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Effect of Swissball Training on Selected Physical Variables among Soccer Players

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Abstract

The purpose of the study was to investigate the effect of swissball training on selected physical variables among soccer players. It was hypothesized that there would be significant differences on selected physical variables due to the effect of swissball among soccer players. For the present study the 30 male soccer players from Engineering Colleges in and around Karur district, Tamilnadu were selected at random and their age ranged from 18 to 25 years. For the present study pre test – post test random 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 swissball training and Group 'B' have not underwent any training. Speed was assessed by 50 metre dash and balance was assessed by stork stand. The data was collected before and after twelve weeks of training. The data was analyzed by applying Analysis of Co-Variance (ANCOVA). The level of significance was set at 0.05. The swissball training had positive impact on speed and balance among soccer players.

Keywords: Swissball Training, Speed, Balance, Soccer.

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Introduction

The Swiss ball give an extensive variety of activities that depend on the capacity of the general population to move with the movement of the ball while playing out the activity, the ball helps in both help the body amid the development and also to bear the cost of a measure of protection from the muscles occupied with the development. The great Swiss ball practices include the stomach muscles, with comparing reactions from the crotch and the stabilizers of the lower back, the angled muscles that run parallel to the spine over the pelvis. The competitor situated over the ball, can take the abs through a total scope of movement through the execution of crunches bending crunches, where the abdominal area contorts in inverse ways amid the smash to broaden the strong impact over the stomach area; and the flexion of the thoracic spine, the vertebrae of the mid-back to enhance general adaptability. The Swiss ball is a preparation help pointed principally at the extending and reinforcing of the stomach, lumbar back, crotch and upper leg muscles of the body. The improvement of muscle serves to the building and keeping up of center quality and key balancing out element in all game. Swiss ball developments require a more noteworthy level of coordination than other floor extends. The Swiss ball likewise allows the execution of both static extends and

in addition dynamic extends, where coordinates drive into or through the expanded joint. Swiss ball practices have both oxygen consuming and anaerobic advantages, contingent upon the force, term, and the recurrence. The Swiss ball is a preeminent supplement to a current preparing program like yoga or Pilates, which advance more prominent quality and adaptability in a protected and controlled physical setting (Carter et al. 2006).

Football, as it is observed today, has experienced an enormous change since its introduction to the world. The physical parts of the diversion incorporate speed, including increasing speed and instability; spryness and adjust; body control, especially in bouncing and heading the ball; leg quality; and perseverance. The improvement of each of these physical abilities must be fused into the preparation required to assemble the individual specialized segments of play. Those specialized ranges are spilling the ball; passing the ball and getting a pass, utilizing the feet, legs, middle, or make a beeline for control the ball as might be fundamental; shooting the ball; heading the ball; in-limits tossed in; corner kicks; the extra shot; and protective checking and handling strategies (Luxbacher, 1996).

Methodology

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was collected before and after twelve weeks of training. The data was analyzed by applying Analysis of Co-Variance (ANCOVA). The level of significance was set at 0.05.

Results

The findings pertaining to analysis of co-variance between experimental group and control group on selected physical variables among soccer players for pre-post test respectively have been presented in table 1 to 2.

Table 1

ANCOVA between Experimental Group and Control Group on Speed of soccer players for Pre, Post and Adjusted Test

	Experimental Group	Control Group	Source of Variance	Sum of Squares	df	Mean Square	F
Pre Test Mean	7.45	7.41	BG	1.26	1	1.26	0.56
			WG	62.46	28	2.23	
Post Test Mean	7.11	7.39	BG	142.03	1	142.03	57.97*
			WG	68.59	28	2.44	
Adjusted Post Mean	7.09	7.38	BG	147.56	1	147.56	67.39*
			WG	59.12	27	2.18	

* Significant at 0.05 level.

df: 1/27= 4.21

Table 1 revealed that the obtained ‘F’ value of 67.39 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 soccer players between experimental group and control group. The graphical representation of data has been presented in figure I.

