



ASSESSMENT OF HEART RATE AND ANXIETY AMONG WORKING WOMEN DUE TO THE EFFECT OF YOGIC ASANAS

Dr.G.MAHALAKSHMI

Director of Physical Education, Thiruvalluvar University College of Arts and Science, Tirupattur, Tamilnadu, India.

ABSTRACT

The purpose of the study was to investigate the effect of changes observed on heart rate and anxiety among working women due to yogic asanas. To facilitate the study, thirty women working at different sectors in Tirupattur district were selected as subjects at random and their ages between 30 to 45 years. The subjects were divided into two equal groups. At the end of the sixth weeks of the training post-tests were taken. The significant differences between the means of experimental group and control group for the pre-test and post-test scores were determined by paired 't' ratio. The level of significance was fixed at 0.05 level of confidence for the degree of freedom 14. Heart rate and anxiety of experimental group showed significant difference when compared to control group.

KEYWORDS: Heart Rate, Anxiety, Yogic Asanas, Working Women.

INTRODUCTION

Yoga is a science that focuses on a person's physical, mental, emotional, psychic, and spiritual elements. When this level of imbalance is experienced, the organs, muscles, and nerves no longer function in harmony, but rather in antagonism to one another. As a result, yoga tries to bring the many body processes into project cohesion so that they can work for the benefit of the entire body. Yoga conveys a comprehensive message to humanity. It's a message for the human body, mind, and spirit (Tran et al. 2001).

Heart rate is impacted by physical, emotional, and cognitive activity in healthy adults, and HRV refers to physiological oscillations that cause varying beat-to-beat fluctuations in HR. HR and HRV are two of the most sensitive and accessible measures of vagal activity and autonomic control. The body's reaction to fear is anxiety. It's important for self-preservation since the fear of the repercussions keeps us from taking unwarranted risks. The fear response becomes out of proportion to the actual risk, resulting in anxiety as an illness. Anxiety disorders are characterized by an overabundance of negative emotions such as fear, anxiety, uneasiness, and tension, which arise spontaneously despite best efforts to

avoid or stave them off. Anxiety triggers physical and mental responses in the body. Anxiety can cause the sympathetic nervous system to overstimulate. Physical symptoms include racing heart, perspiration, and shaking, as well as psychological symptoms including restlessness, sleeplessness, and problems concentrating (Chen et al. 2009).

METHODOLOGY

The purpose of the study was to investigate the effect of changes observed on heart rate and anxiety among working women due to yogic asanas. To facilitate the study, thirty women working at different sectors in Tirupattur district were selected as subjects at random and their ages between 30 to 45 years. The subjects were divided into two equal groups. At the end of the sixth weeks of the training post-tests were taken. The significant differences between the means of experimental group and control group for the pre-test and post-test scores were determined by paired 't' ratio. The level of significance was fixed at 0.05 level of confidence for the degree of freedom 14.

RESULTS

TABLE I
DESCRIPTIVE ANALYSIS OF PRE TEST AND POST TEST MEANS OF EXPERIMENTAL
AND CONTROL GROUP ON SELECTED VARIABLES

S.No	Variables	Pre Test Mean	Post Test Mean
1	Heart Rate	Exp:78.86	Exp:73.66
		Con:79.06	Con:78.93
2	Anxiety	Exp:23.06	Exp:20.60
		Con:23.33	Con:22.53

TABLE II
COMPUTATION OF 't' RATIO BETWEEN THE PRE TEST AND POST TEST
MEANS OF HEART RATE OF EXPERIMENTAL
AND CONTROL GROUPS

Variables	Group	Mean diff	SD	σ DM	't' ratio
Heart Rate	Exp	5.20	1.97	0.50	11.21*
	Con	0.13	1.92	0.49	0.29

*Significant at 0.05 level

An examination of table II indicates that the obtained 't' ratio was 11.21 on heart rate of experimental group was found to be greater than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be significant. The results of this study showed that 6 weeks practice of yogic exercises produced a significant improvement in heart

rate. The obtained 't' ratio was 0.29 on heart rate of control group were found to be lesser than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be not significant. The mean scores of heart rate of experimental and control group were shown graphically in figure I.

