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Effect of Swiss Ball Training on Selected Motor Fitness Variables among Kabaddi Players

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Abstract

The purpose of the study was to investigate the effect of swiss ball training programme on selected motor fitness variables among kabaddi players. For the present study 30 male kabaddi players from Bharathidasan University, Tiruchirappalli, Tamilnadu were selected at random and their age ranged from 18 to 25 years. For the present study pre test – post test randomized 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 'A' and Group 'B'. Group 'A' underwent swiss ball training and Group 'B' underwent no training. Speed and agility was measured by 50 meters dash and shuttle run respectively. The data was collected before and after ten weeks of training. The data was analyzed by applying Analysis of Co-Variance (ANCOVA) technique to find out the effect of Swiss ball training programme. The level of significance was set at 0.05. The findings of the present study have strongly indicates that Swiss ball training of ten weeks has significant effect on selected motor fitness variables i.e., speed and agility of kabaddi players. Hence the hypothesis earlier set that Swiss ball training programme would have been significant effect on selected motor variables in light of the same the hypothesis is accepted. Significant effect of Swiss ball training was found on speed and agility.

Keywords: Swiss Ball, Speed, Agility, kabaddi, Men.

Introduction

Kabaddi is basically an Indian game, which requires both skill and power, and combines the characteristics of wrestling and rugby. More than fifty million people of 65 countries of the world play this game. Kabaddi is aptly known as the "GAME OF THE MASSES" due to its popularity, simple, easy to comprehend rules, and public appeal. The game calls for no sophisticated equipment what so ever, which makes it a very popular sport in the developing countries. Though it is basically an outdoor sport played on clay court, of late the game is being played on synthetic surface indoors with great success. Swiss balls are large, heavy-duty inflatable balls with a diameter of 45 to 75 cm (18 to 30 inches). The Swiss ball is also known by a number of different names, including exercise ball, gym ball, Pilate's ball, sports ball, fit or fitness ball, stability ball, therapy ball, yoga ball, balance ball, body ball, or birth ball. Swiss balls offer you a fun, safe and highly effective way to exercise.

Objective of the Study

The purpose of the study was to investigate the effect of swiss ball training programme on selected motor fitness variables among kabaddi players. It was hypothesized that there would have been a significant effect of ten weeks Swiss ball training programme on selected motor fitness variables among kabaddi players

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Procedure and Methodology

For the present study 30 male kabaddi players from Bharathidasan University, Tiruchirappalli, Tamilnadu were selected as subjects at random and their age ranged from 18 to 25 years. For the present study pre test – post test randomized 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 'A' and Group 'B'. Group 'A' underwent Swiss ball training and Group 'B' underwent no training. Speed and agility was measured by 50 meters dash and shuttle run respectively. The data was collected before and after ten weeks of training. The data was analyzed by applying Analysis of Co-Variance (ANCOVA) technique to find out the effect of Swiss ball training programme on selected motor fitness variables among kabaddi players. The level of significance was set at 0.05.

Results and Discussions on Findings

The findings pertaining to analysis of co-variance between experimental group and control group on selected motor fitness variables among kabaddi

players for pre-post test respectively have been presented in table No.1 to 2.

Table – 1. ANCOVA between Experimental Group and Control Group on Speed of Kabaddi Players for Pre, Post and Adjusted Test

	Experimental Group	Control Group	Source of Variance	Sum of Squares	df	Mean Square	F
Pre Test Mean	8.61	8.68	BG	0.03	1	0.03	0.16
			WG	5.61	28	0.20	
Post Test Mean	7.83	8.64	BG	4.89	1	4.89	34.35*
			WG	3.99	28	0.14	
Adjusted Post Mean	7.84	8.62	BG	4.52	1	4.52	42.48*
			WG	2.87	27	0.10	

*** Significant at 0.05 level.** **df: 1/27= 4.21**

Table No. 1 revealed that the obtained 'F' value of 42.48 was found to be significant at 0.05 level with df 1, 27 as the tabulated value of 4.21 required to be significant at 0.05 level. The same table indicated that there was a significant difference in adjusted means of speed of kabaddi players between experimental group and control group.

