EFFECT OF SAQ TRAINING ON SPEED AND PASSING AMONG COLLEGE MEN FOOTBALL PLAYERS.

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INTRODUCTION

Sport is an activity that follows a set of regulations or traditions and is frequently performed in a competitive manner. Sports include activities like mind sports and motor sports, where mental acuity or equipment quality are important elements, but they also include activities where the competitor's physical ability are the single or primary determinant of the outcome. A typical definition of sport is an organised, skill-based, competitive physical activity that demands dedication and fair play. Because sports typically entail higher degrees of structure and profit, some people see them as different from games.

NEED OF THE STUDY

The capacity to move the body as quickly in one direction as feasible is called speed. Most individuals assume that training for speed just entails retraining their limbs to perform the same movements more quickly when they think of speed training. It's also true that speed and effectiveness cannot be considered in a vacuum, even though this is a factor. Speed is influenced, among other things, by one's capacity for quick starts, or initiating movements.. (Clark, M.A, et.al 2014)

The capacity to accelerate, decelerate, stabilise, and change directions fast while maintaining good posture is known as agility. The ability to move efficiently in multiple directions and quickly change course without losing attention, balance, or fluidity of movement is the essence of agility. Agility is a quality that any athlete can readily recognise because of its grace and precision.(Clark, M.A, et.al 2014)

The capacity to respond and alter one's posture while exerting the greatest amount of power is known as quickness.(Clark, M.A, et.al 2014)

All three elements will improve the quality of the workout, meet the requirement for cardiorespiratory exercise, and offer a range of movement positions and directions.

OBJECTIVE OF THE STUDY

The study objective were

a. To formulated appropriate SAQ training schedule for college level football players.
b. To measure physical fitness variables such as speed among football players
c. To measure the performance related skill variables passing.
d. To experiment with formulated SAQ training on the subjects.

e. To collect pre and post experiment data on selected performance related physical fitness and skill variables of football and players

STATEMENT OF THE PROBLEM

The purpose of this study was to find out the effect of SAQ training on selected performance variables speed and passing among college men football players.

HYPOTHESIS

It was hypothesized that SAQ training would significantly improve selected performance related physical fitness variables speed and passing among college men football players.

SIGNIFICANCE

1. The study is significant in formulating suitable SAQ training for the benefit of college level football players.
2. The study is significant in assessing the college men football players' performance related physical fitness components of football players.
3. The study is significant in finding out the effect of SAQ training on selected performance related skill variables of college men football players.
4. The study is significant in determining benefits for the football players to improve their performance related physical fitness and skill variables of college level football players.
5. The findings of this study would help physical education teachers and coaches to include SAQ training in their training schedule for football players.

DELIMITATIONS

For this investigation, the following delimitations were noted.

1. For this study, only sixty Andhra Pradesh college students who participated in intercollege football competitions on behalf of their schools were chosen as subjects.
2. The individuals' ages ranged from 18 to 25 years old.
3. There were two groups of subjects. Thirty men football players at the collegiate level made up each of the two groups: experimental group I and control group.
4. For this study, only the performance characteristics listed below were taken into account:

   Performance related physical fitness variables

   a. speed,

   Performance related skill variables

   b. passing

LIMITATIONS

The following limitations were taken into account while determining the study's

1. The subjects' prior experiences in any other training have not been taken into account.

2. The adult participants' past involvement in athletics, among other things, has not been taken into account.
3. The subjects' daily habits, nutrition, and other environmental factors were not regulated.
4. Only collegiate football players who competed at the intercollegiate level on behalf of their school were chosen for this study.

METHODOLOGY

The purpose of the study was to find out the effect of Speed Agility Quickness (SAQ) training on selected performance variables of football players.

SELECTION OF SUBJECTS

In order to fulfil the study's objectives, the researcher chose 60 male college football players at random from various Andhra Pradesh universities. The subjects, who ranged in age from 18 to 25, participated in intercollegiate competitions. The chosen participants would be split into two groups the experimental group and the control group each with thirty members.

SELECTION OF VARIABLES

The following variables were chosen for this study based on the investigator's experience gathered from reviewing relevant publications, journals, and books on various training techniques for SAQ training.

Dependent Variables

Performance related Fitness variables - speed

Performance related Skill Variables - Passing

Independent Variables - 12 weeks Speed, Agility and Quickness Training

EXPERIMENTAL DESIGN

In this study, a random group pre- and post-test research design was used. For this study, sixty randomly chosen participants (N=60) football players from various Andhra Pradesh colleges who competed at the intercollegiate level on behalf of their college were taken into consideration. The chosen participants were split into two groups, each with thirty football players: the experimental group and the control group. For a period of 12 weeks, the experimental group received training in speed, agility, and quickness, whereas the control group received no further instruction. Before beginning the experimental therapy, all of the patients had pre-test scores created based on measurements of their physical fitness and performance-related skill factors, like passing and speed. Following a 12-week period of training experiments for the experimental group, both groups underwent evaluations using predetermined criteria variables that ultimately determine post-test results. The effect of variable grid training was determined by comparing the scores from the pre- and

post-test. Using two group ANCOVA, the before and post test results of the two groups were acquired in order to assess the statistical significance of the difference, at the 0.05 level of confidence.

