



Effect of Circuit Training on Strength and Endurance among Kabaddi Players

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Abstract

The aim of this study was to see how circuit training affected the strength and stamina of kabaddi players. Thirty male kabaddi players from Shrimad Andavar College in Tiruchirappalli were chosen at random as subjects for the current analysis, and their ages ranged from 18 to 25 years. The participants were chosen at random and divided into two equal classes. The experimental (Circuit Training) and control groups were developed (CG). In addition to their daily activities, the study group did circuit training for three days a week for six weeks. No experimental training was provided to the control group. Prior to the class, all groups underwent a pre-test to determine physical variables using a standardized test. Following the experimental phase, a post-test was carried out. The level of significance was measured at the 0.05 level using a dependent 't' test. It was concluded that there was significant improvement on strength and endurance due to the effects of circuit training among male kabaddi players.

Keywords: Circuit Training, Physical, Kabaddi.

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Introduction

Circuit coaching is an efficient or difficult shape concerning conditioning. It works well because of growing strength, patience (both cardio and anaerobic), flexibility and coordination. Its versatility has made such popular including the universal Public right via according to pick athletes. Circuit education is a realistic method entailing partial preliminary planning, however beyond that, that desires co-ordination. Athletes locate such motivating considering that such makes conditioning exciting then difficult via opposition towards team mates. Circuit training is a non-stop collection concerning workout routines attempting according to enhance namely much aspects on physical health as possible specially endurance (Antonia, et al. 2013).

Methodology

The aim of this study was to see how circuit training affected the strength and stamina of kabaddi players. Thirty male kabaddi players from Shrimad Andavar College in Tiruchirappalli were chosen at random as subjects for the current analysis, and their ages ranged from 18 to 25 years. The participants were chosen at random and divided into two equal classes. The experimental (Circuit Training) and control groups were developed (CG). In addition to their daily activities, the study group did circuit training for three days a week for six weeks. No experimental training was provided to the control group. Prior to the class, all groups underwent a pre-test to determine physical variables using a standardized test. Following the experimental phase, a post-test was carried out. The level of significance was measured at the 0.05 level using a dependent 't' test.

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Table 1. Variables and test

S.No	Variables	Tests
1	Strength	Dynamometer
2	Endurance	1.5 Mile Run

Results

Table 2. Significance of mean gains & losses between pre and post test scores on selected variables of circuit training group (ctg)

S.No	Variables	Pre-Test Mean	Post-Test Mean	Mean difference	Std. Dev (±)	σ DM	‘t’ Ratio
1	Strength	52.22	56.73	4.51	3.34	0.86	7.88*
2	Endurance	11.41	10.65	0.76	0.47	0.12	16.18*

* Significant at 0.05 level

The obtained ‘t’ ratios for the pre and post test mean difference in the selected variables of power (7.88) and endurance (7.88) are shown in Table II (16.18). As compared to the table value of 2.14 degrees of freedom (1, 14), the obtained ratios were found to be statistically

significant at the 0.05 level of confidence. The mean benefit and losses from pre to post test in physicals, namely power (7.88 p0.05) and endurance (16.18 p0.05), is substantially increased, indicating that the hypothesis is accepted.

