending upon the nature, intensity, and duration of the game or activity, the athletes physiological fitness must be developed accordingly to bring out the best possible accordingly to bring out the best possible performance of a team or athlete.

Judo in 'wide sense', can be physical culture; in the 'narrow sense', a sport, as physical culture; in the 'narrow sense', a sport, as physical it can be an entrance into a special form of physical experience of an intrinsic need, an increase of awareness of what the body is capable of doing. As a sport the individual can participate in violent competition, experience the conflict of one skill oppose to another. As a man-made skill it can develop the bad as well as the good in any personality.

Coordinative abilities are primarily dependent on the motor control and regulation process of central nervous system. For each coordination ability the motor control and regulation process function in a definite pattern when a particular aspect of these functions is improved then the sports-person is in a better position to do a certain group of movements which for their execution depends on the C.N.S. functioning pattern. When executing "Coordination assignments" are determined first of all by the fact that they demand utmost concentration of attention, subtle differentiations and regulations considerable with, alertness, creation of new forms of movements, coordination and what is more restructuring of the firmly-formed coordination links present a rather difficult task for the nervous system. Naturally it is best of all to tackle it at the beginning of the main part of the training session.

In the game of Judo after each bout a judoka fights against a new opponent of different height, posture, measurement and to some extent different weight (specially in open weight category) that enable him to adjust and transform his grips, techniques, posture and movement depending on the opponent, hence to meet such situation he requires a top class differentiation ability.

### Correspondence

**Dr. Anurodh Singh Sisodia**

Associate Professor, UGC-  
HRDCS, Lakshmibai National  
Institute of Physical Education,  
Gwalior, India

There are many systems of what called meditation that attempt to refine the mind by controlling it in one way or another. All such attempts are difficult and far from achieving anything tends to take away life. Because of the difficulty and in-efficiency of their methods of mind control, the idea has become accepted that the path to pure consciousness is difficult. This is a fallacy and stems from ignorance of the nature of the mind. There is great difference between directing the mind in a particular direction through concentration and directing it by permitting its natural affinities to operate. We know that it is the tendency of every mind to flow towards a field of greater happiness. By turning the mind inward the field of absolute bliss, creativity and wisdom. It is upon this principles that our system of meditation (i.e. Transcendental Meditation) is based, and consequently its practice is not difficult.

## 2. Methods

**Selection of Subjects** Sixty Judokas studying at various standards at Lakshmbai National Institute of Physical Education and Jiwaji University, Gwalior voluntarily participated in the study and were selected as the subjects for the study. The subjects were assigned at random to experimental and control group; each group consisted of 30 students. The requirements of the study were explained to all the subjects. All the subjects readily agreed to undergo the testing and training programmes.

**Selection of Variable:** 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 Transcendental Meditation on Differentiation Ability. Differentiation Ability was considered as dependent variable and transcendental meditation was considered as independent variable, Differentiation Ability was measured in point by Backward Medicine Ball Throw 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 20 minutes of training of transcendental meditation for eight weeks under the supervision and guidance of the scholar. While no training was imparted to control group. At the end of eight weeks post test was conducted for both the group.

**Procedure for Administration of the Test:** After selecting the students, they were estimated for their Differentiation Ability Backward Medicine Ball Throw Test in point. After collecting the initial data, the subjects were administrated for eight week training schedule, which was six day per week for duration of 20 mins. immediately after the training schedule, the Differentiation Ability was again estimated long Nose test to the nearest point.