STATISTICAL TREATMENT

All individuals' initial scores prior to the experimental treatment and final scores following the experimental period would be gathered. ANCOVA would be used to statistically test the collected scores for significance. Scheffe's post hoc analysis was not performed on the adjusted means because ANCOVA was used in two groups.

RESULTS ON SPEED

The initial and final means on SAQ training group and control group on Speed among football players and the obtained results on Analysis of Covariance (ANCOVA) is presented in

Table –I-COMPUTATION OF ANALYSIS OF COVARIANCE ON SPEED

	EXPERIMENTAL GROUP	CONTROL	SOURCE OF VARIANCE	SUM OF SQUARES	DF	MEAN SQUARES	OBTAINED F
Pre Test Mean	63.10	64.53	Between	30.82	1	30.82	0.73
			Within	2448.17	58	42.21	
Post Test Mean	59.57	64.97	Between	437.40	1	437.40	13.31*
			Within	1906.33	58	32.87	
Adjusted Post Test Mean	60.17	64.37	Between	261.00	1	261.00	81.16*
			Within	183.32	57	3.22	
Mean Diff	-3.53	0.43					

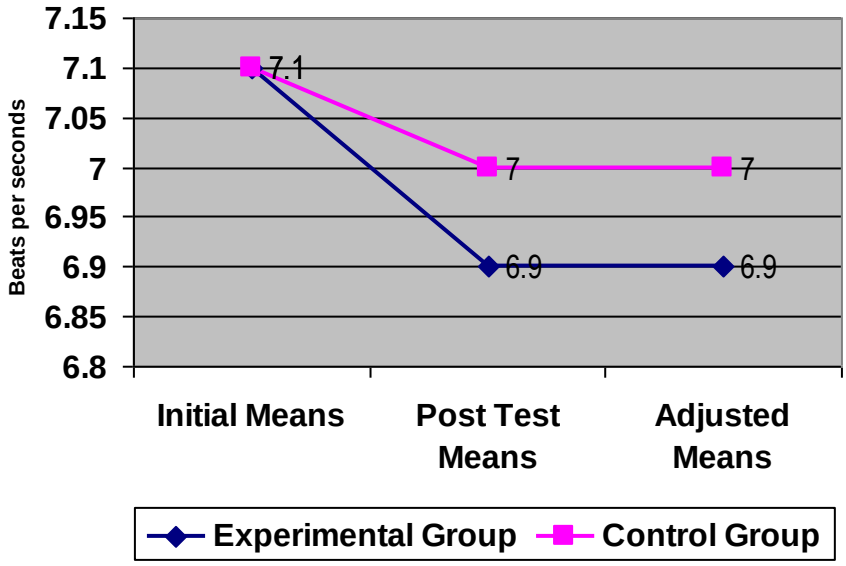
Table F-ratio at 0.05 level of confidence for 1 and 58 (df) =4.01, 1 and 57 (df) =4.01.

* Significant

The pre-test mean for the experimental group was 63.10, while the control group had 64.53. The F value was 0.73, not significant. Post-test mean was 59.57, greater than the required F value of 4.01. Adjusted post-test mean was 81.16, indicating a significant difference. The experimental group showed a significant difference in Speed -3.53 due to SAQ training for football players, as per the 0.05 level results.

The initial, post and adjusted means values of experimental and control group on Speed is presented in Figure 1.

Figure 1- Bar Diagram Showing Initial, Final and Adjusted Means on Speed of Experimental and Control Groups



RESULTS ON PASSING

The initial and final means on SAQ training group and control group on Passing among football players and the obtained results on Analysis of Covariance (ANCOVA) is presented in

Table II-COMPUTATION OF ANALYSIS OF COVARIANCE ON PASSING

	EXPERIMENTAL GROUP	CONTROL	SOURCE OF VARIANCE	SUM OF SQUARES	DF	MEAN SQUARES	OBTAINED F
Pre Test Mean	22.13	21.50	Between	6.02	1	6.02	0.23
			Within	1526.97	58	26.33	
Post Test Mean	24.27	21.33	Between	129.07	1	129.07	6.54
			Within	1144.53	58	19.73	
Adjusted Post Test Mean	24.01	21.59	Between	87.07	1	87.07	42.03*
			Within	118.10	57	2.07	
Mean Diff	2.13	-0.17					

Table F-ratio at 0.05 level of confidence for 1 and 58 (df) =4.01, 1 and 57(df) =4.01.