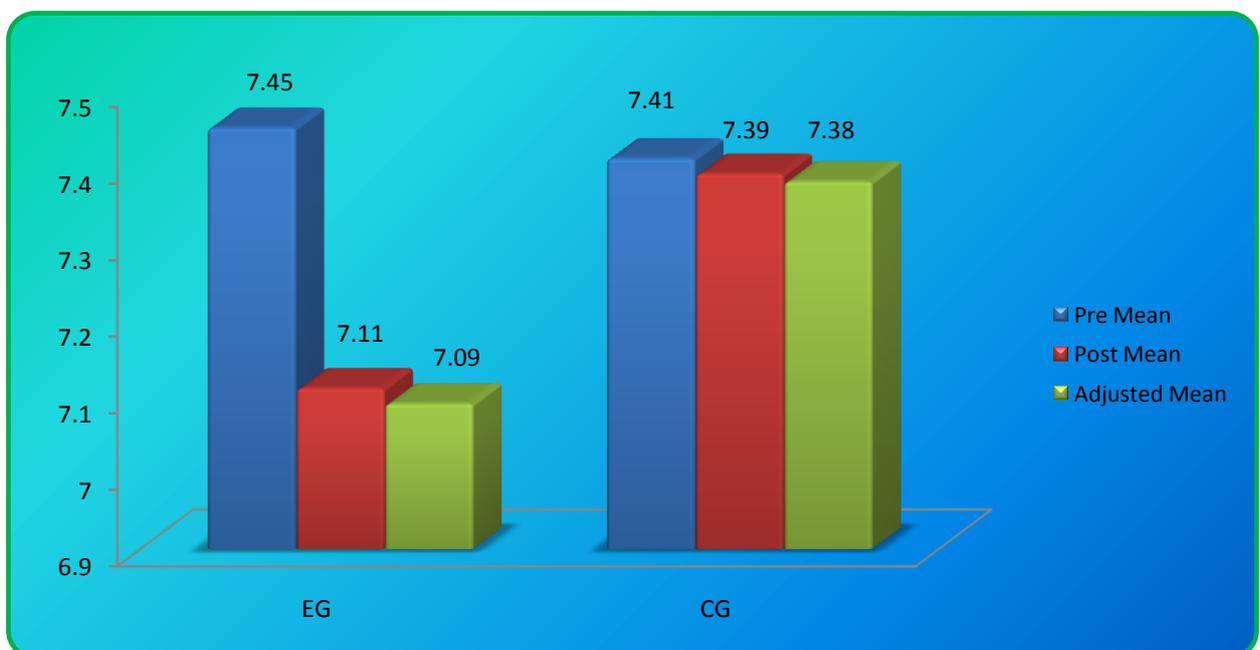


Figure I Comparisons of Pre – Test Means Post – Test Means and Adjusted Post – Test Means for Control group and Experimental Group in relation to Speed

Table 2

ANCOVA between Experimental Group and Control Group on Balance of soccer players for Pre, Post and Adjusted Test

	Experimental Group	Control Group	Source of Variance	Sum of Squares	df	Mean Square	F
Pre Test Mean	40.23	41.01	BG	7.11	1	7.11	1.44
			WG	137.70	28	4.91	
Post Test Mean	48.25	41.51	BG	259.86	1	259.86	32.84*
			WG	221.51	28	7.91	
Adjusted Post Mean	48.24	41.50	BG	262.43	1	262.43	31.88*
			WG	222.19	27	8.22	

* Significant at 0.05 level.

df: 1/27= 4.21

Table 2 revealed that the obtained ‘F’ value of 31.88 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 balance of soccer players between experimental group and control group. The graphical representation of data has been presented in figure II.

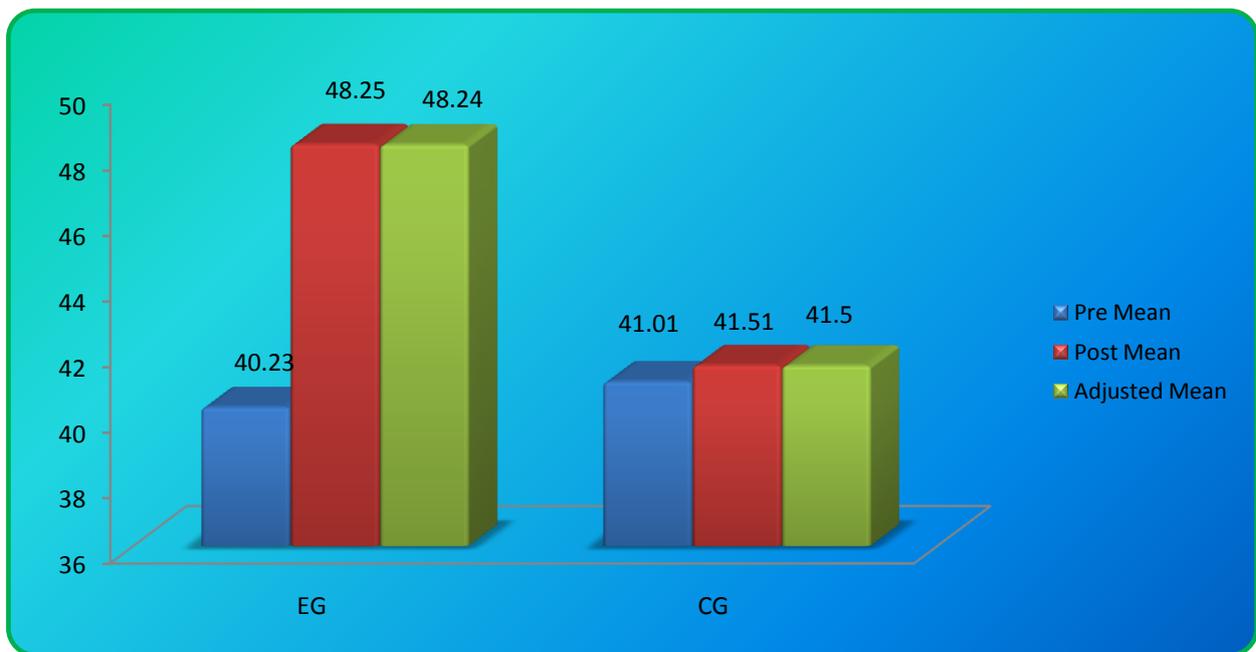


Figure II

Comparisons of Pre – Test Means Post – Test Means and Adjusted Post – Test Means for Control group and Experimental Group in relation to Balance

Discussions on Findings

In case of physical variables i.e. speed and balance the results between pre and post (12 weeks) test has been found significantly higher in experimental group in comparison to control group. This is possible because due to regular swissball training which may also bring sudden spurt in physical variables in soccer players. The findings of the present study have strongly indicates that swissball training of twelve weeks have significant effect on selected physical variables i.e., speed and balance of soccer players. Hence the

hypothesis earlier set that swissball training programme would have been significant effect on selected physical 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:

1. The swissball training had positive impact on speed and balance among soccer players.

2. The experimental group showed better improvement on speed and balance among soccer players than the control group.

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