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Effect of Aerobic Dance Training on Cardio Respiratory Endurance among College level Football Players

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Abstract

The purpose of the study was to investigate the effect of aerobic dance training on cardio respiratory endurance among college level football players. It was hypothesized that there would be significant differences on cardio respiratory endurance due to the effect of aerobic dance training among college level football players. For the present study the 30 male level football players were selected as subjects at random from, Annamalai University, Tamilnadu, India and their ages ranged from 18 to 25 years. For the present study pre test – post test random group design which consists of control group and experimental group was used. The subjects were randomly assigned to two equal groups of eighteen each and named as Group 'A' and Group 'B'. Group 'A' underwent aerobic dance training and Group 'B' underwent no training. Cardio respiratory endurance was assessed by cooper's 12 minute run test. The data was collected before and after twelve weeks of training. The data was analyzed by applying Analysis of Co-Variance (ANCOVA). The level of significance was set at 0.05. The aerobic training had positive impact on cardio respiratory endurance among college level football players.

Keywords: Aerobic Dance, Cardio Respiratory Endurance, Football.

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Introduction

Aerobic dance is used for the growth of cardiovascular suitability. Throughout working out periods, the coaches or instructors use abundant dance steps, jumps, turns, balances and flexing in all transformed strategies and plains in contract with the fitness and abilities of the individual who is exercise, while exciting several portions of the body at the parallel time. This training procedure is used for group workout. In order to exercise to harmony of the identical beat and speed, the tutor must always begin with simple threedimensional rhythmic motions, and then turn them into more complex ones. Aerobic dance is combination of workout and dance activities into practices that are executed with music. Various dance forms are used with ballet, jazz and disco. Aerobic dance programs combine fat burning aerobics with music structure workouts and stretching. There is no jumping around in low -impact aerobic dance .Aerobic dance is safe and useful exercise for the highly fit individual. It can be done in indoors, which makes them year round activities. Anyone with orthopedic complications or who experiences signs such as chest discomfort or shortness of breath should not engage in these activities (David et al. 1990).

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Methodology

The purpose of the study was to investigate the effect of aerobic dance training on cardio respiratory endurance among college level football players. It was hypothesized that there would be significant differences on cardio respiratory endurance due to the effect of aerobic dance training among college level football players. For the present study the 30 male level football players were selected as subjects at random from, Annamalai University, Tamilnadu, India and their ages ranged from 18 to 25 years. For the present study pre test - post test random group design which consists of control group and experimental group was used. The subjects were randomly assigned to two equal groups of eighteen each and named as Group 'A' and Group 'B'. Group 'A' underwent aerobic dance training and Group 'B' underwent no training. Cardio respiratory endurance was assessed by cooper's 12 minute run test. The data was collected before and after twelve weeks of training. The data was analyzed by applying Analysis of Co-Variance (ANCOVA). The level of significance was set at 0.05.

Results

The findings pertaining to analysis of covariance between experimental groups on cardio respiratory endurance among college level football players for pre-post test respectively have been presented in table I.

	Experimental Group	Control Group	Source of Variance	Sum of Squares	df	Mean Square	${f F}$
Pre Test Mean	2140.24	2100.14	BG	0.09	1	0.09	1.06
			WG	2.36	28	0.08	
Post Test Mean	2480.70	2140.00	BG	6.59	1	6.59	124.67*
			WG	1.48	28	0.05	
Adjusted Post Mean	2480.70	2140.00	BG	6.80	1	6.80	163.92*
			WG	1.12	27	0.04	

Table I. ANCOVA between Experimental Groups on Cardio respiratory endurance of College level football players for Pre,Post and Adjusted Test

* Significant at 0.05 level.

Table I revealed that the obtained 'F' value of 163.92 was found to be significant at 0.05 level with df 1, 27 as the tabulated value of 4.21 required to be significant at 0.05 level. The same table indicated that

df: 1/27= 4.21

there was a significant difference in adjusted means of cardio respiratory endurance of college level football players between experimental groups. The graphical representation of data has been presented in figure I.

Figure I. Comparisons of Pre – Test Means Post – Test Means and Adjusted Post – Test Means for Experimental Groups in relation to cardio respiratory endurance



The findings of the present study have strongly indicates that aerobic dance training of twelve weeks have significant effect on cardio respiratory endurance of college level football players. Hence the hypothesis earlier set that aerobic dance training would have been significant effect on cardio respiratory endurance in light of the same the hypothesis was accepted.

Conclusion

On the basis of findings and within the limitations of the study the following conclusions were drawn:

1. The aerobic training had positive impact on cardio respiratory endurance among college level football players.

References

- 1. Alpert, B., Field, T. M., Goldstein, S. & Perry, S. (1990). Aerobics enhances cardiovascular fitness and agility in preschoolers. *Health Psychology*, Vol 9(1), 48-56.
- 2. Cooper, K.H. (1969). *New Aerobics*. New York: Bantam Books, p.30.
- 3. Cooper, K.H. (1985). *Aerobics Program For Total Well-Being: Exercise, Diet, And Emotional Balance.* New York: Bantam Books.

- 4. David, R. H., Betty, M., Werner, W., Hoeger, K. & Colbert, R. (1990). Effect of Low-Impact Aerobic Dance on the Functional Fitness of Elderly Women. *The Gerontologist.* 30 (2): 189-192.
- Kalapotharakos, V.I., Ziogas, G. & Tokmakidis, S.P. (2011). Seasonal aerobic performance variations in elite soccer players. *J Strength Cond Res.* 25(6): 1502-1507.
- Obert, P., Mandigout, M., Vinet, A. & Courteix, D. (2001). Effect of a 13-week aerobic training programme on the maximal power developed during a force-velocity test in prepubertal boys and girls. *International Journal of Sports Medicine*. 22(6):442-6.
- Ravinder, R. M., Viplav, D.S. & Yadaiah, E. (2012). Impact of Aerobic and Anaerobic Training on Blood Lipid Profiles. *Asian Journal of Physical Education and Computer Science in Sports*.7-1. 36-137.