



A STUDY ON EFFECT OF CIRCUIT TRAINING ON AGILITY AND TOE TOUCH SKILLS OF KABADDI PLAYERS OF WARANGAL

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ABSTRACT

The present study was designed to evaluate the effect of circuit training on the various skills of Kabaddi players in Warangal. The researcher defined the population for the study as 50 male Kabaddi players in Warangal. The researcher has taken a sample that represents the population in all relevant aspects. The methodology used in this research involves the choice of a specified group of subjects, the selection of variables, Agility and Toe Touch the administering of standard tests using the relevant tools, obtaining predetermined information about certain factors, and subjecting them to a statistical analysis. Test the finding of this study could provide insights into the potential benefits of circuit training on physical aspects of Kabaddi players, aiding in the Development of effective training programmes, for enhancing performance of Kabaddi players. The Agility and Toe Touch skill training group showed remarkable development due to twelve weeks of training on motor fitness and training for Shuttle Run. Agility refers to the capacity to develop Agility and some of the training methods employed to enhance speed. The circuit training group of Kabaddi players has shown significant improvement in Agility, Toe Touch skill due to twelve weeks of training practice on Toe Touch skill. The control group did not show significant improvement after the final test in Agility and Toe Touch skill in Kabaddi.

KEYWORDS: Circuit Training, Agility, Toe Touch of kabaddi Skill.

INTRODUCTION:

The main objective of games and sports is to promote physical wellbeing. The famous quote, “**A sound mind in a sound body,**” illustrates the importance of physical wellness to achieve mental stability. Games and sports play a significant role in modeling and developing one’s personality.

CIRCUIT TRAINING:

Circuit training is a superb way to improve mobility, strength, and stamina. The circuit training comprises 6 to 10 strength exercises that are completed one after another. Each exercise is performed for a specified number of repetitions or for a specific time before moving on to subsequent exercises.

Neela Kumari (2015) examined the effect of specific training on selected physical and physiological variables among college women kabaddi players. For this purpose of the study 30 subjects were selected from Y.A Government College for women in Chirala, were randomly selected as subjects and their age were between 18 to 22 years. They were assigned in to two groups. 30 students from Y.A 50 Government College for Women Chirala, was randomly selected. They were equally divided into two groups. Each group consists of fifteen subjects. Experimental group I underwent specific training programme for three days in a week. The group II consists of control group. There was no specific training for above said training period. The collected data on physical and physiological variables were

statistically examined to test the various hypothesis formulated by the researcher for comparison ‘t’ ratio was used. It was concluded that there was significant improvement in selected physical and physiological variables of speed, agility, muscular strength, resting heart rate and breath holding time among college women kabaddi players due to specific training.

Madhukar Singh, Dr. Rajeev Choudary and Rakesh Kumar Patel : The objective of the study was to constructive Hand touch skill test in Kabaddi for the purpose of the study 100 male Kabaddi players were selected as subjects for the study age of the subjects was ranging 18-28 years for the present study was test items selected Hand touch to construct skill test in Kabaddi. Factors analysis was used. Level of significance at 0.5 level. As per the norms the present study, sample adequacy was found mediocre. The present study BTS was found significant ($p=000$). Thus show that correlation matrix is not on identity matrix. The component is as Kabadi performance much strengthens.

Method:

The researcher defined the Population for the study as 50 male Kabaddi players of Warangal district. The age group of 18 to 22 years was acted as the subjects. Then they were separately divided in to two equal groups randomly consisting of 25 subjects in each group. The Groups were named randomly by lot Circuit Training group and Control Group. They were tested before and

after training period to measure the Speed and Hand Touch skills applying the following test.

Agility: Shuttle Run test was used to measure the effect of Circuit training on improvement of Agility.

Toe Touch Skill: The skill refers to develop the stretching ability.

The purpose of the study is to determine the effect of circuit training on the improvement of Agility and Toe Touch Kabaddi Skill.

