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EFFECT OF CIRCUIT AND AEROBIC TRAINING ON SELF CONFIDENCE AMONG ADOLESCENCE KABADDI PLAYERS

Physical Education

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ABSTRACT

The purpose of the study was to find out the effect of circuit training and aerobic training on self confidence among adolescence kabaddi players. To achieve the purpose of the present study, forty five adolescence kabaddi players from Bharathidasan University, Tamilnadu were selected as subjects at random and their ages ranged from 18 to 25 years. The subjects (N=45) were randomly assigned to three equal groups of fifteen adolescence kabaddi players each. The group I underwent circuit training, group II underwent aerobic training and group III acted as a control group. The two experimental groups were participated the training for a period of twelve weeks and the control group did not participated in any training programme. The Personality Development Index (PDI) developed by Kaliappan(1993) was used to measure Self confidence of kabaddi players. The data collected from the three groups prior to and post experimentation were statistically analyzed by analysis of covariance (ANCOVA). Whenever the adjusted post-test means were found significant, the scheffe's post-hoc test was administer to find out the paired means difference. To test the obtained results on variables, level of significance 0.05 was chosen and considered as sufficient for the study. The result reveals that the circuit training and aerobic training group produced significant improvement in self confidence.

KEYWORDS

Circuit, Aerobic, Self confidence, Kabaddi.

INTRODUCTION

Circuit training is a method of physical conditioning in which one moves from one exercise to another, usually in a series of different stations or pieces of equipment. Aerobics is a good way to decrease our percentage of body fat and to attain the other metabolic benefits of fitness. Aerobics is also a very good way to develop muscular skeletal fitness while building strength, flexibility, coordination. Aerobics is a progressive physical conditioning programme that stimulates cardio respiratory activity for a time period sufficiently long to produce beneficial changes in the body. To do any work we need energy and even while at rest some physiological functions have to be carried within our body and for that purpose some calories of energy will be burnt. As the intensity and duration of work increases the demand for the fuel in the working muscles also increases. The organs which supply the needful should cope with the demand. The origin of the game dates back to pre-historic times. The game was played all over the country in various forms. It was known as HU-TU –TU in Western India, HA-DO-DO in Eastern Indian and Bangladesh, Chedugudu in Southern India, Kaunbada and various other names in Northern India. Kabaddi may have been derived from the terms 'kaunbada' which means a challenge to the opponent. Some of the major forms of the game are Amar, Gemini, Sanjeevini and game was played as per the situation with Flexible rules. All these forms were synthesized to the present form of Kabaddi.

METHODOLOGY

The purpose of the study was to find out the circuit training and aerobic training on self confidence among adolescence kabaddi players. To achieve the purpose of the present study, forty five adolescence kabaddi players from Bharathidasan University, Tamilnadu were selected as subjects at random and their ages ranged from 18 to 25 years. The subjects were divided into three equal groups of fifteen adolescence kabaddi players each. The study was formulated as a true random group design, consisting of a pre-test and post-test. The subjects (N=45) were randomly assigned to three equal groups of fifteen adolescence kabaddi players each. The groups were assigned as circuit training, aerobic training and control group in an equivalent manner. The group I underwent circuit training, group II underwent aerobic training and group III acted as a control group. The two experimental groups were participated the training for a period of twelve weeks to find out the training packages and the control group did not participate in any training programme. The variable to be used in the present study was collected from all subjects before they have to treat with the respective treatment. It was assumed as pre-test on all variable used in the present study. This test was assumed as post-test. The difference between means of the three groups in the pre-test had to be taken into account during the analysis of the post-test difference between the means. This was achieved by the application of the analysis of covariance,(ANCOVA) Where the final means were adjusted for difference in the initial means, and the adjusted means were tested for significance .Whenever to adjusted posr-test means were found significant, the scheffe's post-hoc test was administer to find out the paired means difference. To test the obtained results on variables, level of significance 0.05 was chosen and considered as sufficient for the study.