**Test Administration (Differentiation Ability):** The purpose of this test is to determine the Differentiation Ability of the subjects. The equipment and materials needed are A gymnastic mat, size 3' x 6', One medicine ball weighting 2 kg, Five medicine balls weighing 1 kg each, Pencil, papers and clipboard A gymnastic mat was kept 2 mts. away from the starting line. A circle of 40 cm. radius was drawn in the middle of the mat and a medicine ball of 2 kg. was kept at the

center of the circle The subjects were asked to stand behind the starting line facing the opposite direction. They were asked to throw five medicine balls (1kg. each) over the head to hit the 2 kg. ball kept on the mat, one after another by using both the hands. One practice trial was given to all the subjects. Scoring: Medicine ball touching the mat - 1 point, Medicine ball touching the circle line - 2 points, Medicine ball touching inside the circle -1 points, Medicine ball touching the 2 kg- Medicine Ball- 4 points. Points were decided considering the first pitch of the ball. The score of the individual was the total points scored in all the five throws.

### 2.1 Training and Practice of transcendental meditation:

The study was conducted for a period of eight weeks in the month of August and September. The climatic condition was rainy (humid) and atmospheric temperature was ranging from 25°C to 35°C. Sixty subjects were assembled in the Judo hall of Lakshmbai National Institute of Physical Education, Gwalior at 5:30 AM for six days per week. Two groups comprising of 30 subjects each were formed i.e. experimental group and control group; Each subject of experimental group was ready to learn Transcendental Meditation. Teacher (an authorized expert of Maharishi Mahesh Yogi Vedic Vishvavidyalaya) gave a Performa to each subject of experimental group. All the subject of experimental group filled the Performa after going through the guide lines of Performa i.e. age, sex, occupation, religion and belief etc. Teacher gave a particular mantra separately to all the subject of experimental group.

Thereafter Teacher briefly in introduced experimental group with the introductory and preparatory speech than he conducted PUJA (Worship) of Guru Bhramanand Saraswati, father of transcendental meditation technique. Followed by Puja all the subjects of experimental group practiced transcendental medication for 20 minutes starting with a silence of half minute and finishing it with a silence of two minute in Lotus like sitting position with close eyes. The subjects of control group were asked to sit quietly with eyes closed in Lotus like position.

### 2.2 Method Applied for The Training Practice of transcendental meditation:

The technique of Transcendental Meditation involves the repetition of a Mantra for 20 minutes each day while the meditators sit in lotus like position with eyes closed. First, the meditator work out the most comfortable position for himself, one which allows the spine to be in an upright position either in lotus like sitting positions on the floor or in a straight backed chair with feet firmly planted on the ground with eyes closed. One began with taking few deep and well-modulated breath to calm down and then proceed to the subvocal repetitions of the Mantra or specific sound.

**2.3 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.

## 3. Results

**Table 1:** analysis of variance of comparison of means of experimental group and control group in differentiation ability

		Sum of Squares	df	Mean Square	F- Value
Pre Test	Between Groups	1.667	1	1.667	0.28
	Within Groups	338.06	58	5.82	
Post Test	Between Groups	286.01	1	286.01	77.45*
	Within Groups	214.16	58	3.693	

\*Significant at .05 level

F value required to be significant at 1, 58 df = 4.01

In relation to pretest, table –I revealed that the obtained ‘F’ value of 0.28 was found to be insignificant at 0.05 level, is case of differentiation ability since this value was found lower than the tabulated value 4.02 at 1, 58 df

In relation to post test, significant difference was found among experimental group and control group pertaining to differentiation ability since ‘F’ value of was found significant at .05 level.

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

	Sum of Squares	df	Mean Square	F-Value
Contrast	304.92	1	304.92	121.69
Error	142.82	57	2.506	

F value required to be significant at 1, 57 df = 4.02

Table 2 revealed that the obtained ‘F’ value of 121.69 was found to be significant at 0.05 level in case of differentiation ability, since this value was found higher than the tabulated value 4.02 at 1, 57 df.

**4. Discussion**

The scholar has made an attempt to present the discussion of findings. After collection of data, appropriate statistical analysis was conducted. The scholar examined the effect of transcendental meditation on differentiation ability in school going children. The results, in general, support that transcendental meditation improves differentiation ability 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 transcendental meditation improved their differentiation ability higher than participants in control group.

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