Result and discussions

TABLE 4.9. DESCRIPTIVE ANALYSIS RAW SCORE ON SHUTTLE RUN IN PRE AND POST-TEST OF PLAYERS IN CONTROL GROUP

	pre test (in sec.)	post test(in sec.)
Mean	29.72	30.36
Std. Deviation	2.37	2.33
Mean Difference	0.64	

Result and discussions:

The Shuttle and Run Test (seconds) Table 4.9 Mean and the standard deviation graph show the difference in speed between pre- and post-test players in the control group.

The mean and standard deviations were 29.72, 2,37 and 30.36, 2.33, respectively. It is clear that the average difference between pre- and post-test of players in the control student group was -0.64.

TABLE 4.10. DESCRIPTIVE ANALYSIS SHUTTLE RUN TEST IN PRE AND POST-TEST OF PLAYERS IN TRAINING GROUP

Shuttle Run	Pre-test	Post-test
Mean	30.36	22.68
Std. Deviation	1.82	2.14
Mean diff.	7.68	

Result and discussions:

The Shuttle Run test (seconds) Table 4.10 Mean and the standard deviation graph show the difference in speed between pre-test and post-test players in the Training group. The

mean and standard deviations were 30.36, 22.68 and 1.82, 2.14, respectively. It is clear that the average difference in speed between pre-test and post-test of players in the Training student group was 7.68.

HYPOTHESIS TEST ON PAIRED MEAN DIFFERENCE OF SHUTTLE RUN IN PRE AND POST-TEST OF PLAYERS IN CONTROL GROUP

Results and Discussion on Hypothesis - III:

Results pertaining to the Hypothesis- III, the null hypothesis is there is no significant difference of Shuttle Run in pre-test and post-test of players in Control Group.

Table-4.11

SHUTTLE RUN	Mean	SD	Paired Differences				t	Df	Sig.
			Mean	SD	95% C. I of the Diff.				
					Lower	Upper			
PRE	29.72	2.37							
POST	30.36	2.33	0.64	1.753	1.364	0.084	1.825#	24	0.080000

*significant, Critical value $t=2.093$, # not significant, at 0.05 levels

Result and discussions:

Table -4.11 Average, standard deviation, mean deviations are added, standard deviation, CI, 'T' value, DF and P-values are tested for Shuttle Run(seconds) before and after in the control group test.

Run is measured using data from the T-Test (seconds) pre-test and post-training for the control group. The data were

analyzed and the results are presented in Table 4.11.

The T-test value observed in the control group on Shuttle Run between pre- and post-test was -1.825, which is 0.05 levels ($p = 0.325$) lower than the required statistical table value of 2.093. The result indicates that the Shuttle Run test of the pre-test and the post-test of the control group are of no importance. Therefore, the hypothesis is accepted.

HYPOTHESIS TEST ON PAIRED MEAN DIFFERENCE OF SHUTTLE RUN IN PRE AND POST-TEST OF PLAYERS IN CIRCUIT TRAINING GROUP

Results and Discussion on Hypothesis -III:

Results pertaining to the Hypothesis-III, the hypothesis are there is significant difference of Shuttle Run in pre-test and post-test of players in CIRCUIT Training Group.

Table-4.12

SHUTTLE RUN	Mean	SD	Paired Differences				t	Df	Sig.
			Mean	SD	95% C. I of the Diff.				
					Lower	Upper			
PRE	30.36	1.82							

POST	22.68	2.14	7.68	1.492	7.064	8.296	25.74*	$\frac{2}{4}$	0.000000
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*significant, *Critical value $t=2.093$,# not significant ,at 0.05levels

Result and discussions:

Table -4.12 Average, standard deviation, mean deviations are added, standard deviation, CI, 'T' value, DF and P-values are tested for Shuttle Run(seconds) before and after in the in the training group test.

Test is measured using test data of Shuttle Run(seconds) before and after the

test. The data were analyzed and the results are presented in Table 4.12.

The T-test value observed in the control group between pre-test and post-test was 25.74, which was higher than the required statistical value of 2.093 at the level of 0.05 ($p = 0.286$). The result indicates the importance of the pre and post Shuttle Run test of the CIRCUIT training group. Therefore, the hypothesis is rejected.

