

The International Journal of Analytical and Experimental Modal analysis

An UGC-CARE Approved Group - A Journal

An ISO : 7021 - 2008 Certified Journal

ISSN NO: 0886-9367 / web : <http://ijaema.com> / e-mail: submitijaema@gmail.com



Certificate of Publication

This is to certify that the paper entitled

Certificate Id: IJAEMA/2823

**“EFFECT OF AEROBIC DANCE TRAINING ON RESTING PULSE RATE
AMONG COLLEGE WOMEN”**

Authored by :

Dr. S. R. V. RAVINDRAN

From

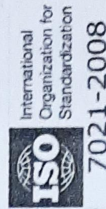
Sourashtra College, Madurai, Tamilnadu, India.

Has been published in

IJAEMA JOURNAL, VOLUME XI, ISSUE XI, NOVEMBER- 2019

Michal A. Olszewski Editor-In-Chief

IJAEMA JOURNAL



<http://ijaema.com/>

EFFECT OF AEROBIC DANCE TRAINING ON RESTING PULSE RATE AMONG COLLEGE WOMEN

Dr.S.R.V.RAVINDRAN

Director of Physical Education, Sourashtra College, Madurai, Tamilnadu, India.

ABSTRACT

The purpose of the study was to determine the effect of aerobic dance training on resting pulse rate among college women. In order to achieve the purpose of this study the researcher has selected 40 college women from Sourashtra College, Madurai, Tamilnadu, India at random and their age ranged from 18 to 25 years. The subjects were divided into two equal groups. The study was formulated as a true random group design, consisting of a pre-test and post-test. The subjects (n=40) were randomly assigned to two equal groups of twenty each. The groups were assigned as experimental group and control group in an equivalent manner. Experimental group participated the aerobic dance training for a period of twelve weeks and the post-tests were conducted. The significant differences between the means of experimental group and control group for the pre-test and post-test scores were determined by Analysis of co-variance. The level of significance was fixed at 0.05 level of confidence for the degree of freedom 1 and 37. Resting pulse rate of experimental group showed significant difference when compared to control group.

KEYWORDS: Aerobic Dance, Resting Pulse Rate, College Women.

INTRODUCTION

Aerobic dance is a movement form which incorporates various dance forms such as folk, ballet, rock, modern and jazz, and which utilizes the same basic training programme. These principles include the use of a large muscle mass, and intensity and duration sufficient to stress the cardiovascular and respiratory system. Aerobic dance is choreographed in such a way that it can be done at three intensities (low, medium, high), giving the individual the opportunity to perform as vigorously as moderately as desired. The low intensity aerobic dance is designed to be equivalent to walking, the medium intensity to jogging, and the high intensity to running. Aerobic dance can be done at different intensities implies that it might be useful in cardiac rehabilitation where it is important to avoid to great strain on the cardiovascular system. Aerobic dance is appealing, particularly to women, because it is performed to music, involves a variety of relatively simple movement forms and is enjoyable. Investigators have found that it requires a moderately high rate of energy expenditure and it appears to have the potential to provide the quality and quantity of exercise necessary for developing and to maintain cardio respiratory fitness and modifying body composition. Aerobic dancing involves a series of specially choreographed routines which are a combination of various dance steps and other whole body movements including running, walking and skipping. Perhaps the appeal in the "dance" title is that it signifies that the session will be accompanied by lively compulsive music and will include pleasing routines. However doing exercises rhythmically to music takes away fitness exercises and is relaxing as well. Music with a strong beat stimulates the desire to move, there is an accompanying physiological and psychological upsurge (Cooper, 1985).

METHODOLOGY

The purpose of the study was to determine the effect of aerobic dance training on resting pulse rate among college women. In order to achieve the purpose of this study the researcher has selected 40 college women from Sourashtra College, Madurai, Tamilnadu, India at random and their age ranged from 18 to 25 years. The subjects were divided into two equal groups. The study was formulated as a true random group design, consisting of a pre-test and post-test. The subjects (n=40) were randomly assigned to two equal groups of twenty each. The groups were assigned as experimental group and control group in an equivalent manner. Experimental group participated the aerobic dance training for a period of twelve weeks and the post-tests were conducted. The significant differences between the means of experimental group and control group for the pre-test and post-test scores were determined by Analysis of co-variance. The level of significance was fixed at 0.05 level of confidence for the degree of freedom 1 and 37.