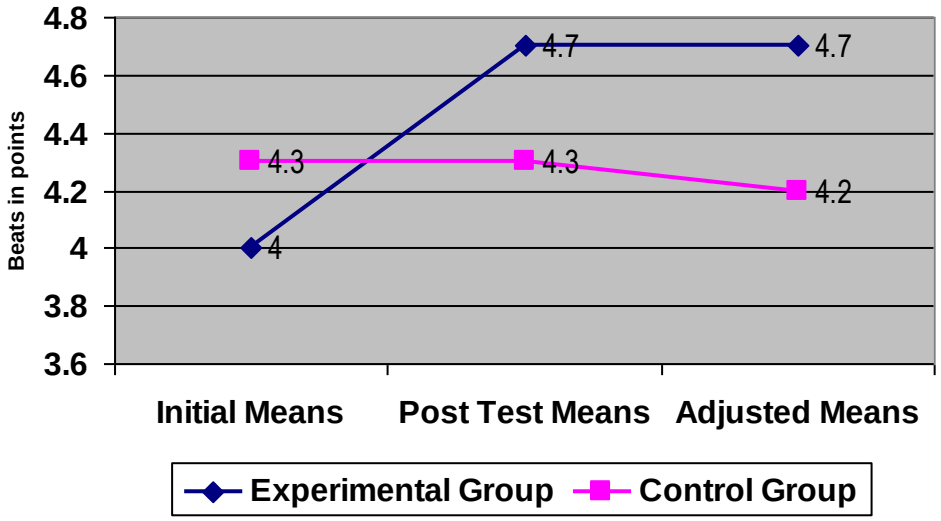
* Significant

The pre-test mean for the experimental group was 22.13, while the control group had 21.50. The F value was 0.23, not significant. The post-test mean was 24.27, not significant. However, the adjusted post-test mean was 42.03, greater than the required F value of 4.01.

Thus, it was proved that experimental group gained mean difference on, Passing 2.13 was due to SAQ training given to football players, and the difference was found to be significant at 0.05 level.

The initial, post and adjusted means values of experimental and control group on Passing is presented in Figure I1 for better understanding of the results of this study.

Figure II-Bar Diagram Showing Initial, Final and Adjusted Means on Passing of Experimental and Control Groups



FINDINGS

According to the results, college football players' performance in terms of physical fitness, speed, agility, cardiovascular endurance, and flexibility, as well as their performance in terms of skills like trapping, kicking, dribbling, and passing, can all be considerably enhanced by a 12-week SAQ programme.

CONCLUSIONS

The study found that 12 weeks of SAQ training significantly improved performance-related variables and speed in intercollegiate level football players. The SAQ group showed greater improvement than the control group, with adjusted mean comparisons showing a significant improvement in skill passing and speed compared to the control group.

Reference:

1. Azmi K and N W Kusnanik (2018), “Effect of Exercise Program Speed, Agility, and Quickness (SAQ) in Improving Speed, Agility, and Acceleration”, Journal of Physics: Conference Series, 947
2. Beets MW amd Pitetti KH. (2005). “Contribution of physical education and sport to health-related fitness in high school students.”, J Sch Health. Jan;75(1):25-30
3. Bloomfield, J, Polman, R, O'Donoghue, P, and McNaughton, L. (2007) “Effective speed and agility conditioning methodology for random intermittent dynamic type sports.” J Strength Cond Res 21: 1093-1100, 2007.

4. Brain Mackenzie (1999). Successful Coaching News Letter.
5. Clark, M.A., Sutton, B.G., Lucett, S.C. (2014). NASM Essentials of Personal Fitness Training, 4th Edition, Revised. Burlington, MA: Jones and Bartlett Learning.
6. Clark KP, et.al. (2010), "The longitudinal effects of resisted sprint training using weighted sleds vs. weighted vests." J Strength Cond Res. 24(12):3287-95.
7. Cronin, JB and Hansen, KT. (2005) "Strength and power predictors of sports speed". J Strength Cond Res 19: 349-357, 2005.
8. de Silva CD, et.al. (2011), "Exercise intensity and technical demands of small-sided games in young Brazilian soccer players: effect of number of players, maturation, and reliability.", J Strength Cond Res. 25(10):2746-51.
9. Dellal A, et.al. (2012), "Variation of activity demands in small-sided soccer games.", Int J Sports Med. 33(5):370-5
10. Dellal A, et.al. (2011), "Small-sided games in soccer: amateur vs. professional players' physiological responses, physical, and technical activities.", J Strength Cond Res. 25(9):2371-81
11. Draganidis D, et.al. (2013) "The time-frame of acute resistance exercise effects on football skill performance: the impact of exercise intensity." J Sports Sci. 31(7):714-22.
12. Fanchini M, et.al. (2011), "Effect of bout duration on exercise intensity and technical performance of small-sided games in soccer.", J Strength Cond Res. 25(2):453-8.