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Dr. Vinodkumar K
Assistant Professor, NSS Training College, Pandalam, Kerala, India

Corresponding Author:
Dr. Vinodkumar K
Assistant Professor, NSS Training College, Pandalam, Kerala, India

Aerobic dance as a means for controlling the body composition of teacher trainees

Dr. Vinodkumar K

Abstract
The purpose of the study is to make aware of the changes in the body composition of teacher trainees due to involvement in aerobic dance. Total number of eighty teacher trainees from Kerala University College of Teacher Education were selected as subjects for this study. The subjects were randomly divided into experimental and control groups of forty each. A pre-test was conducted for both the groups, and the experimental group underwent a training programme of aerobic dance. The control group did not involve in any type of training. A twelve week training programme of aerobic dance was given to the experimental group. After the training programme, a post test was conducted for both groups. The statistics used to analyse the data were mean, standard deviation and t-test. The result shows a significant reduction in the body composition of teacher trainees due to the training programme of aerobic dance.

Keywords: Aerobic dance, body composition

Introduction
Health and fitness of a person can be maintained through involving in regular exercises. Aerobic dance is one of the means for developing physical fitness. Aerobic exercise is an activity that results in increased heart rate for an extended period of time (Christmas and Andersen 2000) [1]. Aerobic exercise involves repetitive motions and uses large muscle groups, which increase core body temperature. Examples of aerobic exercise are walking, dancing, swimming and cycling (McDermott and Mernitz 2006) [4]. Aerobic training can help maintain and improve various aspects of cardiovascular function (Mazzeo *et al*. 1998) [3].
Dance can be learned and enjoyed by all ages. Most dances are performed with musical accompaniment. Daily exercise will also enhance one's mental well-being and promote healthy muscular skeletal function throughout life. It is the responsibility of every country to promote physical fitness of its citizens because physical fitness is the basic requirement for most of the tasks to be undertaken by an individual in his daily life (Uppal, 1992) [5].
Body fat has an important role in maintaining health and fitness. This study aimed to find out how the aerobic dance make effect on body composition of teacher trainees as they are expected to being fit to engage in the teaching learning process without fatigue.

Objectives of the Study
The objectives of this study is
i) To find out the effect of aerobic dance on the body composition of teacher trainees.

Delimitations
i) The study was delimited to the female teacher trainees between 20 to 25 years of age from the Kerala University College of Teacher Education.
ii) The study was further delimited to body composition.

Limitations
i) The life style, habits, heredity and nutritional intake and other personal behaviour styles were beyond the control of the investigator were considered as the limitations of the study.
ii) Any form of motivation is not given to subjects is considered as a limitation of the study.

Hypothesis

It is hypothesized that there would be significant improvement in the body composition of teacher trainees through participating in the training programme of aerobic dance.

Significance of the Study

i. The findings of the study will help the people to know the effect of aerobic dance on body composition.
ii. The outcome of the study will probably make an impact on the public to follow aerobic dance to reduce their body fat.
iii. The findings of this study may also enable students of schools and colleges to be involved in aerobic dance to maintain health and fitness along with their academic pursuits.

Procedure

Selection of Subjects

80 female teacher trainees from Kerala University College of Teacher Education were selected as subjects for this study. The average age of the subjects was 23 years.

Design of the Study

The subjects were randomly divided into two equal groups as 'A' and 'B'. A pre-test was conducted for both groups for the selected variable. After that the training programme was given to the experimental group 'A', and 'B' was the control group. The experimental group 'A' had undergone the training programme of aerobic dance, thrice a week (ie, on Mondays, Wednesdays and Fridays) for 12 weeks and group "B" did not involve in any type of training programme. After twelve weeks of training as per the schedule, a post-test was conducted for the same variable to both groups.

Analysis of data and discussion of findings

The t-test was employed to analyse the significant difference between pre-test and post-test on the selected variables. The level of significance chosen was 0.05.

Table 1: The Significance of Differences between the Pre-Test and Post-Test Means of Body Composition of the Aerobic Dance and Control Groups

Groups	Means		MD	SD	SE	't' value
	Pre-test	Post-test				
Aerobic dance group (N=40)	27.56	26.16	1.40	0.60	0.095	14.625*
Control group (N=40)	27.54	27.55	0.01	0.05	0.007	1.992

* Significant at 0.05 level

't' value required at 0.05 level = 2.03 (df 39)

The statistical results shown in table 1 indicate that the post-test mean (26.16) is less than the pre-test mean (27.56) of the aerobic dance group. In the case of control group the post-test mean (27.55) and the pre-test mean (27.54) do not show any significant difference. The 't' value (14.625) of the aerobic dance group and 't' value (1.992) of the control group derived from 't' test proves highly significant for the aerobic dance group and insignificant for the control group, as compared to the tabulated 't' value (2.03), at 39 degrees of freedom at 0.05 level of significance. Hence, the results shown by the aerobic dance group for body composition are statistically found significant. The results are also diagrammatically presented in figure.

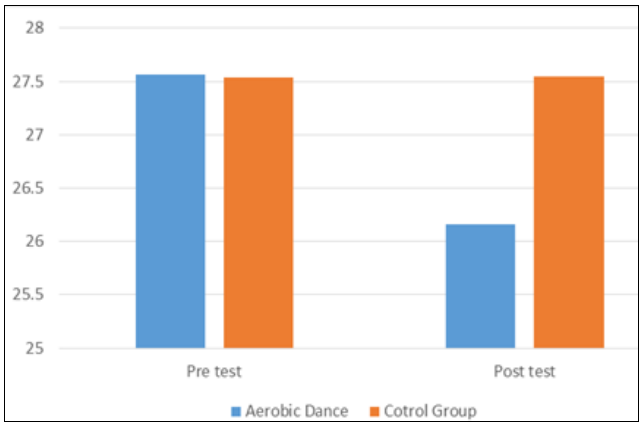

Fig 1: Aerobic dance group for body composition are statistically found significant

Conclusion

Through analysis and observation of the results it is found that the body composition of teacher trainees were significantly decreased due to training programme of aerobic dance.

References

1. Christmas C, Andersen RA. Exercise and older patients: guidelines for the clinician. Journal of American Geriatric Society. 2000;48:318-324.
2. Francis Lorna. Aerobic Dance for Health and Fitness. USA: Wm. C. Brown Communications, Inc. 1993.
3. Mazzeo RS, Cavanagh P, Evans WJ, Fiatarone M, Hagberg J, McAuley E, *et al*. Exercise and physical activity for older adults. Medicine and science in sports and exercise. 1998;30;992-1008.
4. McDermott AY, Mernitz H. Exercise and older patients: prescribing guidelines. American Family Physician. 2006;74:437-444.
5. Uppal AK. Physical fitness. New Delhi: Friends publication. 1992.