FIGURE I
BAR DIAGRAM SHOWING THE PRE MEAN AND POST MEAN OF HEART RATE EXPERIMENTAL AND
CONTROL GROUP

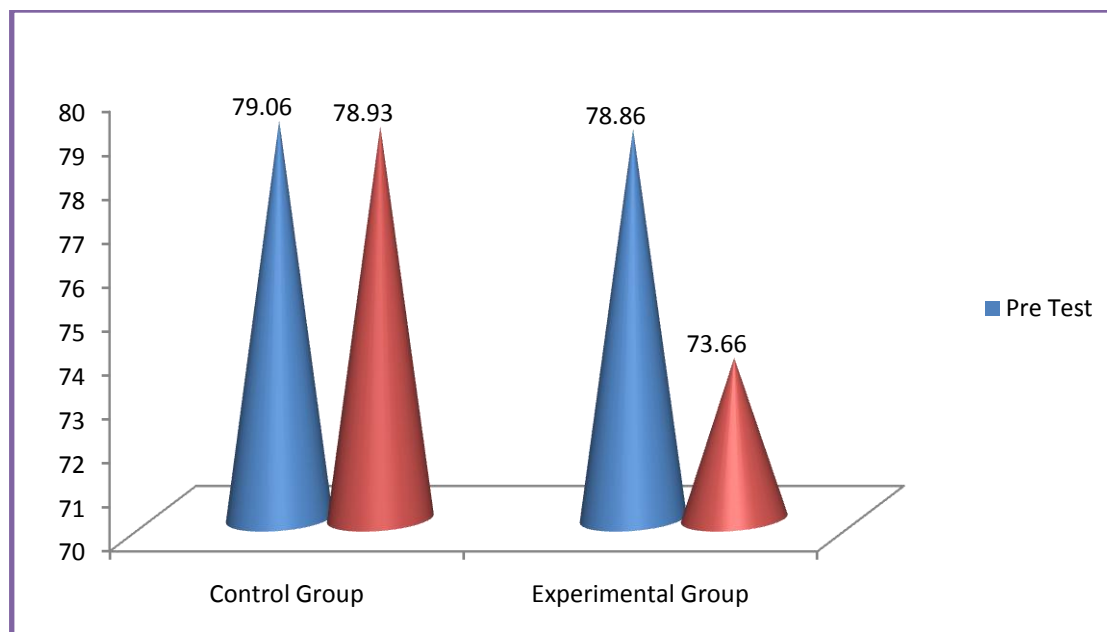


TABLE III
COMPUTATION OF 't' RATIO BETWEEN THE PRE TEST AND POST TEST
MEANS OF ANXIETY OF EXPERIMENTAL
AND CONTROL GROUPS

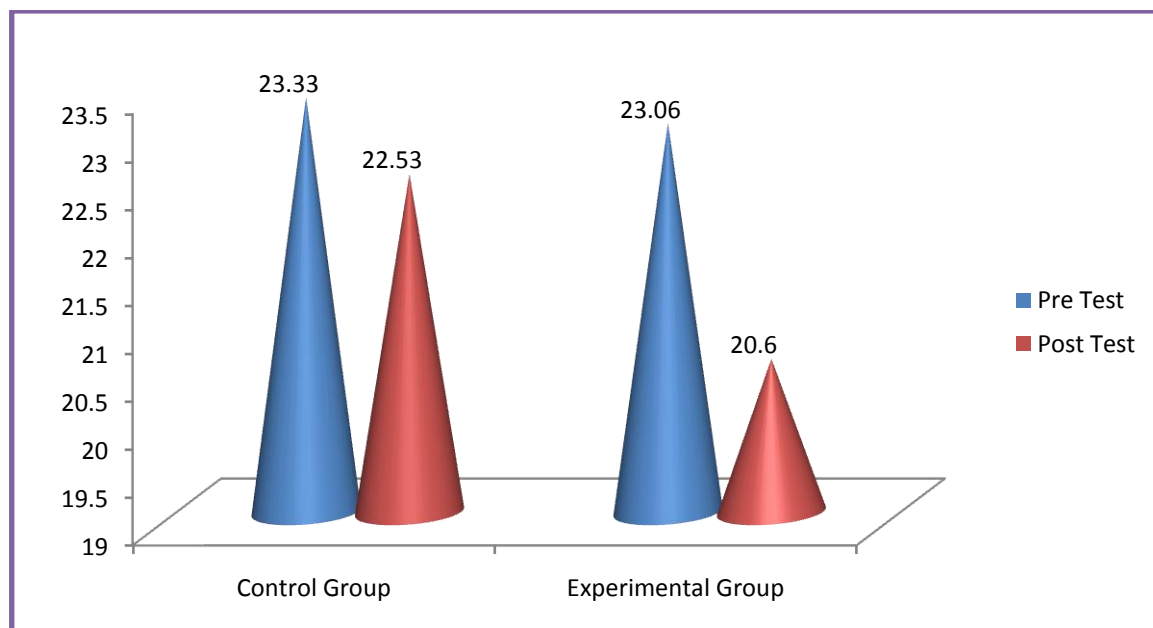
Variables	Groups	Mean diff	SD	σ DM	't' ratio
Anxiety	Exp	2.46	1.71	0.44	5.73*
	Con	0.80	1.56	0.44	1.98

*Significant at 0.05 level

An examination of table III indicates that the obtained 't' ratio was 5.73 on anxiety of experimental group was found to be greater than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be significant. The results of this study showed that 6 weeks practice of yogic exercises produced a significant improvement in anxiety.

The obtained 't' ratio was 1.98 on anxiety of control group were found to be lesser than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be not significant. The mean scores of anxiety of experimental and control group were shown graphically in figure II.

FIGURE II
BAR DIAGRAM SHOWING THE PRE MEAN AND POST MEAN OF ANXIETY OF EXPERIMENTAL AND
CONTROL GROUP



CONCLUSION

- Heart rate and anxiety of experimental group showed significant difference when compared to control group.

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