



EFFECT OF CIRCUIT TRAINING ON SELECTED MOTOR FITNESS COMPONENTS OF KABADDI PLAYERS

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ABSTRACT

Kabaddi is an old and an Indian cultural sport. Kabaddi tournaments was organised from rural to International level Tournaments. In this modern era Kabaddi has new looks that is Professional Kabaddi Tournament. The main purpose of the present study was to determine the effect of Circuit Training on selected Motor Fitness Components of Kabaddi Players at School Level in Akola City. 40 Kabaddi players of Akola city who had participated in School Level Kabaddi Tournaments were taken as subjects in the age group between 15 to 17 years at random. These subjects randomly divided into two equal groups. Each group consist 20 Kabaddi players. First group named Experimental Group as 'A' Group and second group was named Control Group as 'B' Group. Experimental Group has completed Six Weeks Circuit Training Schedule. In this circuit training schedule chin up, Rope Skipping, Dips, Alternate Toe Touch, Squat and Thrust these

exercise were included. To collect data for this study J.C.R. test were administered on two equal groups of Kabaddi players. For comparison of selected motor fitness level of Kabaddi Players't' test was used. The level of significance was set at 0.05 levels. On the basis statistical analysis of pre tests and post tests data of both groups, it is concluded that Circuit Training Schedule of six weeks helps to develop some motor fitness components of Kabaddi players.

KEYWORDS- Circuit Training, Motor Fitness Components, Kabaddi Players.

INTRODUCTION :

Kabaddi is an old and an Indian cultural sport. Kabaddi has a great history. Kabaddi was played in Mahabharata time. Kabaddi is known as various names in different territories. Kabaddi sport did not require any special equipments and facilities. This game is played on Red Soil and it is an outdoor sports. Today Kabaddi is played in all over India as well as worldwide. Kabaddi tournaments was organised from rural to International level Tournaments. In this modern era Kabaddi has new looks that is Professional Kabaddi Tournament. Now Kabaddi is required so many facilities like a Indoor Stadium, Kabaddi Mattress and Shoes, etc.

PURPOSE OF THE STUDY

The main purpose of the present study was to determine the "Effect of Circuit Training on selected Motor Fitness Components of Kabaddi Players at School Level in Akola City"

HYPOTHESIS

H₀: There is no difference may be in means of pre test and post test of Experimental Group after completion of six weeks Circuit Training Schedule.

H₁: There is significant difference may be in means of pre test and post test of Experimental Group after completion of six weeks Circuit Training Schedule.



METHODOLOGY - SOURCE OF DATA

For the present research study, 40 Kabaddi players of Akola city who had participated in School Level Kabaddi Tournaments were taken as subjects in the age group between 15 to 17 years at random. These subjects randomly divided into two equal groups. Each group consist 20 Kabaddi players. First group named Experimental Group as 'A' Group and second group was named Control Group as 'B' Group.

CIRCUIT TRAINING

Experimental Group has completed Six Weeks Circuit Training Schedule. In this circuit training schedule chin up, Rope Skipping, Dips, Alternate Toe Touch, Squat and Thrust these exercise were included.

COLLECTION OF DATA

To collect data for this study J.C.R. test were administered on two equal groups of Kabaddi players. Selected tests were as Explosive leg strength is measured by taking standing broad jump is recorded in meter, muscular endurance and shoulder strength is measured by taking chin-ups in total number of complete chin-ups and agility, speed and cardio-vascular endurance is measured by taking 50 Yard shuttle run in seconds.

SCHEDULE OF J.C.R. TEST

First or Pre JCR Test was conducted before the starting of circuit training schedule. Second JCR Test was conducted after completion first and second weeks of circuit training schedule. Third JCR Test was conducted after third and fourth weeks of circuit training schedule. Fourth or Post JCR Test was conducted after fifth and sixth weeks of circuit training schedule.

STATISTICAL ANALYSIS

For comparison of selected motor fitness level of Kabaddi Players 't' test was used. The level of significance was set at 0.05 levels.

Table No. 1: First or Pre Test of 'A' and 'B' Group

J.C.R. Test	Group	Mean	S.D.	Mean Difference	S.E.
Standing Broad Jump	A	1.556	0.028	0.001	0.006
	B	1.557	0.048		0.010
Chin-ups	A	4.10	0.718	0.10	0.160
	B	4.20	0.695		0.155
50 Yard Shuttle Run	A	11.603	0.123	0.003	0.027
	B	11.606	0.119		0.026

Above Table No. 1 shows the Statistical Analysis of homogeneous groups.

Table No. 2: Pre and Post Test of 'A' Group

J.C.R. Test	Test	Mean	S.D.	Mean Difference	S.E.	't' ratio	P value
Standing Broad Jump	Pre Test	1.556	0.028	0.124	0.006	13.250	0.00001
	Post Test	1.680	0.033		0.007		
Chin-ups	Pre Test	4.10	0.718	2.70	0.160	15.068	0.00001
	Post Test	6.80	0.695		0.155		
50 Yard Shuttle Run	Pre Test	11.603	0.123	-0.528	0.027	15.023	0.00001
	Post Test	11.075	0.189		0.042		
Tabulated 't' ratio=1.729		Degree of freedom=19		Significant Level= 0.05			

Standing Broad Jump: - the above table shows that, Standing Broad Jump means difference between the pre test and post test of experimental group is significant, because the calculated t- value of 13.250 is more than the

tabulated t- value of 1.729 at 0.05 level of significance of 19 degree freedom.