RESULTS

TABLE - I
COMPUTATION OF MEAN AND ANALYSIS OF COVARIANCE OF RESTING PULSE RATE OF EXPERIMENTAL AND CONTROL GROUP

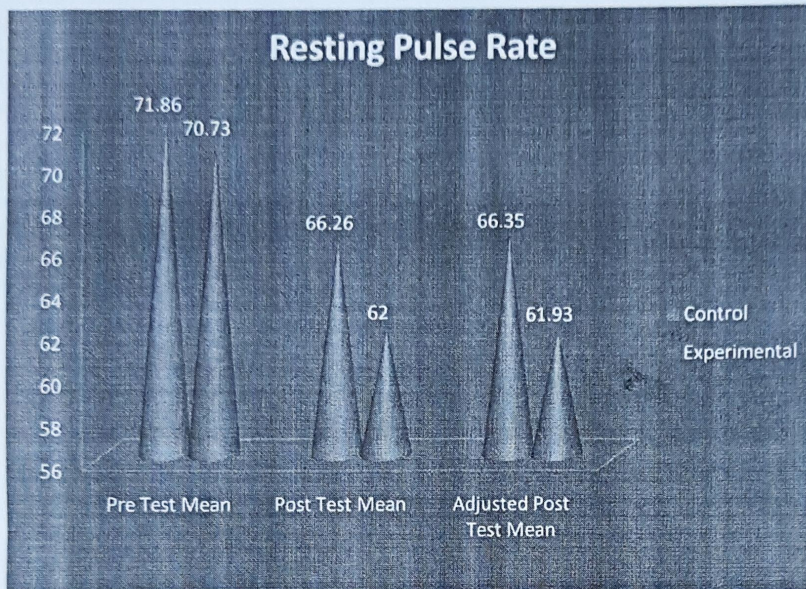
	Control	Experiment	Source of Variance	Sum of Squares	df	Means Squares	F
Pre Test Means	71.86	70.73	BG	10.53	1	10.53	1.00
			WG	396.66	38	10.43	
Post Test Means	66.26	62.00	BG	268.82	1	268.82	37.96*
			WG	269.33	38	7.08	
Adjusted Means	66.35	61.93	BG	272.14	1	272.14	38.38*
			WG	262.65	37	7.09	

Table value for df 1 and 38 was 4.10 * Significant at 0.05 level

Table value for df 1 and 37 was 4.10

The obtained 'F' value for adjusted mean for resting pulse rate were 38.38 was greater than the required value 4.10 at 0.05 level. Since the observed 'F' value on resting pulse rate were highly significant, the adjusted mean differences between experimental and control group was statistically significant. It was concluded that the treatment adopted to this study influenced resting pulse rate. The bar diagram for obtained mean on resting pulse rate for experiment group and control group are postulated in the figure I

FIGURE - I
BAR DIAGRAM SHOWING THE PRE MEAN, POST MEAN AND ADJUSTED MEAN
OF RESTING PULSE RATE



CONCLUSION

1. Resting pulse rate of experimental group showed significant difference when compared to control group.

REFERENCES

1. Aram, V. Chobanian. (2003). The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure, *JAMA*. 289. 19.
2. Carlene, M.M, (2004) *Blood Pressure and Stroke*. Stroke, 35:1024.
3. Cooper, K.H. (1985). *Aerobics Program For Total Well-Being: Exercise, Diet, And Emotional Balance*. New York: Bantam Books.
4. Cornelissen V. A. & N. A. Smart (2013). Exercise training for blood pressure: a systematic review and meta-analysis, *Journal of the American Heart Association*, 2, 1.
5. Cowley, A. W. (1992). *Long-term control of arterial blood pressure*. *Physiological Reviews*, 72, 231-300.

6. Lawrence J. Appel & William B. Stason. (1993). *Ambulatory Blood Pressure Monitoring and Blood Pressure Self-Measurement in the Diagnosis and Management of Hypertension*. 118, 11, 867-882.
7. Mark Willmot. (2004). High Blood Pressure in Acute Stroke and Subsequent Outcome. *Hypertension*. 43:18.
8. Parveen, Rashid. (2003). Blood Pressure Reduction and Secondary Prevention of Stroke and Other Vascular Events. *Stroke*. 34:2741-2748.
9. Reiner, M. C. Niermann, D. Jekauc, and A. Woll, (2013). Long-term health benefits of physical activity—a systematic review of longitudinal studies, *BMC Public Health*, 13, 1, 813, 1–9.
10. Seamus P. Whelton (2001). Effect of Aerobic Exercise on Blood Pressure. *Annals of internal medicine*. 136, 493-503.
11. Ueshima, K.K. Ishikawa-Takata, T. Yorifuji et al., (2010). Physical activity and mortality risk in the Japanese elderly. A cohort study. *American Journal of Preventive Medicine*, 38, 4, 410–418.