ANALYSIS AND INTERPRETATION

TABLE-I Computation of Analysis of Covariance of Mean of Circuit Training, Aerobic Training and Control Groups on Self Confidence (CTG, ATG & CG)

	CTG	ATG	CG	Source of Variance	Sum of Squares	Df	Means Squares	F-ratio
Pre-Test Means	26.20	27.60	27.40	BG	17.200	2	8.600	1.57
				WG	229.600	42	5.467	
Post-Test Means	31.2	30.46	27.13	BG	140.933	2	70.467	10.88 *
				WG	271.867	42	6.473	
Adjusted Post-Test Means	31.76	30.11	26.91	BG	176.951	2	88.475	20.92 *
				WG	173.347	41	4.228	

Table I reveals that the indicated that the obtained 'F'-ratio for the pre-test means among the groups on self confidence were 26.30 for experimental group – I, 27.60 for experimental group – II and 27.40 for control group. The obtained 'F'-ratio 1.57 was lesser than the table 'F'-ratio 3.21. Hence the pre-test mean 'F'-ratio was insignificant at 0.05 level of confidence for the degree of freedom 2 and 42. The post-test means were 31.20 for experimental group – I, 30.46 for experimental group – II and 27.13 for control group. The obtained 'F'-ratio 10.88 was higher than the table 'F'-ratio 3.21. Hence the post-test mean 'F'-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 42. The adjusted post-test means were 31.76 for experimental group – I, 30.11 experimental group – II and 26.91 for control group. The obtained 'F'-ratio 20.92 was higher than the table 'F'-ratio 3.22. Hence the adjusted post-test mean 'F'-ratio was significant at 0.05 level of confidence for the degree of freedom 2 and 41. It shows a significant mean difference among circuit training group, aerobic training group and control group.

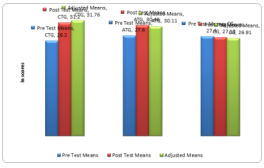

FIGURE-I: Adjusted Post Test Differences of the Circuit Training,

Aerobic Training and Control Groups on Self Confidence (CTG, ATG & CG)

TABLE-II The Scheffe's Test for the Differences between the Adjusted Post Test Means on Self Confidence

Adjusted Post-test means			Mean Difference	Required CI
Circuit Training	Aerobic Training	Control Group		
31.76	30.11	---	1.65	1.90
31.76	---	26.91	4.85*	
---	30.11	26.91	3.20*	

Significant at 0.05 level of confidence

Table II shows the post hoc analysis obtained on adjusted post test means. The mean difference required for the confidential interval to be significant was 1.90. It was observed that both the circuit training group an aerobic training group had significantly improved self confidence than the control group.

DISCUSSION ON FINDINGS

he reviews showed that circuit training and aerobic training had beneficial effect of Self confidence of kabaddi players. Even though several short comings in research on this topic need to be addressed. The similar studies of Alpert (1990), Beachle T.R (1944), cooper K.H.(1964) cooper K.H (1985) Dick F.W(1980) Kalapotharakos (2011), Kin I.A(2001) supported to the result of this study.

CONCLUSION

1. The circuit training group produced significant improvement in self confidence.
2. The aerobic training group produced significant improvement in self confidence.
3. In the control group the obtained 'f' value on all the variables were failed to reach the significant level.

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. Baechle, T. R. (1994). *Essential of Strength Training and Conditioning.* Champaign Illinois: Human Kinetics Publishers.
3. Cooper, K.H. (1969). *New Aerobics.* New York: Bantam Books, p.30.
4. Cooper, K.H. (1985). *Aerobics Program For Total Well-Being: Exercise, Diet , And Emotional Balance.* New York: Bantam Books.
5. Dick, F. W. (1980). *Sporting Training Principles.* Great Britain: University Press Cambridge.
6. 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.

Kin, I.A., Koşar, S,N. & Korkusuz, F. (2001). Effects of step aerobics and aerobic dancing on serum lipids and lipoproteins. *J Sports Med Phys Fitness. 41*(3):380-5.