

EFFECT OF AEROBIC EXERCISES ON SELECTED PHYSICAL FITNESS VARIABLES AMONG WOMEN KHO KHO PLAYERS

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ABSTRACT

The purpose of the study was to find out the effect of aerobic exercises on selected physical fitness variables among women kho kho players. It was hypothesized that there would be significant differences on selected physical fitness variables due to the effect of aerobic exercises among women kho kho players. For the present study the 30 kho kho players from Sri Sarada College of Physical Education for Women, Salem, Tamilnadu were selected at random and their age ranged from 18 to 21 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 fifteen each and named as Group 'I' and Group 'II'. Group 'I' underwent aerobic exercises and Group 'II' has not undergone any training. Explosive power was assessed by standing broad jump and endurance was assessed by 1 mile run. The data was collected before and after twelve weeks of training. The data was analyzed by applying paired 't' test. The level of significance was set at 0.05. It was observed that there was significant improvement in the explosive strength of the experimental group owing to aerobic exercises.

KEYWORDS: Aerobic Exercises, Kho Kho Players, Physical Fitness.

INTRODUCTION

Aerobic exercises is a moderate force exercise that stretches out over a specific timeframe and utilizes oxygen in this cycle. Indeed, in the current occasions, completing heart stimulating exercise has become the most happening exercise pattern among the young. In addition to the fact that performing is high-impact practice fascinating, yet additionally is advantageous for wellbeing. There are various kinds of vigorous exercise like wellness strolling, running, swimming, kickboxing, wellness strolling, inline skating, bicycling and so on. Peruse further to think about the unmistakable kinds of high-impact work out. Aerobic exercises and wellness can be stood out from anaerobic exercise, of which quality preparing and weight preparing are the most remarkable models. The two sorts of activity vary by the term and power of solid withdrawals required, just as by how vitality is produced inside the muscle (Andreasi et al.2010).

METHODOLOGY

The purpose of the study was to find out the effect of aerobic exercises on selected physical fitness variables among women kho kho players. It was hypothesized that there would be significant differences on selected physical fitness variables due to the effect of aerobic exercises among women kho kho players. For the present study the 30 kho kho players from Sri Sarada College of Physical Education for Women, Salem, Tamilnadu were selected at random

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RESULTS

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

S.No	Variables	Pre Test Mean	Post Test Mean
1	Explosive Power	Exp:1.38	Exp:1.45
		Con:1.50	Con:1.49
2	Endurance	Exp:11.73	Exp:10.39
		Con:11.92	Con:11.73

The primary objective of the paired ‘t’ ratio is to describe the differences between the pre-test and post-test scores.

TABLE - II
COMPUTATION OF ‘t’ RATIO BETWEEN THE PRE TEST AND POST TEST MEANS OF EXPLOSIVE POWER OF EXPERIMENTAL AND CONTROL GROUP

S. No	Variables	Mean diff	SD	σ DM	‘t’ ratio
1	Explosive Power	Exp:0.07	Exp:0.11	Exp:0.03	2.22*
		Con:0.01	Con:0.10	Con:0.03	0.19

*Significant at 0.05 level

An examination of table II indicates that the obtained ‘t’ ratio for explosive power of experimental group was 2.22. The obtained ‘t’ ratio on explosive power 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 obtained ‘t’ ratio for explosive power of control group was 0.19. The obtained ‘t’ ratio on explosive power was 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 muscular endurance of experimental group and control group were shown graphically in figure I.

