

Impact of Games Specific Training on Selected Motor Qualities among Soccer Players

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Abstract: The purpose of the study was to find out the impact of game specific training on selected motor qualities among soccer players. 30 male (n=30) soccer players (Bright Star Football Club and Redson Football Club, Tirunelveli District, Tamilnadu, India.) The age of the subjects were ranged from 20-28 years. Group A (n=15) underwent game specific training and Group B (n=15) acted as control group. Dependent Variable is Speed and Strength. In this study the investigator measured the speed and strength of the soccer players through 50Mts dash and push-ups test before and after the six weeks of Game specific training. Hence, to make adjustments for difference in the initial means and test the adjusted posttest means for significant differences the Analysis of Covariance (ANCOVA) was used. All the statistical analysis tests were computed at 0.05 level of significance (p<0.05). There was significant improvement on Speed and Strength due to the impact of game specific training among soccer players.

Keywords: Speed, Strength, Game Specific Training

1. INTRODUCTION

Physical fitness is one of the most important factors that determine the performance level of an individual. Sports performance depends largely on physical fitness factors such as strength, speed, endurance, flexibility and various abilities requiring co-ordination. Sports activity is a physical activity which is not possible without these motor abilities. Fitness factors are the most important for predicting athletic performance. Natural ability is the promise of potential but fundamentals are the foundation of excellence (Clarke and Clarke, 1987). Training is the main component and the basic form of preparing the athlete for higher level of performance. It is a systematically planned preparation with the help of the exercise which realizes the main factors of influencing progress of athlete. The content of training includes all the basic types of preparation of the sportsmen such as physical, technical, tactical and psychological levels. Through systematic training the "fitness level" of the athlete and his acquisition of vital knowledge and skill are improved (Singh, 1991).

2. METHODOLOGY

For the purpose of the present study was to find out the impact of game specific training on selected motor qualities among soccer players. The subject of this study comprised of 30 male (n=30) soccer players from, Bright Star Football Club and Redson Football Club, Tirunelveli District, Tamilnadu, India. The age of the subjects were ranged from 20-28 years. The selected subjects were divided into two groups of 15 in each group. Group I underwent game specific training for six weeks and Group II acted as control that didn't take part in any specific exercises, other than regular activity. All the participants were tested prior to and after the experimentation on speed and strength. Speed measured in 50m Dash and Strength measured in pushups. No attempt was made to equate the groups in any manner. Hence, to make adjustments for difference in the initial means and test the adjusted posttest means for significant differences, the Analysis of Covariance (ANCOVA) was used. All the statistical analysis tests were computed at 0.05 level of significance (p<0.05).

3. RESULTS

Table I. Analysis of Covariance of the Data on Speed of Pre, Post and Adjusted Post Tests Scores of Game Specific Training Group and Control Group (In Seconds)

Test	EG	CG	SOV	SS	df	MS	F-ratio
Pre-test							
Mean	7.14	7.21	B.M	0.001	1	0.001	1.02

SD(\pm)	0.05	0.05	W.G	0.028	28	0.001	
Post-test							
Mean	6.95	7.21	B.M	2.74	1	2.74	30.42*
SD(\pm)	0.28	0.05	W.G	2.52	28	0.09	
Adjusted post-test							
Mean	6.95	7.23	B.S	2.97	1	2.97	33.01*
			W.S	2.43	27	0.09	

*significant at 0.05 level of confidence (The table values required for significance at 0.05 level of confidence for 1 & 28 and 1&27 are 4.20and 4.21 respectively).

CG –Control Group

EG –Game specific training group

SOV – Sum Of Variance

SS - Sum of Squares

df – degrees of freedom

MS - Mean Square

B.M –Between Means

W.G – Within Groups

B.S – Between Sets

W.S – Within Sets

The table I show that the pre-test mean value on game specific speed of game specific training group and control group are 7.14 and 7.21 respectively. The obtained ‘F’ ratio 1.02 for pre-test scores was less than the table value 4.20 for df1 and 28 required for significance at 0.05 level of confidence on speed. The post-test mean values on game specific speed of game specific training group and control group are 6.95 and 7.21 respectively. The obtained ‘F’ ratio 30.42 for post-test scores was greater than the table value 4.20 for df1 and 28 required for significance at 0.05 level of confidence on speed. The adjusted post-test means of game specific training group and control group are 6.95 and 7.23 respectively. The obtained ‘F’ ratio of 33.01 for adjusted post-test means was greater than the table value of 4.21 for df1 and 27 required for significance at 0.05 level of confidence on speed. The results of the study indicated that there was a significant difference among the adjusted post-test means of game specific training group and control group on speed.

