

Research Article

Effects of Different Types of Meditations Namely Transcendental Meditation and Heart Rhythm Meditation on Selected Physiological Variable

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A B S T R A C T

The purpose of the study was to find out the effects of different types of meditations namely Transcendental Meditation and Heart Rhythm Meditation on selected physiological variables namely resting pulse rate among college men students. To achieve this purpose of the study, sixty men students studying for bachelor's degrees in and around colleges nearby Tiruvannamalai District, Tamil Nadu, India were randomly selected as subjects. The age, height and weight of the selected subjects ranged from 18 to 24 years, 158 to 171 cm and 56 to 69 kilograms respectively. The selected subjects were divided into three equal groups of twenty subjects each at random. Group I underwent Transcendental Meditation, Group II underwent Heart Rhythm Meditation and Group III acted as a control. All the subjects of the three groups were tested on selected dependent variables prior to and immediately after the training programme. The collected data were analyzed statistically by using ANCOVA (analysis of covariance) to find out the effects of different types of meditations on selected physiological variables. Whenever the obtained 'F' ratio for the adjusted post-test mean was found to be significant, Scheffe's test was applied as a post hoc test to determine the paired mean differences, if any. The 0.05 level of confidence was fixed to test the level of significance which was considered appropriate.

Keywords: Different Types of Meditations, Transcendental Meditation, Heart Rhythm Meditation, control group, Physiological Variable, Resting Pulse Rate

Introduction

Physical activity is an important and essential element in human health and well-being and its importance has achieved widespread acceptance by the public, professional organizations and the medical community. Yoga is a way of life which can be practiced by any human being regardless of age and condition of health. Yoga is a gaining process of

control over the mind, thereby improving the physiological and psychological behaviour of an individual.¹ Asana means holding the body in a particular posture to bring stability to the body and poise to the mind.¹ The exercises of asana bring purity in tabular channels firmness to the body and vitality to the body and the mind. The science of how all of an organism's organs and systems work is known as

physiology.² The number of beats experienced in exactly one minute while a player is in a resting state is known as the resting pulse rate. the frequency of heartbeats or the number of heart beats per minute, whichever comes first.³

Transcendental Meditation

Though Transcendental Meditation is not a mantra-based meditation in the sense that its main core and direction are oriented towards transcending, it does involve the use of mantras. Maharishi Mahesh Yogi, the great teacher from India who introduced the Transcendental Meditation technique to the wider world, said: "Mantra is a specific thought which suits us, a suitable sound for us which we receive from a trained teacher of Transcendental Meditation.

Heart Rhythm Meditation

Heart Rhythm Meditation is a method of meditation that has been expanded and developed by Puran Bair and Susanna Bair of the Institute for Applied Meditation. The method was described in the 1998 book *Living from the Heart*, by Puran and Susanna Bair (3rd Edition Published in 2019) and in the 2007 book *Energize Your Heart in 4 Dimensions*, by Puran and Susanna Bair. The application of Heart Rhythm Meditation to the development of spiritual maturity is described in the book, *Follow Your Heart*, by Puran and Susanna Bair, edited and illustrated by Asatar Bair and published in 2011. The practice originates from the Jesus Prayer and the teachings of Inayat Khan, who founded the Sufi order and is credited with bringing Sufism to the Western world. Puran and Susanna Bair were disciples of Inayat Khan's eldest son and successor Vilayat Inayat Khan. The HRM founders claim that their approach is non-religious, practical, scientific.

Material and Method

Statistical Technique

The collected data were analyzed statistically by using ANCOVA (analysis of covariance) to find out the effects of different types of meditations namely Transcendental Meditation and Heart Rhythm Meditation on the selected physiological variables. Whenever the obtained 'F' ratio for the adjusted post-test mean was found to be significant, Scheffe's test was applied as a post hoc test to determine the paired mean differences, if any. The .05 level of confidence was fixed to test the level of significance which was considered appropriate.

