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Effect of SAQ Training on Selected Bio-Chemical Variables among College Football Players

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Abstract

The purpose of the study was to investigate the effect of SAQ training on selected bio-chemical variables among college football players. For the present study 30 male college football players from Dr.Sivanthi Aditanar College of Engineering, Tiruchendur, Tuticorin, Tamilnadu were selected at random and their age ranged from 18 to 25 years. The subjects were randomly assigned to two equal groups of fifteen each and named as Group 'A' and Group 'B'. Group 'A' underwent SAQ training and Group 'B' underwent no training. The variables such as LDL and HDL were assessed by enzymatic calorimetric method. The data was collected before and after twelve weeks of training and analyzed by applying Analysis of Co-Variance (ANCOVA). The level of significance was set at 0.05. The findings of the present study have strongly indicates that twelve weeks of SAQ training have significant effect on selected bio-chemical variables. Hence the hypothesis earlier set that SAQ training would have been significant effect on selected bio-chemical variables in light of the same the hypothesis was accepted. Significant effect of SAQ training was found on LDL and HDL.

Keywords: Speed, Agility, Quickness, Bio-Chemical Variables.

Introduction

Speed, agility and quickness training has turn out to be a popular way to train players at various stage. Whether they are from grass root level or in a professional wing, they all can benefit from speed, agility and quickness training. For several years, this method has been not used by all athletes primarily due to a lack of awareness regarding the drills. Some benefits include increases in muscular power, brain signal efficiency, kinaesthetic awareness, motor skills and reaction time (Lee, et al. 2000). Those involved with the development of SAQ programmes have sought to fill this void so as to develop all types of speed, particularly for team sports such as football. SAQ programmes break speed down into three main areas of skill: speed, agility and quickness. Although these may appear to be quite similar, they are in fact very different in terms of how they are trained, developed and integrated into a player's performance. When these skills are successfully combined and specialist SAQ equipment is utilised, they provide the coach with the tools to make good player into an outstanding one. Football has undergone a tremendous improvement since its inception. In human history of all the events the one to attract the largest audience of Football match. Each Football match is a emblematic event of some complexity. One of the greatest strength of the game is its simplicity. At its crudest level all that are needed is a ball and an open space with something to act as a goal post. No other sport is so easily available and so immediately inspiring**.**

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Material and Methods

The purpose of the study was to investigate the effect of SAQ training on selected bio-chemical variables among college football players. It was hypothesized that there would have been a significant effect of SAQ training on selected bio-chemical variables among college football players. For the present study 30 male college football players from Dr.Sivanthi Aditanar College of Engineering, Tiruchendur, Tuticorin, Tamilnadu were selected at random and their age ranged from 18 to 25 years. The subjects were randomly assigned to two equal groups of fifteen each and named as Group 'A' and Group 'B'. Group 'A' underwent SAQ training and Group 'B' underwent no training. The variables such as LDL and HDL were assessed by enzymatic calorimetric method. The data was collected before and after twelve weeks of training and 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 bio-chemical variables among college football players for pre-post test respectively have been presented in table No.1 to 3.

Table I. Descriptive Analysis and 't' ratio of Selected Bio-Chemical Variables of SAQ Training Group

Sl.No	Variables	Pre Test Mean	SD (±)	Post Test Mean	SD (±)	Adjusted Mean	σ DM	't' Ratio
1	LDL	95.20	3.41	86.45	3.62	86.44	0.71	10.72*
2	HDL	57.60	3.83	66.80	4.14	66.73	0.55	5.17*

The above table documents the pre & post tests means, standard deviations adjusted mean and 't' values of SAQ training group on selected variables among college football players.

Table II. Descriptive Analysis and 't' ratio of Selected Bio-Chemical Variables of Control Group

Sl.No	Variables	Pre Test Mean	SD (±)	Post Test Mean	SD (±)	Adjusted Mean	σ DM	't' Ratio
1	LDL	95.38	4.93	94.16	4.06	94.10	0.91	0.59
2	HDL	55.00	3.24	56.86	3.75	56.93	0.28	1.31

The above table documents the pre & post tests means, standard deviations adjusted mean and 't' values of control group on selected variables among college football players.

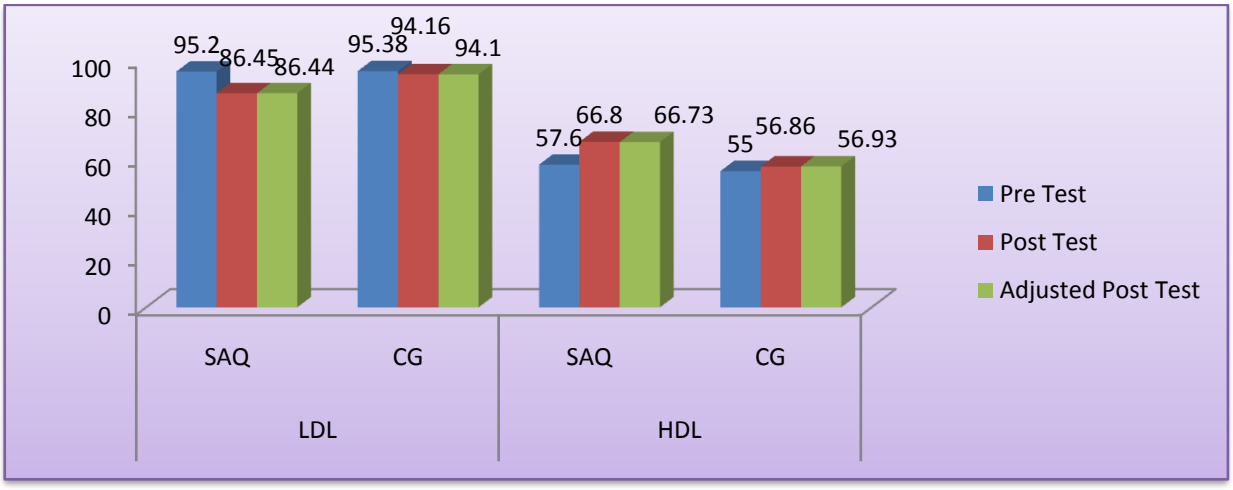
Table III. Computation of Analysis of Covariance on both the Groups on Selected and Bio-Chemical Variables among College football Players

Sl. No	Variables	Source of Variance	Sum of Squares	df	Mean Square	F
1	LDL	BG	3448.82	1	3448.82	65.56*
		WG	1420.28	27	52.60	
2	HDL	BG	735.62	1	735.62	25.18*
		WG	788.90	27	29.21	

* Significant at 0.05 level *F 0.05 (1,27) = 4.21

Table No. III revealed that the obtained 'F' value for LDL and HDL were 65.56 and 25.18 respectively 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 findings of the present study have strongly indicates that twelve weeks of SAQ training have significant effect on selected bio-chemical variables. Hence the hypothesis earlier set that SAQ training would have been significant effect on selected bio-chemical variables in light of the same the hypothesis was accepted.

Figure I. Comparisons of Pre – Test Means Post – Test Means and Adjusted Post – Test Means for Control group and Experimental Group in relation to Bio-chemical Variables



Conclusions

On the basis of findings and within the limitations of the study the following conclusions were drawn: Significant effect of SAQ training was found on LDL and HDL.

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