

Influence of Skill Training in Floor Mat on Selected Performance Variables among Kabaddi Players

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Abstract

The purpose of the study was to influence of skill training in floor mat on selected performance variables among kabaddi players. To achieve the purpose of this study, twenty male kabaddi players were randomly selected from Manthiramoorthy Higher Secondary School, Tirunelveli Town, Tirunelveli, Tamil Nadu, India. Their age were ranged from 15 to 17 years. The selected participants were randomly divided into two groups such as Group 'I' underwent skill training in floor mat (n=10) and Group 'II' acted as control group (n=10). Group 'I' underwent skill training in floor mat for three alternative days and one session per day and each session lasted for an hour for six week periods. Group 'II' was not exposed to any specific training but they were participated in regular activities. The data on selected criterion variables on hand touch was measured by hand touch test (seconds) and toe touch was measured by foot work test (seconds). The pre and post-tests data were collected on selected criterion variables prior to and immediately after the skill training in floor mat. The pre and post tests scores were statistically examined by the dependent 't' test and Analysis of Co-Variance (ANCOVA) for each and every selected variables separately. It was concluded that the skill training in floor mat group were improved criterion variables on hand touch and toe touch when compared to the control group. However the control group had not shown any significant improvement on selected criterion variables.

Keywords: Skill Training in Floor Mat, Hand Touch, Toe Touch, Kabaddi Players

1. Introduction

Training is to increase athlete's work and skill capabilities and to develop strong psychological traits. Training is primarily a systematic athletic activity of long duration, which is progressively and individually graded. Training adaptation is sum of transformations brought about by systematically repeating exercise (Bompa, 1999).

Sports performance can be improved through Sports training. Like any other type of human performance, sports performances are also a product of the total personality of the sports person. In general the personality of a person reflects aspects like physical, physiological, social and psychic traits. Therefore apart from physical and physiological traits, the social and psychic traits of the sportsperson need to be improved for achieving improvement in sports performances (Singh, 1991).

Training load can be increased gradually or step by step is result in strong and faster adaptation process and more effective reaction from the organism. Step by step of increase of load gives time to the organism to adapt to the increased demands. Beginning lesser load is greater improvement but latter higher load is necessary to produce even a small increase in performance (Arumugam, 2018).

Kabaddi at any level is a thrilling game enjoyed by players of all ages. The vast majority plays the game primarily for social reasons and do not normally have the opportunity for the sort of coaching that could significantly improve both their individual skills and overall performance (Taylor & David, 1988).

Kabaddi is perhaps the only combative sports in which attack is an individual attempt while defence is a group effort. The attack in Kabaddi is known as “raid.” The antis touched by the raider before the returns to how court. These players can resume play only when their side scores points against the opposite side during their raiding turn or if the remaining players succeed in catching the opponent’s raider (Prasad Rao, 2002).

2. Purpose of the Study

The purpose of the study was to influence of skill training in floor mat on selected performance variables such as toe touch and hand touch among kabaddi players.

3. Methodology

To achieve the purpose of this study, twenty male kabaddi players were randomly selected from Manthiramoorthy Higher Secondary School, Tirunelveli Town, Tirunelveli, Tamil Nadu, India. Their age were ranged from 15 to 17 years. The selected participants were randomly divided into two groups such as Group ‘I’ underwent skill training in floor mat (n=10) and Group ‘II’ acted as control group (n=10). Group ‘I’ underwent skill training in floor mat for alternate three days and one session per day and each session lasted for an hour for six week periods. Group ‘II’ was not exposed to any specific training but they were participated in regular activities. The data on selected criterion variables on hand touch was measured by hand touch test (seconds) and toe touch was measured by foot work test (seconds).

The pre and post-tests data were collected on selected criterion variables prior to and immediately after the skill training in floor mat. The pre and post tests scores were statistically examined by the dependent ‘t’ test and Analysis of Co-Variance (ANCOVA) for each and every selected variables separately.

4. Result and Discussions

4.1 Hand Touch

The analysis of dependent ‘t’ test on the data obtained for hand touch of the pre-test and post-test means of experimental and control groups have been analyzed and presented in Table 1.

Table 1: Computation of ‘t’ - Ratio between Pre and Post Test Means of Experimental and Control Groups on Hand Touch (Seconds)

Tests		Pre Test	Post Test	‘t’ - Value
Experimental Group	Mean	17.94	15.09	10.04*
	SD	0.59	0.61	
Control Group	Mean	18.14	17.84	1.05
	SD	0.54	0.56	

*Significant at 0.05 level. The table value required for 0.05 level of significance with df 9 is 2.26.

The table 1 shows that the pre-test mean values of experimental and control groups are 17.94 and 18.14 respectively and the post test means are 15.09 and 17.84 respectively. The

obtained dependent t-ratio values between the pre and post test means of experimental and control groups are 10.04 and 1.05 respectively. The table value required for significant difference with df 9 at 0.05 level is 2.26. Since, the obtained ‘t’ ratio value of experimental group was greater than the table value, it was understood that experimental group had improved on hand touch. However, the control group has not improved. The ‘obtained t’ value is less than the table value, as they were not participated to any specific training.

The analysis of covariance on hand touch of experimental and control groups have been analysed and presented in Table 2.

Table 2: Analysis of Covariance on Hand Touch of Experimental and Control Groups

Adjusted Post Test Means		Source of variance	Sum of squares	df	Mean square	F-ratio
Experimental Group	Control Group	Between	777.75	1	777.75	41.95*
17.41	17.81	Within	315.18	17	18.54	

* Significant at 0.05 level. Table value for df 1, 17 was 4.45

Table 2 shows that the adjusted post test means of experimental group and control groups are 17.41 and 17.81 respectively. The obtained F-ratio value is 41.95 which is greater than the table value 4.45 with df 1 and 17 required for significance at 0.05 level. Since the value of F-ratio is greater than the table value, it indicates that there is a significant difference among the adjusted post-test means of experimental group and control groups on hand touch.