Selection of Subjects

To achieve this purpose of the study, sixty men students studying for bachelor's degrees in and around colleges nearby Tiruvannamalai District, Tamil Nadu, India were randomly selected as subjects. The selected subjects were divided into three equal groups of twenty subjects each at random. Group I underwent Transcendental Meditation, Group II underwent Heart Rhythm Meditation and Group III acted as a control.

Selection of Variable

The physiological variable namely resting pulse rate was selected as the criterion variable. Transcendental Meditation and Heart Rhythm Meditation were selected as independent variables. The selected criterion variable was measured by taking Radial Pulse.

Analysis of the Data Resting Pulse Rate

The analysis of covariance on the resting pulse rate of the pre and post-test scores of the transcendental meditation group, heart rhythm meditation group and control group have been analyzed and presented in Table 1.

Table 1. Analysis of Covariance of the Data on Resting Pulse Rate of Pre and Post-Tests Scores of Transcendental Meditations, Heart Rhythm Meditation and Control Groups

Test	Transcendental meditation Group	Heart rhythm meditation Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre-Test								
Mean	69.2	69.75	70.25	Between	11	2	5.5	1.63
S.D	1.88	1.74	1.89	Within	192.7	57	3.38	
Post Test								
Mean	66.6	64.8	70.35	Between	320.7	2	160.35	34.56*
S.D.	2.7	1.85	1.79	Within	264.5	57	4.64	
Adjusted Post Test								
Mean	66.69	64.8	70.27	Between	302.3	2	151.15	32.58*
				Within	259.6	56	4.64	

(The Table values required for significance at a 0.05 level of confidence for 2 and 57 and 2 and 56 are 3.15 and 3.15 respectively).

Table 1, shows that the pre-test mean values on resting pulse rate of the transcendental meditation group, heart rhythm meditation group and control group are 69.20, 69.75 and 70.25 respectively. The obtained "F" ratio of 1.63 for pre-test scores is less than the table value of 3.15 for df 2 and 57 required for significance at a .05 level of confidence on resting pulse rate. The post-test means values on the resting pulse rate of the transcendental meditation group, heart rhythm meditation group and control group are 66.60, 64.80 and 70.35 respectively. The obtained "F" ratio of 34.56 for post-test scores is greater than the table value of 3.15 for df 2 and 57 required for significance at a .05 level of confidence on resting pulse rate. The adjusted post-test means values on resting pulse rate of the transcendental meditation group, heart rhythm meditation group and control group are 66.69, 64.80 and 70.27 respectively. The obtained "F" ratio of 32.58 for adjusted post-test means is greater than the table value of 3.15 for df 2 and 56 required for significance at a .05 level of confidence on resting pulse rate.

The results of the study indicated that there was a significant difference among the adjusted post-test means of the transcendental meditation group, heart rhythm meditation group and control group on resting pulse rate. Since the three groups were compared, whenever the obtained 'F' ratio for the adjusted post-test was found to be significant, Scheffe'S test was used to find out the paired mean differences and it was presented in Table 2.

Table 2. The Scheffe Test for the Differences Between Paired Means on Resting Pulse Rate

Transcendental Meditation Group	Heart Rhythm Meditation Group	Control Group	Mean Differences	Confidence Interval
66.69	64.8	-	1.89*	1.73
66.69	-	70.27	3.58*	1.73
-	64.8	70.27	5.47*	1.73

* Significant at 0.05 level of confidence.

Table 2 shows that the mean difference values on resting pulse rate between the transcendental meditation group and heart rhythm meditation group, transcendental meditation group and control group and heart rhythm meditation group and control group are 1.89, 3.58 and 5.47 respectively which were greater than the required confidence interval value 1.73 for significance at .05 level of confidence. The results of the study showed that there was a significant difference between the transcendental

meditation group and heart rhythm meditation group, the transcendental meditation group and control group and the heart rhythm meditation group and control group on resting pulse rate.

Conclusion

The study's findings led to the following conclusions, which are listed below. Based on the basis of resting pulse rate, there were considerable variations between the heart rhythm meditation group, the control group, the transcendental meditation group. After twelve weeks of training, there was a significant change in a specified physiological measure, namely resting pulse rate, as a result of transcendental meditation and heart rhythm meditation.

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