FIGURE - I
BAR DIAGRAM SHOWING THE PRE MEAN AND POST MEAN OF EXPLOSIVE
POWER OF EXPERIMENTAL GROUP
AND CONTROL GROUP

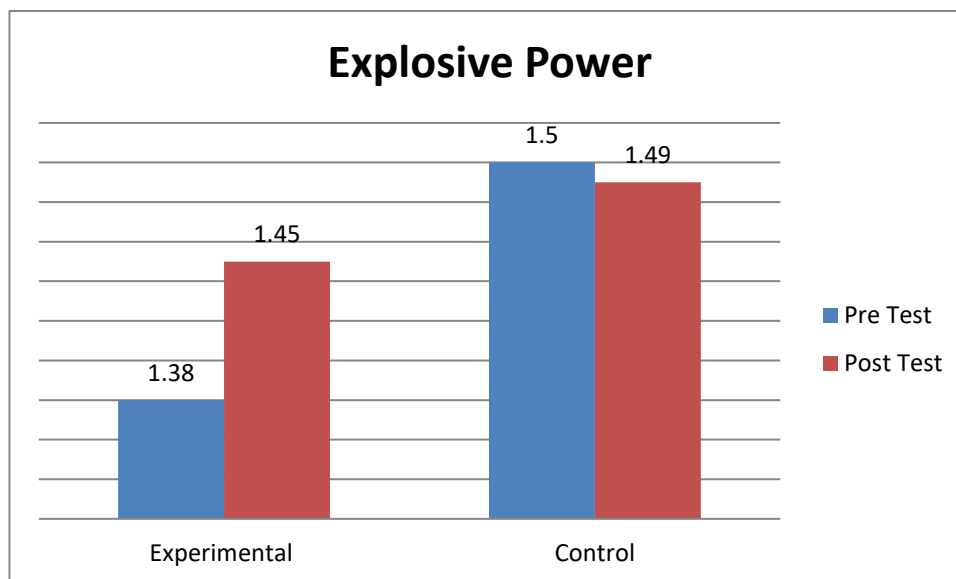


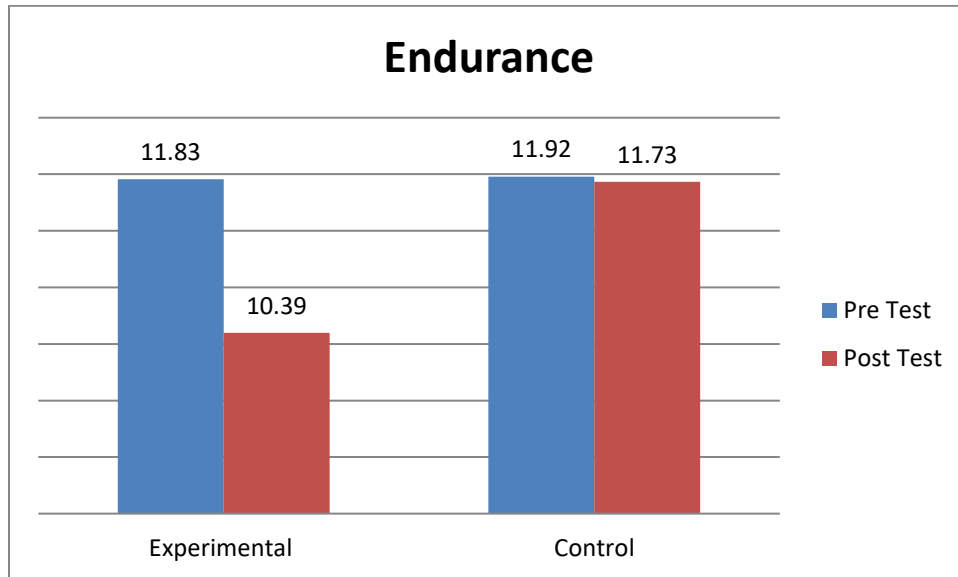
TABLE - III
COMPUTATION OF 't' RATIO BETWEEN THE PRE TEST AND POST TEST MEANS
OF ENDURANCE OF EXPERIMENTAL
AND CONTROL GROUP

S. No	Variables	Mean diff	SD	σ DM	't' ratio
1	Endurance	Exp:5.43	Exp:0.77	Exp:0.20	27.37*
		Con:0.19	Con:1.21	Con:0.31	0.61

*Significant at 0.05 level

An examination of table III indicates that the obtained 't' ratio for endurance of experimental group was 27.37. The obtained 't' ratio on endurance 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 obtained 't' ratio for endurance of control group was 0.61. The obtained 't' ratio on endurance was 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 endurance of experimental group and control group were shown graphically in figure II.

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



CONCLUSIONS

1. It was observed that there was significant improvement in the explosive strength of the experimental group owing to aerobic exercises.
2. It was observed that there was significant improvement in the endurance of the experimental group owing to aerobic exercises.

REFERENCES

1. Andreasi,V., Michelin, E., Rinaldi, A,E and Burini, R, C.(2010). Physical fitness and assosiations with anthropometric measurements in 7to 15-years old school children. journal De Pediatria,v ol,86(6):PP.497-502.
2. Anne, L. Rothstein. (1985). *Research Design and Statistics for Physical Education* (Englewood Cliffs, N.J: Prentice Hall, Inc.).
3. Barrow, H., M. and McGee, R. (1971). *A Practical Approach to Measurement in Physical Education*, Philadelphia: Lea & Febiger.
4. Gillette ,p,a., and Elseman,P,A.(2003). The effect of intensity controlled aerobic dance exercise aerobic on capacity of middle aged, over weight women.www. google.com.
5. Lundberg, TR, Fernandez-Gonzalo, R, Gustafsson, T & Tesch, PA. (2012). Aerobic Exercise Alters Skeletal Muscle Molecular Responses to Resistance Exercise. Med Sci Sports Exerc. 2012 Mar 28.