

Effect of Interval Training On Selected Physical Related Variables among University Men Football Players

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Abstract: *The purpose of this study was to find out the effect of interval training programme on selected physical related variables among university men football players. To achieve this purpose of the study, thirty men football players were selected from Annamalai University, Annamalai Nagar, Chidambaram, Tamilnadu, India were selected as subjects at random. The selected subjects were divided into two equal groups of fifteen subjects each, such as interval training programme group and control group. The group one underwent interval training for three days per week for twelve weeks. Group two acted as control group who did not participate any special training programmes apart from their regular routine physical activities. The following physical related variables namely speed and flexibility performance was selected as criterion variables. All the subjects of two groups were tested on selected dependent variables at prior to and immediately after the training programme. The ANCOVA (analysis of co variance) was used to analyze the significant difference, if any among the groups. The .05 level of confidence was fixed as the level of significance which was considered as an appropriate. The results of the study revealed that there was a significant difference between interval training and control groups among university men football players on selected physical related variables namely speed and flexibility performance.*

Key Words: *Interval Training, Football, Speed, Flexibility.*

1. INTRODUCTION:

Football is a skilful game requiring full body coordination along with other fitness components like endurance, speed, strength, agility which play an important role. In football players should have ability to control the ball, Pass the ball and at times he should be able to kick the ball. Lower body extremities are mostly used because football is itself is a game played by foot.

Training in football should attempt to match the functional movements and precise demands of game play as closely as possible. The major aim of training for football should be to improve performance in game related tasks. Training should be designed with safety and injury avoidance as priorities.

Interval training, also known as interval workouts or interval runs, are short, intense efforts followed by equal or slightly longer recovery time. For example, after a warm up, run two minutes at a hard effort, followed by two to three minutes of easy jogging or walking to catch your breath. Unlike tempo workouts, you're running above your red line and at an effort where you are reaching hard for air and counting the seconds until you can stop—a controlled fast effort followed by a truly easy jog. The secret is in the recovery as patience and discipline while you're running easy allows you to run the next interval strong and finish the entire workout fatigued but not completely spent. Just like rest, your body adapts and gets stronger in the recovery mode.

There are three types of interval training, all of which require the runner to run at or above race pace for a given time or distance. The first type sustains bursts of speed during continuous running. The runner increases from a slower pace for a fixed distance of time. After the time or distance has been reached, the runner slows back to the previous training pace. The second type of interval training are simply repeat runs at or above race pace for a given distance or time. The third type of interval, formal intervals is run on the track at a given distance with a specific goal time.

2. METHODOLOGY:

The purpose of the study was to find out the effect of interval training programme on selected physical related variables among university men football players. To achieve this purpose of the study, thirty men football players were selected from Annamalai University, Annamalai Nagar, Chidambaram, Tamilnadu, India were selected as subjects at random. The selected subjects were divided into two equal groups of fifteen subjects each, such as interval

training programme group and control group. The group one underwent interval training for three days per week for twelve weeks. Group two acted as control group who did not participate any special training programmes apart from their regular routine physical activities. The following physical related variables namely flexibility performance were selected as criterion variables. All the subjects of two groups were tested on selected dependent variables at prior to and immediately after the training programme. The ANCOVA (analysis of co variance) was used to analyze the significant difference, if any among the groups. The .05 level of confidence was fixed as the level of significance which was considered as an appropriate.

3. TRAINING PROGRAMME:

For experimental group, interval training programme has been given for three days per week for twelve weeks. Training was given in the morning session. The training session includes warming up and cooling down. Every day the workout lasted for 45 to 60 minutes approximately. During experimental period control group did not participate in any of the special training.

4. ANALYSIS OF THE DATA

The influence of interval training programme on each criterion variables analysed separately and presented below.

4.1 SPEED

The ANCOVA on Speed ability of the pre and post test scores for Interval training programme group and control group have been analyzed and presented in table I.

TABLE -I

ANCOVA ON SPEED ABILITY FOR INTERVAL TRAINING AND CONTROL GROUPS

Test		Interval Training group	Control Group	Source of variance	S.S	df	M.S	"F" ratio
Pre test	Mean	7.67	7.70	Between	0.02	2	0.01	0.26
	S.D	1.03	1.21	Within	1.76	57	0.03	
Post test	Mean	6.76	7.68	Between	9.16	2	4.58	99.60*
	S.D	0.93	1.19	Within	2.62	57	0.05	
Adjusted post test	Mean	6.78	7.68	Between	8.97	2	4.49	123.92*
				Within	2.03	56	0.04	

*significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence for 2 and 57 and 2 and 57 are 3.34 and 3.35 respectively.

The table I show that the adjusted post-test means on speed ability of interval training programme group and control group are 6.78 and 7.68 respectively. The obtained "F" ratio of 123.92 for adjusted post-test means is greater than the table value of 3.35 for df2 and 56 required for significance at .05 level of confidence on dribbling ability. The results of the study indicated that there was a significant difference between the adjusted post-test means of interval training programme group and control group on speed ability.

4.2 FLEXIBILITY

The ANCOVA on Flexibility of the pre and post test scores for interval training programme group and control group have been analyzed and presented in table II.

TABLE -II

ANCOVA ON FLEXIBILITY FOR INTERVAL TRAINING PROGRAMME AND CONTROL GROUPS

Test		Interval Training group	Control Group	Source of variance	S.S	df	M.S	"F" ratio
Pre test	Mean	17.95	18.00	Between	0.10	2	0.05	0.01
	S.D	2.61	2.36	Within	249.90	57	4.38	
Post test	Mean	23.65	17.75	Between	352.90	2	176.45	33.03*
	S.D	2.12	2.06	Within	304.50	57	5.34	
Adjusted post test	Mean	23.70	17.75	Between	357.59	2	178.79	157.39*
				Within	63.62	56	1.14	

*significant at .05 level of confidence.(The table values required for significance at .05 level of confidence for 2 and 57 and 2 and 57 are 3.34 and 3.35 respectively).

The **table II** show that the adjusted post-test means on Flexibility of interval training programme group and control group are 23.70 and 17.75 respectively. The obtained “F” ratio of 157.39 for adjusted post-test means is greater than the table value of 3.35 for df2 and 56 required for significance at .05 level of confidence on Flexibility. The results of the study indicated that there was a significant difference between the adjusted post-test means of interval training programme group and control group on Flexibility.

5. CONCLUSION

- There was a significant difference between interval training programme group and control group on speed and flexibility performance of the football players.
- And it was found that there was a significant improvement on selected criterion variables such as speed and flexibility due to Interval training programme on football player

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