ISSN: 2349 - 4891

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

Effect of SAQ Training on Selected Physical Fitness Variables Among College Men Cricketers

T.Pushparaj[1] & Dr. S. Arul[2]

[1]*Research Scholar, Department of Physical Education, Annamalai University, Chidambaram, Tamilnadu, India.*
[2]*Associate Professor, Department of Physical Education, Annamalai University, Chidambaram, Tamilnadu, India.*

Received 24th March 2021, Accepted 25th April 2021

Abstract

The purpose of the study was designed to examine the effect of SAQ training on speed and agility of college men cricketers. For the purpose of the study, thirty men cricket players from the colleges in Virudhunagar district were selected as subjects. They were divided into two equal groups. Each group consisted of the fifteen subjects. Group I underwent SAQ training for three days per week for twelve weeks. Group II acted as control who did not undergo any special training programme apart from their regular physical education programme. The following variables namely speed and agility were selected as criterion variables. All the subjects of two groups were tested on selected dependent variables by using 50 mts run and shuttle run respectively at prior to and immediately after the training programme. The analysis of covariance was used to analyze the significant difference, if any among the groups. 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. The results of the study showed that there was a significant difference between SAQ training group and control group on speed and agility. And also it was found that there was a significant improvement on speed and agility due to twelve weeks of SAQ training.

Keywords: SAQ training, Speed, Agility, College men Cricketers, ANCOVA.

Introduction

The programming component of speed, agility and quickness (SAQ) training is similar to reactive training and follows the same concepts of the integrated performance paradigm. Speed in this text essentially refers to straight-ahead speed. Agility refers to short bursts of movement that involve change of direction. Quickness refers to the ability to react to a stimulus and change the motion of the body. This form of training is often viewed as being beneficial only for the athlete. However, by using the proper progression as seen in the OPT™ model, the health and fitness professional can effectively use SAQ training to add intensity and complexity, increase the cardiorespiratory demand and provide a simple and exciting variety to a routine workout. SAQ training allows a client to enhance his/her ability to accelerate, decelerate and dynamically stabilize the entire body during higher velocity, acceleration and deceleration movements, in all planes of motion (such as running, cutting and changing direction). It may further help the nervous system to respond or react more efficiently to demands placed upon it and enhance muscular recruitment and coordination, when performed with correct mechanics.

Correspondence
Dr. S.Arul
Annamalai University

Methodology

The purpose of the study was designed to examine the effect of SAQ training on speed and agility of college men cricketers. For the purpose of the study, thirty men cricket players from the colleges in Virudhunagar district were selected as subjects. They were divided into two equal groups. Each group consisted of the fifteen subjects. Group I underwent SAQ training for three days per week for twelve weeks. Group II acted as control who did not undergo any special training programme apart from their regular physical education programme. The following variables namely speed and agility were selected as criterion variables. All the subjects of two groups were tested on selected dependent variables by using 50 mts run and shuttle run respectively at prior to and immediately after the training programme. The analysis of covariance was used to analyze the significant difference, if any among the groups. 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.

Analysis of the Data

Speed

The analysis of covariance on speed of the pre and post test scores of SAQ training group and control group have been analyzed and presented in Table 1.

ISSN: 2349 – 4891

Table 1. Analysis of covariance of the data on speed of pre and post tests scores of saq training and control groups

Test	SAQ training group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test							
Mean	8.21	8.23	Between	0.0030	1	0.0030	0.14
S.D.	0.16	0.24	Within	0.6107	28	0.0218	
Post Test							
Mean	7.75	8.21	Between	1.5870	1	1.5870	16.69*****
S.D.	0.12	0.11	Within	2.6617	28	0.0951	
Adjusted Post Test							
Mean	7.76	8.21	Between	1.5053	1	1.5053	45.49*****
			Within	0.8934	27	0.0331	

* Significant at .05 level of confidence.
(The table values required for significance at .05 level of confidence for 2 and 28 and 2 and 27 are 3.34 and 3.35 respectively).

The table 1 shows that the adjusted post-test means of SAQ training group and control group are 7.76 and 8.21 respectively on speed. The obtained "F" ratio of 45.49 for adjusted post-test means is more than the table value of 3.35 for df 1 and 27 required for significance at .05 level of confidence on speed. The results of the study indicated that there was a significant difference between the adjusted post-test means of SAQ training group and control group on speed.

Agility

The analysis of covariance on agility of the pre and post test scores of SAQ training group and control group have been analyzed and presented in Table 2.

Table 2. Analysis of covariance of the data on agility of pre and post tests scores of saq training and control groups

Test	SAQ training group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test							
Mean	8.49	8.51	Between	0.0030	1	0.0030	0.08
S.D.	0.17	0.18	Within	1.0267	28	0.0367	
Post Test							
Mean	8.23	8.49	Between	0.4992	1	0.4992	8.89*****
S.D.	0.20	0.20	Within	1.5731	28	0.0562	
Adjusted Post Test							
Mean	8.24	8.48	Between	0.4283	1	0.4283	64.61*****
			Within	0.1790	27	0.0066	

* Significant at .05 level of confidence.
(The table values required for significance at .05 level of confidence for 2 and 28 and 2 and 27 are 3.34 and 3.35 respectively).

The table 2 shows that the adjusted post-test means of SAQ training group and control group are 8.24 and 8.48 respectively on agility. The obtained "F" ratio of 64.61 for adjusted post-test means is more than the table value of 3.35 for df 1 and 27 required for significance at .05 level of confidence on agility. The results of the study indicated that there was a significant difference between the adjusted post-test means of SAQ training group and control group on agility.

Conclusions

1. There was a significant difference between SAQ training group and control group on speed and agility.
2. And also it was found that there was a significant improvement on selected criterion variables such as speed and agility due to SAQ training.

References

1. Bloomfield, J., Polman, R., O'Donoghue, P. and McNaughton, L. (2007) Effective speed and agility conditioning methodology for random intermittent dynamic type sports. The

ISSN: 2349 – 4891

Journal of Strength and Conditioning Research, 21(4), 1093-1100.
2. Gambetta, V. (1996) In a blur: How to develop sport-specific speed. Sports Coach 19(3), 22-24.
3. Gorostiaga, E.M., Izquierdo, M., Ruesta, M., Iribarren, J., GonzálezBadillo, J.J. and Ibáñez, J. (2004) Strength training effects on physical performance and serum hormones in young soccer players. European Journal of Applied Physiology 91, 698-707.
4. Jovanovic, M., Sporis, G., Omrcen, D. and Fiorentini, F. (2011) Effects of speed, agility, quickness training method on power performance in elite soccer players. The Journal of Strength and Conditioning Research 25(5), 1285-1292.
5. Little, T. and Williams, A.G. (2006). Specificity of acceleration, maximum speed and agility in professional soccer players. The Journal of Strength and Conditioning Research 19(1), 76-78.
6. Markovic, G., Jukic, I., Milanovic, D. and Metikos, D. (2007) Effects of sprint and plyometric training on muscle function and athletic performance. The Journal of Strength and Conditioning Research 21(2), 543-549.
7. Meckel, Y., Machnai, O. and Eliakim, A. (2009) Relationship among repeated sprint tests, aerobic fitness, and anaerobic fitness in elite adolescent soccer players. The Journal of Strength and Conditioning Research 23(1), 163-169.
8. Pearson, A. (2001) Speed, Agility and Quickness for Soccer. London: A & C Black. Polman, R., Walsh, D., Bloomfield, J. and Nesti, M. (2004) Effective conditioning of female soccer players. Journal of Sports Sciences 22(2), 191-203.