The pre-test, post-test and adjusted post-test means values of game specific training group and control group on speed are graphically represented in the figure – I

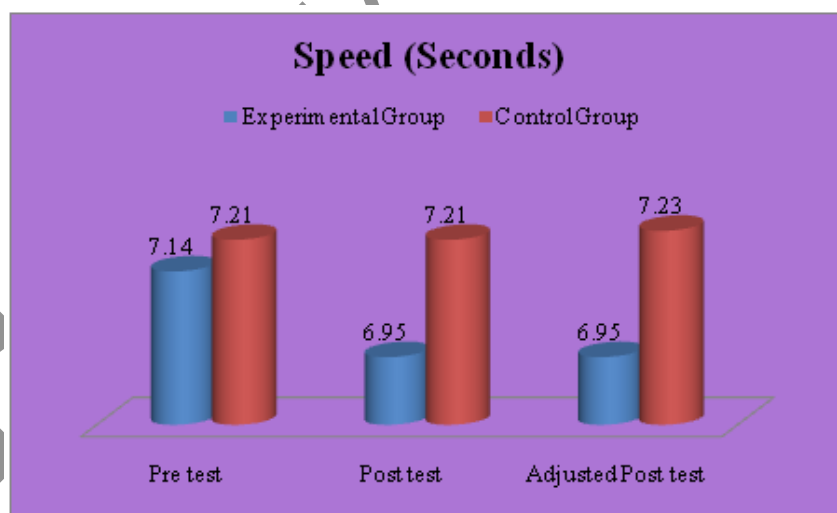


Figure I. The Pre-Test, Post-Test and Adjusted Post-Test Mean Values of Game Specific Training Group and Control Group on Speed

Table II. Analysis of Covariance of the Data on Strength of Pre, Post and Adjusted Post Tests Scores of Game Specific Training Group and Control Group (In Counts)

Test	EG	CG	SOV	SS	Df	MS	F-ratio
Pre-test							
Mean	27.14	26.84	B.M	62.19	1	62.19	1.67
SD(\pm)	2.99	3.02	W.G	1043.56	28	37.24	
Post-test							
Mean	31.08	25.98	B.M	3006.30	1	3006.30	20.14*
SD(\pm)	2.94	2.90	W.G	4179.56	28	149.27	

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Adjusted post-test							
Mean	34.13	25.01	B.S	4794.92	1	4794.92	62.03*
			W.S	2087.10	27	77.30	

*significant at 0.05 level of confidence (The table values required for significance at 0.05 level of confidence for 1 & 28 and 1&27 are 4.20and 4.21 respectively).

CG –Control Group

EG –Game specific training group

SOV – Sum Of Variance

SS - Sum of Squares

df – degrees of freedom

MS - Mean Square

B.M –Between Means

W.G – Within Groups

B.S – Between Sets

W.S – Within Sets

The table II shows that the pre-test mean value on game specific strength of game specific training group and control group are 27.14 and 26.84 respectively. The obtained 'F' ratio 1.67 for pre-test scores was less than the table value 4.20 for df1 and 28 required for significance at 0.05 level of confidence on strength. The post-test mean values on game specific strength of game specific training group and control group are 31.08 and 25.98 respectively. The obtained 'F' ratio 20.14 for post-test scores was greater than the table value 4.20 for df1 and 28 required for significance at 0.05 level of confidence on strength. The adjusted post-test means of game specific training group and control group are 34.13 and 25.01 respectively. The obtained 'F' ratio of 62.03 for adjusted post-test means was greater than the table value of 4.21 for df1 and 27 required for significance at 0.05 level of confidence on strength. The results of the study indicated that there was a significant difference among the adjusted post-test means of game specific training group and control group on strength.

The pre-test, post-test and adjusted post-test means values of game specific training group and control group on strength are graphically represented in the figure – II

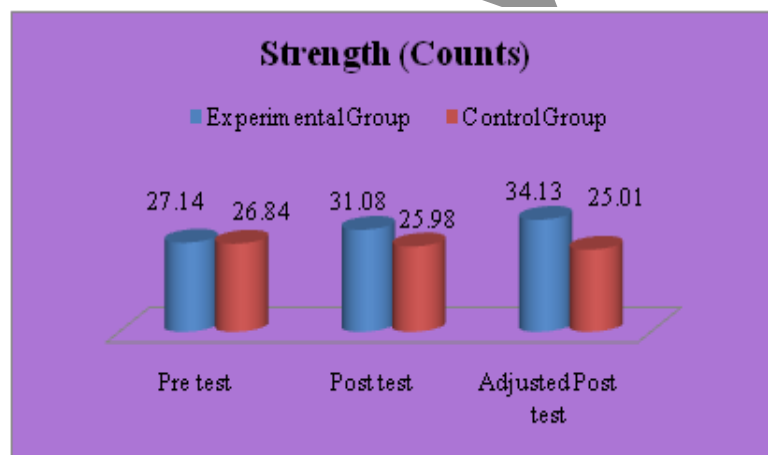


Figure II. The Pre-Test, Post-Test and Adjusted Post-Test Mean Values of Game Specific Training Group and Control Group on Strength

4. DISCUSSION

The result of study indicates that there was significant improvement on selected motor qualities (speed, endurance, strength and flexibility) due to the impact of game specific training among soccer players when compared to control group. It is inferred from the literature and from the result of the present study. That systematically designed training develops dependent variables are very importance quilts for better performance in almost all sports and games. Hence it is concluded that systematically designed training may be programs of all the discipline in order to achieve maximum given due recognition and implemented properly in the training performance.

5. CONCLUSIONS

From the analysis of the data, the following conclusions were drawn,

There was significant improvement on speed due to the impact of game specific training among soccer players.

There was significant improvement on strength due to the impact of game specific training among soccer players.

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Early View