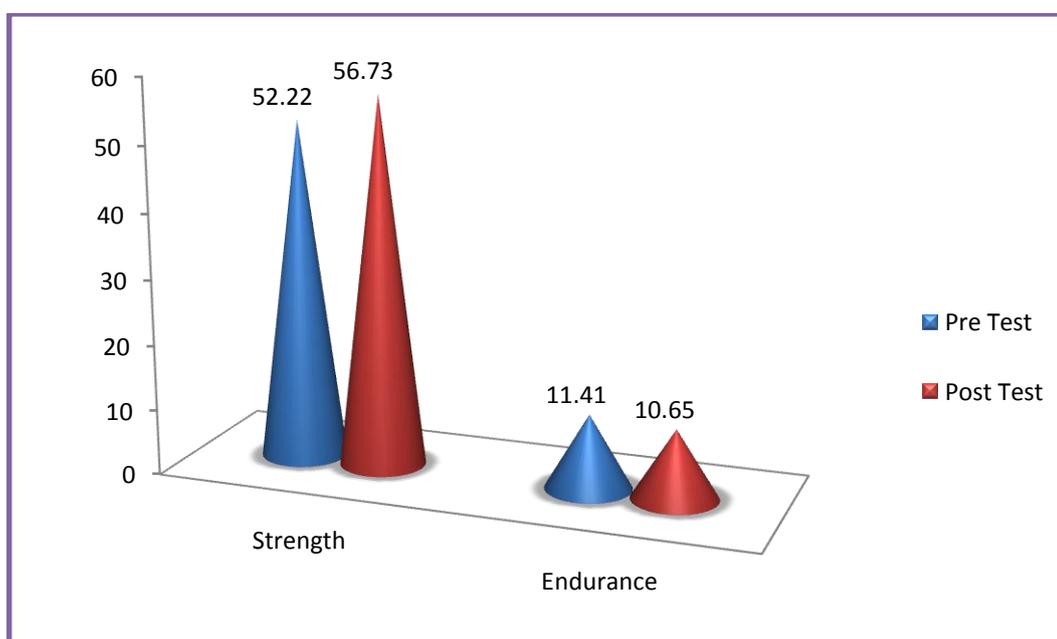


Figure I. Comparisons of pre – test means and post – test means for experimental group in relation to physical variables

Table 3. Significance of mean gains & losses between pre and post test scores on selected variables of control group (cg)

S.No	Variables	Pre-Test Mean	Post-Test Mean	Mean difference	Std. Dev (±)	σ DM	't' Ratio
1	Strength	52.10	52.18	0.08	3.28	0.84	0.78
2	Endurance	11.29	11.25	0.04	0.35	0.09	0.22

* Significant at 0.05 level

The obtained 't' ratios for the pre and post test mean difference in the selected variables of power (0.78) and endurance (0.78) are shown in Table III (0.22). As

compared to the table value of 2.14 degrees of freedom (1, 14), the obtained ratios were considered to be statistically insignificant at the 0.05 level of confidence.

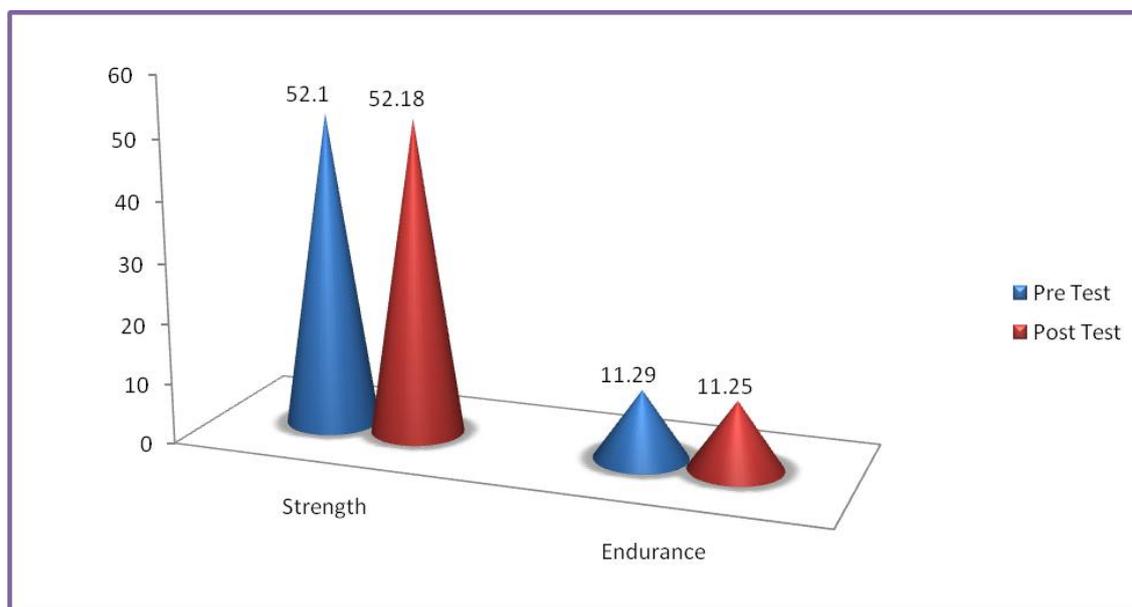


Figure II. Comparisons of pre – test means and post – test means for control group in relation to physical variables

Discussions on Findings

In the case of physical variables such as strength and endurance, the experimental group's pre- and post-test findings were substantially higher than the control group's. This is because kabaddi players can experience a sudden increase in physical variables as a result of routine circuit training. The results of this study show that six weeks of circuit training has a major impact on selected physical variables such as kabaddi players' strength and stamina. As a result, the hypothesis previously established that a circuit training program would have a major impact on selected physical variables was acknowledged.

Conclusion

1. The circuit training had positive impact on strength and endurance among kabaddi players.

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