TABLE 4.29.DESRIPTIVE ANALYSIS RAW SCORE ON TOE TOUCH IN PRE AND POST TEST OF PLAYERSIN CONTROL GROUP

	pre test (in sec.)	post test(in sec.)
Mean	12.28	12.36
Std. Deviation	1.24	1.32
Mean Difference	0.08	

Result and discussions:

The Toe Touch Test (seconds) Table 4.29 Mean and the standard deviation graph show the difference in speed between pre- and post-test players in the control group. The

mean and standard deviations were 12.28, 1.24 and 12.36, 1.32, respectively. It is clear that the average difference between pre- and post-test of players in the control student group was -0.08.

TABLE 4.30 .DESCRIPTIVE ANALYSIS TOE TOUCH TEST IN PRE AND POST-TEST OF PLAYERS IN TRAINING GROUP

Toe Touch	Pre-test	Post-test
Mean	12.32	7.32
Std. Deviation	1.11	0.95
Mean diff.	5	

Result and discussions:

The Toe Touch test (seconds) Table 4.30 Mean and the standard deviation graph show the difference in speed between pre-test and post-test players in the Training group. The

mean and standard deviations were 12.32, 1.11 and 7.32, 0.95, respectively. It is clear that the average difference in speed between pre-test and post-test of players in the Training student group was 5.

Table-4.3. HYPOTHESIS TEST ON PAIRED MEAN DIFFERENCE OF TOE TOUCH IN PRE AND POST-TEST OF PLAYERS IN CONTROL GROUP

Results and Discussion on Hypothesis -VIII:

Results pertaining to the Hypothesis-VII, the null hypothesis is there is no significant difference of Toe Touch in pre-test and post-test of players in Control Group.

TOE TOUCH	Mean	SD	Paired Differences				t	Df	Sig.
			Mean	SD	95% C. I of the Diff.				
					Lower	Upper			
PRE	12.28	1.24							
POST	12.36	1.32	-0.08	0.572	-0.316	0.156	-1.07	24	0.491000

0.0*Critical value $t=2.093$ not significant at 5levels

Result and discussions:

Table -4.31 Average, standard deviation, mean deviations are added, standard deviation, CI, 'T' value, DF and P-values are tested for Toe Touch (seconds) before and after in the control group test.

Test is measured using test data of Toe Touch (seconds) before and after the

test. The data were analyzed and the results are presented in Table 4.31

The T-test value observed in the control group between pre- and post-test was -1.07, which was lower than the required statistical value of 2.093 at the level of 0.05 ($p = 0.286$). The result indicates that the Toe Touch test of the pre-test and the post-test of the control group are of no importance. Therefore, the hypothesis is accepted.

Table-4.32. HYPOTHESIS TEST ON PAIRED MEAN DIFFERENCE OF TOE TOUCH IN PRE AND POST-TEST OF PLAYERS INCIRCUIT TRAINING GROUP

Results and Discussion on Hypothesis -VIII:

Results pertaining to the Hypothesis-VIII, the hypothesis are there is significant difference of Toe Touch in pre-test and post-test of players in CIRCUIT Training Group.

TOE TOUCH	Mean	SD	Paired Differences	t	Df	Sig.
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			Mean	SD	95% C. I of the Diff.				
					Lower	Upper			
PRE	12.32	1.11							
POST	7.32	0.95	5	0.913	4.623	5.377	27.386	24	0.000000

*Critical value $t=2.093$ not significant at 0.05 levels

Result and Discussion:

Table -4.32. Average, standard deviation, mean deviations are added, standard deviation, CI, 'T' value, DF and P-values are tested for Toe Touch (seconds) before and after in the in the training group test.

Test is measured using test data of Toe Touch(seconds) before and after the test. The data were analyzed and the results are presented in Table 4.32.

The T-test value observed in the control group between pre-test and post-test was 27.386, which was higher than the required statistical value of 2.093 at the level of 0.05 ($p = 0.286$). The result indicates the importance of the pre and post Toe Touch test of the CIRCUIT training group. Therefore, the hypothesis is rejected.

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