ISSN: 2349 - 4891

International
Journal of Recent Research and Applied Studies
(Multidisciplinary Open Access e-journal)

A Study on Effects of Isolated and Combined SAQ and Strength Trainings on Selected Physical Variables of Intercollegiate Men Football Players

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Received 20th October 2014, Accepted 25th December 2014

Abstract

Sport is sometimes described as our national passion, a mere recreational activity that somehow has become symbolic of our national character. The secret lies in the SAQ continuum and the use of progressive sequential learning techniques breaking down complex sports science and making it easy to understand its practical use. The study has made attempt to study the Physical variables of intercollegiate men football players and to find out the effects of isolated and combined SAQ and Strength training on selected Physical variables of intercollegiate men football players with the random sampling. Eighty men Football Players who had participated in inter collegiate Football tournaments from various affiliated Colleges of Bharathiar University, Coimbatore, Tamilnadu, India during the year 2012-2013. The study is analysed with the use of the following tools 1. Analysis of covariance (ANCOVA) and 2. The scheffe's post hoc test. It was clear from the results of the study that SAQ training and Strength training had produced significant changes on selected physical variables of college men football players.

Keywords: SAQ, Strength Training, Physical Variables, Football.

Introduction

"When you are fit, you look better and are likely to have more physical energy: when you feed fit, two good things of life have more meanings two sky is blue, the music is sweeter, the steak is tastier". Now a day's more and more individuals particularly boys and girls are affected by sports activities and increasing the number that are representing in the sports area. Sport is sometimes described as our national passion, a mere recreational activity that somehow has become symbolic of our national character. Whether we prefer to watch a lanky swimmer, a battling tennis star or a laconic cricketer scoring centuries in the hot sun, most of us admit to having at least some sporting interest.

Soccer is the greatest game in the world. These wonderful acts of speed, agility and quickness are what make the difference between winning and losing, often thought to be god given gifts and therefore neglected on the training field. The secret lies in the SAQ continuum and the use of progressive sequential learning techniques breaking down complex sports science and making it easy to understand its practical use. The end result is the development of multi-directional, explosive speed specifically for Soccer. Sport is sometimes described as our national passion, a mere recreational activity that somehow has become symbolic of our national character. The secret lies in the SAQ continuum and the use of progressive sequential learning techniques breaking down complex sports science and making it easy to understand its practical use.

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Methodology

The purpose of the study was to find out the effects of isolated and combined SAQ and Strength training on selected Physical variables of intercollegiate men football players. Eighty men Football Players who had participated in inter collegiate Football tournaments from various affiliated colleges of Bharathiar University, Coimbatore, Tamilnadu, India during the year 2012-2013 were selected. The study was analysed with the use of the following tools Analysis of covariance (ANCOVA) and the scheffe's post hoc test. In all cases 0.05 levels was fixed as significant level to test the hypothesis.

Analysis of Data

The data tested on the obtained variables have been analyzed and presented in the table I to V.

Results

Table I. Computation of analysis of co-variance of pre test, post test and adjusted post test on speed.

Test	SAQ Training Group	Strength Training Group	Combined SAQ and Strength Training Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test									
Mean	7.59	7.56	7.57	7.56	Between	0.015	3	0.005	0.20
S.D.	0.16	0.15	0.16	0.17	Within	1.935	76	0.025	
Post Test									
Mean	7.28	7.42	6.97	7.58	Between	4.051	3	1.350	56.63*
S.D.	0.15	0.18	0.09	0.18	Within	1.813	76	0.024	
Adjusted Post Test									
Mean	7.26	7.44	6.97	7.57	Between	4.008	3	1.336	168.24*
					Within	0.596	75	0.008	

The results of the above table indicated that there was a significant difference between the adjusted post-test means of SAQ training, Strength training, Combined SAQ and Strength training and Control groups on speed.

Table II. Computation of analysis of co-variance of pre test, post test and adjusted post test on agility.

Test	SAQ Training Group	Strength Training Group	Combined SAQ and Strength Training Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test									
Mean	8.01	8.00	8.02	8.00	Between	0.009	3	0.003	0.11
S.D.	0.16	0.15	0.17	0.17	Within	1.959	76	0.026	
Post Test									
Mean	7.83	7.90	7.54	8.02	Between	2.457	3	0.819	34.37*
S.D.	0.14	0.14	0.17	0.16	Within	1.811	76	0.024	
Adjusted Post Test									
Mean	7.83	7.91	7.53	8.00	Between	2.488	3	0.829	199.75*
					Within	0.311	75	0.004	

The results of the above table showed that there was a significant difference between the adjusted post-test means of SAQ training, Strength training, Combined SAQ and Strength training and Control groups on agility.

Table III. Computation of analysis of co-variance of pre test, post test and adjusted post test on leg length.