The pre, post and adjusted post test means values of experimental and control group on hand touch were graphically represented in the figure 1.

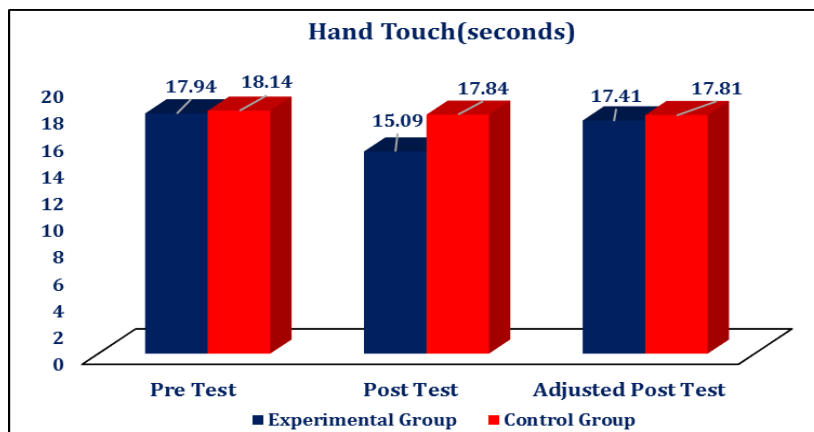


Figure 1: Pre, Post and Adjusted Post Test Means Values of Experimental and Control Group on Hand Touch.

4.2 Toe Touch

The analysis of dependent ‘t’ test on the data obtained for toe touch of the pre-test and post-test means of experimental and control groups have been analyzed and presented in Table 3.

Table 3: Computation of ‘T’ - Ratio between Pre and Post Test Means of Experimental and Control Groups on Toe Touch (Seconds)

Tests		Pre Test	Post Test	‘t’ - Value
Experimental Group	Mean	21.89	17.47	5.51*
	SD	1.45	0.99	
Control Group	Mean	22.62	21.74	1.10
	SD	1.59	1.64	

*Significant at 0.05 level. The table value required for 0.05 level of significance with df 9 is 2.26.

The table 3 shows that the pre-test mean values of experimental and control groups are 21.89 and 22.62 respectively and the post test means are 17.47 and 21.74 respectively. The obtained dependent t-ratio values between the pre and post test means of experimental and control groups are 5.51 and 1.10 respectively. The table value required for significant difference with df 9 at 0.05 level is 2.26. Since, the obtained ‘t’ ratio value of experimental group was greater than the table value, it was understood that experimental group had improved on toe touch. However, the control group has not improved. The ‘obtained t’ value is less than the table value, as they were not participated to any specific training.

The analysis of covariance on toe touch of experimental and control groups have been analyzed and presented in Table 4.

Table 4: Analysis of Covariance on Toe Touch of Experimental and Control Groups

Adjusted Post Test Means		Source of variance	Sum of squares	df	Mean square	F-ratio
Experimental Group	Control Group	Between	41.27	1	41.27	14.53*
17.41	21.56	Within	48.28	17	2.84	

* Significant at 0.05 level. Table value for df 1, 17 was 4.45

Table 4 shows that the adjusted post test means of experimental group and control groups are 17.41 and 21.56 respectively. The obtained F-ratio value is 14.53 which is greater than the table value 4.45 with df 1 and 17 required for significance at 0.05 level. Since the value of F-ratio is greater than the table value, it indicates that there is a significant difference among the adjusted post-test means of experimental group and control groups on toe touch.

The pre, post and adjusted post test means values of experimental and control group on toe touch were graphically represented in the figure 2.

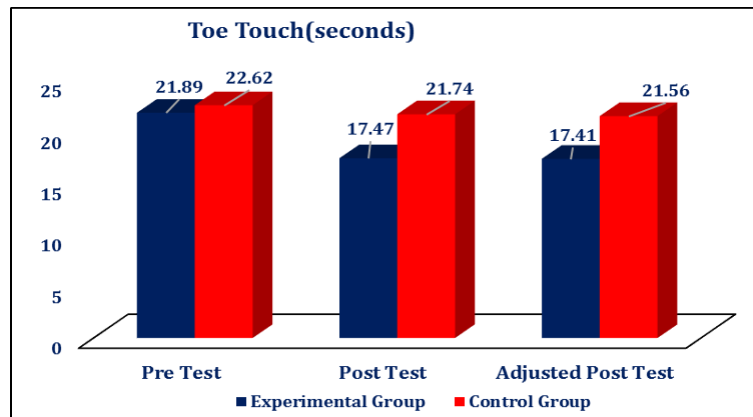


Figure 2: Pre, Post and Adjusted Post Test Means Values of Experimental and Control Group on Toe Touch

5. Discussion on Findings

The result of the study indicates that the experimental group namely skill training in floor mat group had shown significant improvement in all selected performance variables such as hand touch and toe touch. The control group athletes had not shown significant changes in any of the selected variables. The following studies are supported to the result of this investigation such as Fernandez, Kinner & Ferrauti, (2010), Mallick, Shaikh & Goon, (2013), Binnie, et al., (2014), Binnie, Dawson, Pinnington, Landers & Peeling, (2013), Pinnington & Dawson, (2001), Guillen, et al., (2017) and Kumar & Arumugam (2018).

6. Conclusions

1. There was a significant improvement on selected performance variables such as hand touch and toe touch due to the influences of skill training in floor mat.
2. There was a significant difference exists between experimental and control groups on hand touch and toe touch.

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