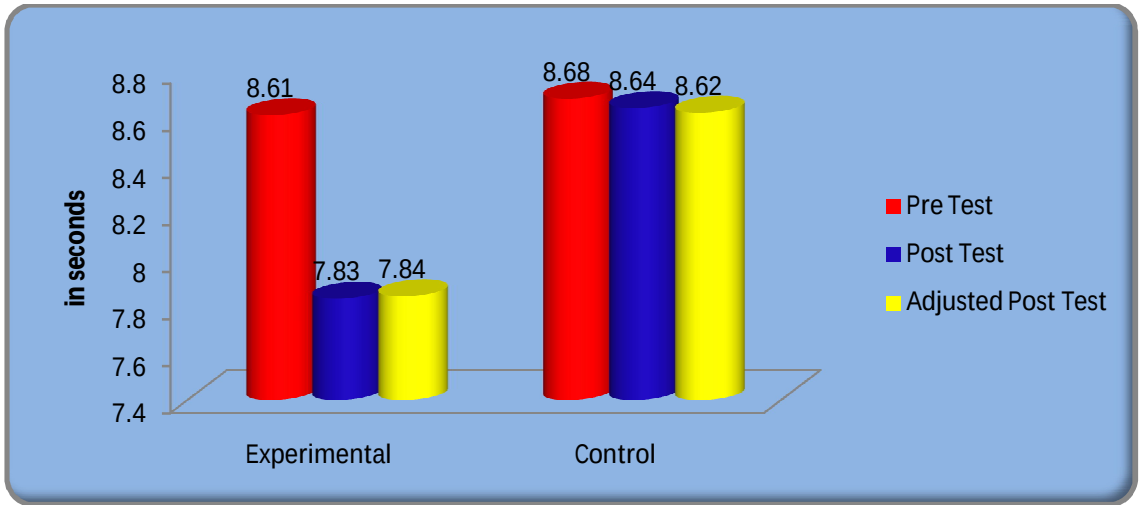

Figure – 1. Comparisons of Pre – Test Means Post – Test Means and Adjusted Post – Test Means for Control group and Experimental Group in relation to Speed

Table – 2. ANCOVA between Experimental Group and Control Group on Agility of Kabaddi Players for Pre, Post and Adjusted Test

	Experimental Group	Control Group	Source of Variance	Sum of Squares	df	Mean Square	F
Pre Test Mean	18.13	17.88	BG	0.46	1	0.46	0.29
			WG	44.84	28	1.60	
Post Test Mean	16.97	17.69	BG	3.83	1	3.83	14.62*
			WG	7.34	28	0.26	
Adjusted Post Mean	16.97	17.69	BG	3.80	1	3.80	13.98*
			WG	7.34	27	0.27	

*** Significant at 0.05 level.** **df: 1/27= 4.21**

Table No. 2 revealed that the obtained 'F' value of 13.98 was found to be significant at 0.05 level with df 1, 27 as the tabulated value of 4.21 required to be significant at 0.05 level. The same table indicated that there was a significant difference in adjusted means of agility of kabaddi players between experimental group and control group.

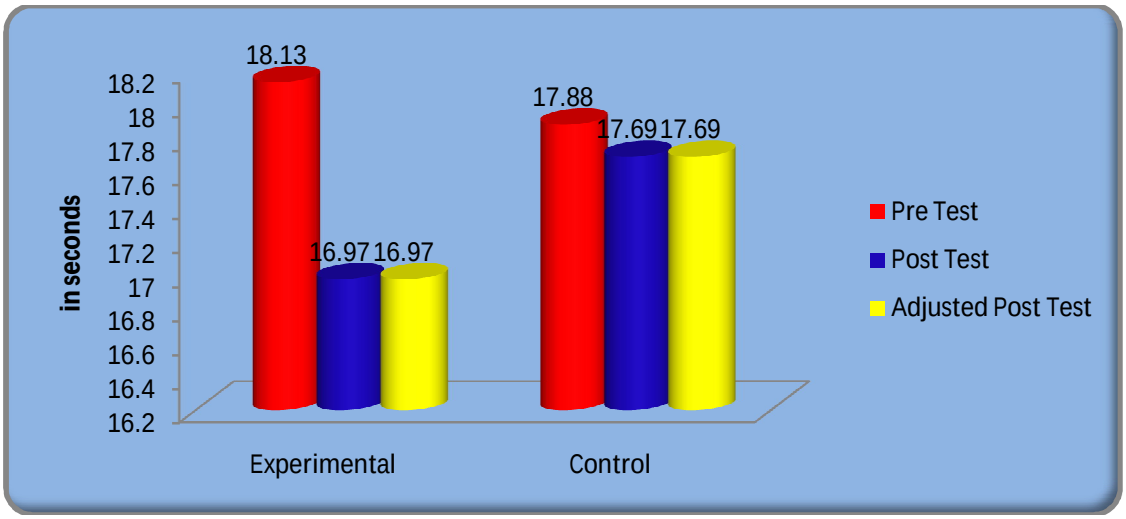

Figure – 2. Comparisons of Pre – Test Means Post – Test Means and Adjusted Post – Test Means for Control group and Experimental Group in relation to Agility

In case of motor fitness variables i.e. speed and agility the results between pre and post (10 weeks) test has been found significantly higher in experimental group in comparison to control group. The findings of the present study have strongly indicates that Swiss ball training of twelve weeks have significant effect on selected motor fitness variables i.e., speed and agility of kabaddi players. Hence the hypothesis earlier set that Swiss ball training programme would have been significant effect on selected motor fitness variables in light of the same the hypothesis was accepted.

Conclusions

On the basis of findings and within the limitations of the study the following conclusions were drawn: Significant effect of Swiss ball training was found on speed and agility.

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