Test	SAQ Training Group	Strength Training Group	Combined SAQ and Strength Training Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test									
Mean	94.15	93.95	93.70	93.95	Between	2.300	3	0.767	0.30
S.D.	1.60	1.73	1.56	1.51	Within	194.900	76	2.564	
Post Test									
Mean	95.05	95.75	96.55	93.90	Between	75.738	3	25.246	13.19*
S.D.	1.54	1.37	1.23	1.37	Within	145.450	76	1.914	
Adjusted Post Test									
Mean	95.03	95.88	96.86	93.98	Between	81.386	3	27.129	55.25*
					Within	36.829	75	0.491	

The results of the above table indicated that there was a significant difference between the adjusted post-test means of SAQ training, Strength training, Combined SAQ and Strength training and Control groups on leg strength.

Table IV. Computation of analysis of co-variance of pre test, post test and adjusted post test on arm potential (quickness).

Test	SAQ Training Group	Strength Training Group	Combined SAQ and Strength Training Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test									
Mean	81.60	81.65	81.95	81.65	Between	1.500	3	0.500	0.56
S.D.	0.88	0.99	0.94	0.95	Within	67.500	76	0.888	
Post Test									
Mean	86.70	84.20	91.85	81.70	Between	1127.838	3	375.94	407.30*
S.D.	0.92	1.01	0.99	0.92	Within	70.150	76	0.923	
Adjusted Post Test									
Mean	86.76	84.24	91.77	81.68	Between	1106.584	3	368.86	458.00*
					Within	60.403	75	0.805	

The results of the above table indicated that there was a significant difference between the adjusted post-test means of SAQ training, Strength training, Combined SAQ and Strength training and Control groups on arm potential (quickness).

Table V. The Ordered Scheffe's Test for the Differences between Paired Means

SAQ Training Group	Strength Training Group	Combined SAQ and Strength Training Group	Control Group	Mean Differences	Confidence Interval Value
SPEED					
7.26	7.44	-	-	0.17*	0.07
7.26	-	6.97	-	0.29*	0.07
7.26	-	-	7.57	0.30*	0.07
-	7.44	6.97	-	0.47*	0.07
-	7.44	-	7.57	0.13*	0.07
	-	6.97	7.57	0.60*	0.07
AGILITY					
7.83	7.91	-	-	0.08*	0.05
7.83	-	7.53	-	0.30*	0.05
7.83	-	-	8.00	0.17*	0.05
-	7.91	7.53	-	0.38*	0.05
-	7.91	-	8.00	0.09*	0.05
	-	7.53	8.00	0.47*	0.05
LEG STRENGTH					
95.03	95.88	-	-	0.85*	0.51
95.03	-	96.86	-	1.83*	0.51
95.03	-	-	93.98	1.05*	0.51
-	95.88	96.86	-	0.98*	0.51
-	95.88	-	93.98	1.90*	0.51
	-	96.86	93.98	2.88*	0.51
ARM POTENTIAL (QUICKNESS)					
86.76	84.24	-	-	2.52*	0.66
86.76	-	91.77	-	5.02*	0.66
86.76	-	-	81.68	5.08*	0.66
-	84.24	91.77	-	7.54	0.66
-	84.24	-	81.68	2.56*	0.66
	-	91.77	81.68	10.09*	0.66

The mean difference values for speed were greater than required confidence interval value 0.07 at .05 level of confidence. Hence, the above comparisons were significant. The mean difference values for agility were greater than required confidence interval value 0.05 at .05 level of confidence. Hence, the above comparisons were significant. The mean difference values for leg strength were greater than required confidence interval value 0.51 at .05 level of confidence. Hence, the above comparisons were significant. The mean difference values for arm potential (quickness) were greater than required confidence interval value 0.66 at .05 level of confidence. Hence, the above comparisons were significant.

Summary and Findings

The purpose of the study was to find out the effects of isolated and combined SAQ and strength trainings on selected physical, physiological, blood lipids and skill performance variables among college football players namely speed, agility, leg strength, arm potential(quickness). The data collected from the players before and after the experimental period were statistically examined with the analysis of covariance (ANCOVA) to determine the differences, if any, among the adjusted post test means on selected dependent variables separately. Whenever the obtained 'F' ratio for adjusted post test was found to be significant, the Scheffe'S test was applied as a post hoc test to find out the paired mean differences, if any. The .05 level of confidence was fixed as the level of significance to test the 'F' ratio obtained by the analysis of covariance, which was considered as an appropriate.

Conclusion

It was clear from the results of the study that SAQ training and Strength training had produced significant changes on selected physical variables of college men football players. Further, it was concluded that there was a significant difference among SAQ training group, Strength training group, combined SAQ and strength training group and control group on selected physical variables of college men football players.

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Please cite this article as: P. Senthilkumar, Dr. R. Annadurai. A Study on Effects of Isolated and Combined SAQ and Strength Trainings on Selected Physical Variables of Intercollegiate Men Football Players. *International Journal of Recent Research and Applied Studies*, 2014, 1, 7(17), 66 - 70.