Chin-ups:- the above table shows that, Chi-ups mean difference between the pre test and post test of experimental group is significant, because the calculated t-value of 15.068 is more than the tabulated t- value of 1.729 at 0.05 level of significance of 19 degree freedom.

50 Yard Shuttle Run:- the above table shows that, 50 Yard Shuttle Run mean difference between the pre test and post test of experimental group is significant, because the calculated t-value of 15.023 is more than the tabulated t- value of 1.729 at 0.05 level of significance of 19 degree freedom.

Table No. 3 : Pre and Post Test of 'B' Group

J.C.R. Test	Test	Mean	S.D.	Mean Difference	S.E.	't' ratio	P value
Standing Broad Jump	Pre Test	1.557	0.048	0.007	0.010	0.273	0.393
	Post Test	1.564	0.139		0.031		
Chin-ups	Pre Test	4.20	0.695	0.000	0.155	0.000	0.50
	Post Test	4.20	0.833		0.186		
50 Yard Shuttle Run	Pre Test	11.606	0.119	-0.022	0.026	0.746	0.232
	Post Test	11.584	0.161		0.036		
Tabulated 't' ratio=1.729 Degree of freedom=19 Significant Level= 0.05							

Standing Broad Jump:- the above table shows that, Standing Broad Jump means difference between the pre test and post test of control group is not significant, because the calculated t- value of 0.273 is not more than the tabulated t- value of 1.729 at 0.05 level of significance of 19 degree freedom.

Chin-ups:- the above table shows that, Chi-ups mean difference between the pre test and post test of control group is not significant, because the calculated t-value of 0.000 is not more than the tabulated t- value of 1.729 at 0.05 level of significance of 19 degree freedom.

50 Yard Shuttle Run:- the above table shows that, 50 Yard Shuttle Run mean difference between the pre test and post test of control group is not significant, because the calculated t-value of 0.746 is not more than the tabulated t- value of 1.729 at 0.05 level of significance of 19 degree freedom

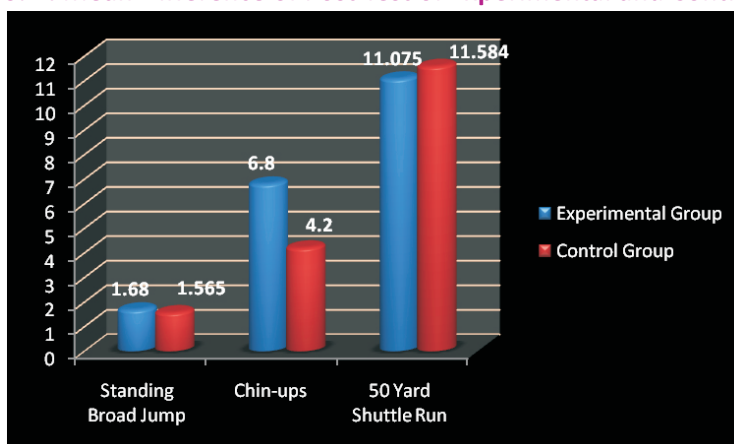
Table No. 4: Post Test of 'A' Group and 'B' Group

J.C.R. Test	Group	Mean	S.D.	Mean Difference	S.E.	't' ratio	P value
Standing Broad Jump	A	1.680	0.033	0.115	0.007	3.596	0.0004
	B	1.565	0.139		0.008		
Chin-ups	A	6.80	0.695	2.60	0.155	10.708	0.00001
	B	4.20	0.833		0.186		
50 Yard Shuttle Run	A	11.075	0.423	0.509	0.042	9.151	0.00001
	B	11.584	0.161		0.361		
Tabulated 't' ratio=1.684 Degree of freedom=38 Significant Level= 0.05							

Standing Broad Jump:- the above table shows that, Standing Broad Jump means difference between the post test of Experimental Group and Control Group is significant, because the calculated t- value of 3.596 is more than the tabulated t- value of 1.684 at 0.05 level of significance of 38 degree freedom.

Chin-ups:- the above table shows that, Chi-ups mean between the post test of Experimental Group and Control Group is significant, because the calculated t-value of 10.708 is more than the tabulated t- value of 1.684 at 0.05 level of significance of 38 degree freedom.

50 Yard Shuttle Run:- the above table shows that, 50 Yard Shuttle Run mean difference between the post test of Experimental Group and Control Group is significant, because the calculated t-value of 9.151 is more than the tabulated t- value of 1.684 at 0.05 level of significance of 38 degree freedom.

Graph No. 1: Mean Difference of Post Test of Experimental and Control Group**DISCUSSION OF HYPOTHESIS:**

Experimental Group: As per the table no. 2 shows that, significant differences observed in Standing Broad Jump, 50 Yards shuttle run and chin-ups in that condition hypothesis 'H1' is accepted.

Experimental & Control Group: As per the table no. 4 Statistical Analysis of post test of experimental and control groups shows that, significant differences observed in Standing Broad Jump, Chin-ups and 50 Yards shuttle run in that condition hypothesis 'H1' is accepted.

CONCLUSION:

It is concluded that Circuit Training Schedule of six weeks helps to develop some motor fitness components of Kabaddi players at School Level in Akola City

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